

# SPECIAL STUDY ON ECONOMIC CHANGE

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HEARINGS  
BEFORE THE  
JOINT ECONOMIC COMMITTEE  
CONGRESS OF THE UNITED STATES  
NINETY-FIFTH CONGRESS  
SECOND SESSION

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**PART 1**

MAY 31, JUNE 1, 6, AND 7, 1978

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Printed for the use of the Joint Economic Committee



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# SPECIAL STUDY ON ECONOMIC CHANGE

WEDNESDAY, MAY 31, 1978

## LONG-TERM DEMOGRAPHIC TRENDS

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, pursuant to notice, at 10 a.m., in room S-207, the Capitol, Hon. Richard Bolling (chairman of the committee) presiding.

Present: Representatives Bolling and Brown of Ohio.

Committee staff present: John R. Stark, executive director; Louis C. Krauthoff II, assistant director; William R. Buechner and L. Douglas Lee, professional staff members; Mark Borchelt, administrative assistant; and Charles H. Bradford, minority professional staff member.

Special Study on Economic Change staff present: Charles S. Sheldon II, research director; Robert Ash Wallace, research director; George D. Krumbhaar, Jr., counsel; Richard D. Bartel, staff economist; Paula J. Dobriansky, research assistant; and A. A. "Chip" Sayers, research assistant.

Also present: Dennis L. Little and Cynthia E. Huston, Congressional Research Service, Library of Congress.

### OPENING STATEMENT OF REPRESENTATIVE BOLLING, CHAIRMAN

Representative BOLLING. The committee will come to order.

I have a very long opening statement which will do for most of the opening statements of the 13 days of hearings. So I hope everybody will recognize that this is designed to cover a broad period of time.

This morning we are opening the first set of public panel discussions of the Joint Economic Committee in connection with our special study on economic change.

I might explain for those not familiar with the special study project that it grew out of discussions with the majority and minority members of the Joint Economic Committee and with the leadership in the House and Senate. We prepared a prospectus at that time, about 1 year ago, which called for a 3½-year study, and it identified the nature of major economic changes occurring in the United States and in the world that we felt needed analysis and policy alternatives for consideration. On the basis of this description, House Concurrent Resolution 248 was introduced in the

House and passed overwhelmingly, and then was approved by the Senate by unanimous consent last July 18.

The underlying thesis of the study is that economic, social, political, international, and technical conditions have changed, and are still changing markedly. This suggests that conventional wisdom and established economic tools may not be equal to the challenge of making sound policies in the economic sphere. The so-called "laws" of economics have not been repealed, but all guiding principles presuppose a certain environment of conditions, customs, and practices; and when these change, the implementation of new policies and the modes of adjustment have to change also.

There was a period of perhaps 20 or 30 years when economists could take some satisfaction in having found enough guidelines to policymaking that this Nation could achieve rapid economic growth, reasonably full employment, and minimal amounts of price inflation. The watchword became for a brief period "fine tuning" to remove the remaining small irregularities and temporary disequilibriums. But no country today seems able to provide full employment, stable prices, continued growth, and non-beggar-thy-neighborliness in its international relations all at the same time.

Perhaps we can never attain such a happy state. But the United States and several other major countries were reasonably close to such a stable and progressive macro-solution, even with other shortcomings and unfulfilled dreams of parts of their populations. Can we once again find policies to help us return to a more stable economic environment and provide work for those who need it? The task will not be easy; partly because of problems having to do with changes in institutions, attitudes, and resources.

During the months the special study has been underway, it has acquired a small supplementary staff to work with the permanent staff of the Joint Economic Committee and with the Congressional Research Service. We have broken the larger array of problems into their component parts. In this effort, a considerable amount of help has come from a diverse group of individual consultants, resource people, and economic analysis groups around the country.

Almost everyone consulted can agree on most of the underlying problems. Differences begin to develop as how best to describe the issues and to arrange them in a logical framework for analysis. The view is probably reasonably close to unanimous that we must weave together again the component parts of the study to show how they all relate and interact. It does little good to solve one specific problem while ignoring the secondary and tertiary costs of the "solution." There are considerable disagreements over when this process of integration or synthesis should take place—in the beginning, middle, or end—even if theoretically we all seek the same result.

What the special study staff has done, in cooperation with the regular staff, support agencies, and many outside consultants, is develop a 10-part program of analysis as the first part of the process. We have selected an area director for each of these sections of the study, working with the special study staff, the rest of the Joint Economic Committee staff, and the Congressional Research Service to develop an array of specific papers and other studies which will illuminate the basic changes and the dilemmas,

and the policy alternatives in his specific area. Within the limits of time and funding, we have had to make such undertakings selective and illustrative, not exhaustive. We seek drafts of as many of these individual papers as possible by the end of the year, so that in 1979 we can subject them to peer review, and otherwise prepare them for publication.

Let me tell you about the 10 major areas we are investigating. They are: (1) Demography and human resources; (2) natural resources and energy; (3) research and innovation; (4) Federal sector finances; (5) State and local finances; (6) pension systems; (7) "stagflation," that is, persistent unemployment coupled with inflation; (8) Government regulation and intervention; (9) the international environment; and (10) convergent trends and crises.

These titles are broad, and there are inherent problems of subject overlap and duplication; or, the problems are common ones, but the emphasis and viewpoint in the analysis may be somewhat different. Almost any explicit topic which we might select for analysis is found to have aspects which affect most if not all the 10 topics I have just listed.

To delineate these 10 areas more specifically, we developed a detailed outline after many months of meetings and discussions. The ultimate "laundry list" cut so broad a swath that we could not possibly pursue every topic to a complete analysis within the scope of this study. So in the next stage we convened informal bodies of experts and resource people who would meet with the staff to suggest priorities and to recommend qualified people to undertake those individual papers which offered the best prospects for providing a useful product.

I have already suggested we have a necessary further step to integrate the results of all these studies, so that the committee does not end up just with an interesting collection of essays and reports. We recognize the necessity, but the "how to" has not finally evolved.

An early step is to make sure that the 10 area directors who head the efforts in each of the 10 fields themselves meet about once a month, joining with staff from the Joint Economic Committee and the Congressional Research Service. As a minimum, they can discuss common problems, share issues, and develop plans to exploit data bases of common interest. This helps us identify the overlaps, the gaps and arrange extra channels of communication among individual contributors. We find this part of the process working reasonably well. The next steps will come in 1979 as the flow of draft papers comes in for review and integration.

We do not plan to rely exclusively on commissioned papers to gather information for the study. We regard as equally important steps to involve a larger community in the issues, and approaches to their understanding as well as to choices about them. At both stages, we seek objective, dispassionate understanding if possible, something with which people of many persuasions can feel comfortable as providing useful insights. We expect some papers, and some witnesses in public forums, to show advocacy of their own positions, but we hope in such cases to end up with a sufficiently wide range of views that even those who are ready to take sides will view these efforts as constructive and educational for all of us.



This brings us to the nature of the meetings which open here today, and which we expect to extend over a total of 13 mornings. This first round focuses on demographic factors, then on employment and unemployment, and finally moves on to issues of prices, productivity, capital formation, and inflation. These hearings represent an introduction to the study in general, not any single area exclusively.

We plan to treat each session as a panel meeting. I would like to suggest ground rules which will govern our procedures. I will call on each invited witness to summarize his views on the assigned topic for the morning in about 10 minutes. I urge strongly that each invited speaker observe these time limits, so that we do not lose the primary focus of a discussion. Of course, witnesses can file longer or more formal prepared statements for the record. Only after we have heard each listed witness will we turn to questions or comments. I would also hope that the followup questions and comments will be kept fairly brief and germane.

I would like to add to my opening statement at this point. I have, for at least 20 years, been dealing with panel discussions. As a matter of fact, we were among those who originated them, in a day when it was considered scandalous for Congress to be holding informal panel discussions.

These panel discussions held during the fifties, convinced me more than almost anything else I have seen that democratic process works in an intellectual sense. The best ideas, the best insights, come out of exchanges, in a free discussion between a variety of people, some of whose purpose is primarily intellectual, and some whose approach is political.

That is what we can achieve, a synthesis, an approach that will be viable in the real world as well as in the theoretical world. That depends, of course, on a great deal of participation, as far as Members are concerned.

I have seen, in my own experience, in the early fifties, that it did not take a great number of Members to be present to leaven the discussion, not because they could contribute the new ideas or original ideas, but that they could clearly understand the difficulties confronted in politics in realizing those ideas, and might be able to contribute something to the reality of changes.

Since the early fifties, I am inclined to believe that those discussions must have been worth the time. I hope we will have additional Members participating, but Congress has become so busy with its routine, that it is very difficult to get Members to get involved in more than the routine that faces them each day.

In that event, we can rely on our conclusions.

At this point, it seems appropriate to me to say that these papers, interesting as they will be to me and to some of us, will be worthless unless we reach some conclusions that have a fundamental effect on the actions taken over a period of time.

To return to my statement, all those seated around the tables will have turns within the limits of time. Because the members of the committee have not had the same opportunity to sit in on all the months of staff discussions which the staff and resource people have enjoyed, with one possible exception, myself, and I have not sat in on all of them, but I have sat in on a great many of them, it

is only proper that they will have first opportunity to engage in the dialog. At every panel meeting each day, we will have appropriate representatives of the special study staff, the regular staff of the Joint Economic Committee, an area director of the SSEC, and a resource person from the Congressional Research Service. We also invite the visiting witnesses—panelists—to ask questions of each other.

As chairman, I will have the task of recognizing individuals with questions or comments, and of guiding the direction of the discussion toward the major issues of the panel for the day in question.

I would like to say that this is the longest opening statement I have made in my 30 years in Congress. I am proud of that, as a matter of fact, because there have been many longer statements presented than this one.

Rather than repeat all of these remarks each day, I have had this statement duplicated, so that participants on following days can read these both for orientation purposes and to understand the ground rules under which each panel will operate.

I will introduce the first of the panelists to speak for approximately 10 minutes.

Mr. Peter A. Morrison is a senior demographer, population analyst, at the Rand Corp., California. He has taught at the University of Pennsylvania department of sociology. He is a consultant to the National Commission on Population Growth in America's Future, served on the board of directors of the Population Association of America. He earned his Ph.D. at Brown, principal research interests include local and national population related to population changes in urban growth, dynamics of demography, demography of families, and applied demographic forecasts.

Mr. Morrison, please proceed.

#### STATEMENT OF PETER A. MORRISON, SENIOR DEMOGRAPHER, THE RAND CORP., SANTA MONICA, CALIF.

Mr. MORRISON. The past two decades have seen major demographic shifts, including changes in the size, structure, and spatial distribution of the population, and the composition of the households and families into which the population is grouped.

My presentation this morning has a twofold purpose: First is to provide a factual description of contemporary and forthcoming population trends; second is to highlight the principal linkages between this demographic context and the Joint Economic Committee's broader concerns.

In addressing these questions, I have drawn on the results of research supported by the National Institute of Child Health and Human Development and the Economic Development Administration. The views and conclusions expressed here, of course, are my own and should not be interpreted as representing those of the Rand Corp. or any of the agencies sponsoring its research.

Let me highlight the demographic topics discussed in the major sections of my prepared statement. First, U.S. population growth has moderated, and the outlook is for continued slow growth. A transition to stability, or zero population growth, appears to be underway. An important consideration is that, as the population growth slows, it will not do so uniformly in every place, or for all

age groups. Some places will face rapid growth, while certain others—like New York State—are destined to feel the effects of population decline well before the rest. Likewise, the population will continue to increase in certain age ranges but decline in others.

This unevenness of change has an important bearing on how the Nation will experience the gradual transition to stability, which, in national terms, will extend well into the 21st Century.

Change in American fertility has been a key factor here. I have shown in figure 1, what the past and projected fertility trends look like. You can see that presently fertility stands just above its historic low.

I want to emphasize, however, that the importance of changing fertility goes beyond the simple arithmetic of national growth. As fertility changes, the population's age structure is transformed.

This means, among other things, lower school enrollments, and, eventually, larger social security payments. As a basic determinant of the population's age structure, shifts in fertility may have intense and long-lasting social, fiscal, and political effects, a point elaborated on in my prepared statement.

What about the future outlook for fertility? As you can see from figure 1, we must consider a range of projections. There are uncertainties, but these uncertainties are well defined, and there is a substantial body of evidence on which to base an informed judgment.

In my judgment: (1) The long-term trend in fertility is very unlikely to rise above the level depicted in the high projection—series I; (2) it is plausible that fertility could drop below the low projection—series III; (3) finally, fertility is almost certain to become more volatile on a year-to-year basis than it has in the past, as couples exercise more effective control over whether and when to have children in response to economic conditions.

Intertwined with this trend toward smaller families has been a sharp increase in the percentage of wives who earn income outside of the home, and correspondingly, in the percentage of families that enjoy two paychecks.

In 1977, 46 percent of wives were in the labor force, compared with only 24 percent in 1950. Among today's working age men, by comparison, 78 percent are in the labor force—about 10 percentage points lower than in 1950.

Families with at least two workers are the mode today, and in my judgment, this trend will advance considerably further in the years ahead. I base this judgment on the fact that there has been a fundamental shift in the way that young wives order their careers as mothers and income earners. Wives are starting to work earlier in life; they are continuing to work after children arrive; and their attachment to the labor force is more permanent. If you do some sophisticated cohort comparisons between today's young wife and her counterpart a decade or more ago, you find that many more of today's young wives are likely to be working in their older years than before, and they will more often hold full-time jobs.

I regard this set of interconnected demographic changes—smaller families and the changing economic position of wives—as among

the most profound contemporary influences on our society and economy.

Later on I deal with the pressures of a changing age profile. A growing population, of course, is one major driving force behind expanding demand for public services, and rising revenues to support those services. But many service demands grow in proportion to the population in specific age ranges. As I indicated, various age ranges are growing or declining at different rates and will continue to do so by virtue of the unevenness and imbalance in our present age structure.

Between 1970 and 1976, for example, the population aged 5 to 13 declined 11 percent, which, of course, has exerted pressure for closing schools and laying off teachers.

The population aged 25 to 34 increased 27 percent, which has crowded the labor market for young people. This unevenness is embedded in the age structure. There is nothing we can do about it. It invites that metaphor of the python swallowing the pig.

Changing settlement patterns are of major importance in this overview. Since today's other witnesses will discuss specific aspects of this, I shall limit myself to a very broad review of trends.

I do wish to insert for the record two papers of my own: "Current Demographic Change in Regions of the United States," and "How Demographers Can Help Members of Congress."

Representative BOLLING. We would like to have them and when we receive them we will decide how we want to use them.

[The papers referred to follow:]

CURRENT DEMOGRAPHIC CHANGE IN REGIONS OF THE UNITED STATES

Peter A. Morrison

November 1977

P-6000

SUMMARY

Within the last decade, the falloff in the birthrate combined with changes in regional migration patterns have made migration a powerful influence in determining which areas of the nation grow and which do not. As a consequence, it has taken on a political weight beyond its demographic and economic import.

More generally, demographic change has been a catalyst for larger political issues that have been quick to mature in a period of economic depression and energy shortages. The current situation of the Northeast, for example, illustrates how a regional shift in net migration in the context of an overall drop in the birthrate can halt population growth and weaken the political influence of an historically dominant region.

On a national scale, the new patterns of movement are away from large metropolitan areas and toward nonmetropolitan areas, apparently reversing the historical trend. But analysis on a regional basis shows that the change is more subtle. It is less a flight to the wilderness than a march toward new urban frontiers. Growth in the metropolitan population is shifting away from mature industrial subregions (e.g., the Northeastern Metropolitan Belt and the Lower Great Lakes Industrial subregions) and toward subregions in the South and West. In the non-metropolitan sector, there has been a strong and pervasive increase in net migration. In part, this increase reflects the traditional pattern of growth in the vicinity of metropolitan centers, but it also results from a new pattern of developing specialized activities in areas located beyond the immediate sphere of metropolitan life. These include: resource extraction (e.g., in the Southern Appalachian Coal Fields), recreation (e.g., in Northern New England), and retirement (e.g., in the Ozark-Ouachita Uplands).

As the American predilection to migrate fosters rearrangement of the population, it also restructures the balance of political power and arouses territorial instincts. The current flows of net migration are altering the status quo along a broad front and evoking protest.

from both the gainers (who support no-growth movements) and the losers (who support federal no-growth subsidies) in this population lottery. Among the specific concerns are: How many residents can a region claim as its own (which partly determines its share of federal aid)? What are migration's effects on a region's stock of skilled and educated workers, on the one hand, and needy dependents on the other? What is the impact of undocumented aliens in those few states and large metropolitan centers to which the majority of aliens make their way? What, if anything, can be done to ease the institutional agonies entailed in reversing an earlier process of expansion to accommodate the cessation of population growth?

In an era of slowed population growth nationally, the ebb and flow of migration will figure prominently in both the fortunes of particular regions and the public debate about regional change. Three general policy approaches are distinguished for dealing with the issues that migration poses:

(1) Control or redirect migration flows. Policies might be designed, for example, to blunt forces that impel out-migration from the Northeast; to steer Sunbelt in-migrants away from areas judged to be growing too rapidly; or to assist certain target groups (e.g., unemployed youth) desiring to relocate to job-surplus areas.

(2) Ameliorate the visible consequences of migration. Under this approach, policies would focus on assisting localities in dealing with the common problems that are imposed by regionwide growth and decline.

(3) Federalize the redistribution of resources to complement the pattern of migratory redistribution. Acknowledging that some regions inevitably will gain and others lose in terms of the distinctive kinds of people that accumulate in places, the third policy approach would transform such national problems as welfare dependency (which are disproportionately accumulated in certain regions) into national responsibilities.

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The Rand Corporation  
Santa Monica, California 90406

CURRENT DEMOGRAPHIC CHANGE IN REGIONS OF THE UNITED STATES<sup>\*</sup>

by

Peter A. Morrison

The Rand Corporation, 1700 Main Street, Santa Monica, Calif. 90406

I. INTRODUCTION

People with strong bonds to a region become aroused, understandably, when they perceive threats to the economic, social, and political interests of their region. The most basic kind of threat--and probably the most difficult to deal with--attaches to population change in a region, especially when the rate of change is accelerated. Fertility, mortality, and migration continuously alter the composition and size of any population, but so gradually in most places that few can realize how thorough and potent the process is. When for a host of reasons the rate of change speeds up, the more rapid alteration of the population disturbs social, economic, and political arrangements not only within regions but between them. The traditional power bases in the nation become reshuffled.

Signs of such realignment are today cropping up locally and especially nationally. In late 1975, for example, at the height of New York City's first skirmish with bankruptcy, the New York Daily News carried the stunning headline, "FORD TO CITY: DROP DEAD!" In 1976 a virtually unknown and modestly experienced politician from the Deep South was elected president of the U.S.

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\* Paper presented at a conference on "Alternatives to Confrontation: A National Policy Toward Regional Change," sponsored by the Lyndon Baines Johnson Presidential Library and the Lyndon B. Johnson School of Public Affairs, and held at the University of Texas at Austin, September 24-27, 1977.

This paper draws on research supported by a grant from the Economic Development Administration, U.S. Department of Commerce. The author thanks Judith P. Wheeler, Will Harriss, Phyllis Ellickson, Ira S. Lowry, David Lyon and Kevin F. McCarthy for helpful comments on earlier drafts.



The shifts in political power exposed in these separate events reflect the massive demographic transformations that have been quietly under way for a decade which, taken together, have destabilized the social and economic status quo in a large number of places.\* A falloff in the birthrate, reversal of the historic trend in migration from rural to urban settings, and redirection of regional population movements have acted as a single force to alter the national landscape of growth and decline. Like wind drifting snow, they have created new features, obliterated old ones, and in some places exposed what lies beneath.

The falloff in the birthrate has throttled back the rate of population growth nationally and, in the process, revealed migratory comings and goings as the principal determinant of local growth and decline in many places. Federal statistics now register the beginnings of population decline in 36 of the nation's metropolitan areas, partly as a result of the low birthrate but mostly due to the excess of departing migrants over arriving ones. As the cities' magnetism has waned, population has stopped growing or begun to decline--a situation generally regarded as the prelude to economic stagnation--and has severely strained traditional mechanisms of municipal finance.

The counterpart of this trend toward urban decline is the "rural renaissance"--the revival or acceleration of population growth in small cities and towns, even those that are remote from metropolitan areas. These small, once stable communities are ill-equipped to deal with sudden population growth. Like new celebrities they lack the full array of legal and institutional structures for coping with unaccustomed attention.

The most complex facet of this demographic transformation--the redistribution of population among regions--has the most far-reaching implications. The changing directions of internal migration during the 1970s signal, and at the same time reinforce, new patterns in the regional distribution of economic vitality. These shifts are

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\* See George Sternlieb and James W. Hughes, "New Regional and Metropolitan Realities of America," Journal of the American Institute of Planners, Vol. 43, No. 3 (July 1977), pp. 227-241.

responsible for a variety of new regional conflicts of interest as well as for the new regional political coalitions whose power is just starting to be felt. Demographic change has been a catalyst for larger political issues that have been quick to mature in a period of economic depression and energy shortages. The widely publicized regional shifts of population in this decade have given rise to the "Sunbelt" and the "Frostbelt" (not to mention other regions that the media have dubbed the "Welfare Belt," the "Brain Belt," the "Smog Belt" and so forth). Although the geographic boundaries of these regions are loosely defined at best, the interests and grievances they share are quite specific--and a grievance more often defines a region than a boundary.

This "tournament of the belts" is a kind of preliminary bout to the main event--the tension between growing and declining cities. Here the contending factions are made up of places--the Clevelands and Detroits, where growth has stopped, and the Tucsons and Boulders and Petalumas, which, far from enjoying their growth, often see themselves as victimized by the access that migration confers on places. The broad redirection of migration flows as measured in regional statistics is most palpable at the local scale, especially where an earlier trend has been completely reversed.

The severity of the problems confronting some areas has prompted demands for relief--no-growth policies have been adopted in a number of places, while others are clamoring for subsidies for population that isn't there. One might suppose that migration rates had taken a strong upswing, but that is not the case. What has happened is that the population growth which was conferred more or less uniformly throughout the nation during the postwar baby boom decades has stopped, exposing the effects of the highly differential growth conferred by migration. Moreover, besides creating a quite different distribution pattern, these two means of growth--natural increase vs. migration--produce quite different political implications. Population gained by new births will not enter a voting booth for 18 years. The bulk of the population gained (or lost) by migration, however, represents immediate political power. For a decade or so, unusually large numbers of people--the baby boom generation--have been entering not only the labor and housing markets but also the prime ages for migrating.

## II. THE NATIONAL DEMOGRAPHIC CONTEXT\*

Over the past decade, growth of the national population has slowed considerably, owing to a sharp decline in fertility with no offsetting change in mortality. The decline in fertility reflects an interplay between the widespread use of highly effective contraceptive methods and changing attitudes toward childbearing. While contraceptive practice was being modernized over the last 10 years, fertility norms were shifting downward; young adults were shying away from large families and generally were postponing childbearing.

Estimating the impact of lower fertility now and in the future is complicated by the fact that while birthrates continue at an all-time low, household formation is at an all-time high. The average annual rate of increase in households rose from 1.8 percent during 1955-1965 to 2.3 percent during 1970-1976, an artifact largely of the post-World-War-II baby boom (which has now matured into a "young adult" boom). As Figure 1 shows, the dissimilarity in population and household growth trajectories is projected to persist into the foreseeable future (13 years).

That dissimilarity blurs the growth-slowing effects of lower fertility, for "population" can be said to be contracting or expanding, depending on whether people or households is the unit of measurement. That is why in many cities where population is declining--South Bend, Indiana, for example--public institutions must nevertheless meet the needs of an expanding "population" of households.

### CHANGED PATTERNS OF MIGRATION

Like fertility trends, migration trends have taken new directions whose effect generally is to intensify the impact of lower fertility in metropolitan areas and nullify it in nonmetropolitan areas. As

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\* This section is drawn from two earlier papers prepared by the author: New York State's Transition to Stability: The Demographic Outlook, The Rand Corporation, P-5794, January 1977; and Emerging Public Concerns over U.S. Population Movements in an Era of Slowing Growth, The Rand Corporation, P-5873, October 1977. Also see: Thomas J. Espenshade and William J. Serow, eds., The Economic Consequences of Slowing Population Growth (New York: Academic Press, forthcoming).

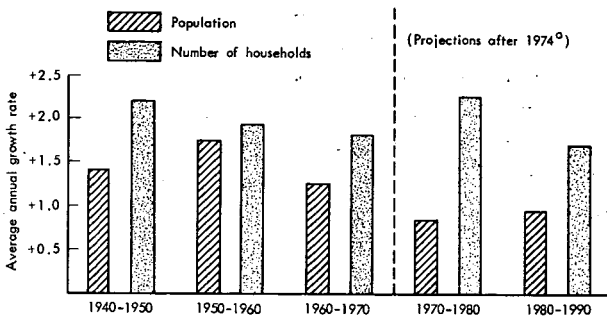


Fig. 1--Annual growth rates in population and number of households, 1940-1974, and projections to 1990

<sup>a</sup>Population projection: Census Series II  
Household projection: Census Series C

Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 601 and 607.

is now widely known, national statistics show that more Americans are moving away from metropolitan areas than are moving to them, reversing a long established urbanization trend.\* Each year between 1970 and 1975, 131 people moved out of the metropolitan sector for every 100 who moved in. For the most recent period measured (1975-1976), the

\* See: Calvin L. Beale, The Revival of Population Growth in Non-metropolitan America, ERS-605, Economic Development Division, Economic Research Service, U.S. Department of Agriculture, June 1975; Curtis C. Roseman, Changing Migration Patterns Within the United States, Resource Papers for College Geography, No. 77-2, Association of American Geographers, Washington, D. C., 1977; John M. Wardwell, "Equilibrium and Change in Nonmetropolitan Growth," Rural Sociology, Vol. 42, No. 2 (Summer 1977), pp. 156-179; C. Jack Tucker, "Changing Patterns of Migration between Metropolitan and Nonmetropolitan Areas in the United States: Recent Evidence," Demography, Vol. 13, No. 4 (November 1976), pp. 435-443; Peter A. Morrison, "Rural Renaissance in America? The Revival of Population Growth in Remote Areas," Population Bulletin, Vol. 31, No. 3 (Population Reference Bureau, Inc., Washington, D. C., 1976).

reversal continued.\* As a result, nearly two-thirds of all nonmetropolitan counties are gaining migrants, compared with only one-quarter in the 1960s and one-tenth in the 1950s.

The underlying demographic structure of these shifts is suggested by data comparing the direction of population change in the decade of the 1960s with that of 1970-1975 (Table 1). The reversal of net migration is particularly noticeable for counties with little commuting and those that are entirely rural and not adjacent to an SMSA (Standard Metropolitan Statistical Area). Clearly, the migration reversal cannot be explained away as just more metropolitan sprawl or "spillover," for it is affecting distinctly remote and totally rural nonmetropolitan areas as well as those adjacent to metropolitan centers.\*\* The resulting net migration to these places may be due to less "push," i.e., greater retention of native residents who no longer feel compelled by economic pressures to migrate, or to more "pull," i.e., increased inflow of urbanites from outside who are drawn there for a variety of reasons.

In any case, nonmetropolitan areas have become distinctly more attractive both to their residents and to outsiders whereas metropolitan areas have become less so. Paradoxically, though, migrants to the nonmetropolitan sector no longer clearly favor the high-income areas within it--an indication, perhaps, that scenery has begun to compete with salary.\*\*\*

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\* Nonmetropolitan areas have continued gaining migrants after the economic depression earlier in the decade. Between 1975 and 1976, migrants to the metropolitan sector were outnumbered by those moving out by a ratio of six to five. Source: U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 305, January 1977.

\*\* Related to this point, see: D. R. Vining, Jr. and A. Strauss, "A Demonstration that the Current Deconcentration of Population in the United States is a Clean Break with the Past," Environment and Planning A, Vol. 9 (1977), pp. 751-758.

\*\*\* Calvin L. Beale, "Current Status of the Shift of U.S. Population to Smaller Communities," paper presented at the annual meeting of the Population Association of America, April 1977, St. Louis.

Table 1

COMPONENTS OF POPULATION CHANGE FOR GROUPS OF METROPOLITAN AND NONMETROPOLITAN  
COUNTIES: 1960-1970 AND 1970-1975

Population Category	Provisional 1975 Population (000's)	Annual Population Change Rate		Annual Natural Increase Rate		Annual Net Migration Rate <sup>a</sup>	
		1960- 1970	1970- 1975	1960- 1970	1970- 1975	1960- 1970	1970- 1975
<b>UNITED STATES TOTAL</b>	213,051	1.3	0.9	1.1	0.7	0.2	0.2
<b>METROPOLITAN</b>							
Total, all SMSAs <sup>b</sup>	156,098	1.6	0.8	1.1	0.7	0.5	0.1
>1.0 million	94,537	1.6	0.5	1.1	0.6	0.6	-0.2
0.5 - 1.0 million	23,782	1.5	1.0	1.2	0.8	0.4	0.3
0.25 - 0.5 million	19,554	1.4	1.3	1.2	0.8	0.2	0.5
<0.25 million	18,225	1.4	1.5	1.2	0.8	0.2	0.7
<b>NONMETROPOLITAN</b>							
Total, all nonmetro- politan counties	56,954	0.4	1.2	0.9	0.6	-0.5	0.6
<i>In counties from which:</i>							
≥20% commute to SMSAs	4,407	0.9	1.8	0.8	0.5	0.1	1.3
10% - 19% commute to SMSAs	10,011	0.7	1.3	0.8	0.5	-0.1	0.8
3% - 9% commute to SMSAs	14,338	0.5	1.2	0.9	0.6	-0.4	0.6
< 3% commute to SMSAs	28,197	0.2	1.1	1.0	0.6	-0.8	0.5
<i>Entirely rural counties<sup>c</sup> not adjacent to an SMSA</i>	4,661	-0.4	1.3	0.8	0.4	-1.2	0.9

SOURCE: Unpublished preliminary statistics furnished by Richard L. Forstall, Population Division, U.S. Bureau of the Census; and Calvin L. Beale, Economic Research Service, U.S. Department of Agriculture.

<sup>a</sup>Includes net immigration from abroad, which contributes newcomers to the U.S. as a whole and to the metropolitan sector, thereby producing positive net migration rates for both.

<sup>b</sup>Population inside Standard Metropolitan Statistical Areas (SMSAs) or, where defined, Standard Consolidated Statistical Areas (SCSAs). In New England, New England County Metropolitan Areas (NECMAs) are used.

<sup>c</sup>"Entirely rural" means the counties contain no town of 2,500 or more inhabitants.

If the nonmetropolitan sector has become known in the 1970s for the revival of population growth, the metropolitan sector has become notorious for population loss.\* Where only one of the nation's 25 largest SMSAs lost population during the 1960s (Pittsburgh), fully 9 were declining as of 1975: New York, Los Angeles-Long Beach, Philadelphia, St. Louis, Pittsburgh, Newark, Cleveland, Seattle-Everett, and Cincinnati. Approximately one-sixth of the nation's 259 metropolitan areas were losing population at mid-decade, and one-third of metropolitan residents lived in areas of population decline.

It would be misleading to project a picture of widespread abandonment of urban and suburban territory in these declining metropolitan centers. On the contrary, most SMSAs are still growing, and even those with declining population overall contain communities which are continuing or even accelerating their growth, particularly on the metropolitan fringe. But migration is clearly differentiating among individual metropolitan areas, and its influence has become all the more apparent as the receding tide of natural increase has exposed the places that people are leaving.\*\* Migration, then, determines where and how soon the manifestations of slowdown in overall population growth will first appear (e.g., New York State); and, conversely, it is evident that even approaching zero population growth will not eliminate the impact of rapid growth somewhere (e.g., Houston or Fort Lauderdale).

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\* The post-1970 halt in metropolitan population growth has been observed in other countries as well. See, for example: Daniel R. Vining, Jr., and Thomas Kontuly, Population Dispersal from Major Metropolitan Regions: An International Comparison, Discussion Paper No. 100, Regional Science Research Institute, Philadelphia, Pa., September 1977; Norman Glickman, Growth and Change in the Japanese Urban System: The Experience of the 1970s, International Institute for Applied Systems Analysis, Laxenburg, Austria, August 1977.

\*\* William Alonso, "The Current Halt in the Metropolitan Phenomenon," paper prepared for the Symposium on Challenges and Opportunities in the Mature Metropolis, St. Louis, Mo., June 6-8, 1977.

### OUTLOOK FOR THE FUTURE

Judging from current fertility expectations and experience, a gradual transition to population stability--zero population growth--appears to be underway. For now, the most reasonable conditional forecast in light of current birth expectations is the Census Bureau's projection series II (associated with an ultimate completed cohort fertility rate of 2.1 births per woman).<sup>\*</sup> That projection indicates a slight rise from present levels to annual increases of 2.1 million during most of the 1980s. Thereafter, the annual increase falls in a range of 1.4 to 2.0 million during the 1990s and drifts lower in later years (Figure 2).

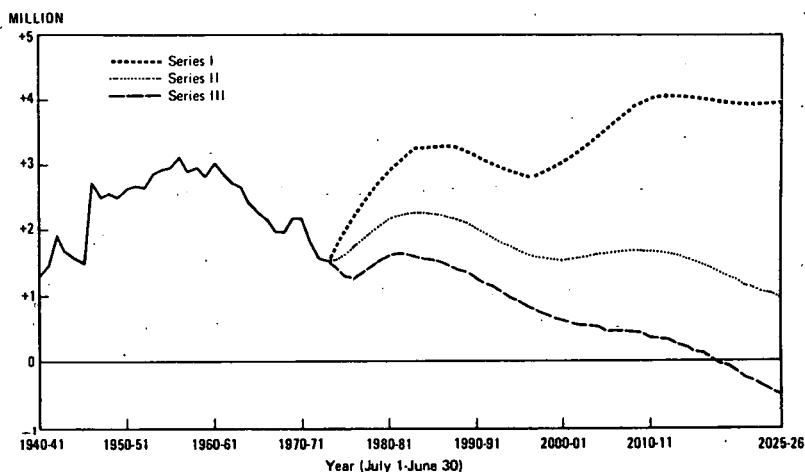


Fig. 2--Estimates and projections of annual population change: 1940 to 2025

<sup>\*</sup>In 1976, wives 18 to 24 years old expected a lifetime average of 2.1 births. When adjusted to include those women who have not yet married or who will remain single, the birth expectations data suggest, as of this time, that the average lifetime fertility of all women 18 to 24 will be about 2.0 births. Source: U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 300, November 1976.



Events can upset forecasts, of course. Future fertility, the principal determinant of population growth, is uncertain; future growth rates may be higher or lower than those in the series II projection (which I regard as most reasonable). For that reason, the Census Bureau also compiled projection series I (higher fertility, associated with an assumed 2.7 births per woman) and projection series III (lower fertility, associated with an assumed 1.7 births per woman). These projections, also shown in Figure 2, bracket what most demographers would regard as a reasonable range of future possibilities.\*

Trends in migration are even more difficult to forecast, because the changing spatial distribution of economic opportunities to which migrants respond lies largely beyond our predictive reach. The changing fortunes of geographic regions result from a complex accumulation of forces, whose future course is as much a matter of accident as of intent.\*\* It is unclear whether the 1970s reversal of migration between metropolitan and nonmetropolitan sectors will prove to be temporary or long-term, for the shift coincided with and may be due in part to the economic recession of the past several years. If so, a resumption of metropolis-bound migration would be expected with improvement in the economy (although while the latter has occurred, the former has not). At the same time, the taste for rural living may persist, so that metropolitan and nonmetropolitan growth will co-exist in the future. Whatever its nature and likely longevity, though, the migration reversal has manifested itself diversely in various geographic regions of the United States.

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\* A substantial body of evidence exists on which an informed judgment about future fertility trends can be based. In my judgment, the long-term trend of future fertility (and hence population growth through natural increase) is unlikely to rise above the level assumed in series I; it seems plausible, on the other hand, that fertility could fall below the level assumed in series III.

\*\* For further detail, see Roger J. Vaughan, The Urban Impacts of Federal Policies: Vol. 2, Economic Development, R-2028-KF/RC, The Rand Corporation, June 1977; U.S. Senate, Committee on Appropriations, Patterns of Regional Change--the Changes, the Federal Role, and the Federal Response: Selected Essays, Committee Print, October 1977, Government Printing Office, Washington, D.C.

### III. NEW PATTERNS OF REGIONAL GROWTH AND DECLINE

While national population growth is slowing, the fortunes of different regions present a complex picture of growth and decline with quite marked breaks with the past. I have restricted my discussion to the post-1950 period and to just two of the many possible systems of regions with which demographic trends could be comprehended.\* These are: (1) the nine Census Divisions (and the four Census Regions in which they are nested), and (2) the 26 Economic Subregions, formulated and applied by Calvin Beale and his associates at the U.S. Department of Agriculture. The two types (Figures 3 and 4) each have distinctive advantages for analytical purposes.\*\* Data for the first of these scales enables me to contrast developments in the Northeast and the South and to draw attention to the first of the three principal points I want to make:

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\*Regions may be defined as: (1) areas of relative homogeneity, with borders determined by discontinuities (homogeneous regions), (2) heterogeneous areas, whose different parts complement and support one another and typically form a functional hierarchy (polarized regions), or (3) a space whose various parts depend on the same set of decisions (planning regions). For further discussion of the rationale for various regionalizations, see Niles M. Hansen, A Critique of Economic Regionalizations of the United States, Research Report RR-75-32, International Institute for Applied Systems Analysis, Laxenburg, Austria, September 1975.

\*\*Census Divisions and Regions are convenient mostly as territorial common denominators for which data are available, especially when our analyses include earlier decades of this century. Also, because they are composed of whole states, they are regions with administrative and political meaning.

Economic Subregions divide the nation into 26 economically and culturally distinct groupings of counties. Blind to the often artificial boundaries that separate states, they reflect the administratively untidy economic and cultural geography of the nation: differences in regional resource endowment, in economic activity, in the evolution and present form of human settlement, and so forth. The analytical strengths of using subregions are straightforward: (1) They are entities that have had historically persistent demographic characteristics that people seem to recognize and understand, and (2) they reflect the considered judgment of knowledgeable persons, not narrowly conceived administrative criteria.

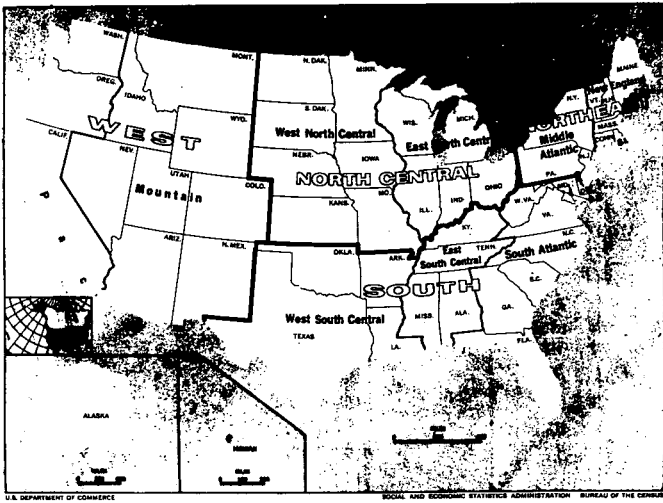


Fig. 3 - Census Regions and Geographic Divisions of the United States

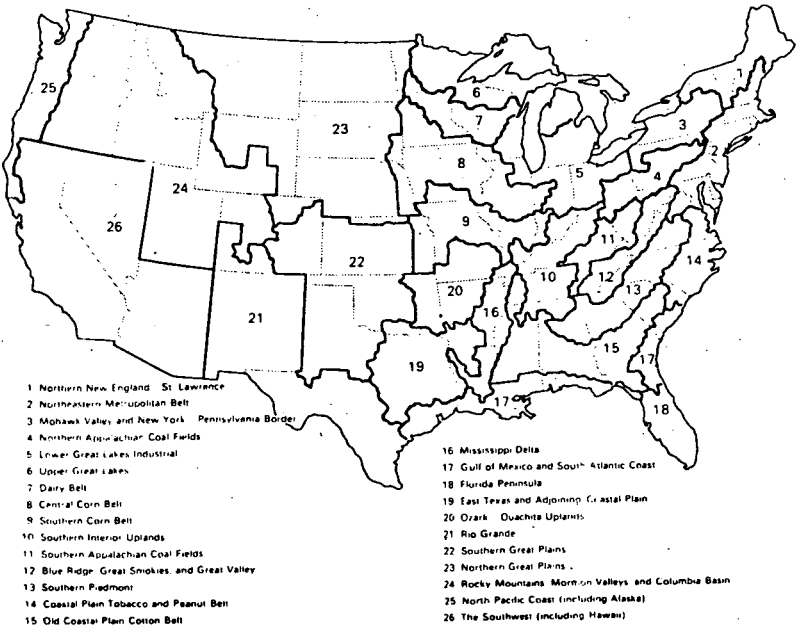


Fig. 4--Twenty-six Economic Subregions

- o The shift in migration, together with moderating natural increase, is determining where the symptoms of national decline first appear.

Data at the subregional level allow me to demonstrate my second and third points:

- o Migration continues to support metropolitan growth in the 1970s, although the locus of this growth has shifted away from the Northeast;
- o Nonmetropolitan settlement patterns everywhere have evolved beyond the point where proximity to metropolitan activity is a prerequisite for local growth.

#### REGIONAL MIGRATION SHIFTS

Roughly since 1970, underlying patterns of regional migration have transformed population growth at the regional scale (see Figure 5). The South's 5.1 million population increase in the first 5 years of this decade is a sharp departure from other recent five-year periods. The Northeast, in contrast, has entered an era of virtual stability, and the North Central region's population increase has slowed considerably.

The current situation of the Northeast illustrates how a regional shift in net migration, combined with the overall drop in the birthrate, can halt population growth and weaken the political influence of an historically dominant region. Natural increase has diminished everywhere (although somewhat more so in the Northeast than in other regions) since 1960 (Table 2). The Northeast gained 2.3 million people through natural increase between 1960 and 1965, but only 1.0 million between 1970 and 1975. Net migration, however, has changed very differently in the Northeast than in the South. Before 1970, the Northeast had nominal five-year gains of several hundred thousand from migration; thereafter the region began to suffer a sizable loss of 700,000 between 1970 and 1975. This loss has intensified since 1972, and the Northeast now registers net population decline since out-migration exceeds the population's natural increase.

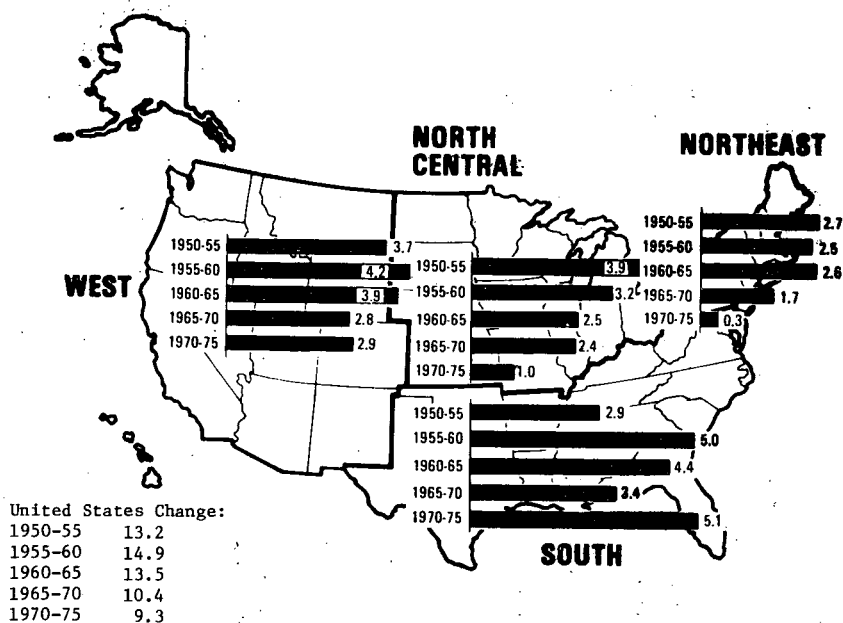


Table 2  
Population Change by Component for Each Region:  
Five-Year Periods, 1950 to 1975

(In millions. Periods begin July 1)

Period	Natural increase					Net migration				
	United States	Region				United States	Region			
		North-east	North Central	South West	South		North-east	North Central	South West	South
1950-55	12.1	2.3	3.5	4.5	1.9	1.0	0.4	0.4	-1.6	1.9
1955-60	13.2	2.6	3.9	4.7	2.2	1.7	0.0	-0.7	0.3	2.0
1960-65	12.0	2.3	3.3	4.2	2.2	1.5	0.3	-0.8	0.3	1.7
1965-70	8.7	1.6	2.3	3.0	1.7	1.7	0.1	0.1	0.4	1.1
1970-75	6.8	1.0	1.8	2.5	1.5	2.5	-0.7	-0.8	2.6	1.4

Source: U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 640, November 1976, Table B.

These losses have been more severe in the three middle Atlantic states (New York, New Jersey and Pennsylvania) than in the five New England states which make up the remainder of the Northeast.\*

The sharply increased streams of migrants out of some of the nation's colder regions have been gravitating south and west. Florida, for example, added 22 percent to its population between 1970 and 1976. More important, though, migratory growth appears to be diffusing throughout the South and West in this decade (see Figure 6). Prior to 1970, the large number of in-migrants into Florida had offset what was, in fact, a migratory loss for the rest of the South (Table 3). But since 1970, Florida's ballooning net in-migration has been matched by an equally large in-migration to the rest of the region. This migration into the other southern states is noteworthy since it foreshadows a future wave of growth throughout the region.

The nation's other fast-growing region, the West, shows a comparable diffusion of migratory growth. California's migratory experience no longer dominates the West's regional migration growth as it did prior to 1965 (Table 3). Between 1970 and 1975, the other 12 states in the West gained 1.0 million through net in-migration (more than twice California's share), compared with only 0.2 million (less than one-seventh of California's share) between 1960 and 1965. Gains in the Mountain States were especially impressive: In the first six years of the 1970s, these eight states gained 913,000 through net in-migration, compared with 307,000 during the entire decade of the 1960s.

Overall, these regional trends are departures from the past, made all the more apparent locally by the low rate of natural increase. The course these migration trends will follow in the future is difficult to forecast, however, because their coincidence with an economic depression makes this an atypical period. As the sharply contrasting developments in the Northeast and the South clearly demonstrate,

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\* Between 1970 and 1976, for example, 851,000 more persons migrated away from these three states than migrated to them, resulting in a 2.3 percent loss of the Middle Atlantic states' 1970 population. In conjunction with comparatively low natural increase, this loss has virtually halted population growth.

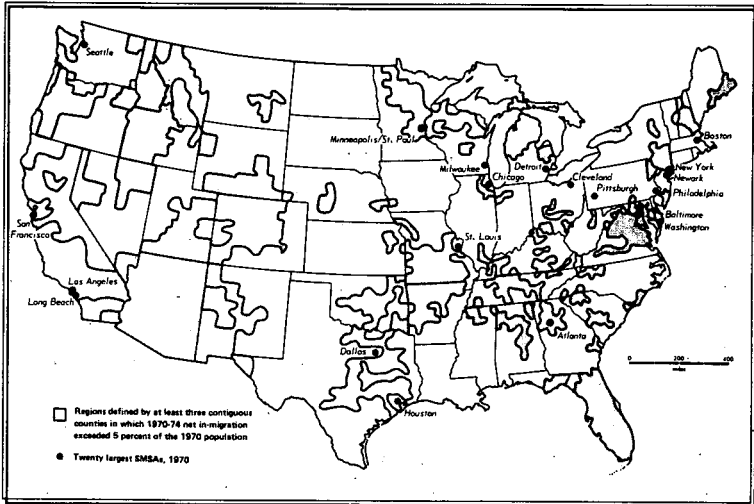


Fig. 6 - Regions of Relative Growth Due to Migration, 1970-1974.

Source: Curtis C. Roseman, Changing Migration Patterns Within the United States, Resource Papers for College Geography, No. 77-2, Association of American Geographers, Washington, D.C., 1977, Figure 10.

Table 3

Net Migration for Selected Areas: 5-Year Periods, 1950 to 1975

Period	California	Rest of West	Florida	Rest of South
<i>In millions</i>				
1950-55	1.6	0.3	0.7	-2.3
1955-60	1.7	0.4	0.9	-0.6
1960-65	1.5	0.2	0.6	-0.4
1965-70	0.5	0.6	0.7	-0.3
1970-75	0.4	1.0	1.4	1.2
<i>As percent of beginning population</i>				
1950-55	14.7	3.0	24.8	-5.3
1955-60	12.3	4.4	24.9	-1.3
1960-65	9.7	1.8	12.8	-0.8
1965-70	2.7	4.1	11.7	-0.5
1970-75	2.1	6.7	19.9	2.1

Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 640, November 1976, Table C.

however, shifting migration, together with moderating natural increase, is determining where and when the symptoms of national population slowdown first appear.

#### SUBREGIONAL PATTERNS

As we have seen, the attractiveness of metropolitan areas nationally has weakened since 1970, and a growing number of individual areas have begun to decline. At the same time, there has been a strong revival of population growth in nonmetropolitan areas. Are these national shifts pervasive or are they more prevalent in some parts of the nation than in others?

Recent unpublished data kindly furnished by Calvin Beale show the net migration into or out of the individual counties that make up each of the 26 economic subregions shown in Fig. 4. They show the rate at which counties in a subregion (not the entire subregion) are gaining or losing population through migration. That gain or loss, of course, comes about through an unknown combination of migration streams among and within subregions. The moves producing these changes may be intraregional (i.e., among counties within a subregion) or they may be interregional. Because we cannot distinguish between the two, we cannot gauge gains or losses for a subregion itself, only the average experience of counties within it, classified by type. Even so, there are clear and diverse patterns among the 26 subregions which do not show up in the aggregate national statistics showing a heightened out-migration from the metropolitan sector since 1970.

#### The Metropolitan Sector

The recent slowdown in metropolitan growth has been measured nationally, but its occurrence is far from uniform in all sections of the country. Metropolitan population growth has been halted in some sections of the country but accelerated in others by subregional population movements. Restricting our focus to the metropolitan sector, it is evident that the locus of migratory attraction is shifting away from the metropolitan counties in four subregions in the North and East for the most part and toward eight subregions in the South and West. Simply put, migrants are moving to metropolitan areas in



certain subregions and away from them in others. National metropolitan growth, then, continues and is even accelerating in certain areas, but they are not the same areas as before.

This pattern is illustrated in Fig. 7, which shows subregions where the metropolitan sector is losing migrants (vertical stripes) and gaining migrants (horizontal stripes) in the 1970s. The bolder patterns indicate that outflow or inflow has been initiated or intensified between this decade and the previous one--e.g., heavy vertical stripes signify a higher outflow rate during the 1970s than the 1960s or a shift to net out-migration following net in-migration during the 1960s.

There are seven subregions (confined mostly to the North and East) where net migration is withdrawing population from the metropolitan sector. Of these seven subregions, four (heavy vertical stripes) are experiencing new or more intense net out-migration during the 1970s. Metropolitan population in the Northeastern Metropolitan Belt (No. 2), for example, recorded net in-migration at 0.3 percent annually during the 1960s, but net out-migration at 0.4 percent annually thereafter. The overall result has been a decisive halt to metropolitan growth through a combination of out-migration and declining natural increase (as was seen for the Northeast region as a whole). For the remaining three subregions where there is net outflow from the metropolitan sector, the post-1970 out-migration is less intense than it was earlier; their metropolitan areas are still losing population through migration, but diminishingly so, and their populations have been less affected.

Most of the Southern and Western subregions show the mirror-image of this pattern. There, net migration is adding to the metropolitan population in 13 subregions. Eight of these have experienced net migration at an accelerated rate since 1970, in several instances reversing pre-1970 out-migration. An impressive illustration of such a reversal is seen in the Rio Grande Subregion (No. 21), where annual net migration for metropolitan counties changed from -0.8 percent during the 1960s to +0.8 percent thereafter.

Overall, metropolitan population growth has been halted in some sections of the country but accelerated in others by population

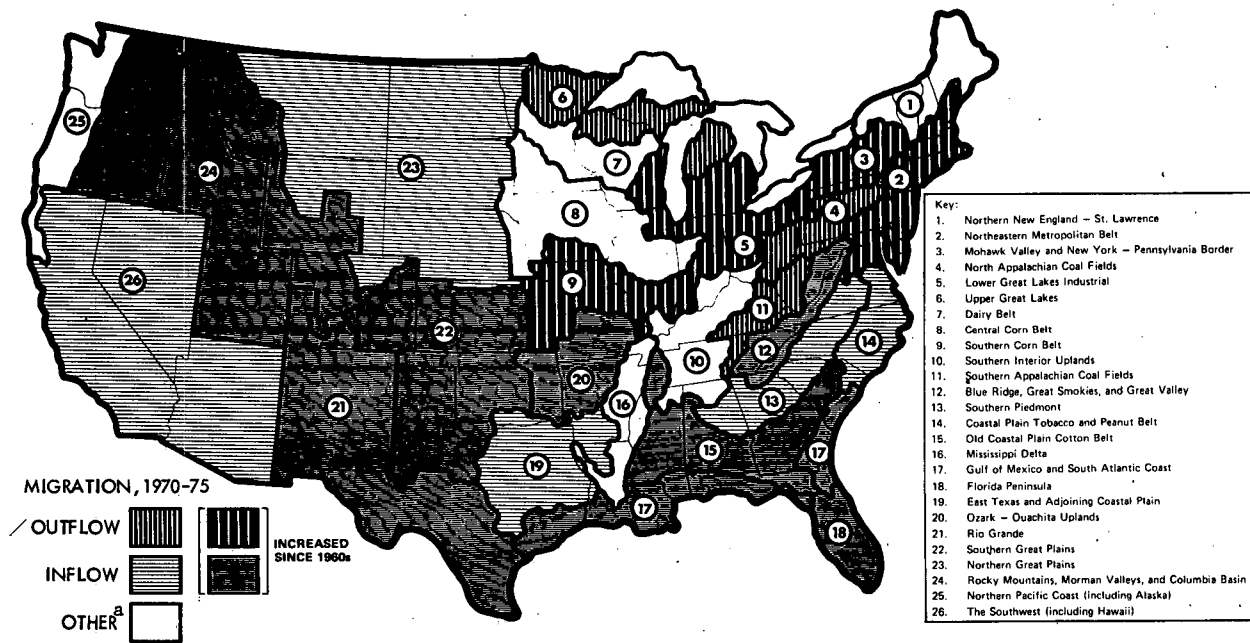


Fig. 7 — Metropolitan counties: the changing locus of migratory growth

<sup>a</sup>Nominal net migration; or no metropolitan population.

movement at the subregional scale. The geographic locus of migratory attraction (a barometer of economic opportunity) has shifted noticeably in the 1970s, and will to an extent perpetuate population and employment growth throughout much of the South and West.

#### The Nonmetropolitan Sector

The strong revival of nonmetropolitan population growth has been produced by a single change--reversal of the historic out-migration from the nonmetropolitan sector--but the reasons for this "rural renaissance" are multifaceted. Migration toward nonmetropolitan areas in the 1970s reflects a number of significant (often mutually reinforcing) influences.\* These areas are evolving along three basic dimensions.

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\* See: Beale, The Revival of Population Growth in Nonmetropolitan America, op. cit.; idem, "Rural Development: Population and Settlement Prospects," Journal of Soil and Water Conservation, Vol. 29 (1974), pp. 23-27; "A Further Look at Nonmetropolitan Population Growth Since 1970," American Journal of Agricultural Economics, Vol. 58, No. 5 (1976), pp. 953-958. The following recent studies, which focus on the combinations of influences at work in specific regions of the nation, are especially useful: James P. Allen, "Population Changes in the Nonmetropolitan West, 1970-1975," The Great Plains-Rocky Mountain Geographical Journal, forthcoming; E. Evan Brunson and Thomas D. Bever, Southern Growth Trends: 1970-1976, Research Report published by the Southern Growth Policies Board, Research Triangle Park, N.C., June 1977; C. Shannon Stokes, "Population Trends in Pennsylvania and the Northeast," Farm Economics, periodical published by Pennsylvania State University in cooperation with the Cooperative Extension Service, U.S. Department of Agriculture, University Park, Pa., July 1976; Glenn V. Fugitt and Calvin L. Beale, "Post-1970 Shifts in the Pattern of Population Change in the North Central Region," CDE Working Paper 76-17, Center for Demography and Ecology, University of Wisconsin, Madison, May 1976; John A. Kuehn and Curtis Braschler, New Manufacturing Plants in the Nonmetro Ozarks Region, Agricultural Economics Report No. 384, Economic Research Service, U.S. Department of Agriculture, September 1977; Richard L. Morrill, "What's Behind the Rural Recovery? Population Trends in the Pacific Northwest, 1970-1975," paper presented at the annual meeting, Association of American Geographers, Salt Lake City, April 1977; Wilbur Zelinsky, et al., Population Change and Redistribution in Nonmetropolitan Pennsylvania, 1940-1970, report submitted by The Pennsylvania State University's Population Issues Research Office to the Center for Population Research, National Institute of Child Health and Human Development, DHEW, November 1974.

The first is that of ease of access to the national metropolitan economy, a constraint which has been relaxed considerably in recent years by advances in transportation. Such advances have enabled more people to settle in locales which are separated from large urban centers without being isolated from them. The sharply accelerated migration into nonmetropolitan areas is partly a manifestation of metropolitan expansion along transportation routes--an evolution of metropolitan spatial form that gives rise to new urban nodes. Small, self-contained urban centers spring up in nonmetropolitan areas adjacent to existing metropolitan centers because business can now be efficiently transacted at a distance.

Industrial trends have also relaxed some of the traditional constraints on settlement patterns. Two noteworthy industrial trends are: (1) decentralization of manufacturing in response to reduced transportation costs, inexpensive land, and low wage rates in nonmetropolitan areas, and (2) the revival or expansion of energy extraction, and highly localized large-scale energy-related industrial development in the Rocky Mountain states.

What can loosely be termed changes in the American lifestyle comprise a third dimension of evolution. Included here are: (1) the trend toward earlier retirement and semi-retirement, which has multiplied the ranks of retirees and lengthened the interval during later life when a person is no longer tied to a specific place by a job, (2) new sources of income, such as pensions and other payments which were either earned elsewhere in younger years or are a transfer of public funds from taxes paid elsewhere.\* These new kinds of income have expanded retirees' roles as consumers, whose presence in an increasingly service-oriented society creates jobs wherever they go; and (3) an increased orientation at all ages toward leisure activities, caused in part by rising per capita incomes and centered

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\* See: Vernon Renshaw and Howard L. Friedenbergl, "Transfer Payments: Regional Patterns, 1965-1975," Survey of Current Business, Vol. 57, No. 5, May 1977, pp. 15-19.

on amenity-rich areas outside the daily range of metropolitan commuting.\*

A common feature of these several changes is that they have laid the foundation for expansion of nonmetropolitan employment. Servicing the arriving migrants and temporary residents provides opportunities which induce existing residents to stay and which also entice more newcomers. This synergistic development has appeared in locales as diverse as Northern New England and the Upper Great Lakes (popular as recreation areas), the Ozark-Ouachita Uplands (favored by retirees), and the Northern Great Plains (the site of energy-related industrial development).\*\* Although particular circumstances vary from place to place, the outcomes are much the same: initial base employment opportunities, however created, furnish the jobs that retain existing residents and draw opportunity-seeking migrants from elsewhere. The resulting population, larger and more affluent, enlarges local demand for goods and services, thereby creating new jobs for more migrants.

The changing economic fortunes of nonmetropolitan areas have manifested themselves diversely. Some subregions stand out because preexisting growth has accelerated sharply. What is more often noteworthy, though, is simply the reversal of previous decline, seen in

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\* See: Richard Lamb, Metropolitan Impacts on Rural America, Research Paper No. 162, Department of Geography, University of Chicago, 1975; and "Intra-Regional Growth in Non-Metropolitan America: Change in the Pattern of Change," paper presented at the annual meeting, Association of American Geographers, Salt Lake City, 1977. The latter study demonstrates that whereas much of the migration to nonmetropolitan areas before 1970 could be attributed to proximity to urban areas interacting with amenity appeal, migration in the 1970s to amenity-rich areas appears to have been freed from traditional distance constraints.

\*\* These developments are widespread and often highly localized, occurring in specific counties within these subregions. Useful regionally-focused studies are: Robert W. Marans, et al., Waterfront Living: A Report on Permanent and Seasonal Residents in Northern Michigan (Ann Arbor, Institute for Social Research, University of Michigan, 1976); Stephen J. Tordella, "Recreational Housing in Wisconsin Counties, 1970," Population Notes, No. 4, August 1977, published by the Applied Population Laboratory, Department of Rural Sociology, University of Wisconsin, Madison.

the comparison of a given subregion's nonmetropolitan population trends in the 1970s with those in the 1960s.

Adjacent counties. Accessibility is central to the idea of functional integration into the national metropolitan economy. Freeways and other means of transportation that have fostered the phenomenon of long-distance commuting afford metropolitan access to areas that lie considerable distances from centers of economic activity. If metropolitan size makes for economies of scale, then nonmetropolitan areas are increasingly able to "borrow" that size through daily access.\*

The Federal metropolitan-nonmetropolitan distinction was designed to reflect the presence or absence of social and economic integration into city life that is conferred by residence in a particular location.\*\* Since metropolitan and nonmetropolitan areas are defined in terms of whole counties, which are often geographically large and socioeconomically heterogeneous, the approximation to a functional definition is at best crude. Moreover, many persons who are classified as "nonmetropolitan" reside in counties that are within easy commuting range of metropolitan centers. A considerable proportion of these adjacent nonmetropolitan residents are functionally metropolitan: their lifestyles are more like those of the SMSA residents than those of people who live in remote rural areas.

This functionally metropolitan population consists mostly of persons residing in nonmetropolitan counties that are adjacent to presently defined SMSAs. These counties are the ones most likely to benefit from the outward dispersal of population from a neighboring metropolitan center.

The data in Figure 8, which refer to this "nonmetropolitan adjacent" sector, enable us to distinguish this "disguised metropolitan

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\* William Alonso, "Urban Zero Population Growth," Daedalus, Vol. 102, No. 4 (Fall 1973), pp. 191-206.

\*\* For many purposes, that area in and around a city where activities form an integrated economic and social system is considered a unit. The Standard Metropolitan Statistical Area (SMSA) was developed in 1960 as such a unit, for which many general purpose statistics are now tabulated. All persons who reside outside of SMSAs are defined as nonmetropolitan.

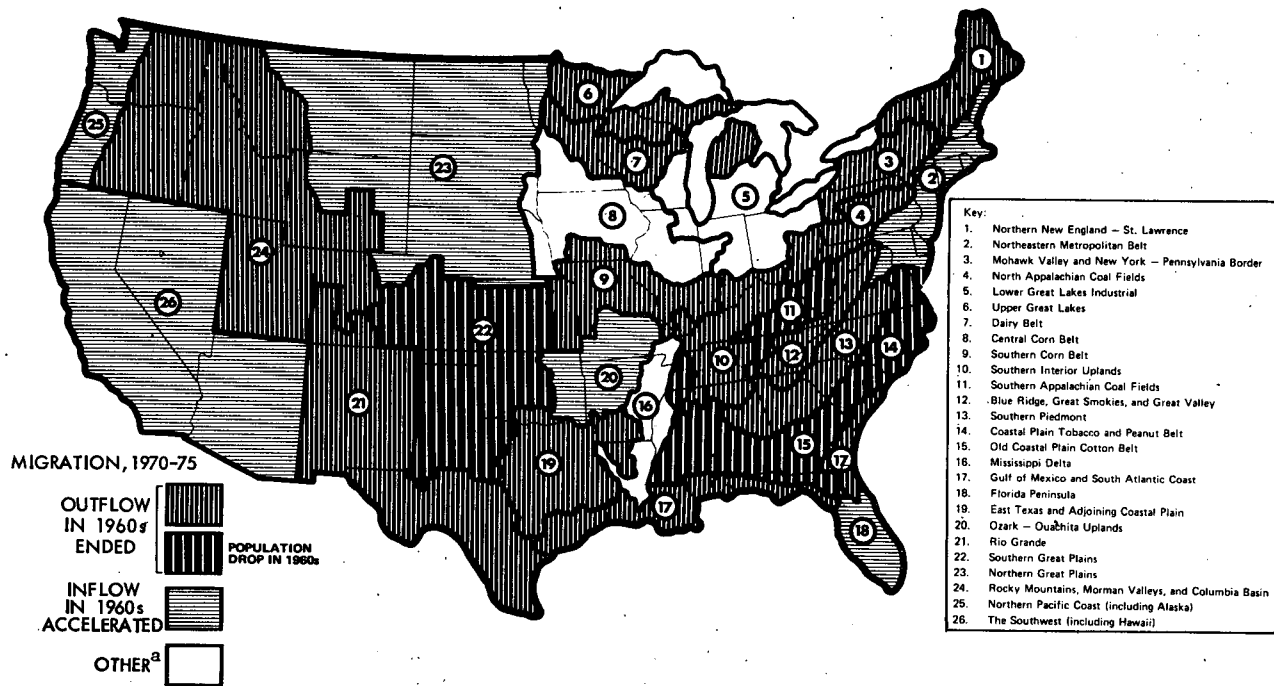


Fig. 8 — Nonmetropolitan counties (adjacent): the reversal of population loss

<sup>a</sup>Nominal net migration; or previous outflow not completely ended.

growth" within each subregion. Subregions are grouped according to several patterns of demographic change in this sector: The first pattern (represented in vertical stripes) shows subregions that experienced migration outflow in the 1960s which ended in the 1970s. In some of these subregions--the heavier vertical stripes--that outflow had been so severe as to result in absolute population decrease. (All that decrease, of course, has now ended.) The second (represented in horizontal stripes) shows subregions that experienced net in-migration during 1960-1970, accelerating thereafter.

In these areas adjacent to the nation's metropolitan centers, the pervasiveness of the "rural renaissance" is evident. Fully 20 of the 26 subregions registered net migration loss in the "nonmetropolitan adjacent" sector during the 1960s; in five, that loss was severe enough to produce absolute population decline despite the moderately high birthrates in that decade. Yet, in the 1970s, net migration has become distinctly more positive: In 17 of these 20, net migration reversed from negative to positive, and despite lower birthrates in this decade, all subregions experienced population increase in this sector.

This cessation of previous, often severe out-migration from the "nonmetropolitan adjacent" sector suggests that metropolitan growth continues, although perhaps not always within the arbitrary boundaries of SMSAs. The true picture undoubtedly is more complex than these data can reveal and does not lend itself to simple generalizations. Judging from the impressive growth trends indicated, however, it is reasonable to infer that the "nonmetropolitan adjacent" sector has fallen much more heavily under the sway of metropolitan influence in the 1970s than before--and in virtually every section of the country. Thus, the new locus of migratory attraction includes the "nonmetropolitan adjacent" sector in all subregions, as well as the metropolitan sector in many of those Southern and Western ones noted earlier.

Nonadjacent Counties. In the past, metropolitan integration offered a generic explanation of why some nonmetropolitan areas grew but others did not. But the nonmetropolitan growth of the 1970s, by many indications, also reflects specialized activities occurring in



areas located beyond the immediate sphere of daily metropolitan life. Population trends in the "nonadjacent" sector reflect developments in these areas, which presumably are less closely tied to the national metropolitan economy. Such counties by no means lack sizable urban centers; but by definition such centers are below the minimum 50,000 population threshold that qualifies an urban county as a metropolitan one. In all cases, however, these smaller cities and towns are not near a metropolitan area.

The data in Figure 9 refer to the "nonmetropolitan nonadjacent" sector. Subregions are grouped as before on the basis of change in net migration between 1960-70 and 1970-75. The pattern of change shown closely resembles the pattern in the adjacent sector, and often with more intensity. The "nonmetropolitan nonadjacent" sector was losing migrants in all but a few subregions in the 1960s, and that loss was severe enough to incur absolute population decline in fully 10 of them. Yet, by the 1970s, that outflow had ended virtually everywhere, eradicating the decline of the past. Only one subregion failed to register any growth in this sector.

The Southern Appalachian Coal Fields (No. 11) is an exemplary case: The annual net migration rate for this sector shifted from a 2.6-percent outflow during the 1960s to a 0.8-percent inflow during the 1970s; and the population, which had been declining by 1.3 percent annually, began increasing by about 1.6 percent.

The heavily industrialized subregions also have registered noticeable improvement in this sector. The Northeastern Metropolitan Belt (No. 2), where growth of the metropolitan population halted in the 1970s, is registering better than a 1.7-percent annual increase in the "nonmetropolitan nonadjacent" sector--considerably above that for the 1960s. Much of this increase reflects formation and growth of small communities which appear to be prospering despite the larger trend of metropolitan no-growth. Regional differences in the laws

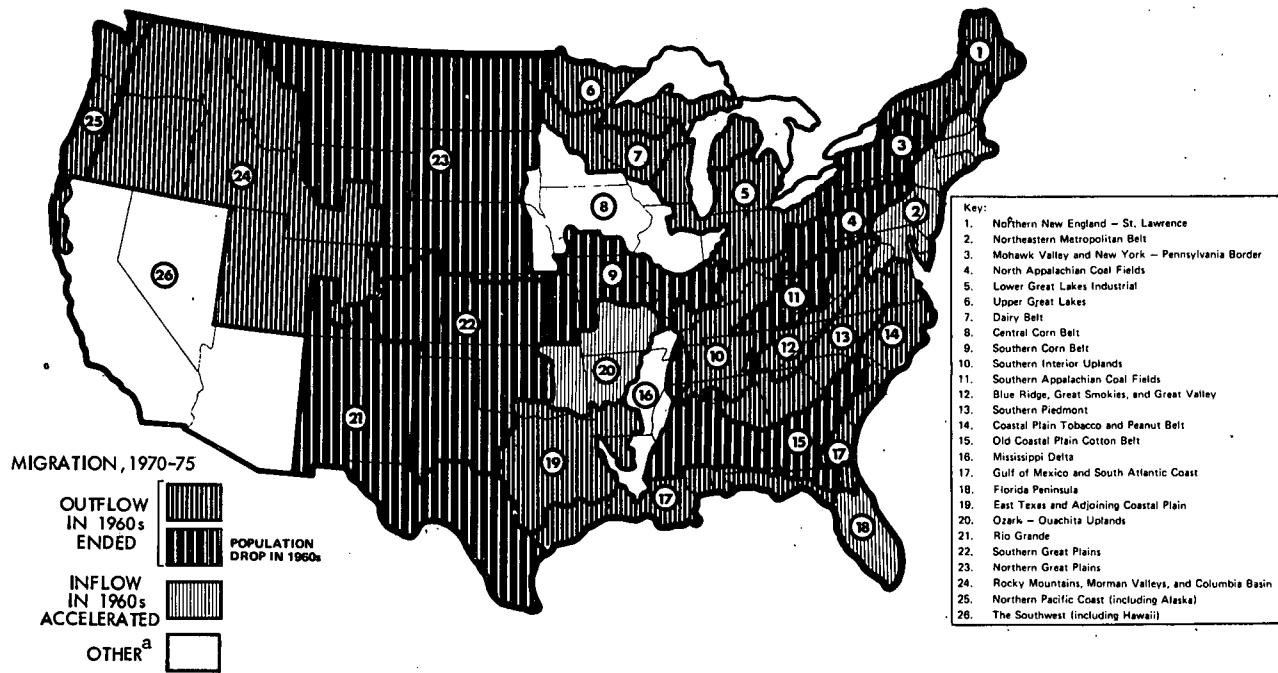


Fig. 9 — Nonmetropolitan counties (nonadjacent): the reversal of population loss

<sup>a</sup>Nominal net migration; or previous outflow not completely ended.

and regulations governing annexation also play a part.\*

Population trends in the nonadjacent sector closely parallel those in the adjacent one. The degree of new attractiveness in the former and its pervasiveness (despite enormous variations in the overall fortunes of particular regions) are especially noteworthy, for they suggest that metropolitan expansion is being supplemented by self-contained local urbanization, even in remote reaches of nonmetropolitan America.

Clearly, the pattern of U.S. settlement has evolved beyond the point where nearness to a metropolis is a prerequisite to local migratory growth. The cultures of city slicker and country bumpkin have merged--with an assist from television and the federal highway program--and Safeways, Sears, and Sizzlers have diffused down the urban hierarchy to serve even small and remote settlements.

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\*The propensity of places to annex population, and the amount of population acquired per annexing place, varies among regions. In the Northeast, especially, legal factors inhibiting annexation prevent cities from acquiring much of the suburban growth that occurs beyond their boundaries. For further elaboration see: Glenn V. Fuguitt and Calvin L. Beale, "Recent Trends in City Population Growth and Distribution," paper prepared for the 1976 Public Policy Forum, Problems of Small Cities, Washington, D.C., December 1976.

#### IV. PUBLIC CONCERNS AND REGIONAL POPULATION SHIFTS

Population is continuously replaced and recomposed, enlarged or reduced over time through two types of mechanisms. Population is replaced and may grow naturally or decline as people die and babies are born. When there are more births than deaths, the population grows by natural increase. Since the death rate is virtually constant over time in the United States, it is the fluctuating birthrate that governs population change by this natural mechanism.

Population can also grow, shrink, or be replaced and recomposed through the movement of migrants to or from a region. Population growth or decline through migration is measured in a given area by net migration--the numerical difference between incoming and outgoing migrants--but that figure registers only the surface ripples of much larger crossflows of migrants going in opposite directions. The total number of people moving (gross migration) is far larger than the net migration figure that results. For example, between 1965 and 1970 Texas recorded a net migration gain of 306,000, which happened to be the difference between the 1,148,000 people who moved there and the 842,000 who left. It could as easily have been the difference between 306,001 arrivals and 1 departure--which shows the extent to which net migration statistics fail to indicate the volume of migration; in this case, roughly two million acts of interstate migration were involved in a net population gain of less than one-third of a million.

In almost every place in the United States, the population is continuously recomposed by a gradual procession of migrants coming and going, for the most part deliberately. That element of deliberate choice in most moves sharply differentiates population growth by net migration from growth by natural increase and, more important, it differentiates the places that are being affected. A place that grows by net migration of 1,000 has gained a thousand people who are there because they want to be there, and a place that loses 1,000 migrants has lost a thousand people who don't want to be there.

Natural increase does not contribute deliberate residents; it only adds to population by lottery.\*

The purposefulness of migration makes it a largely autonomous process and one that, at least in the United States, is indicative of opportunity seeking. The view that personal success is achievable as readily outside as inside one's native region is a distinctive and deeply ingrained element of the American culture. It is the product of the persistent vacuum pull of economic opportunities in other places, which enables individuals alert to opportunity to exploit newly developed resources or knowledge quickly. The American economy benefits from the readiness of its population to migrate: Without a tradition of migration, which moves people from areas where jobs are dwindling to places where workers are needed, U.S. economic development would be sluggish and less efficient than it actually has been.

As this American predilection to migrate fosters rearrangement of population in space to answer the changing needs of the national economy, it also restructures regional political interests. These political effects are far more evident at the local and regional level, where growth often comes as much from net migration as from natural increase. Equally important, natural increase has no direct electoral consequences for at least 18 years, whereas growth (or decline) through migration has immediate effects. For example, the current flow of net migration toward the South and West and toward nonmetropolitan areas is altering the status quo along a broad front. Specific concerns can be grouped in several major categories:

1. Head count concerns. Formulas whereby federal largesse--e.g., revenue sharing, LEAA funding to states, and the like--is distributed

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\* Not surprisingly, places that grow primarily through migration possess a distinctive regional character that echoes common motives and expectations behind the original settlement and is perpetuated by an ongoing process of selective migration. Well-known examples are Yankee New England and Mormon Utah. See Raymond D. Gastil, Cultural Regions of the United States (Seattle: University of Washington Press, 1975); Wilbur Zelinsky, The Cultural Geography of the United States (Englewood Cliffs, N.J.: Prentice-Hall, 1973); Dorothy O. Johansen, "A Working Hypothesis for the Study of Migrations," Pacific Historical Review, Vol. 36 (1967), pp. 1-12.

among localities and regions typically give weight to the number of people the area claims as its inhabitants. Regions unable to boast more bodies (or, worse, to establish even as many as they had last year) will lose funds; even though--perhaps for that very reason--they may merit more federal assistance. This point has not been lost on cities and regions with shrinking populations, and they are pressing now for revisions of these formulas that will direct federal dollars to areas that are losing population. But if a formula that compensates areas for population growth is politically unpalatable, one that gives dollar credits for population loss may be equally offensive. The image arises of an urban "black hole"--a once great city into which an unending stream of federal dollars disappears as its population vanishes.

2. Human capital concerns. In recomposing a region's population, net migration may alter its labor pool, replenishing or depleting its stock of human capital. Skilled workers may depart, to be replaced by less skilled in-migrants; young adults educated at one region's expense may move themselves, and that investment, to another.

3. Dependency concerns. Some segments of the population (e.g., persons claiming public assistance) are recognizably a public burden, and others (e.g., uneducated rural-to-urban migrants) are thought to be. Their migration can scarcely be a matter of local indifference because of the real or perceived costs they impose. Certain popular notions persist, though, in the face of contrary research evidence--for example, that low-income migrants move to large cities like New York to gain access to generous public assistance allowances.\*

4. Concern with undocumented aliens, an issue figuring prominently in California, Texas and a few other states to which many aliens make

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\* For recent evidence on this point, see David M. DeFerranti, et al., The Welfare and Nonwelfare Poor in New York City, R-1381-NYC, The Rand Corporation, June 1974; Miriam Ostow and Anna B. Dutka, Work and Welfare in New York City (Baltimore: Johns Hopkins University Press, 1975), p. 76; Larry H. Long, "Poverty Status and Receipt of Welfare Among Migrants and Nonmigrants in Large Cities," American Sociological Review, Vol. 39 (February 1974), pp. 46-56; Gene B. Peterson, et al., Southern Newcomers to Northern Cities (New York: Praeger, 1977).

their way. Illegal aliens formerly stayed close to the border, often in rural areas, but as substantial numbers have scattered throughout the nation, the issue of their local impact has come to figure prominently in many parts of the country. There is much disagreement about what effects they have: some insist that alien Mexican workers take jobs that could otherwise be filled by unemployed Americans or legal migrants; and that illegal aliens overburden social services of all kinds, taking more in the form of social welfare services than they contribute in taxes.\* Evidence being scarce, these allegations and the thorny issues they pose have gained wide currency.\*\*

5. Sociopolitical concerns. More generally, newly declining areas discover that shrinkage cannot be accomplished merely by reversing the process of expansion within an existing organizational setting; and newly growing ones resent the problems that arriving migrants cause and the unwelcome access this migration confers on destination areas. The impact of growth through migration vs. natural increase can be suggested by this hypothetical situation: The population of a town composed exclusively of 300 childless couples is doubled overnight when every couple produces twins on the same day. Compare the impact on the physical capacity, economy, and the "feel" of the town of this doubling of population with one that arises from the arrival one day of 600 adult newcomers, all of whom must be housed, transported to work and supplied with municipal services.

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\* Leon F. Bouvier, et al., "International Migration: Yesterday, Today, and Tomorrow," Population Bulletin, Vol. 32, No. 4 (Population Reference Bureau, Inc., Washington, D. C., 1977).

\*\* A summary of recent evidence is given in Wayne A. Cornelius, Illegal Mexican Migration to the United States: Recent Research Findings, Policy Implications and Research Priorities, Cambridge, Mass., MIT Monograph Series on Migration and Development, No. C/77-11, May 1977; Jorge Bustamante, "Undocumented Immigration from Mexico: Research Report," International Migration Review, Vol. 11, No. 2 (Summer 1977), pp. 149-177; U.S. House of Representatives, Committee on the Judiciary, Illegal Aliens: Analysis and Background, Committee Print, June 1977:

These and other concerns surface at different geographic scales and travel under different guises, but they are bound to persist. In an era of slowed population growth at the national level, it is likely that the ebb and flow of migration will figure prominently in both the fortunes of particular regions and the public debate about regional change.\* It is, for example, now fairly apparent that migratory gains in the Sunbelt South are occurring largely at the expense of Northern industrial states. This recognition has been one factor prompting the debut of such regional alliances as the Coalition of Northeast Governors, the Northeast-Midwest Economic Advancement Coalition, and the Southern Growth Policies Board. In the course of only a decade, migration's pivotal role in determining which areas of the nation grow and which do not has become apparent. Consequently, population movements have taken on a political weight beyond their demographic and economic import.

The data examined in this section show that migration is changing the patterns of growth for many regions defined at several different scales. Some regions exhibit a clean break with an earlier trend, with the results of the break showing up most clearly at the local level. Cincinnati, Los Angeles, and Philadelphia are only three of 36 metropolitan areas that now enjoy local ZPG along with its unavoidable "shrinking pains".\*\*

Metropolitan growth, we have seen, has gravitated away from the North and East and toward the South and West. Regions where metropolitan no-growth is becoming common will continue to face problems of excess capacity and a depreciated stock of public facilities--most notably, vacant and abandoned housing and vandalized, underused schools.

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\* Carol L. Jusenius and Larry C. Ledebur, Federal and Regional Responses to the Economic Decline of the Northern Industrial Tier, Office of Economic Research, Economic Development Administration, U.S. Department of Commerce, March 1977; idem, A Myth in the Making: The Southern Economic Challenge and Northern Economic Decline, November 1976.

\*\* See Gurney Breckenfeld, "It's Up to the Cities to Save Themselves," Fortune, March 1977, pp. 194-206.



Selective outmigration will add still more to the burden of dependency that elderly and low-income citizens impose on a locality by lingering on after younger and more mobile people have left.

In-migration can be beneficial, but new kinds of concerns can also crop up in newly growing areas. Around the turn of the century, Oregonians were said to offer an occasional prayer:

We thank the goodness and the grace  
That brought us to this lovely place;  
And now with all our hearts we pray  
That other folks will stay away.

Today, residents of small communities in growing regions are equally concerned with the ailments they associate with "newcomers." Some of those ailments can be perceived readily only by examining tables of statistical data; consequently, the sheer visibility of migrants seems to have made them a ready focus of territorial issues concerning rights of access to places. Submerged beneath this concern are more profound legal and political questions, such as "Who gets to live where?" and "Who is to decide that question, and by what criteria?"

Migration enables people to live where they believe their opportunities for personal satisfaction are most attractive. The benefits accrue to both the individual migrant and society as a whole, as the exodus of blacks from the rural South and their subsequent return to its flourishing metropolitan sector today amply demonstrate. Despite its long-term benefits, though, many Americans (including migrants themselves) still harbor a faint distrust of both the process and its participants when their day-to-day lives are affected.

Migration, then, has come to be viewed as a powerful and unpredictable force in the newly declining and growing areas alike, but it is not clear what role, if any, public policy should assume vis-à-vis the issues it generates. We need a framework for dealing with the issues themselves. The following paragraphs do not presume to prescribe policy; rather, they discuss possible directions that policy may take and what consequences may ensue.

Migration's public policy consequences arise from two distinct sources: \* (1) people's inability to make well-informed assessments

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\* I have drawn heavily here on ideas propounded by my colleague T. Paul Schultz.

of their long-run opportunities in an existing setting or a potential new one, and (2) the public effects of their migration on others whom they leave behind at origin and join at destination. In the former case, government agencies can try to provide information to potential migrants to improve the choices they make. In the latter case, the externalities (either costs or benefits) are transferred by instruments of public finance to the migrant or to a higher level of social organization encompassing the affected populations.

This perspective suggests three possible approaches for dealing with the issues that migration is now posing in our society:

1. Control or redirect migration flows if the patterns of contemporary regional growth and decline are judged to be unsatisfactory. Migration policy might intervene to alter these patterns to achieve specified broad purposes, thereby addressing the factionalism engendered by regional economic change. For example, policies might be designed to blunt the forces that prompt migrants to leave the Northeast, or to steer Sunbelt in-migrants away from places where existing residents feel they are being inundated by newcomers. Job information and relocation assistance might be provided to certain target groups (e.g., unemployed youth and other "economic refugees") whose job prospects may be far brighter in job-surplus regions of the country.\* That can be done, and has been, as witness the federal government's efforts to relocate Cuban and Vietnamese refugees. The idea of having migration policies surely is not immune to criticism, and the purposes themselves are controversial. Trying to tinker with so vast and complex a system as the one which continuously redistributes people, their productive capacity, and their votes would be politically complex.

Perhaps the existing migration streams are only part of some long-run equilibrium process designed to rectify the original mistake the British settlers made when they landed in the upper-right-hand corner of the map instead of proceeding directly to Houston. In any

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\* A proposal recently made by Congressman Reuss. See: U.S. House of Representatives, Subcommittee on the City, Committee on Banking, Finance, and Urban Affairs, To Save A City, Committee Print, September 1977, p. 32.

event, if the government does not adopt official migration policies we can be sure that other forces will fill the vacuum, and perhaps in ways not to our liking. Critics and advocates of migration policy alike acknowledge that "hidden" migration policies are already at work. When government agencies build highways, regulate energy prices, and impose environmental restrictions or regulations, they simultaneously redistribute employment growth and alter incentives for private investment. Although such government activities are nominally unrelated, they exert a powerful undirected influence on migration patterns.

2. Ameliorate the visible consequences of migration. This approach, in contrast to the first, sees migration shifts as mostly inevitable. It focuses on helping localities find workable solutions to the common problems imposed by regionwide growth and decline, thereby responding to the factionalism engendered by the highly visible consequences of local population change. Many of the large urban centers in the Northeastern Metropolitan Belt, for example, face the prospect of continued out-migration and its ensuing shrinking pains--a withering tax base without a corresponding reduction in demands for public services, and the need to manage excess housing and underused facilities. These common concerns that follow in the wake of urban ZPG might be addressed by policies that promote an orderly thinning out and reduction of excess capacity.

In the newly growing nonmetropolitan sector, population growth will increase the demand for public services. The kinds of services demanded will depend on the age composition of in-migrants: Younger couples will create demands for more schools; older in-migrants will enlarge the demand for health services, now or in future years.

3. Federalize the redistribution of resources to complement the pattern of migratory redistribution. From the national perspective, internal migration is largely a zero-sum game. Out-migration may relieve Mississippi of its poor, but these same out-migrants will appear as poor in-migrants somewhere else (although their poverty may cease there). Likewise, physicians trained at Boston's expense may remove themselves (and Massachusetts' considerable human capital

investment) to Florida. Migration's inherently selective nature makes it inevitable that some regions will gain and others will lose in terms of the distinctive kinds of people that accumulate in places. Acknowledging these facts of life, the third policy approach would be to transform such national problems as welfare dependency (which are disproportionately accumulated in some parts of the country) into national responsibilities.

These approaches do not define policy; instead, they express ways to view regional change and to devise organizational responses to the problems that change engenders. The choice of which policy stance should be taken depends on one's convictions about the proper role of the public sector; on what one believes policy has in its power to do; and on the extent to which these processes of change themselves can be harnessed toward deliberate ends.

HOW DEMOGRAPHERS CAN HELP MEMBERS OF CONGRESS

Peter A. Morrison

March 1978

SUMMARY

Demographic change modifies the groups of recipients and donors involved in three forms of redistribution: (1) across generations, through Social Security, government retirement programs, and the financing of education; (2) across regions, through urban and regional development programs, revenue sharing, and federal procurement; and (3) across income groups, through welfare, food stamp, and Medicare programs. The numbers of people involved, and the places where they live, change from year to year as people are born or die and as they migrate from one place to another. Such changes often upset a long-standing economic or political balance, or make it difficult to achieve some sought-after balance.

The demographic processes that underlie these shifts are understood well enough that it is possible to foresee some of their long-range implications. These implications often are difficult to acknowledge, though, because they pose problems (as with Social Security) that seem to have no politically feasible solution.

A necessary step in such instances is to build a public perception of the problem's existence and why public action is needed. It is at this stage that demographers may be useful in enabling policymakers to build a case for action.

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HOW DEMOGRAPHERS CAN HELP MEMBERS OF CONGRESS\*

by

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I. INTRODUCTION

Issues concerning the redistribution of wealth and income crop up constantly in Congressional debate. When they do, we can assume that several questions occur to the member of Congress who must vote on them. First and foremost, whose wealth or income is being redistributed, and who are the recipients? How many of them are there, and how many will there be in the future? Where do both groups of people live? Which regions will benefit or lose? All of these questions bear on issues of national importance, and they matter to each Congressperson's local constituents as well.

I have built my discussion around three general forms of redistribution (Fig. 1), all of which are linked to these questions concerning population:

- o *Redistribution across generations* through Social Security, government retirement programs, and the financing of education;

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\* Remarks at a seminar on "Coming Changes in America: Tax, Energy, Welfare Reform Implications" for members of the U.S. Congress, sponsored by the Congressional Research Service and the Woodrow Wilson School of Public and International Affairs at Princeton University, January 26-28, 1978, Princeton, New Jersey.

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## **SOURCES OF CONGRESSIONAL CONCERN WITH DEMOGRAPHIC CHANGE**

### FORMS OF REDISTRIBUTION OF INCOME AND WEALTH

- ACROSS GENERATIONS: SOCIAL SECURITY, GOVERNMENT RETIREMENT PROGRAMS, FINANCING OF EDUCATION
- ACROSS REGIONS: URBAN AND REGIONAL DEVELOPMENT PROGRAMS, REVENUE SHARING, FEDERAL PROCUREMENT
- INCOME REDISTRIBUTION: WELFARE, FOOD STAMPS, MEDICARE

### POLICY ISSUES ARE SHAPED AND GIVEN URGENCY AS POPULATION SHIFTS

- RECIPIENT AND DONOR GROUPS CHANGE IN NUMBERS AND COMPOSITION
- POPULATION SHIFTS ALTER INTENSITY OF PROBLEMS AND IMPOSE LIMITS ON POTENTIAL REMEDIES



- o *Redistribution across regions* through programs for urban and regional development, revenue sharing, and so on, and indirectly through federal procurement;
- o *Income redistribution*, including welfare, food stamp, and Medicare programs.

Demographic processes continually alter the groups of recipients and donors in these three forms of transfer. The numbers of people involved, and the places where they live, change from year to year as people are born or die and as they migrate from one place to another. Such changes often upset a longstanding economic or political balance, or make it difficult to achieve some sought-after balance. My purpose here is to furnish you with some perspective on how current and foreseeable population trends shape and lend urgency to the policy issues before Congress.

Demographers deal largely with two broad types of change that affect the context within which policy is made. The first consists of *changes in birth and death rates*, important because they produce imbalances in the population's age distribution. These imbalances are long-lasting, but many of the resulting impacts can be foreseen. For example, the bumper crop of people born right after World War II crowded the schools during the next decade and began forming their own households in the late 1960s. From birth to maturity, they have strained the capacity of maternity wards, then schools, and now the housing market.

The second type of change, which is far more complex and subtle, stems from *new patterns of migration*. When a family moves from Detroit to Denver, Detroit loses a taxpayer, but it also gains a job vacancy.

Changes in birth and death rates affect redistribution across generations; migration affects redistribution across regions; and both affect redistribution of income.

## II. REDISTRIBUTION ACROSS GENERATIONS

The trials and tribulations of Social Security, along with other government retirement programs, illustrate how demographic change can destabilize public programs--in this case, threatening to crack the cornerstone of intergenerational transfer in our society. States and localities, afflicted by the same demographic shift, have been forced to draw on general tax revenues to finance their retirement programs. In doing so, they create what are, in effect, new intergenerational transfer programs.

Recognition of the problem was surprisingly long in coming, all things considered (Fig. 2). The problem originated quietly but powerfully during the late 1940s and 1950s as sharply rising birth rates expanded the ranks of future recipients, and gradually declining death rates kept current recipients alive--and receiving--longer. That expansion made it comfortable for planners to stay with the assumption that fertility would *remain* moderately high. (After all, it would take nothing short of a baby-boom-size workforce at the end of the century to generate enough revenues to support the post-WWII baby-boom generation when *they* began to reach retirement age.) That assumption was rendered invalid, of course, with the onset of the "baby bust" in the late 1960s. It was not until the early 1970s that the public, already hypersensitive to inflation and rising prices, came to recognize the alarming problems in store for Social Security.

The fundamental demographic change can be traced in the elderly dependency ratio (Fig. 2). This ratio shows the size of the elderly population (65 years and over) in relation to the working age population (ages 18 to 64)--in other words, the number of elderly dependents per hundred working age adults. The ratio has risen steadily over recent decades, and it is projected to climb from 17 per hundred in 1970 to 32 per hundred by 2030.\* This projected course reveals the

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\*The future outlook here is based on the Census Bureau's Series II projection, which assumes continued low fertility rates and a slow and steady reduction in future mortality. See U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 704, July 1977.

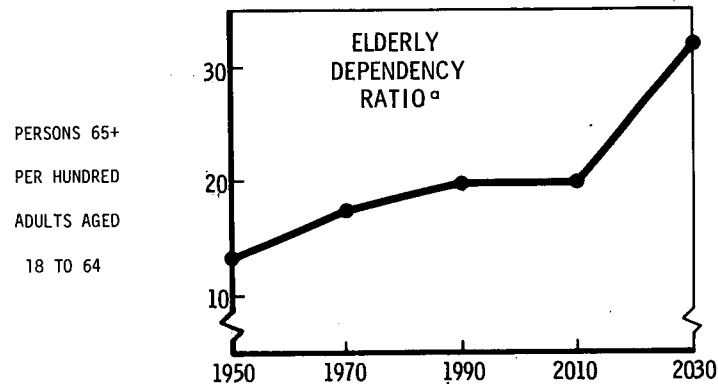
Fig. 2

## REDISTRIBUTION ACROSS GENERATIONS

### POLICY CONTEXT FOR SOCIAL SECURITY

- HIGH BIRTH RATES (1947-1960) EXPANDED RANKS OF FUTURE RECIPIENTS
- LOW BIRTH RATES (LATE 1960s ON) REDUCED RANKS OF FUTURE DONORS
- INFLATION AND RISING PRICES DREW ATTENTION TO THE PROBLEM

### LONG-TERM OUTLOOK: A SCRIPT ALREADY WRITTEN



<sup>a</sup>Census series II projection after 1977

slowly deteriorating demographic context within which other more immediate threats to the Social Security system's financial stability have become known.

The immediate "crisis" with Social Security has been precipitated by a combination of inflation and the manner in which benefits and contributions are coupled. Apart from these factors, though, Social Security is a program whose future script was largely written when Americans began to shun large families and converge on the 2-child family as a norm (or, in some cases, decided to remain childless).

The program's future is disconcerting. Barring a major war, the number of future Social Security recipients will surely rise. With low birth rates, though, the number of prospective donors already has shrunk, and it is uncomfortable to consider the possibility that the number may shrink further, depending on how few children *our* teenagers decide to have.

This brings up a point that I believe merits further discussion during this seminar. It is the question of how to devise some arrangement for putting demographic judgment and foresight at the ready service of Congress. As this example shows, policy is too often made without the benefit of demographic "early warnings" that can enable policymakers to anticipate the effects of population change and adjust their actions to the constraints that change will impose.

### III. REDISTRIBUTION ACROSS REGIONS

The population's changing geographic distribution is a second illustration of how demographic trends impinge on policy. In this case, new migration patterns are undermining long-standing economic and political balances in the distribution of income, wealth, and employment growth. What is happening demographically is far more complex and subtle than we have time for here, but two basic shifts are taking place (Fig. 3).

The first, of course, is that the *metropolitan* population's growth is shifting away from the mature industrial subregions in the Northeast and around the lower Great Lakes and toward other subregions in the South and West. This pattern is illustrated in Fig. 4, which shows subregions where the metropolitan sector is losing migrants (vertical stripes) and gaining migrants (horizontal stripes) in the 1970s. The bolder patterns indicate that outflow or inflow has been initiated or intensified between this decade and the previous one--e.g., heavy vertical stripes signify a higher outflow rate during the 1970s than the 1960s or a shift to net out-migration following net in-migration during the 1960s. Overall, *movements of population have brought metropolitan population growth to a halt in some sections of the country while accelerating it in others.*

The second is a sharp increase in migration to *nonmetropolitan* areas throughout the nation. The flight to the suburbs in the 1950s and 1960s has its counterpart today in an outward movement to more remote areas. In part, these trends reflect the traditional pattern of growth in the vicinity of metropolitan centers, but there is also a new pattern of people moving to places outside the immediate sphere of metropolitan life. This is shown in Fig. 5, which displays migration trends for those nonmetropolitan counties in each subregion that are *not* adjacent to a metropolitan area. (Trends in this "nonadjacent" sector reflect developments in areas that are less closely tied to the national metropolitan economy.) Subregions are grouped according to several patterns of demographic change in this sector: The two darkest

## REDISTRIBUTION ACROSS REGIONS

### MIGRATION TRENDS

- METROPOLITAN POPULATION: SUBURBANIZATION CONTINUES; GROWTH IS SHIFTING AWAY FROM SOME REGIONS TO OTHERS
- NONMETROPOLITAN POPULATION: ALL REGIONS ARE WITNESSING GROWTH, OFTEN IN NEW SETTINGS

### POLITICAL RESPONSES TO DECLINE AND GROWTH

- TRADITIONAL POWER BASES RESHUFFLED
- NEW REGIONAL ALLIANCES
- DEMANDS FOR GOVERNMENT ACTION

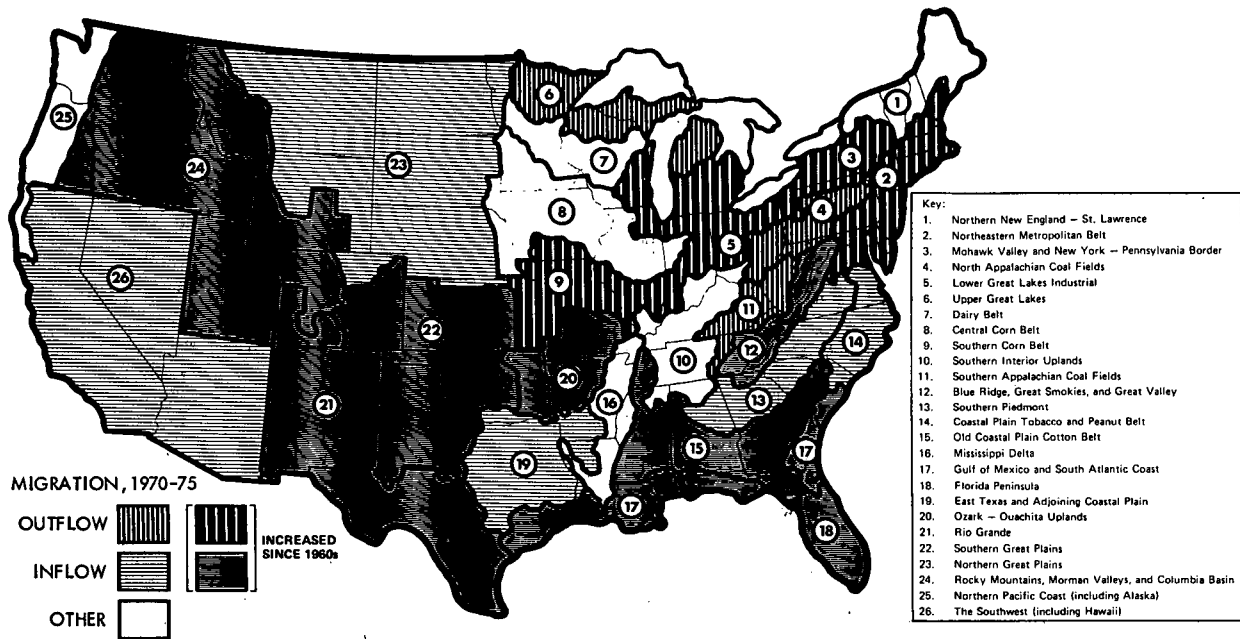


Fig. 4 - Metropolitan counties: the changing locus of migratory growth

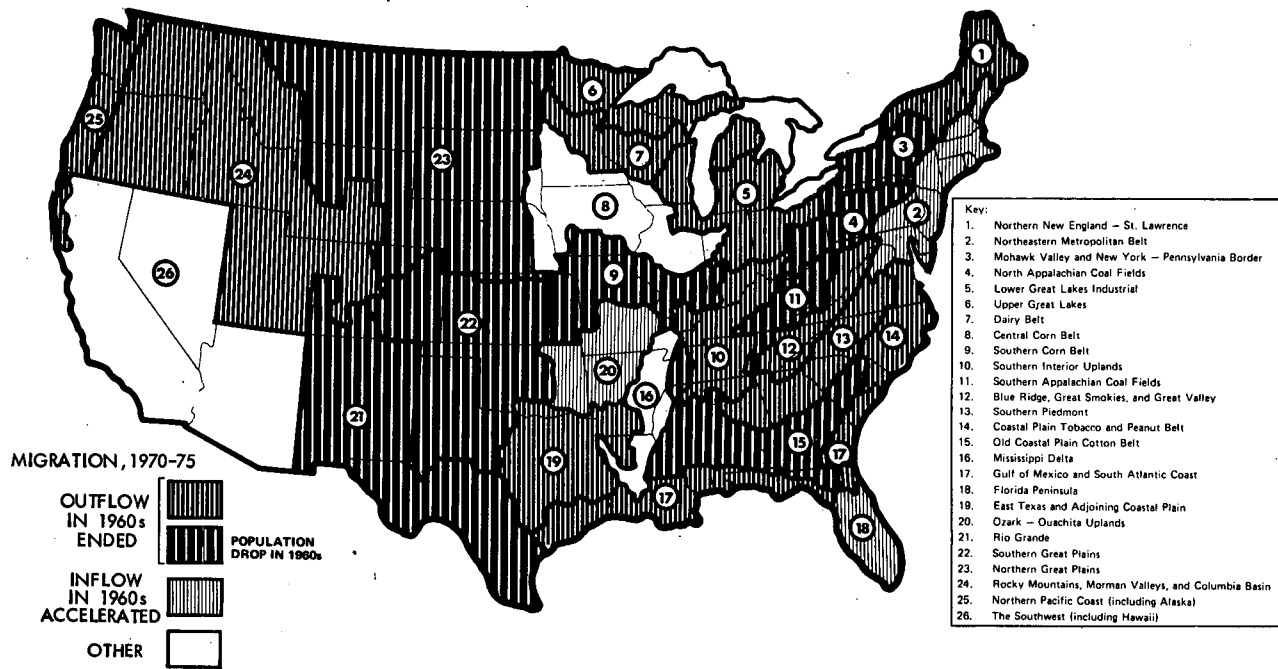


Fig. 5 - Nonmetropolitan counties (nonadjacent): the reversal of population loss



patterns show subregions that experienced migration outflow in the 1960s which ended in the 1970s. In some of these subregions--the heaviest stripes--that outflow had been so severe as to result in absolute population decrease. (All that decrease, of course, has now ended.) The second (represented in the lightest stripes) shows subregions that experienced net in-migration during 1960-1970, accelerating thereafter.

Clearly, the reversal of the historic out-migration from the non-metropolitan sector has been pervasive. Still, the circumstances and settings of this new nonmetropolitan growth are diverse. They include regions oriented to recreation in Northern New England, the Rocky Mountains, and the Upper Great Lakes; energy supply areas in the Northern Great Plains and Southern Appalachian Coal Fields; retirement communities not only in Florida and Arizona, but in the Ozarks as well; and small manufacturing towns throughout much of the South.

*These migration shifts in both metropolitan and nonmetropolitan sectors have begun to reshuffle traditional power bases across the nation.* The changes have been exposed in the new regional alliances--the Coalition of Northeast Governors, the Southern Growth Policies Board, and others--and will become more apparent in 1982 with Congressional reapportionment. The shifts also are posing common kinds of problems in specific places:

1. *Head-count concerns.* When federal largesse is distributed among localities and regions--in such forms as revenue sharing, community assistance, vocational education, LEAA funding to states, and the like--the formulas for distributing it typically give weight to the number of people the area claims as its inhabitants. Regions unable to boast more bodies (or, worse, to claim even as many as they had last year) will lose funds, even though they may deserve *more* federal assistance for that very reason.

2. *Labor force quality concerns.* In recomposing a region's population, net migration may alter its labor pool, replenishing or depleting its stock of human capital. Skilled workers may depart from an area, to be replaced by less skilled in-migrants; young adults

educated at one region's expense may move themselves, and that investment, to another.

3. *Concerns about dependency.* Some segments of the population (for example, those on public assistance) are recognizably a public burden, and others (such as uneducated rural-to-urban migrants) are thought to be. Their accumulation in a place (whether through immigration on their own part or through out-migration by other people) can scarcely be a matter for local indifference because of the real or perceived costs they impose.

4. *Concern over undocumented aliens.* This issue figures prominently in California, Texas, New York, and a few other states to which many aliens make their way. Illegal aliens used to stay close to the border, often in rural areas; but substantial numbers of them are now scattered throughout the nation. There is much disagreement about what effects they have: Some observers insist that alien Mexican workers take jobs that unemployed Americans or legal migrants could have filled, and that illegal aliens overburden social services of all kinds, taking more in the form of social welfare services than they contribute in taxes. Although evidence is scarce, these allegations have nevertheless gained wide currency.

5. *Local "shrinking pains."* Newly declining areas are discovering that decline is not a graceful process. "Shrinking pains" have become commonplace, and not just in central cities. Cincinnati, Los Angeles, and Philadelphia are only three of about 36 metropolitan areas where the population is no longer growing. Nationwide, about one-sixth of all metropolitan areas are losing population, and one-third of metropolitan residents live in areas of population decline. For central cities, especially large ones and those in the Northeast, the problems are far worse.

These nongrowing areas will continue to face problems of residential and productive obsolescence--most notably, vacant and abandoned housing, underused schools, outmoded public facilities, and an aging inventory of stores, offices, and factories. Selective out-migration will add to the burden of dependency that elderly and low-income citizens impose on a locality by lingering on after younger and

more mobile people have left. These forces will worsen the fiscal situation of declining jurisdictions in an obvious fashion: Tax bases will shrink, while service demands may even grow.

6. *Newly experienced growth.* While some areas resent the problems that migrants generate when they leave, other areas equally resent the problems that arriving migrants cause: congestion, sprawl, and support costs. Local officials often feel frustrated at their inability to dampen the external forces that attract migrants. They have therefore attempted to deal with the effects, instead, by:

- o Instituting local population ceiling ordinances, as in Boulder, Colorado, Petaluma, California, and elsewhere;
- o Proposing federal legislation to control the influx of migrants, as the Governor of Hawaii did last year;
- o Attempting to withdraw unilaterally from federal welfare programs, as in Plumas County, California.

In an era of slowed population growth nationally, the ebb and flow of migration will figure prominently in both the fortunes of particular regions and the public debate about regional change. Pressures are likely to build for two broad types of legislative action: (1) actions to ameliorate the more visible *consequences* of migration by, for example, assisting localities in dealing with the common problems that are imposed by regionwide decline and growth; (2) actions to federalize the redistribution of *resources* to complement demographic patterns by, for example, federalizing welfare and health care responsibilities.

IV. INCOME REDISTRIBUTION

My final illustration of how demographic trends shape the context of Congressional debate concerns income redistribution (Fig. 6). Black Americans, as we all know, have a high incidence of poverty. Part of the explanation of the income problem of blacks lies in their residential separation, which deprives them of opportunities for jobs, schooling, and other public services.

It will come as no news that the percentage of central-city dwellers who are black continues to rise--from 21 percent in 1970 to about 24 percent in 1976. Less widely appreciated is the fact that demographic trends are perpetuating this pattern of racial separation. This perpetuation comes about not only through the obviously divergent migration patterns of whites and blacks, but for other less obvious reasons as well. Partly because of its younger age structure (see Fig. 6), the black population has a higher rate of natural increase than the white. This demographic fact means that blacks, already disproportionately concentrated in the central cities of large metropolitan areas, will become even more concentrated in these cities in the absence of other changes. That is, even if everybody suddenly stopped migrating, the existing pattern of black central cities and white suburbs would intensify geographic separation along racial lines. Inevitably, the Congress must reckon with the long-term implications of powerful demographic forces that perpetuate metropolitan racial separation.

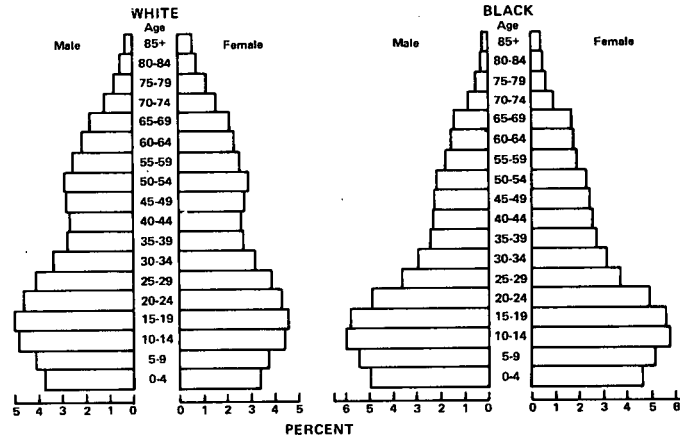
Are we likely to see a revival of the central cities through the return of the middle class, which might begin to solve these problems in a "natural" fashion? I cannot rule out the possibility that the typical big city may begin to attract substantial numbers of well-heeled newcomers. Such gentrification, as it is labelled, is obviously under way in certain places, most notably within the District of Columbia. It is also said to be happening in Boston's South End, Brooklyn's Park Slope section, Queens Village in Philadelphia, and Detroit's Renaissance Center. But while some neighborhoods have revived in some cities, it is quite another matter to regard these isolated success

Fig. 6

## INCOME REDISTRIBUTION AND METROPOLITAN RACIAL SEPARATION

- BLACKS AN INCREASING FRACTION OF CENTRAL CITY DWELLERS  
1970 . . . . . 21%  
1976 . . . . . 24%
- DEMOGRAPHIC DIFFERENCES BETWEEN BLACK AND WHITE POPULATIONS REINFORCE EXISTING PATTERN
  - Age structure: younger among blacks
  - Fertility rate: higher among blacks

### AGE DISTRIBUTION OF WHITE AND BLACK POPULATION



stories as the forerunners of a widespread regeneration trend involving a "back-to-the-cities" movement. Substantial urban resettlement occurs, it seems, only where the central city economy offers high-paying white-collar jobs to large and growing numbers of young workers.

The majority of central cities, in my judgment, will continue to conform more closely to the "downward spiral" than to the "regeneration" model because the typical city does not contain the kind of base that would induce regeneration. Only a few cities are likely to escape becoming trapped in this spiral, whereby a progressively larger fraction of the needy find themselves economically stranded in central cities as more affluent whites and blacks gravitate outward.

V. CONCLUSIONS

Demographic change modifies the groups of recipients and donors involved in several important kinds of redistribution and in doing so has larger political ramifications. The demographic processes that underlie these shifts are understood well enough that it is possible to foresee some of their long-range implications. These implications often are difficult to acknowledge, though, because they pose problems (as with Social Security) that seem to have no politically feasible solution.

A necessary step in such instances is to build a public perception of the problem's existence and why public action is needed. It is at this stage that demographers may be useful in enabling policymakers to build a case for action. Demographic analysis can draw attention to the circumstances that are built into the population's structure and the imbalances that are engendered by its changing spatial distribution. The monitoring of demographic trends, periodic analyses of what has *changed* and what the changes *mean*, and other forms of demographic reporting, build public recognition and help pave the way for Congress to act.

Mr. MORRISON. Basically, there are two noteworthy aspects of changing population distribution. First, quite a few of the Nation's major metropolitan areas have stopped growing demographically, and some have commenced declining. These are shown in figure 6 of my prepared statement.

Second, the nonmetropolitan areas, even those which are unurbanized and remote from metropolitan centers, have undergone a revival of population growth.

What has happened is that local growth continues, but in new and different places than 10 years ago. It has made for some disruptive effects at the local scale.

Let me devote the remainder of my time to the implications of these changes, which are exceedingly broad. Rather than attempting an exhaustive inventory, I want to indicate how they relate to congressional concerns by giving one brief illustration of how demographic change modifies the group of recipients and donors involved in several important kinds of redistribution. The illustration centers on the social security system.

The demographic problem with social security originated quietly but powerfully in the 1940's and 1950's as sharply rising birth rates expanded the ranks of future recipients, and gradually declining death rates kept current recipients alive—and receiving—longer. That expansion made it comfortable for planners to stay with the assumption that fertility would remain moderately high. After all, it would take nothing short of a baby-boom-size work force at the end of the century to generate enough revenues to support the post-WWII baby-boom generation when they began to reach retirement age.

Of course, that assumption was rendered invalid at the end of the 1960's, but it was not until the early 1970's that the public perception of the alarming imbalance in social security reached the political forum.

I have shown in figure 9 one statistic that tells the story in a nutshell; the elderly dependency ratio. This ratio shows the size of the elderly population (65 years and over) in relation to the working age population—ages 18 to 64—in other words, the number of elderly dependents per 100 working age adults.

The ratio has risen steadily over recent decades, and it is projected to climb from 17 per 100 in 1970 to 32 per 100 by 2030. This projected course reveals the slowly deteriorating demographic context within which other more immediate threats to the social security system's financial stability have become known. This is but one of several illustrations of how the changing demographic context gives rise to long-term imbalances that tend not to be recognized until after the point that one can do anything realistic about it. There are some other examples in my prepared statement.

Let me summarize by stating that, in my opinion, policymakers are not receiving the full benefit of demographic analysis. Demography seems to be only partly understood and poorly used by those who make policy decisions. I believe that there is substantial room for improving the societal response to this ever-changing but partially predictable set of forces I have described. Additional demographic research needs to be coupled with efforts to put demo-



graphic judgment at the ready service of the Congress in dealing with these long-term problems associated with population change.

The demographic processes that underlines the shifts I have described are understood well enough that it is possible to foresee some of their long-range implications. These implications sometimes are difficult to acknowledge, though, because they pose problems—as with social security—that seem to have no politically feasible solution. A necessary step in such instances is to build a public perception of the problem's existence, and why public action is needed.

It is at this stage that demographic analysis may be useful in enabling policymakers to build a case for action.

[The prepared statement of Mr. Morrison follows:]

PREPARED STATEMENT OF PETER A. MORRISON

*Overview of Demographic Trends Shaping the Nation's Future*<sup>1</sup>

ABSTRACT

This testimony provides a factual description of contemporary and forthcoming population trends, and highlights the principal linkages between this demographic context and the Joint Economic Committee's broader concerns. The overview of demographic changes highlights the following points:

1. U.S. population growth has moderated and the outlook is for continued slow growth. A transition to stability appears under way.

2. As population slows, however, it will not slow uniformly everywhere and for every age group. This point has an important bearing on how the nation will experience the prolonged transition to stability.

3. New migration patterns are fostering rearrangement of the population regionally and locally. This rearrangement is modifying the groups of recipients and donors involved in various types of redistribution; it also is undermining long-standing economic and political balances in the distribution of income, wealth, and employment growth.

4. The concentration of population in certain ages foreshadows certain inevitable changes that will affect school and college enrollments and the demand for particular kinds of dwelling units suited to specific age groups.

5. American households have become increasingly fragmented. The same living quarters are shared by fewer people, and many now live alone or in other kinds of "nonfamily" situations.

6. Two-paycheck families have increased sharply, and the trend is likely to advance considerably further in the years ahead. The way that young wives order their careers as mothers and income earners has changed fundamentally; as a result, many more of today's young wives will be earning income in their older years, and will more often hold full-time jobs.

The implications of these demographic changes are illustrated via several examples, and the following conclusions are drawn:

1. Policymakers are not receiving the full benefit of demographic analysis. Technical demographic analysis, and the sounder basis for judgment it provides, needs to enter the policy planning process more systematically and in a timely fashion.

2. Demographic analysis can assist Congress in building a public perception of certain long-range problems and why public action is needed.

I. INTRODUCTION

Demographic shifts compose one part of the broader economic context with which these hearings are concerned. These shifts include changes in the size, structure, and spatial distribution of the population, and the composition of the households and families into which the population is grouped. The past two decades have seen major shifts in long-term demographic patterns of fertility and migration. Demo-

<sup>1</sup> Prepared at the request of the Joint Economic Committee, U.S. Congress, and presented at its hearings in Washington, D.C.

This statement draws on research supported by grants from the National Institute of Child Health and Human Development (DHEW) and the Economic Development Administration (DOC). Views and conclusions expressed are those of the author and should not be interpreted as representing those of the Rand Corporation or any of the agencies sponsoring its research.

graphic analysis can draw attention to emerging and approaching issues associated with these shifts and set the stage for public debate on timely actions for dealing with those issues.

My presentation this morning has a twofold purpose:

1. To provide a factual description of contemporary and forthcoming population trends,
2. To highlight the principal linkages between this demographic context and the Joint Economic Committee's broader concerns.

In addressing these questions, I have drawn on the results of several recently completed Rand studies, sponsored by the National Institute of Child Health and Human Development and the Economic Development Administration. The views and conclusions expressed here, of course, are my own and should not be interpreted as representing those of Rand or any of the agencies sponsoring its research.

## II. OVERVIEW OF DEMOGRAPHIC CHANGES

### *Highlights*

1. U.S. population growth has moderated, and the outlook is for continued slow growth. A transition to stability, or zero population growth, appears to be under way.
2. As population growth slows, however, it will not slow uniformly everywhere and for every age group. Some places will face rapid population growth, while certain others are destined to feel the effects of population decline well before the rest. Likewise, the population in certain age ranges (e.g., ages 35 to 44) will increase sharply over the next two decades, whereas those in the pre-adolescent ages will decrease. This unevenness has profound implications for how the nation will experience the prolonged transition to stability.
3. New migration patterns are fostering rearrangement of the population regionally and locally. These patterns have been modifying the groups of recipients and donors involved in redistribution through urban and regional development programs, revenue sharing, and federal procurement. They also are undermining long-standing economic and political balances in the distribution of income, wealth, and employment growth.

### *Growth of population*

Toward the end of the 1960s, the U.S. population entered a period of transition to zero growth. Nationally, population increase averaged 2.8 million each year between 1955 and 1965. Since then, average annual increase has diminished to 1.9 million (and below since 1971). Change in American fertility has been the key factor here. The fertility rate declined sharply and now stands barely above its historic low (Fig. 1).

Figure 1

U.S. Total Fertility Rate: Past and Projected

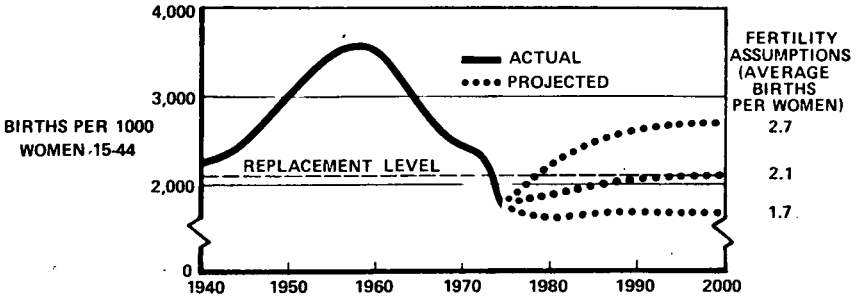
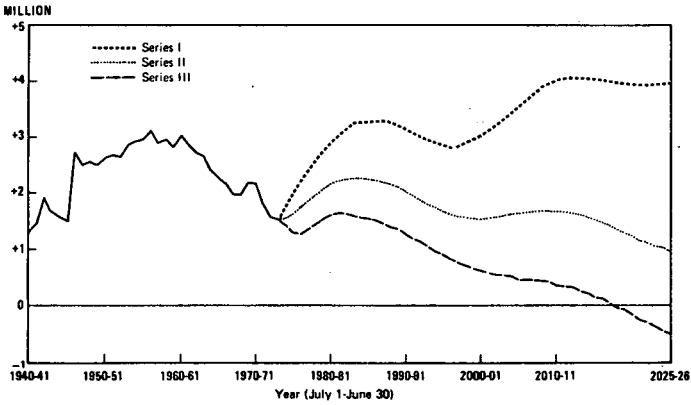


Figure 2. Estimates and Projections of Annual Population Change: 1940 to 2025



Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 601.

The contemporary trend in fertility reflects an interaction between the widespread use of more effective methods of contraception and changing attitudes toward childbearing:

*Contraceptive practice has been modernized over the last ten years.*—The increased use of highly reliable means of contraception, along with the availability of legal abortion as a backup method, has afforded couples virtually complete control over their fertility and reduced unwanted childbearing. In 1975, three out of every four married couples using contraception had either been sterilized or were using the pill or the IUD. Ten years earlier, just a little more than one-third were using these reliable methods.

*There has been a major downward shift in fertility norms and an aversion to having large families, at least among young adults.*—Nationally in 1975, almost 75 percent of married women 18 to 24 years old expected to have no more than two children, as contrasted with about 45 percent in 1967. Intentional childlessness has increased somewhat in recent years (although there are strong indications that childbearing is not going out of style).

*There has been a postponement of childbearing among married couples.*—Many wives have embarked on careers, or couples have put off having their first child or additional children until their economic situation improves. The birth rate, of course, drops when childbearing is "rescheduled" in this way, and it can go back up equally fast when circumstances change.)

The importance of changing fertility goes beyond the simple arithmetic of national growth, however. Changes in fertility transform the population's age structure, which means, among other things, lower school enrollments and, eventually, larger Social Security payments. As a basic determinant of the population's age structure, shifts in fertility may have intense and long-lasting social, fiscal, and political effects.

As fertility has declined, public attention also has begun to focus on who bears children today. One reason for this new concern is that among very young teenagers, the birth rate is rising, and births to teenagers now figure more prominently among all births in this country (19 percent of the total in 1975 compared with 14 percent in 1960). Not only has the percentage of births to adolescents risen, but also the percentage of adolescents who bear a child out of wedlock has climbed sharply—not because of more out-of-wedlock conceptions, but because fewer teenage mothers are selecting marriage as a solution to an out-of-wedlock pregnancy. "Kids with kids" impose considerable long-term costs on society.

The future outlook for national population growth is surrounded by uncertainties. These uncertainties are well defined, though, and there is a substantial body of evidence on which to base an informed judgment about future fertility trends. For now, the most reasonable conditional forecast in light of current birth-expectations data is the Census Bureau's projection series II (associated with an ultimate completed cohort fertility of 2.1 births per woman). That projection indicates a slight rise to an annual increase of 2.2 million during most of the 1980s. Thereafter, the annual increase moderates to a range of 1.5 to 2.0 million during the 1990s and drifts lower in later years. (Refer to Fig. 2.)

Events can upset forecasts, of course. Since future fertility is uncertain, future growth rates may be higher or lower than those in the "best guess" series II projection. For that reason, the Census Bureau also compiled projection series I (higher fertility associated with an assumed 2.7 births per woman) and projection series III (lower fertility, associated with an assumed 1.7 births per woman). These projections, also shown in Fig. 2, bracket what most demographers would regard as a reasonable range of future possibilities. In my judgment: (1) the long-term trend of future fertility (and hence population growth through natural increase) is very unlikely to rise above the level depicted in series I; (2) it seems plausible, on the other hand, that fertility could fall below the level depicted in series III; (3) annual birth rates are almost certain to become more volatile, as couples can exercise more effective control over whether and when to have children in response to economic conditions.

#### *Formation of households*

While the growth of the U.S. population has slowed considerably, the growth in the number of U.S. households has not. The average annual rate of increase in households rose from 1.8 percent during 1955-1965 to 2.2 percent during 1970-77. In other words, new households are forming at nearly three times the rate that the population is growing (Fig. 3). This dissimilarity in population and household growth trajectories is projected to persist in the foreseeable future (13 years).

The current and impending surge of household formations is attributable largely to the massive numbers of young adults born during the postwar baby boom, who

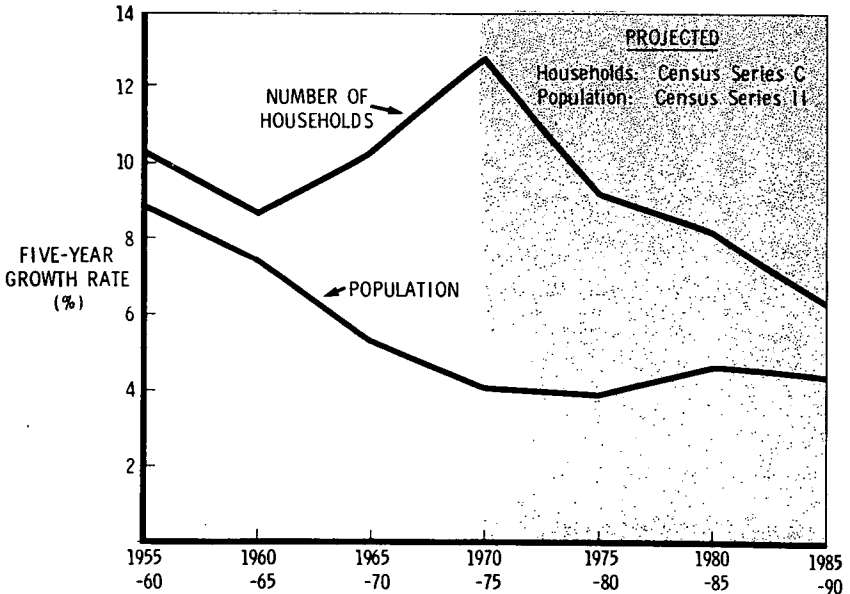
are now passing through the prime household-forming ages (roughly speaking, 20 to 30). Other concurrent trends lend further impetus to this surge: (1) the tendency for unmarried young adults (whose ranks are increasing) to set up independent households after leaving their parental homes but before marrying and forming their own families; and (2) the increase in the number of "survivor" households (mostly elderly widows) who choose to occupy separate living quarters after their children have formed their own families.

*All in all, American households have become increasingly fragmented.*—The same living quarters are shared by fewer people, and many now live alone or in other kinds of "nonfamily" situations (i.e., households composed of people who live entirely alone or with individuals unrelated to them).

The fact that households are forming much more rapidly than the population is growing can play statistical tricks in so-called declining cities. Depending on which measure one chooses, a city like South Bend, Indiana can be characterized as either growing or declining. Take households as your unit of measure, and South Bend has grown roughly 1 percent annually since 1970; count people, and it has declined about 1 percent annually.

Figure 3

### CONTRASTING GROWTH RATES: U.S. POPULATION VS. NUMBER OF HOUSEHOLDS



### Changing composition of families

The population has converged on the 2-child family as the desired norm, and intentional childlessness, as we have seen, has increased somewhat in recent years. Intertwined with this trend toward smaller families has been a sharp increase in the percentage of wives who earn income, and the closely related percentage of two-paycheck families (Fig. 4). In 1977, 46 percent of wives were in the labor force, compared with only 24 percent in 1950. (Among today's working-age men, by comparison, 78 percent are in the labor force—about 10 percentage points lower than in 1950.)

Families with at least two workers are the mode today, and in my judgment this trend will advance considerably further in the years ahead. I base this judgment on the fact that there has been a fundamental shift in the way that young wives order their careers as mothers and income earners. Wives are starting work earlier in life and continuing to work after children arrive. Furthermore, their attachment to the labor force is more permanent. Compared with their counterparts a decade or more ago, many more of today's young wives will be working in their older years, and will more often hold full-time jobs.

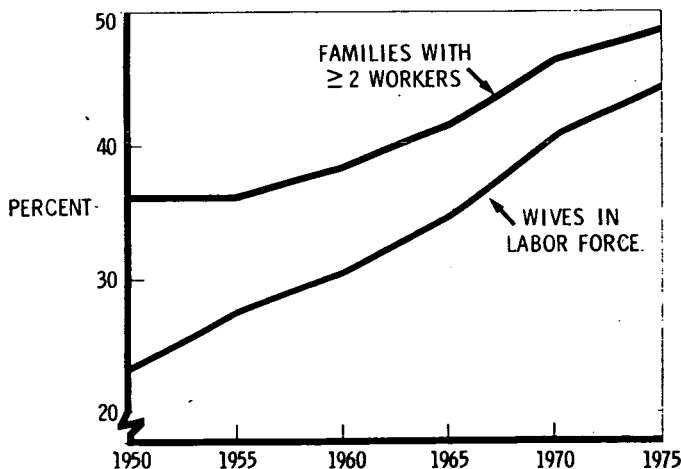
Also noteworthy is the rapidly increasing representation of women in higher paying professional occupations. For example, women now account for one of every eight physicians and one of every four first-year medical students, compared with one of every eighteen physicians in 1962. These trends foreshadow a widening of the income difference between the well-heeled family with two workers and the family with only one.

No less important for judging the future are trends among today's younger generation, who have been steeped in ideas of sexual equality and, in turn, promote them. There is a growing disinclination among college women to confine their activities to the home and family. Annual national surveys show that far fewer first-year college women endorse that traditional role now than they did even in the recent past (only 18 percent in 1975 compared with 44 percent in 1967). First-year college men show a similar decline (from 67 percent to 37 percent).

In sum, several developments seem likely to make for the earlier initiation of a career by a wife and greater likelihood of her adhering to and advancing within that career. The future worklives of men and women will likely come to resemble each other more and more, both in terms of occupation distribution and time spent in the labor force.

Figure 4

## FAMILIES WITH WORKING WIVES AND TWO PAYCHECKS ARE RAPIDLY INCREASING



The result will be increasing numbers of multi-worker families, each with higher family income, in the years ahead. In my opinion, this set of interconnected demographic changes—smaller families and the changing economic position of wives—will prove to be among the most profound contemporary influences on our society and economy.

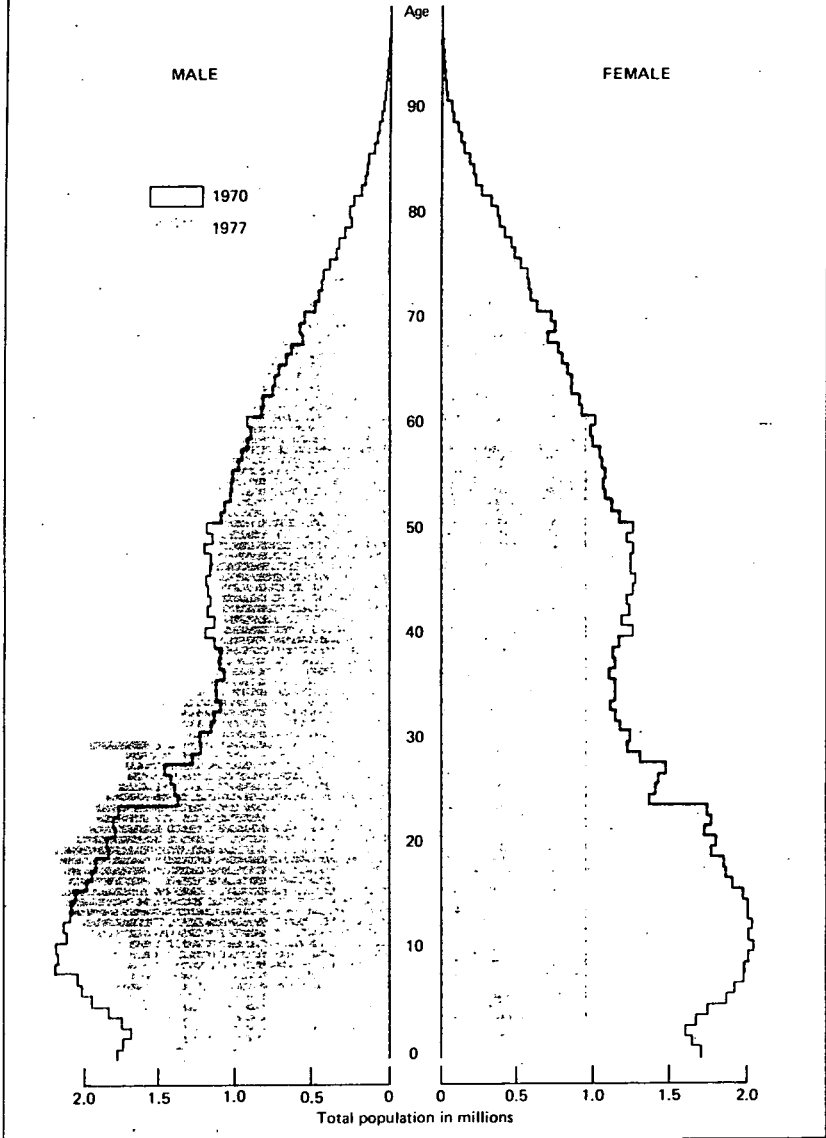
*Pressures of a changing age profile*

Wide variations in the rate of population change for different age groups stand out as another major feature on the nation's demographic horizon. A growing population is, of course, one major driving force behind expanding demands for public services and rising revenues to support those services. But many service demands grow in proportion to the population in specific age ranges—police and prisons had to expand in the 1960's to cope with the wave of young people passing through the ages of peak criminal activity; public health care facilities expand to accommodate the elderly and the poor; and, of course, elementary school enrollments have begun to fall off as the population under 10 has shrunk. Similarly, revenues are partly a function of the proportion of persons in the working ages.

The rate at which a population is changing at any given time may vary widely from one age group to another. Between 1970 and 1976, the national growth rate (5 percent) concealed considerable unevenness of change. For example: The population 5 to 13 declined 11 percent. The population 25 to 34 increased 27 percent. The population 35 to 44 was unchanged.

These different rates of growth for different age groups reflect past fluctuations in fertility, the most notable of which have been the national decline in fertility that occurred during the economic depression of the 1930's, the baby boom following the Second World War, and the sudden drop in the fertility rate in the late 1960's. Each major rise and fall has left its indelible imprint on the population's age profile, whose unevenness is evident in Fig. 5.

**Figure 5 Distribution of the Total Population, by Age and Sex: April 1, 1970 and July 1, 1977**





Peristalsis—the way a python swallows a pig—is an apt metaphor for how the United States has absorbed the impact of these swings in fertility. The many children born after World War II crowded the schools during the next decade and began forming their own households in the later 1960's. From birth to maturity they have overcrowded maternity wards, then schools, then juvenile justice institutions, and then the housing market.

This concentration of population in certain ages foreshadows certain inevitable changes that will affect school and college enrollments and the demand for particular kinds of dwelling units suited to specific age groups.

#### *Changing geographic distribution*

Let me now shift to a consideration of the population's changing settlement patterns. Since several of today's other witnesses will discuss specific facets of this broad topic, I will limit myself to a more general review of trends. I do wish to insert for the record two papers of my own: "Current Demographic Change in Regions of the United States" (November 1977), and "How Demographers Can Help Members of Congress" (March 1978). Both these papers elaborate on my discussion here.

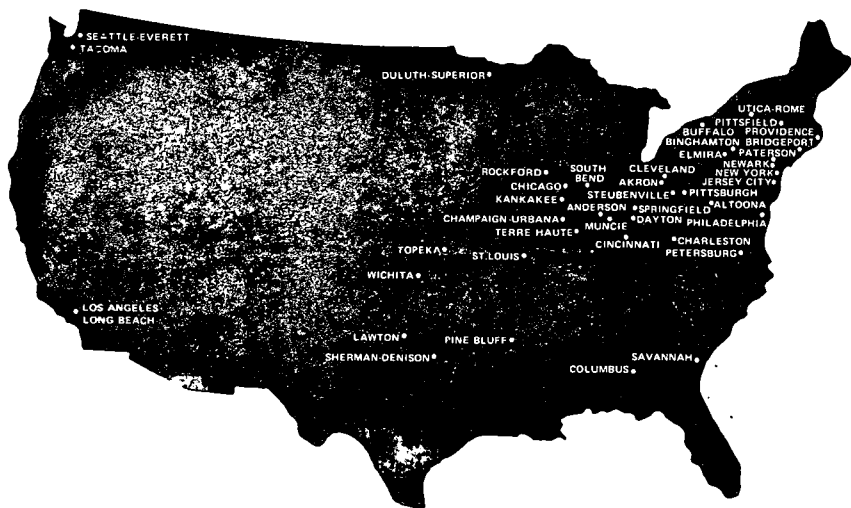
Within the last decade, changes in migration patterns (in conjunction with the falloff in the birth rate) have altered the national landscape of growth and decline. Like wind drifting snow, they have created new features, obliterated old ones, and in some places exposed what lies beneath.

#### *Metropolitan areas and their central cities*

The sharp decline in births has throttled back the rate of population growth nationally and in the process revealed migratory comings and goings as the principal determinant of local growth and decline in many places. Since 1970, 42 of the nation's 259 Standard Metropolitan Statistical Areas (SMSA's) have failed to register any significant population growth (Fig. 6). This cessation of metropolitan growth is partly the result of the low birth rate, but is mostly due to the excess of departing migrants over arriving ones. As the cities' magnetism has waned, population has stopped growing or begun to decline—a situation often (but mistakenly) regarded as the prelude to economic stagnation—and has severely strained traditional mechanisms of municipal finance.

Figure 6

### 42 SMSAs WITHOUT GROWTH, 1970-1975 (OF 259 SMSAs DEFINED IN 1976)



Within metropolitan areas, the outflow of population from declining cities continues, and with a predictable order of march: Affluent whites go first, the poor, the elderly, and minorities (if they go) go last. In the interim, the population that is left behind tends to grow more disadvantaged and, disproportionately, to have special needs. Problems of dependency and poverty, which are not exclusively problems of these shrinking cities, accumulate within them and clamor for solutions.

The most obvious and troublesome facet of this process is metropolitan racial separation. Some blacks are moving into the suburbs, to be sure, but most of them remain concentrated in large central cities; and as the cities' populations shrink, the concentration of blacks intensifies.

Nationally, blacks make up about 24 percent of central-city dwellers, and the percentage has continued to rise in this decade. Part of the rise, as just noted, is due to the outflow of whites from central cities. But demographic differences between the black and white populations in large cities also are pushing this percentage higher, perpetuating the existing pattern of racial separation within metropolitan areas through a kind of "no-fault" segregation (Fig. 7).

This perpetuation comes about partly because the black population, with comparatively more future parents, has intrinsically greater potential for growth in the places where blacks now live. Fully 29 percent of blacks in large central cities are between 5 and 17 years of age (compared with only 20 percent of the comparable white population). And only 6 percent of blacks are 65 and older (whereas 13 percent of comparable whites fall within this age range).

These contrasting structural characteristics of the two populations mean that blacks, already disproportionately concentrated in the central cities of large metropolitan areas, will become even more concentrated in these cities in the absence of other changes. That is, even if everybody suddenly stopped migrating, the black population would continue to grow faster than the white population, intensifying racial separation where it now exists.

Figure 7

## BLACKS IN CENTRAL CITIES

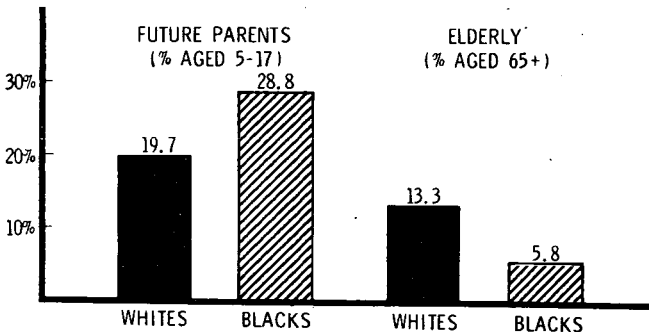
- BLACKS MAKE UP AN INCREASING SHARE OF CITY DWELLERS

1970.....21%  
1976.....24%

- DEMOGRAPHIC FACTORS WILL PERPETUATE THIS TREND

- FERTILITY RATE CURRENTLY HIGHER AMONG BLACKS
- AGE COMPOSITION FAVORS FASTER BLACK GROWTH

## AGE COMPOSITION OF WHITES AND BLACKS IN LARGE CITIES



Inevitably, the Congress must reckon with the long-term implications of powerful demographic forces that perpetuate metropolitan racial separation.

Are we likely to see a revival of the central cities through the return of the middle class, which might begin to solve these problems in a "natural" fashion? I cannot rule out the possibility that the typical big city may begin to attract substantial numbers of well-heeled newcomers. Such gentrification, as it is labelled, is obviously under way in certain places, most notably within the District of Columbia. It is also said to be happening in Boston's South End, Brooklyn's Park Slope section, Queens Village in Philadelphia, and Detroit's Renaissance Center. But while some neighborhoods have revived in some cities, it is quite another matter to regard these isolated success stories as the forerunners of a widespread regeneration trend involving a "back-to-the-cities" movement. Substantial urban resettlement occurs, it seems, only where the central city economy offers high-paying white-collar jobs to large and growing numbers of young workers.

The majority of central cities, in my judgment, will continue to conform more closely to the "downward spiral" than to the "regeneration" model, because the typical city does not contain the kind of base that would induce regeneration. Only a few cities are likely to escape becoming trapped in this spiral, whereby a progressively larger fraction of the needy find themselves economically stranded in central cities as more affluent whites and blacks gravitate outward.

#### *Nonmetropolitan areas*

The counterpart of this trend toward metropolitan decline is the "rural renaissance"—the revival or acceleration of population growth in small cities and towns, including those that are remote from metropolitan areas. These small, once stable communities, are ill-equipped to deal with sudden population growth. Like new celebrities they lack the full array of legal and institutional structures for coping with unaccustomed attention.

The pattern of growth in nonmetropolitan areas is more balanced now than before. Many previously lagging areas have revived while other previously growing areas have stabilized. Nearly two-thirds of all nonmetropolitan countries have gained migrants in the 1970's, compared with only one-quarter in the 1960s and one-tenth in the 1950's.

The revival of net migration into the nonmetropolitan sector is not restricted to areas with strong metropolitan commuting ties or those that are urbanized. The revival is especially noticeable for counties with the least commuting and those that are entirely rural and not adjacent to an SMSA. What is happening in the nonmetropolitan sector, therefore, cannot be explained away semantically as just more metropolitan sprawl or "spillover," for it is affecting distinctly remote and totally rural nonmetropolitan areas as well as those adjacent to metropolitan centers.

#### *Regional shifts*

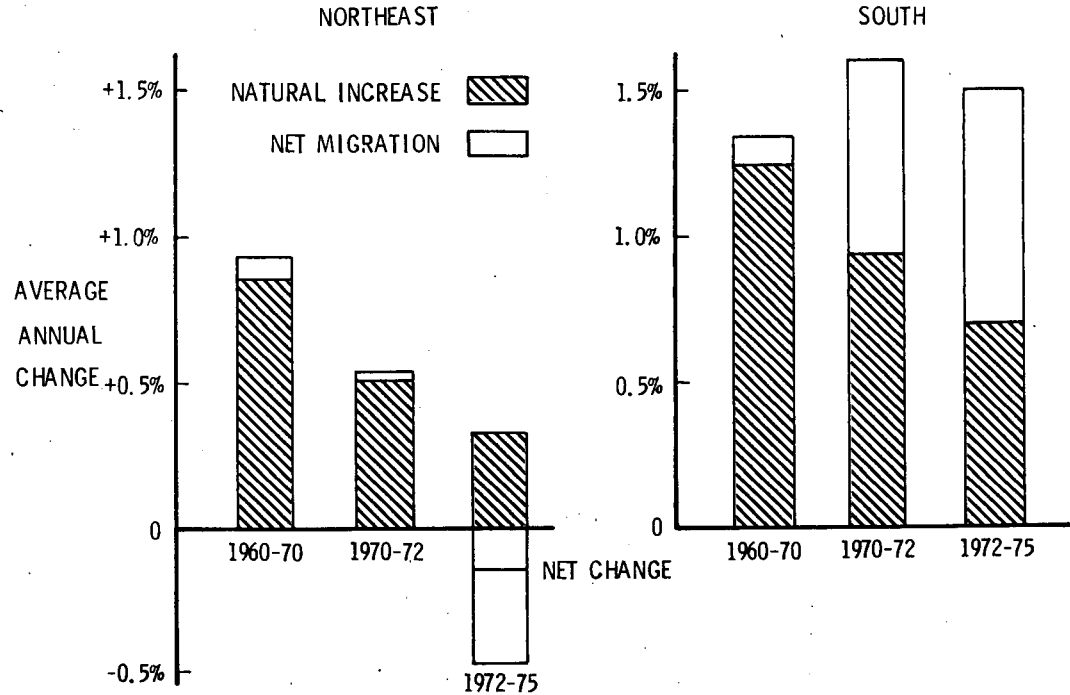
The changing directions of internal migration during the 1970s signal, and at the same time reinforce, new patterns in the regional distribution of economic vitality. These shifts are responsible for a variety of new regional conflicts of interest as well as for the new regional political coalitions whose power is starting to be felt.

The fortunes of different regions present a complex picture of growth and decline, with frequent marked breaks from past patterns. The shift in migration, together with moderating natural increase, has determined where the symptoms of national decline first appear.

The clearest illustration of this point is found by comparing the Northeast and the South (as defined by the Bureau of the Census). The contrasting developments in these two regions (shown in Fig. 8) demonstrate how recent shifts in net migration, together with the overall drop in the birthrate, have produced sharply diverging rates of population growth.

Figure 8

## POPULATION CHANGES IN NORTHEAST AND SOUTH BEFORE AND AFTER 1970



The heights of the bars in Fig. 8 show the average annual rate of population change in both regions for three recent time periods: the 1960's, the early 1970's, and the mid-1970's. Population change is divided into its two demographic components: natural increase (the excess of births over deaths) and net migration.

Notice that the rate of population growth has declined sharply in the Northeast but not in the South. The losses of the Northeast are due to both a downturn in net migration and the falloff in the birthrate. Prior to 1972, the Northeast had a nominal migration gain. After 1972, net migration reversed and turned into a sizeable rate of out-migration. The Northeast now registers negative change in population, because out-migration more than offsets the population's natural increase.

In the South, the population growth rate during the 1970s has not differed appreciably from that of the 1960s. What has changed, though, is the source of this growth: Notice that the net migration component is substantially greater than it was. In other words, a rising influx of newcomers has sustained the South's population growth as natural increase has waned. Although babies have become scarcer, the South has managed to attract migrants; the Northeast is running out of both.

All in all, the South isn't growing any faster than it did in the 1960's, and its lead over the Northeast isn't anything new—the South has been growing faster than the Northeast for at least fifteen years. But the South's margin over the Northeast today is due to migration, whereas in the 1960's it was due to natural increase; and that shift has altered the political complexion of the South.

The crux of interest, then, lies not so much in gross figures on the national population slowdown as in the political, economic, and cultural changes that regions undergo as migrants move among them.

### III. IMPLICATIONS FOR PUBLIC POLICY

The implications of these demographic changes are exceedingly broad. Rather than attempting an exhaustive inventory, let me illustrate the two kinds of demographic impacts which I mentioned at the beginning: (1) Demographic change modifies the groups of recipients and donors involved in several important kinds of redistribution, and (2) demographic change undermines long-standing economic and political balances in the distribution of income, wealth, and employment growth.

#### *Demographic change and redistribution across generations*

The trials and tribulations of Social Security, along with other government retirement programs, illustrate how demographic change can destabilize public programs—in this case, threatening to crack the cornerstone of intergenerational transfer in our society. States and localities, afflicted by the same demographic shift, have been forced to draw on general tax revenues to finance their retirement programs. In doing so, they create what are, in effect, new intergenerational transfer programs.

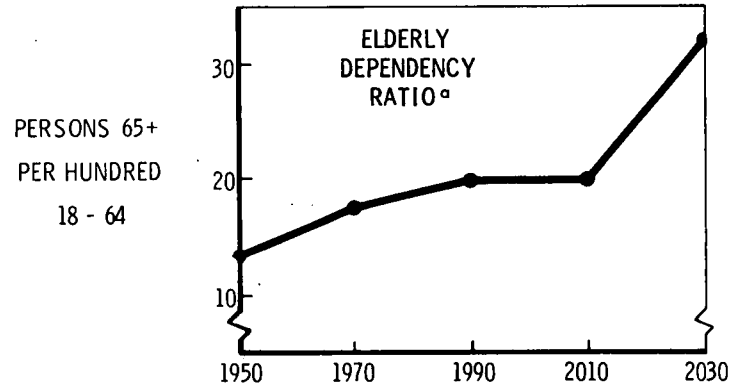
Recognition of the program was surprisingly long in coming, all things considered (Fig. 9). The problem originated quietly but powerfully during the late 1940's and 1950's as sharply rising birth rates expanded the ranks of future recipients, and gradually declining death rates kept current recipients alive—and receiving—longer. That expansion made it comfortable for planners to stay with the assumption that fertility would remain moderately high. (After all, it would take nothing short of a baby-boom-size workforce at the end of the century to generate enough revenues to support the post-WWII baby-boom generation when they began to reach retirement age.) That assumption was rendered invalid, of course, with the onset of the "baby bust" in the late 1960's. It was not until the early 1970's that the public, already hypersensitive to inflation and rising prices, came to recognize the alarming problems in store for Social Security.

## REDISTRIBUTION ACROSS GENERATIONS

### POLICY CONTEXT FOR SOCIAL SECURITY

- HIGH BIRTH RATES (1947-1960) EXPANDED RANKS OF FUTURE RECIPIENTS
- LOW BIRTH RATES (LATE 1960s ON) REDUCED RANKS OF FUTURE DONORS
- INFLATION AND RISING PRICES DREW ATTENTION TO THE PROBLEM

### LONG-TERM OUTLOOK: A SCRIPT ALREADY WRITTEN



<sup>a</sup>Census series II projection after 1977

The fundamental demographic change can be traced in the elderly dependency ratio (Fig. 9). This ratio shows the size of the elderly population (65 years and over) in relation to the working age population (ages 18 to 64)—in other words, the number of elderly dependents per hundred working age adults. The ratio has risen steadily over recent decades, and it is projected to climb from 17 per hundred in 1970 to 32 per hundred by 2030. This projected course reveals the slowly deteriorating demographic context within which other more immediate threats to the Social Security system's financial stability have become known.

The immediate "crisis" with Social Security has been precipitated by a combination of inflation and the manner in which benefits and contributions are coupled. Apart from these factors, though, Social Security is a program whose future script was largely written when Americans began to shun large families and converge on the 2-child family as a norm (or, in some cases, decided to remain childless).

The program's future is disconcerting. Barring a major war, the number of future Social Security recipients will surely rise. With low birth rates, though, the number of prospective donors already has shrunk, and it is uncomfortable to consider the possibility that the number may shrink further, depending on how few children our teenagers decide to have.

This illustration brings up a point that I believe merits serious consideration. It is the question of how to devise some arrangement for putting demographic judgment and foresight at the ready service of Congress. As this example shows, policy is too often made without benefit of demographic "early warnings" that can enable policy-makers to anticipate the effects of population change and adjust their actions to the constraints that change will impose.

#### *Demographic change and the distribution of income, wealth, and employment growth*

Migration shifts in both metropolitan and nonmetropolitan sectors have begun to reshuffle traditional power bases across the nation. These changes have been exposed in the new regional alliances—the Coalition of Northeast Governors, the Southern Growth Policies Board, and others—and will become more apparent in 1982 with Congressional reapportionment. The shifts also are posing common kinds of problems in specific places:

1. *Head-count concerns.*—When federal largesse is distributed among localities and regions—in such forms as revenue sharing, community assistance, vocational education, LEAA funding to states, and the like—the formulas for distributing it typically give weight to the number of people the area claims as its inhabitants. Regions unable to boast more bodies (or, worse, to claim even as many as they had last year) will lose funds, even though they may deserve more federal assistance for that very reason.

2. *Labor force quality concerns.*—In recomposing a region's population, net migration may alter its labor pool, replenishing or depleting its stock of human capital. Skilled workers may depart from an area, to be replaced by less skilled in-migrants; young adults educated at one region's expense may move themselves, and that investment, to another.

3. *Concerns about dependency.*—Some segments of the population (for example, those on public assistance) are recognizably a public burden, and others (such as uneducated rural-to-urban migrants) are thought to be. Their accumulation in a place (whether through in-migration on their own part or through out-migration by other people) can scarcely be a matter for local indifference because of the real or perceived costs they impose.

4. *Concern over undocumented aliens.*—This issue figures prominently in California, Texas, New York, and a few other states to which many aliens make their way. Illegal aliens used to stay close to the border, often in rural areas; but substantial numbers of them are now scattered throughout the nation. There is much disagreement about what effects they have: Some observers insist that alien Mexican workers take jobs that unemployed Americans or legal migrants could have filled, and that illegal aliens overburden social services of all kinds, taking more in the form of social welfare services than they contribute in taxes. Although evidence is scarce, these allegations have nevertheless gained wide currency.

5. *Local "shrinking pains."*—Newly declining areas are discovering that decline is not a graceful process. "Shrinking pains" have become commonplace, and not just in central cities. Nationwide, about one-sixth of all metropolitan areas are losing population, and one-third of metropolitan residents live in these areas of population decline. For central cities, especially large ones and those in the Northeast, the problems are far worse.

These nongrowing areas will continue to face problems of residential and productive obsolescence—most notably, vacant and abandoned housing, underused schools, outmoded public facilities, and an aging inventory of stores, offices, and factories.

Selective out-migration will add to the burden of dependency that elderly and low-income citizens impose on a locality by lingering on after younger and more mobile people have left. These forces will worsen the fiscal situation of declining jurisdictions in an obvious fashion: Tax bases will shrink, while service demands may even grow.

6. *Newly experienced growth.*—While some areas resent the problems that migrants generate when they leave, other areas equally resent the problems that arriving migrants cause: congestion, sprawl, and support costs. Local officials often feel frustrated at their inability to dampen the external forces that attract migrants. They have therefore attempted to deal with the effects, instead, by:

Instituting local population ceiling ordinances, as in Boulder, Colorado, Petaluma, California, and elsewhere;

Proposing federal legislation to control the influx of migrants, as the Governor of Hawaii did last year;

Attempting to withdraw unilaterally from federal welfare programs, as in Plumas County, California.

#### IV. CONCLUSIONS

Policymakers are not receiving the full benefit of demographic analysis; demography seems to be only partly understood and poorly used by those who make policy decisions. There is substantial room for improving the societal response to this ever-changing but partially predictable set of forces I have described.

A prerequisite for improvement, however, is an institutional means whereby technical demographic analysis, and the sounder basis for judgment it provides, enters the policy planning process more systematically and in a timely fashion. There is also a need for what can be termed "applied demography," whereby the demographic context I referred to is cast in a format that facilitates planning and policy actions. Social Security is a case in point.

Accurate prediction is but one contribution that demographic analysis can make. By illuminating future contingencies systematically and charting courses that seem most probable, demographic analysis can help strengthen the policymakers' design of a posture for meeting what the future may hold.

The demographic processes that underlie the shifts I have described are understood well enough that it is possible to foresee some of their long-range implications. These implications sometimes are difficult to acknowledge, though, because they pose problems (as with Social Security) that seem to have no politically feasible solution. A necessary step in such instances is to build a public perception of the problems' existence and why public action is needed.

It is at this stage that demographic analysis may be useful in enabling policymakers to build a case for action. Such analysis can draw attention to the circumstances that are built into the population's structure and the imbalances that are engendered by its changing spatial distribution. Demographic reporting, in short, can build public recognition and help pave the way for Congress to act.

Representative BOLLING. Thank you very much.

Our next panelist is Mr. Calvin L. Beale. He is leader of the Population Studies Group of the Economic Development Division, Economic Research Service of the U.S. Department of Agriculture. He is a graduate of Wilson Teachers College, which is now part of the University of the District of Columbia.

His graduate work was done at the University of Maryland and the University of Wisconsin. For the last 25 years he has specialized at the Department of Agriculture in the study of rural demography and the meaning of its changes. He is a trained demographer, and he has prepared numerous studies dealing with nonmetropolitan population changes.

We are glad to hear from you.

#### STATEMENT OF CALVIN L. BEALE, LEADER, POPULATION STUDIES GROUP, ECONOMIC DEVELOPMENT DIVISION, ECONOMIC RESEARCH SERVICE, DEPARTMENT OF AGRICULTURE

Mr. BEALE. In the 1970's, the rural and small towns, or nonmetropolitan areas of the United States have had a very substantial



and widespread growth of population that was, I think it is fair to say, completely unpredicted in public discussion or in the literature of any of the social sciences 10 years ago.

We have never before had a period in our history in which the nonmetropolitan population was growing more rapidly than the metropolitan. It is a unique time in that regard.

Since 1970 about 2¼ million more people have moved into such communities than have moved away from them, whereas in the 1960's, the net flow of people was out of the rural areas to the amount of 3 million.

So there is a natural desire for insight into what this means and how long it may continue.

I would offer several generalizations about this trend that I think are necessary to understand if one is to have an appreciation of it.

One is that it is very widespread regionally. It does not occur in every county, but it is in every region of the country. It is not something that is just taking place in the counties that are adjacent to metropolitan areas. It occurs just as normally in rather remote areas.

It is in the open country areas that the degree of this turnaround is the greatest. It is not that the small towns are not participating in this, but the actual extent of change is greater in the rural, open country areas.

The people who are involved in this trend can be categorized in three ways. One, there is a greater retention in the rural areas; two, there is the return of people into the rural areas who originated there but have been in the metropolitan areas for some time; and then there are people who originally came from a metropolitan area, but who have chosen to move to a small town.

The characteristics which are shown very briefly in table 2 of the prepared statement summarize the points that the newcomers are somewhat better educated, somewhat younger, have somewhat better incomes, and somewhat better professional and industrial status than those who have been residing in the nonmetropolitan areas all the time. Migrants on the whole are more likely to be white than are the average residents of the areas into which they are moving.

All this is not unusual for migrants, but it is rather significant for these nonmetropolitan areas, which have had a lower educational and income average than the country as a whole to begin with. So the trend is increasing the general social, economic status of the population of these areas.

I would categorize the reasons for this trend in four broad ways.

There is less displacement out of rural areas. We are not having the dislocations from agriculture or mining that we once had. This is true despite the agricultural crisis of last year.

Second, there are more nonagricultural job alternatives available. This process started with manufacturing decentralization in the 1960's, and has now spread into every employment category.

Third, there is more retirement going on to small towns or rural areas than we had foreseen. Most older people do not move, but of those who do move, a disproportionate number seem to seek a

rural or small town area. Many now have good retirement incomes that make it possible for them to do this if they wish.

Finally, much of the movement seems to be occurring for non-economic motivations. People have to have money to live, but they are not tending to move in a manner intended to maximize their income to the extent that was true in the 1950's or 1960's. We conclude this by inference from the areas into which they are moving, many of which are low income areas. We also confirm it from surveys of people who have moved.

Finally, this trend is international in character. It is not something peculiar to our country. It is happening in a number of other most advanced nations, nations where urban and rural conditions are not too different. For example, it is occurring in northwestern Europe.

I think the effect of this trend could be rated as generally beneficial. Like any social trend, it has advantages and disadvantages. It places more people in the kinds of communities in which they say they prefer to live.

Public opinion surveys show that many people have expressed dissatisfaction with metropolitan areas, and more seem to be acting on this premise. Growth broadens the tax base of many of these rural areas. It helps to restore the normality of age composition, except in the retirement communities. It even improves the community psychology.

We once had half of our counties declining in population. When this goes on for a whole generation, an atmosphere of decline and a moribund view of the community that develops. I do want to stress that we still have a decline in many rural counties. We probably have 500 or 600 of them.

But we now also have those that have reverted to growth, such as in southern Missouri. We have improved efficiencies in manufacturing. The manufacturers would not have gone out to the rural areas to the extent they did unless they felt they could obtain cost efficiencies, although some may have moved just to get a cheaper labor force.

I think there is a greater competitiveness in manufacturing with imported products. I think some plants only survive by making a move to lower cost communities.

One effect is that nonmetropolitan communities are now much more diverse than before. I constantly have to say at the Department of Agriculture that most nonmetropolitan people do not make their living in agriculture, even indirectly anymore. Only 9 percent of nonmetropolitan population is engaged in agriculture; 23 percent are in manufacturing.

But this makes these areas more susceptible to general goods producing recessions, I think one of the most unspoken aspects of the last recession was that it was more severe in the nonmetropolitan areas than in the metropolitan areas. This never seemed to come out in the presentations to the Congress.

The nonmetropolitan areas had a lower unemployment rate before the recession. In the acute phase of the slump they went up to a higher unemployment rate than the metropolitan areas. But they also recovered more quickly. Income in the nonmetropolitan areas still lags behind the metropolitan areas. The nonmetropoli-

tan family average is about 20 percent less income, but there is a converging trend, so we are now eliminating some of these income differences.

We don't, unfortunately, know what the cost of living is in non-metropolitan areas. The Government statistics provide much data for metropolitan areas, but providing that for the vast open country population has not been possible.

So we must still speculate. If you ask us now what is the difference in real income between metropolitan and nonmetropolitan people; we don't know. I think this is something that needs to be remedied.

One would have to say that the population dispersal trend has negative aspects as far as energy consumption. When I say negative, I mean going against the trend of national policy. Rural people use more gasoline per capita, at least 20 percent more. Even though they get better mileage, they travel so much more in the course of their work or family business that they end up using more per capita.

The energy situation with regard to housing seems to be quite mixed, and it is difficult to know where the balance lies. Rural homes are more likely to be free-standing homes that are more subject to the elements. They are also more likely to be mobile homes.

But they are somewhat smaller than urban homes. There are fewer apartments, and thus fewer situations where you have a huge group of people living in one building, with the price of electricity included in the monthly payments, and where they therefore waste electricity on that basis.

The rural areas probably have much more potential for the development of solar energy. It is much easier to have space for the collectors, and the rural population has a more southerly location in the United States.

Looking at the future of this trend, I feel very diffident, maybe because I am older than Peter Morrison. I have lived through some of these odd periods when my demographic colleagues have made projections that have proven to be atrocious.

We did not foresee this trend. I am not sure that we can foresee all the consequences, or how long it will last. I do think it has enough factors producing it, and enough factors internationally, that it will probably last through the 1980's.

Maybe it will last longer than that, but I don't think we can see beyond this more immediate period. We are not becoming a rural Nation. We will continue to be primarily a metropolitan population. But we seem to be reducing the proportion of people who live in the metropolitan areas, and increasing those who live in rural or in small metropolitan areas. Invariably, some of these nonmetropolitan areas grow to metropolitan scale sizes in the process of growth. We will continue to skim off populations in the nonmetropolitan group through reclassification. But we do seem to have all of the megascale urbanization that we need to be a modern technological society.

If there is one point I would like to stress, I think it would be the increased degree of noneconomic motivation in bringing about these changes. The improved employment opportunities in the

rural and small town areas have permitted much of the growth to take place. But we find at least a fourth of the people who move into rural, small towns, accepted a reduction in income to do so, and that the motivations that they will give you tend, in the majority of cases, to be primarily noneconomic. They will either have developed a positive attitude toward the value of life in a rural setting, or have negative reactions to life in the large cities, and are, to repeat, not moving necessarily in a way intended to maximize their incomes.

I think that we need much more research than we presently have to assess this decentralization. I know that is a typical way for social scientists to end a presentation.

I have tried to avoid that, but I will say it today. I think it is difficult to judge the merits and demerits of this trend economically, when so many of the people involved in it seem to be making the move for social reasons.

How do you put those into a scale? I am very much impressed by the fact that in 1970-72, when many academicians or Government people were still talking about the move to the cities, or its consequences, or remedies for rural areas, saying, let's take these people out of the rural areas and put them into the cities, at that very time thousands of individuals and hundreds of businesses were already making individual decisions to move into the rural areas, and the trend was underway for at least 2 or 3 years before it was recognized.

[The prepared statement of Mr. Beale follows:]

PREPARED STATEMENT OF CALVIN L. BEALE<sup>1</sup>

*Recent U.S. Rural Population Trends and Selected Economic Implications*

In the 1970's, the nonmetropolitan or rural and small town areas of the United States have been characterized by a widespread and substantial growth of population that was completely unpredicted in public discussion or in the literature of any of the social sciences 10 years ago. My field is demography. So thoroughly did demographers fail as futurists in foreseeing today's trends that I view it more an act of charity on your part than one of faith that you should invite population analysts here today. Yet the desire for insights into the future is logical and the demand unflagging no matter how limited the performance. So I will say what I can about rural growth and its implications.

If for convenience one defines rural areas as the nonmetropolitan counties of the Nation, we can say that the rate of population growth in these counties has exceeded that of metropolitan areas since 1970, something never before witnessed. It has done so because 2¼ million more people moved into such communities from 1970-76 than moved away, whereas in the 1960's the net flow of people was out of the rural areas to the amount of 3 million (Table 1). The rural outflow had been lessening in the 1960's, but there was no hint of a national turnaround of the magnitude we have witnessed.

I should like to offer a list of generalizations about the renewal of rural and small town growth that I believe are important to understanding it and to thinking about its impact.

1. The trend is very widespread, affecting every region of the country although not every county.

2. It is found in remote and completely rural areas as well as in those that are partly urbanized and incipiently metropolitan.

3. The degree of turnaround is greater in the open country and unincorporated areas than it is in the small towns.

4. It is brought about by the movement of urban natives into rural areas, by the return of people of rural origin who once lived in the cities and suburbs, and by

<sup>1</sup> Mr. Beale heads the Population Studies Group in the Economics, Statistics, and Cooperatives Service.

greater retention of rural people who under former conditions might have decided to leave. All three of these elements are involved.

5. The migrants on the whole are somewhat younger, better educated, higher in income and industrial status and more likely to be white than are the average residents of the areas into which they are moving (table 2).

6. People are not being displaced from farming and other rural extractive industries as they used to be. Today the loss of people from agriculture is just a fraction of what it was in the 1960's (despite the current farm crisis) and mining employment has revived.

7. The growth rate of nonagricultural wage and salary jobs in nonmetropolitan areas has been twice as high as that in metropolitan areas since 1970 and is both a cause and effect of the population turnaround.

8. Despite the growth of jobs, there is no doubt that nonpecuniary motivations are paramount for most of the movers. This is the principal way in which the trend differs from the rural-to-urban trend that preceded it. Everyone needs a source of income, but a majority of the new migrants consistently report a positive attraction to rural areas or a negative reaction to the large cities as their major motivation. A substantial fraction accept an income cut in the process:

9. Older people are strictly a minority in this migration, but those who move go disproportionately to rural and small town counties. Several hundred counties have become retirement destinations (whatever else they are) and are the most rapidly growing type of nonmetropolitan county.

10. The growth pattern of nonmetropolitan areas today is much like that of small and middle-sized metropolitan areas, which are also having greater population increase despite the low birth rate. The real contrast is between the major population areas and the rest of the country.

11. The topping out of large-scale urbanization is not peculiar to the United States. It is showing up in a number of other advanced nations.

At this point in the new trend we are able to measure it and describe it with reasonable confidence. At first we had only overall measures of change available and needed to draw our conclusions about causes or characteristics of the migrants by inference. Now we have an increasing number of surveys being completed on the migrants that give us a means of speaking more confidently about who they are and what has possessed them to confound society's former expectations. But as yet very little has been accomplished in studying the impacts of the new trend either for receiving communities or for the Nation as a whole. Thus in responding to some of the specific inquiries made in your letter of invitation I am necessarily speculating in part and confined in all good prudence to generalities.

The general effect of the new population trend in nonmetropolitan areas is probably beneficial: Prolonged or heavy population loss can be depressing for a community, even if it is a rational response to existing conditions. The age composition of the population may have become badly distorted by outmigration, with too few of the most active and well-educated young adults remaining. A psychology of decline and community fatalism may develop under which young adults can hardly keep their self-esteem or respect of their peers unless they seek their fortunes elsewhere. The tax base narrows. The community may be over-invested in public facilities and wary of indebtedness for further improvements. Population may drop below the numbers or density at which it can operate an inexpensive and efficient government.

It is necessary to remember that the national trend is an average of many diverse situations. We still have over 500 nonmetro counties that are declining in population (although usually at a much diminished rate from the 1960's), and are still seeking a way of stabilizing their size. The two outstanding characteristics of these areas are that they tend either to be heavily agricultural or to have a large black population that does not yet find rural conditions to its liking. However, the return of growth, per se, is not necessarily a panacea. Some rural areas are going from one extreme to another. The dilemma of continued decline may be replaced by the vexations of too rapid growth, or growth that changes the character of an area to the dismay of many of the longer term residents. With these reservations in mind regarding areas that are exceptional because of runaway growth or continued decline, some comments can be offered about the probable effects of renewed rural and small town growth.

*Employment opportunities.*—The current attractiveness of nonmetro areas to firms engaged in manufacturing or a wide array of trade and services has greatly increased the number and range of employment opportunities available to rural and small town people. The nonmetro economy is becoming more diverse and more similar to urban economies. Employment opportunities for nonmetro women—which

are typically limited in areas dominated by farming, mining, or timber work—have dramatically improved in the last 15 years. Even though wage rates tend to be below average, many rural families now have two incomes and are able to continue to live in the community of their preference rather than feel compelled to move elsewhere. Between 1970 and 1977, the Department of Agriculture estimates that the rate of growth in nonagricultural wage and salary jobs was twice as fast in nonmetropolitan areas as in the metro areas, and that higher growth rates extended to every major industry category. Such trends make the nonmetro areas more susceptible to industrial recessions, however. Normally the formal unemployment rate is lower in nonmetro areas, but in the acute phase of the last recession (the winter and spring of 1975), nonmetro unemployment rates quickly rose above metro rates, although this fact did not seem to be included in the monthly presentations of the unemployment situation made to Congress. Today only 9 percent of the nonmetropolitan work force is engaged in agriculture, forestry, and fisheries, compared with 23 percent in manufacturing.

*Income.*—Nonmetropolitan income levels are still below metro levels, but they are converging. The median family income of a nonmetro family is about 20 percent less than its metro counterpart. If present trends continue, there could be near convergence of metro and nonmetro incomes sometime near the end of this century. It is questionable whether full convergence will occur, given the continued advantages of urban areas for location of some of the highest paid occupations.

Does the increased movement of jobs and people into lower income areas mean that the average income level of the total U.S. population is being retarded by the decentralization trend? Are the rural-urban income differences offset by differences in costs of living and nonwage income? As basic as these questions are, we have to say that we do not know the answers. The Federal government collects and issues cost of living data for many different cities, but it does not do so for rural and small town areas as a whole. We are left with nothing but speculation about what the real income disparity—if any—is between urban and rural or metro and nonmetro populations. The lack of such data is surely one of the major deficiencies in the Federal statistical system, and an impediment to assessing the impact of increased rural population growth.

Has the gradual recent shift in metro-nonmetro population location had an effect on Gross National Product? Development economists with whom I have consulted in the Department of Agriculture think there are some GNP gains, some losses, and some shifts without change. They view the net effect as small but almost certainly positive. Certain cost efficiencies may well have been achieved by shifting industry or power generation to rural or small town sites. Firms threatened by foreign competition may have survived more readily, and it could probably be argued that the effect has been anti-inflationary. But an element of exploitation may also be present if the motivation is merely to find a labor force that is still willing to work for very low wages or other benefits. We should like to see gross product data estimated on a metro-nonmetro basis and believe it would be possible to impute such numbers.

*Regional development.*—Some of the strongest nonmetro growth areas coincide closely with the depressed regions whose condition caused such concern in earlier years, especially the Southern Appalachian Coal Fields, the Ozarks, and the Upper Great Lakes Cutover country. It is difficult to say that the improvement in these regions is the direct result of explicit Federal policy, but there are ancillary effects. It is impossible to conceive of extensive development occurring in the Ozark areas of Arkansas, Missouri and Oklahoma without the many Federal dams that have been built. While these dams were primarily intended for power and/or navigation, the subsequent demographic and economic growth probably stemmed more from the attractiveness of the reservoirs for recreation and retirement. In the coal fields the development activities of the Appalachian Regional Commission have been instrumental in improving transportation and other facilities in the area, but it is the unrelated revival of coal mining employment that has been the main reason for renewed growth. In the Upper Great Lakes there is very little that one can point to in the way of Federal assistance that has helped to set off the current pattern of growth.

*Effect on financing of community services.*—The population influx into nonmetropolitan areas can affect local government fiscal positions in several ways. First, increases in population size can permit small local governments to take advantage of size economies in the provision of local services. Second, changing population compositions will alter the needs and demands for public services. Finally, the rapidity of growth can determine the extent to which growth becomes a problem.

The ability of local governments to realize lower service costs as a result of size economies depends on the government structure and the pre-growth population size. Population growth in sparsely settled rural counties is likely to result in lower per capita costs of services. In 1972, expenditures in counties with fewer than 10,000 people were \$28 per capita higher than in counties with 10,000-25,000 residents. Education and highways are among services that easily afford size economies to growing local governments with fewer than 10,000 people. These economies result from such factors as more efficient pupil/teacher ratios in schools and greater use of roads without appreciable need for improvement.

Further, in sparsely populated areas larger numbers of users are not likely to reduce the quality of services available to each citizen. For example, researchers have estimated that to finance a police force large enough to maintain a 24-hour-a-day patrol, at least 10,000 residents are necessary. Therefore, the quality of services may increase with population in sparsely populated areas, while the unit cost of providing the services decreases.

In the more populated nonmetropolitan counties (those with populations over 50,000) reductions in costs are less likely to accompany population growth. Sufficient numbers of residents are already available to permit full time coverage by police departments or efficient pupil/teacher ratios in education. Further economies of size could only be obtained in the most capital-intensive services, so more populated rural counties will not find significant cost reductions associated with growth.

Perceived needs and demands for local services will depend heavily on the makeup of the new residents. Whether the immigrants are young families with school-aged children or retired older people will be an important determinant of the cost of providing local services. Currently, education expenditures comprise approximately 45 percent of total local government expenditures. If the school age population rises, local expenditure needs will tend to increase. However, although older citizens may desire more of some services (police protection for example), the expenditures for all local services tend to decrease as an area becomes a retirement community. It goes without saying that an influx of higher income people may be more readily accommodated than a growth of low income population.

Demands for services will also be dependent on population densities. A significant factor in the demand for such local services as police and fire protection and sewage disposal is the desire to offset problems aggravated by dense populations. Population growth in the more densely settled rural areas, therefore, is likely to increase expenditure needs for local services.

The relationship of rate of population growth to fiscal strains is unclear, except that very high rates of growth are more likely to require major changes in facilities. The capacity of government to respond quickly to such changes is limited. Unquestionably we now have instances of rural areas growing more rapidly than is desirable.

In sum, population increases can benefit very small or sparsely settled areas where the efficiency and quality of government services is limited by low numbers of people. Additional population may not present benefits in more populous areas, or in areas acquiring populations who need costly services, or in areas where rapidly or extent of growth overwhelms the capacity of the local government to respond.

*Energy use.*—People living in the open country or in other unincorporated areas drive about 40 percent more miles each year in their personal cars than do those living in incorporated places. They drive 70 percent more miles each year than people living in cities of 100,000 or more population. Only part of this greater usage is offset by better mileage per gallon of gas in rural areas. Households in unincorporated areas apparently use at least a fourth more gasoline per vehicle per year than do those in cities of 100,000 population or more, even when better mileage per gallon is allowed for. Thus the trend of increased population in rural areas requires more use of gasoline by individuals than would be the case if the growth were in cities. The excess usage is brought about somewhat more by higher average number of trips required in rural areas than by greater distance per trip. Rural people also have less access to public transportation as an alternative, and thus are more susceptible to adverse effects from a fuel shortage than are urban people.

The energy picture for residential uses is somewhat mixed. Rural homes are much more likely to be free-standing conventional homes or mobile homes with individual heating units than is true in urban areas where there are so many apartments. Rural homes are also more likely to have uninsulated attics. But with the great amount of rural building in recent years, rural homes are no longer more likely to be older structures of inadequate original construction. The average costs that nonmetro people report for electricity and fuel are not greatly different from those

reported by metro residents. Their individual homes are on the average somewhat smaller than those in metro areas, particularly with the much greater use of mobile homes, meaning less space to be heated. The overall residential energy efficiency of rural versus urban location does not seem clear cut. Not enough data actually exist on fuel usage to judge whether the smaller but more exposed rural units require more fuel than the urban mix of units which has larger houses but more apartments. It does seem likely that adoption of solar energy will be easier in rural areas both from the point of view of available space for collectors and more southerly regional location of the rural population. The rural areas are also showing some increase in wood for heating fuel (especially in the Northeast) but not at a rate that keeps pace with the growth of rural housing in general.

*The Future.*—We may not do any better in predicting the future course of the current trend in population redistribution than we did in foreseeing its beginning. With some diffidence, I suggest that the trend seems likely to continue in the next decade. The fact that it is produced by a variety of causes and is somewhat international in character strengthens my view that it is not likely to end very soon or abruptly. The ills of the major metropolitan areas—both real or perceived—do not seem to be lessening quickly and residential preference polls continue to show a large potential for further outmovement. Furthermore, the technology of data and communication is replacing some of the face-to-face contacts once necessary and obtainable only by urban agglomeration, and allows for a more decentralized business pattern.

I do not suggest that we are about to become a rural nation again. We will continue to be predominantly metropolitan and urban, but with a lower percentage of our people living in the major centers—say those of 2 million population or more each—and a larger proportion living in small or medium-sized metro areas and in rural areas and small towns. In effect, the Nation has all of the megascale urbanization that it needs to function as a modern society, and has probably exceeded the most desirable level in terms of its general social health. The collective triumph of the layman and the business community around the turn of this decade was that they perceived this situation. Through a host of individually made decisions, they began to shift the net flow of population and business before either the academic community or the government understood what was going on.

If I were to stress one point to this Committee about the current gradual shift of people toward nonmetropolitan and smaller metropolitan areas, it would be to re-emphasize the increase influence of noneconomic motivations in shaping the trend. Everyone has to have money to live, and it is through improved economic conditions in many rural and small town communities that much of the trend is possible. But its importance to the people involved cannot in most instances be evaluated in economic terms. People are just not moving to the extent they used to in a manner intended to maximize income. The trend may have relevance for economic policy, especially if it brings greater realization of the enlarged role that nonmetro areas play in the nonagricultural economy of this country and an end to the mystique that large metropolitan areas have an unchangeable growth dynamic built into them. But elements of value judgment quickly enter into an assessment of a trend when social benefits have to be compared with macro economic outcomes (including energy use). The shift clearly locates more people in the types of communities where surveys indicate that residential satisfactions are highest. What scale does one use in judging the importance of this against economic measures? Much more thought and research needs to go into appraisal of the decentralization trend than is now underway.



TABLE 1.—POPULATION CHANGE BY METROPOLITAN STATUS

(In thousands)

Area	Population					Net migration			
	Number			Percentage change		1970-76		1960-70	
	1976	1970	1960	1970-76	1960-70	Number	Percentage rate <sup>1</sup>	Number	Percentage rate <sup>1</sup>
Total United States.....	214,658	203,301	179,323	5.6	13.4	2,800	1.4	3,001	1.7
Metropolitan counties <sup>2</sup> .....	155,901	148,877	127,191	4.7	17.0	545	.4	5,959	4.7
Nonmetropolitan counties.....	58,757	54,424	52,132	8.0	4.4	2,255	4.1	-2,958	-5.7
Adjacent counties <sup>3</sup> .....	30,433	28,033	26,116	8.6	7.3	1,328	4.7	-705	-2.7
Nonadjacent counties.....	28,324	26,391	26,016	7.3	1.4	928	3.5	-2,253	-8.7

<sup>1</sup> Net migration expressed as a percentage of the population at beginning of specified period.

<sup>2</sup> Metropolitan status as of 1974.

<sup>3</sup> Nonmetropolitan counties adjacent to Standard Metropolitan Statistical Areas.

Source: U.S. Census of Population: 1970 and Current Population Reports, Bureau of the Census. Prepared by Population Studies Group, Economic Development Division, ESCS, USDA.

TABLE 2.—CHARACTERISTICS OF U.S. NONMETROPOLITAN POPULATION IN 1975 BY MIGRATION STATUS SINCE 1970

Characteristic	Nonmetropolitan population			
	Total, 1975	Nonmetro in both 1970 and 1975	Metro in 1970 and nonmetro in 1975	
			Number	Percent of total nonmetro
Total, 5 years and over .....	53,295	47,078	6,217	11.7
White .....	48,183	42,318	5,865	12.2
Black and other races .....	5,113	4,761	352	6.9
Male .....	25,902	22,837	3,065	11.8
Female .....	27,393	24,241	3,152	11.5
South .....	22,231	19,606	2,625	11.8
North and West .....	31,064	27,472	3,592	11.6
5 to 14 years .....	10,677	9,270	1,407	13.2
15 to 24 years .....	10,644	9,388	1,256	11.8
25 to 34 years .....	7,398	5,809	1,589	21.5
35 to 44 years .....	6,014	5,272	742	12.3
45 to 64 years .....	11,890	11,059	831	7.0
65 years old and over .....	6,673	6,280	393	5.9
Median age (years) .....	31.9	33.4	27.3	.....
Total, 18 years old and over .....	38,928	34,449	4,479	11.5
Elementary school .....	9,805	9,234	571	5.8
High school, 1 to 3 years .....	6,778	6,046	732	10.8
4 years .....	14,495	12,841	1,654	11.4
College, 1 to 3 years .....	4,408	3,662	746	16.9
4 years and over .....	3,442	2,666	776	22.5
Median years .....	12.2	12.2	12.6	.....
Civilian employed, 16 years old and over .....	21,865	19,130	2,456	11.4
Agriculture .....	2,039	1,911	128	6.3
Mining .....	428	378	50	11.7
Construction .....	1,388	1,216	172	12.4
Manufacturing .....	5,042	4,598	444	8.8
Transportation and public utilities .....	1,256	1,116	140	11.1
Trade .....	4,127	3,694	523	12.4
Finance, insurance, and real estate .....	753	621	132	17.5
Professional services .....	3,819	3,256	563	14.7
Services other than professional .....	1,615	1,430	185	11.5
Public administration .....	1,032	912	120	11.6
Median income:				
Male .....	\$7,072	\$6,954	\$7,850	.....
Female .....	\$2,620	\$2,611	\$2,650	.....

Source: Unpublished data from March 1975 "Current Population Survey," Bureau of the Census, retabulated for the Department of Agriculture.

**Representative BOLLING.** That is very evenhanded. I am glad that you noted that that came from academicians as well as politicians. You didn't say it that way though. Next we will hear from Mr. Thomas Muller, currently director of land use evaluation, Land Use Center of the Urban Institute. He has worked closely with all levels of government on the economic consequences of growth, and decline, and has authored many reports and scholarly articles on this subject.

He received his doctorate from American University in 1969. He is interested in the impacts of how demographic changes will impact the demand for public services, and consequently the economics of public services.

**STATEMENT OF THOMAS MULLER, DIRECTOR OF LAND USE  
EVALUATION, LAND USE CENTER, THE URBAN INSTITUTE**

Mr. MULLER. As was noted by the other speakers, several demographic and economic changes, which either began or accelerated over the past decade, are having now, and will continue to have, a profound impact on the Nation's economy and social well-being of the coming decade.

I intend to complement some of the comments made by Mr. Morrison and Mr. Beale.

One of the issues in terms of demography has been the concern about migration from central cities. To place this in perspective, about 8.2 percent of the white population has left the cities over the last 7 years, which means 10.3 million people. There has been some discussion of movement back into the cities. The fact remains, however, as illustrated in table 1, that the annual out-migration from central cities has actually been increasing in terms of yearly rates. Between 1975 and 1977, approximately 1.6 million people annually left the central cities.

One of the interesting phenomena that comes out of this is that out-migration from cities is as sharp in the South and West as it was in the Northeast, since the beginning of the 1970's. This phenomenon is widespread, although there is some movement of young families back to certain central cities.

In fact the migration in terms of population is probably not as sharp as it is when measured by income and wealth. Certainly at the regional level, we have had a much more dramatic change in the distribution of wealth and income over the last decade than population statistics would indicate. A State such as New York lost 20 percent of its income and wealth over the last 6 years.

Perhaps the most important phenomenon which has taken place has been the growth of transfer payments, which, I believe, have important implications both on inflation and on other issues facing our Nation from an economic and social perspective.

Again, to put this into perspective, in some of our larger, older cities, notably St. Louis, of the incremental change of income between 1975 and 1977 50 percent of the total came from transfer payments. In Philadelphia, the share was 36 percent and in Boston, 46 percent.

If one looks at the growth between 1970 and 1975—of every dollar of incremental income—and this is independent of inflation, almost one-half of the total came from transfer payments in selected cities. Even at the metropolitan level, which includes suburbs, the growth in transfer payments has been dramatic.

In the New York region, which includes 18 million people, from 1970 to 1975, 27 percent of all income growth has been in transfer payments. By way of contrast, in the metropolitan area of Houston during the same period, only 8 percent of all income growth has been from transfer payments; 77 percent came from payroll income, as compared to less than half of this percentage in New York. Thus, there has been a dramatic shift taking place at the regional level.

I believe the New York-Houston comparison is most useful. It indicates the vigor of growth in some of our South and Southwest-

ern areas, and the economic stagnation and the overdependence on transfer payments in many of the older Northern cities.

Indeed, I believe we have an implicit national income policy through transfer payments. We are essentially redistributing income by transfer payments to our inner cities and some rural areas. I believe this will have major implications on inflation today and in the future.

Since more people are dependent on transfer payments, it does make a choice of where to live somewhat easier. To complement what Mr. Beale said, one of the major reasons for the growth in the State of Maine is that people are either retired or receiving other transfer payments which play a part in selecting where they prefer to live.

My discussion of rural Vermont also indicates this pattern. The large dependence on transfer income is giving our residents more flexibility to live where they prefer to live, which, as all surveys show, is not in our large cities.

At the same time, the current pattern causes some income redistribution from the large urban areas which, again, as Mr. Beale suggested, may have some negative effect. So, again, there are some benefits as well as costs associated with the movement of population. We have not reached the point where we can measure those effects. But there is little doubt that the growth of transfer payments needs to be considered as a major issue confronting everyone in the Congress and elsewhere when attempting to deal with inflation.

In the last part of 1977, 40 percent of all Federal outlays were in the form of transfer payments. That is a growth of over 40 percent over a 6 or 7 year period. In 1971, as I recall, the national defense budget, and transfer of payments were equal in dollar outlays.

By the last quarter of 1976, the defense budget was 22 percent of all Federal outlays; transfer payments, 40 percent. This gives us some indication of the shifts that are taking place. I believe that as transfer payments approach 50 percent of all Federal outlays their impact on where households choose to locate will be even more pronounced than it is presently.

Again, to cite an example, if you examine the residence of retired military personnel, 80 percent of the recipients are in Southern and Western States. This is in part because traditionally military bases and other facilities were in these regions of the country; and in part because choices people are making of where to live once retired.

But as the share of transfer payments as a national income increases, the implications of effects will be magnified. I believe that is an issue that deserves continuous attention.

Covering very briefly several other points, regional changes which have been taking place as a result of migration also deserve some attention. For example, if one looks at the central cities and urban areas in terms of population changes, we find, as I noted earlier, substantial out-migration of whites from central cities. In suburban areas, the rate of minority growth has been much greater, probably because the base was low to begin with.

At the regional level, we find that in the Northeast States such as New York, Pennsylvania, Ohio, we have had out-migration to

the South and West of the white population. We had an in-migration of the black population to these states from 1960 to 1975. The 1977 data indicate that this has also changed. In terms of nonmetropolitan movement, examining New York State, which most of us know has seen a substantial out-migration from its cities, particularly Buffalo and New York City, a number of small towns are growing in population.

In fact, looking at some of the statistics, Ithaca, Clifton, towns of 20,000 to 30,000 are growing in New York State. Not everyone is leaving New York. Actually, what we see is that a number of cities in upstate New York, in the 20,000 to 30,000 population range, have in-migration of households. Again, we have had losses in central cities, but we have also had growth in smaller communities.

The other place where population growth is taking place is on the periphery of metropolitan areas, mainly because of the interstate highway system. The effect of interstate highways has been to spread population out substantially from the urban core. One can almost trace fingers growing out of cities, including Washington, where one finds through interstate highway development, smaller towns developing 30 or 40 miles distant from the center core.

Limited access highways have made it feasible to open up land further from the inner core. Thus we have an extension of urbanization into the rural areas. As the cost of housing, particularly the land component rises, it becomes economically feasible for a builder to be constructing units 40, 50 miles from the core cities, with many persons commuting these distances daily.

I recently came across data that indicate that many people are commuting daily from Ocean City, N.J., to New York City, 65 miles distant.

I personally, shudder at this commuting distance; but the consequences of the rise in housing are such that that this seems to be the only viable alternative people who prefer single family housing have.

Finally, let me just spend a minute on the changes in demand for public services which are taking place in growing and declining areas. Again, one of the dilemmas is how to deal with the paradox of growth and decline.

The view of Congress has been that as areas grow, they don't need much special assistance from the Federal Government. There have been several exceptions, one in Kitsap County in the State of Washington where a large defense facility is under construction. A Public Law specifies direct aid to the local governments as a result of the imbalance that is taking place from the demand to expand roads and schools. In order to help local and State governments to overcome the gaps between revenue from people moving in and the costs of new facilities, federal aid is provided.

But more typically, however, growth is a problem that most areas can solve. Comparing decline and growth, we have found that decline is beyond the control of local governments to reverse.

The question is, What are the short- and long-term impacts? We don't know how to measure impact well. We do know that our central cities are not economically competitive. The issue is wheth-

er we should help them become competitive, or whether or not they should attempt to be competitive with their own resources.

But the fact remains that the out-migration of not only people but industry from our older cities is continuing. Even though the level of decline may stabilize, the problem will remain with us for a long time.

One of the items that one notices is the sharp decline in education demand, the fact that most of our large cities show substantial declines in school enrollment. In many instances, this has been 15 or 20 percent of enrollment in a 5-year period. We also find that the proportion of families receiving social service assistance has been increasing. Over 10 percent of all of our central city families are receiving assistance in the form of welfare payments of some type.

In the Northeast, 12 percent of our families in their central cities receive such assistance, or, one out of eight families. I believe this ratio may continue to rise.

Again, we find a situation of some growing areas coping with their problems and providing the population with adequate facilities. On the other hand, old cities have smaller populations to pay for maintenance of their aged infrastructure.

The last point which I would like to make deals with the question of housing, because it is an issue which always arises in discussions of future population movement and economic effects of such movement.

The fact is that despite projections regarding future costs of energy, and the movement back to our cities, 75 percent of new housing units remain single, unattached, units; this pattern has been stable for the last 4 or 5 years.

The fact is that a larger share of single family unit construction has been going on than at the height of the energy crisis. We find that the cost of housing has been rising rapidly, yet there is a very sharp demand for housing, particularly detached one family units.

In my view, this can be attributed to the basic change that has been taking place over the last 6 or 7 years from viewing housing as a means of shelter to purchasing housing as a capital investment:

I attribute this change in attitude to our inflationary pressures. I think middle income families recognize a single family structure, as a very good investment, one on which they can receive a higher rate of return, than on other investments.

It is an investment that families can have with leverage. This can explain the phenomena that the typical American is buying a larger house with a smaller family, holding personal income constant. It is my view, the spiralling cost of housing will continue unless we can curb inflation, because I believe the two factors are closely interrelated. If we have more inflation, we can anticipate more demand for housing.

Let me close my remarks with the housing issue. Hopefully I can contribute to the discussion which will follow.

[The prepared statement of Mr. Muller follows:]

## PREPARED STATEMENT OF THOMAS MULLER

## OPENING REMARKS

Several economic and demographic changes which began or were accelerated during the 1970's will have a profound impact on our nation's economic and social structure during the 1980's and beyond.

My comments today will focus on a number of these trends which are of interest to this committee and others.

One of the most widely discussed demographic movements, both in Congress and elsewhere, has been the outmigration from our central cities. These cities lost 8.2 percent of their white population between 1970 and 1977. Outmigration exceeded 10.3 million during this 7 year interval. The regional shift of population from the North to the South and West is also a well known phenomenon. However, economic changes among regions, measured by shifts in wealth and income, have been more dramatic than migration data would indicate. For example, New York State contributed 11.2 percent of personal income and 25.3 percent of corporate taxes in 1970, and only 8.9 percent of personal and 17.2 percent corporate taxes in 1976.

The growth in transfer payments during the 1970's has been dramatic. Between 1970 and 1976 over 20 percent of all nominal income growth has been from transfer payments. In some of our larger older cities, notably St. Louis, the share of transfer payments has been 50 percent, in Boston 46 percent and Philadelphia 36 percent. Even at the metropolitan level, which includes suburbs, the statistics remain impressive. In the New York region, which includes over 18 million persons, 27 percent of added income between 1970 and 1975 was attributable to transfer payments, which are a useful gage of economic status. By contrast, in the Houston metropolitan area, only 8 percent of income change was from transfer payments, while earnings accounted for over 77 percent of the growth.

Another problem facing our nation is how to best deal with issues of decline and growth. Our emerging policy is that federal intervention is required to counteract decline. In a few instances, however, the federal government has provided financial assistance to mitigate problems associated with growth. Issues of growth of concern to Congress, particularly fiscal problems, are briefly discussed in the statement which follows these opening remarks.

Housing, particularly for low and moderate income households, is another broad national concern. In my view the current population redistribution should not have a negative impact on the ability of families to have adequate housing. The major problem—a more rapid rise in the housing costs compared to disposable income—is probably attributable primarily to the shift in viewing housing as an investment, rather than as a shelter. Given current projections of inflation, this is likely to continue. However, the outmigration of white, middle income families from central cities has produced a qualitative improvement in central city housing for minorities, particularly during the 1960's when the demand for these units was low. While this is now changing in some jurisdictions, one should not ignore one of the few benefits of outmigration from the urban core.

A question which always arises is whether higher energy costs will change the pattern of intrametropolitan and interregional migration. I suggest that higher gasoline and natural gas prices are unlikely to have much influence on the pattern of population redistribution in our nation in the foreseeable future. The experience of other Western nations, various surveys taken in our nation, and our experience since 1974 all point to this conclusion.

During 1976, transfer payments accounted for 33.8 percent of all federal expenditures, national defense 32.4 percent. In the last quarter of 1977, transfer payments comprised 39.8 percent of the outlays, national defense 22 percent.

As transfer payments approach 50 percent of all federal outlays, their impact on where households elect to locate will be even more pronounced than it is today. They will result in a redistribution of income from large metropolitan areas in northern states to smaller jurisdictions, particularly in the South West. For example, about 80 percent of all military pensions are paid to recipients in the southern and western states.

Since most transfer payments have explicit or implicit cost of living adjustments, their effect on inflation will be growing. It will be increasingly difficult to control inflation, while earned income will have to bear an increasingly larger burden of federal and state taxes, since a large proportion of their revenue is from personal income taxes, and transfer payments are typically exempt from this tax. The issue of how to deal with transfer payments may well become one of the major problems this committee will have to deal with.

## PRESENT AND FUTURE POPULATION FLOWS

*Intrametropolitan movement*

Since 1960, outmigration from central cities has continued at an accelerated rate (see Table 1). While there has been, in recent years, some movement of young, middle income households back to selected neighborhoods in central cities, even in the District of Columbia, which is one of the cities experiencing this movement, outmigration between 1976 and 1977 exceeded 15,000 persons.

One of the lesser known facts is the movement out of central cities in the South and West, which between 1975 and 1977 exceeded the movement in the North.

Minority population in central cities is growing at a rate of about 1 percent. Thus, almost all net outmigration from central cities is from white households, the District of Columbia being one of the exceptions.

While white population in suburbs is growing, the rate of Black growth is 3.5 times as rapid. However in non-metropolitan areas the rate of white population growth is above the level of minority groups. (See Table 2).

*Interregional flows*

Migration from northern industrial states—New York, Pennsylvania, Illinois, Ohio—is continuing, primarily to the South and West. However, several predominantly rural northern states, including New Hampshire and Vermont, are attracting some immigrants. Thus, while the movement out of central cities is common to all areas, suburbs in the South and West are continuing to grow.

As shown in Table 3, while Middle Atlantic States had a decrease in population, it was due exclusively to white outmigration. The number of Blacks and other races increased, presumably as a result of "legal" immigration.

TABLE 1.—NET METROPOLITAN MIGRATION 1960-77

[In thousands]

	1960-70	1970-75	1975-77
Central cities.....	-3,449	-7,018	-3,331
Suburbs.....	8,756	+5,423	2,718
Total metro area.....	5,307	-1,595	-613
Annual migration to central cities.....	-345	-1,403	-1,665

TABLE 2.—CHANGE IN POPULATION BY LOCATION AND RACE

[In millions]

	1970	1977	Percent change 1970-77
Central city:			
White.....	48.9	44.9	-8.2
Black.....	12.9	13.7	6.4
Suburban:			
White.....	70.0	76.9	9.8
Black.....	3.4	4.6	34.5
Nonmetropolitan:			
White.....	56.3	61.9	9.9
Black.....	5.7	6.1	7.1

Source: Bureau of the Census.



TABLE 3.—MIGRATION BY RACE 1970-75

Region/State	White	Black	Other
Northeast.....	-916	86	137
Middle Atlantic.....	-956	78	126
New York.....	-701	60	60
North Central.....	-852	-18	73
South.....	1,597	44	121
West.....	761	119	258
United States.....	1,623	232	598

Source: Bureau of the Census.

Indeed, the number of non-Black minorities in Middle Atlantic states increased by over 120 percent in five years, both because of high birth rates and immigration. Black migration to the South is a very small component (3 percent) of total migration to the South.

#### Nonmetropolitan movement

Nonmetropolitan growth appears to be concentrated on the periphery of Rapid transit afforded by limited access highways has expanded commuting distance beyond metropolitan boundaries. As a result, new development is sprouting near highway interchanges 30-50 miles from the urban core. This movement is an extension of the suburbs, taking place as the price of land rises.

One example of this expansion is in New Jersey, where, as shown below, all growth has been concentrated in the three remaining nonmetropolitan counties.

TABLE 4.—POPULATION CHANGE: 1970-76

County	Number	Percent
Nonmetro.....		
Sussex.....	25,000	32.1
Ocean.....	100,000	48.0
Cape May.....	16,000	26.3
Balance of State.....	21,000	.3

*Smaller cities, including States with net population losses.*—While New York State had an absolute decline in population during the 1970's, and large cities lost population, a number of smaller non-metropolitan cities grew, as shown below:

TABLE 5.—POPULATION CHANGE: 1970-75

(In thousands)

City	Number	Number	Percent
Ithaca.....	26.2	28.8	9.7
Plattsburg.....	18.7	21.1	13.0
Saratoga Springs.....	19.9	24.9	25.1
Clifton Park.....	14.9	20.7	39.0
New York.....	7,896	7,841	-5.2
Buffalo.....	463	407	-12.0
Rochester.....	295	267	-9.4

#### Population characteristics

In earlier periods, the largest share of population growth was attributable to natural increase—births over deaths. In recent years, however, natural increase has been limited to 0.8 percent annually. Thus, the internal migration as a factor explaining area population growth or decline has increased in importance.

Immigration from other countries is the second cause of population growth, particularly in such states as New York, California, and Texas, as was suggested earlier. Between 1830 and 1920, 37 million immigrants came to this nation, accounting for a substantial share of the national growth during this 90 year period. Legal immigration, however, is currently only a small (20 percent) share of total population growth. In addition to "official" immigration, there are an estimated 6 million illegal aliens, with over a third of this total concentrated in the Northeast. Immigra-

tion thus continues to be a significant growth factor in Middle Atlantic and South-west regions.

In addition to quantitative changes, reduced birth rate, high divorce rate, and extended life expectancy have caused qualitative changes. For example, the number of divorced females heading a household increased from 694 thousand in 1960 to 2.1 million in 1975, while the number of one person households increased from 6.9 million in 1960 to 15.0 million in 1975. The size of the average household has been shrinking for many decades. In 1976, the average household size was only 2.94.

#### GROWING IMPORTANCE OF TRANSFER PAYMENTS

##### *Importance of transfer payments in older cities*

Transfer payments are most important in central cities, an important part of household income. A large percentage of Black families, particularly those residing in central cities and rural areas, have to depend on transfer payments.

As shown in Table 6 transfer payments have constituted a very large share of nominal income gains in such cities as St. Louis, Philadelphia and New York between 1970 and 1975. This is the result of several factors, the most important being the outmigration of younger employed households, and the increased concentration in these cities of persons depending on transfer payments as their primary source of income.

##### *Transfer payments at the State-regional level*

Even at the state level, transfer payments are an increasingly important part of personal income. As in the case of central cities, there is substantial variation. For example, 27 percent of all added income in New York State between 1970 and 1976 was derived from transfer payments, compared to only 14 percent in Texas.

Transfer payments from federal pensions, both civilian and military are concentrated in the South and West. However, social security payments are distributed more or less equally among regions and states.

##### *Impact of transfer payments on population redistribution*

Transfer payments have facilitated to some extent, regional population movement. For example, Florida is a net recipient of over \$1.5 billion annually in transfer payments, primarily pensions, while New York State loses over \$1.0 billion in social security payments.<sup>1</sup> Transfer payments in the form of pensions enable Americans to retire in areas they prefer—be it in the "sunbelt" or Vermont, with the result of fiscally benefitting recipient areas, since the impact on the main local cost-education, is low and the federal government is assuming medical costs and a large share of other social outlays.

TABLE 6.—TRANSFER PAYMENTS AS SHARE OF PERSONAL INCOME GROWTH 1970-75

	Per capita In- come growth 1970-75	Percent transfer payments	Percent Wages—pri- vate sector	Percent other Income
Boston (Suffolk County).....	\$1,426	45.9	35.9	18.2
Baltimore City.....	1,772	37.6	41.1	21.3
New York City.....	1,628	34.9	34.2	30.9
Philadelphia.....	1,941	35.7	33.7	30.6
St. Louis.....	1,665	50.0	27.3	22.7
Boston SMSA.....	1,802	27.7	53.7	18.6
Houston SMSA.....	2,674	8.2	77.3	14.5
New York SMSA.....	2,032	25.9	48.3	25.6

#### CHANGES IN DEMAND-DECLINING AREAS

##### *Education*

Enrollment in city public schools has been declining in almost all large cities since the 1970's. This is illustrated by the decline in the population under the age of 14 in central cities. Between 1970 and 1976, elementary school enrollment in the nation was reduced by 12 percent. In central cities the reduction has been greater. Changes in enrollment in selected large cities are shown below.

<sup>1</sup> Net gain or loss is calculated by the difference in social security collections and distribution of benefits during 1974-76.

[In percent]

City	Population change 1970-75	Enrollment change 1971-75
Cleveland.....	-13	-15
Indianapolis.....	-4	-17
Milwaukee.....	-7	-12
Philadelphia.....	-7	-9
Houston.....	8	-10
New Orleans.....	-6	-12
San Francisco.....	-7	-15
United States.....	4.6	-2.7

While enrollment is declining, the cost per pupil is rising faster in large cities than in other jurisdictions. Thus, one problem central cities face is how to control the cost of education as enrollment declines, and utilize funds saved for other public services. While the demand for school as measured by enrollment is declining, students appear to require more individual attention since many of these students lack motivation, and are handicapped, either socially or physically. Indeed, one of the major problems older cities will have is the entry into the labor market of a semi-education minority population in the 1970's.

#### Public safety

The ratio of crime has increased at an alarming rate since the late 1950's, although there is some evidence it may have peaked in central cities in the mid 1970's, in part as a result of the decline in the number of teenagers who commit a large percentage of all crimes.

Police budgets and personnel have risen more rapidly during the last decade than most other services, primarily in response to rising crime.

#### Social services

Social services, nationally, are concentrated in central cities, in which 10 percent of all families receive assistance, as illustrated below.

	Families receiving assistance (thousands)	All families (thousands)	Percent assistance of total
U.S. total (1977):			
Central city.....	1,393	13,910	10.0
Suburbs.....	692	19,443	3.6
Outside SMSA's.....	877	17,592	5.0
Northeast (1977):			
Central city.....	478	3,967	12.1
Suburbs.....	193	5,450	3.5
Outside SMSA's.....	85	2,346	3.6

Source: Bureau of the Census.

In the Northeast, almost one out of eight families is receiving assistance. The concentration of families receiving assistance in central cities is in part due to the migration of more affluent households to suburbs.

The concentration of elderly in cities is an other problem facing social service agencies. As shown below, central cities have 36 percent more elderly, on a per capita basis, compared to their suburbs, but fewer school age children.

	Central cities	Percent	Balance of SMSA	Percent
Total population (thousands).....	58,220	100.0	80,793	100.0
Under 14.....	10,934	18.8	16,563	20.5
Over 65.....	6,842	11.8	7,004	8.7

## CHANGES IN DEMAND-GROWING AREAS.

While most school districts are experiencing decline, a number of schools are expanding as a result of large immigration, as in Kitsap County, Washington State.

The cost of public safety also rises rapidly in areas of growth. In fact, there is a high correlation between crime rates and growth, with areas of rapid growth showing some of the highest crime rates in the nation.

Collectively, because of diseconomies associated with size, once a jurisdiction stops growing, its service costs per capita will be substantially higher than they were prior to the beginning of its rapid growth higher.

## COST OF EXPANSION

*Expansion in rural areas*

Population growth in rural areas causes substantial economic as well as social change. A major issue facing these areas is the front-end cost of expanding the infrastructure to meet rising needs, such as roads, utilities, and other facilities which require expansion, with a lag in revenue to pay for added facilities. Given the growing resistance by the public to debt service paid from property taxes, this problem will continue in the future.

One example of costs associated with rapid growth in a predominantly rural area can be found in Kitsap County, Washington State, the site of the Trident submarine base. The population growth has put severe strains on the local public service and facilities. In this instance, federal funds under Section 608 of Public Law 522 have been provided to assist the community during the time period between the need for new facilities and the ability of local government to pay for these facilities from taxes new residents will generate. In the long run, a rural community can cope with the problem by adequate land use controls and other measures, but in the short-run, assistance is required. Federal intervention as in Kitsap County, is, however, unique. One exception are energy impacted communities which can receive federal loans and grants.

Large federal sums allocated for costly sewage treatment plants have provided an incentive for added development in suburban and ex-urban areas. To some extent, these federally-aided facilities have made central cities less competitive for both individuals and business firms.

*Rise in capital outlays*

The main problem confronted by rapidly growing jurisdictions is the need to expand their capital facilities, while faced with a substantial lag in revenue. Since construction costs are rising more rapidly than the cost to operate and maintain facilities, the real cost of the infrastructure per capita is rising. The traditional means to accommodate growth has been long term debt. However, local residents have been turning down bond issues in larger numbers. If, for example, California passes the referendum limiting local taxes, debt financing would be extremely difficult.

The federal government has caused, in several localities, a rapid influx of population into quasi-rural areas, with the situation described above—the need for expanding the infrastructure—typical. To meet this need at one site—Kitsap County in the state of Washington—Public Law 522 authorizes payments to local and state government if an “unfair and excessive financial burden” results from the expansion triggered by the new defense facility. While this process provides a means of offsetting some of the “front-end” costs, this approach would not be practical nor necessary if private development were the cause of rapid growth, since the rate of such growth could be controlled locally.

*Scale diseconomies*

There is little doubt that, on a per capita basis, it is more expensive to provide public services in cities than those in the 50,000-75,000 size category. This is not a new phenomenon. Indeed, as early as the beginning of the 20th century, large cities—New York, Boston—spent more for police, fire and related services compared to others.

*Effects of environmental regulations*

Environmental regulations have had several effects on local economies, many of them not intended by the legislation. Since production facilities in older urban areas are likely to be less efficient, compared to newly constructed facilities in growing areas, regulations are more likely to result in older facilities closing down.

This means that as a jurisdiction grows in population, it eventually reaches a size when it is inefficient. At this point, it spends more for services for two reasons: (1) The unit cost is higher; (2) cities with high densities require more services than

smaller, low density jurisdictions. There are higher costs associated with both size and density as recent studies demonstrate.

#### IMPACT OF POPULATION MOVEMENT ON HOUSING SUPPLY AND DEMAND

##### *Type of housing demand*

During 1976, 75 percent of all new residential units were one family structures, and the proportion of these units was only slightly lower in 1977. By contrast, only 56 percent of all units during 1973 were single family. Thus, despite predictions during 1974 that the energy problem would increase the demand for multi-unit structures, particularly in central cities, there is no evidence of such a pattern. This is an important fact, since it indicates that new construction continues to be concentrated in low density suburban and non-metropolitan areas which can accommodate this type of housing.

While high rise condominiums have a market in several large cities, this market represents only a small proportion of total housing demand. Condominiums in 1976 accounted for fewer than 6 percent of all new units. Current tax rules and personal preferences for low density housing continue to encourage the construction of single family detached units.

The importance of mobile homes, as measured by their share of all new units, has declined since 1973, suggesting that households are willing to purchase more expensive housing rather than accept substandard shelter.

##### *Location of new housing*

At the regional level, new housing is concentrated in the South, followed by western states. During 1975, only 13 percent of all units under construction were in the Northeast, although the region includes 27 percent of the national population. Within metropolitan areas of all regions, new units are concentrated in suburbs, particularly in jurisdictions on the periphery of built-up areas, where raw land is relatively cheap.

##### *Causes for housing demand*

Although the cost of new housing, particularly in suburbs, has risen more rapidly than disposable income during the 1970's, the demand for new dwellings has not subsided. The current level of demand is triggered primarily by new household formations. While the number of married couples, the traditional market for new housing, increased only 5.5 percent since 1970, the growth in the number of unrelated individuals was 37 percent, increasing the total number of households by 14.9 percent, or somewhat less than the 18.7 percent increase in the number of new units. The difference is probably attributable to abandonment, demolition, and changes in the use of residential structures, as well as an increase in "second" homes among more affluent households.

Since the average size of a household, and thus presumably demand for large units, decreased substantially in recent years, what explains the rise in the selling price of a household? Unlike what one would anticipate, the percentage of housing with 1,600 or more square feet increased from 37 percent in 1970 to 49 percent in 1976! Thus, part of the higher cost represents a demand for larger units, and is probably related to a shift from purchasing or renting housing as shelter to buying housing as an investment. Since large, single family detached housing in suburban areas appreciates faster than other housing, the demand for expensive suburban units has remained quite high. Thus there is a paradox of shrinking household size, while the typical American is purchasing more space—over 500 square feet per capita in the mid 1970s.

##### *Future directions*

There is reason to believe that housing construction activity will continue to be high in growing regions—particularly in southern and western states, with the majority of new housing detached units. Central city housing, especially high quality rehabilitated units, will continue to be in demand among affluent households without school age children. However, regardless of future energy price increases, it is unlikely that there will be a substantial "back to the central city" movement among families currently residing in suburbs and non-metropolitan areas.

More Americans in the coming years will own their shelter, and it will be increasingly difficult to find reasonably priced rental apartments in cities as well as in other jurisdictions for those who cannot afford or prefer not to live in owner-occupied housing.

The redistribution of population does not appear to be directly linked with the price of housing. For example, the price of single housing in Houston, a growing area, continues to be lower than in Northeast metropolitan areas with continuing

net out-migration. In growing areas, the private market is probably more able to provide housing for households other than those in low income categories than growing. In fact, housing for moderate income households is probably less of a problem in the Southwest and West than in older urban areas.

The difference in the cost of housing construction explains this pattern. Construction costs in the New York and Boston region are 20 percent above the national urban mean, in Houston, Austin and Dallas considerably below the mean.

#### IMPACT OF ENERGY COSTS

The potential affects of energy costs on urban migration are as follows:

(1) Increasing cost of private transportation (personal auto) could discourage long trips between residence and place of work, shopping and recreation.

(2) Higher utility bills could mean households will seek more compact housing.

(3) The higher cost of all products as a result of increased energy cost as a component of production costs could discourage the purchase of large, low density suburban housing.

In my view, none of the above is likely to take place in the foreseeable future for the following reasons:

(1) The cost of gasoline rose less slowly over the last few decades than the cost of automobiles. Even if the price were to increase sharply (to the level of Western European nations—\$1.00-\$2.00 per gallon) Americans would change to more efficient cars. This view is based on survey results in California and the experience in Western Europe.

(2) High utility bills may encourage migration to states with temperate climates, but, this item is not likely to be a major factor. Given improved insulation, most Americans are likely to invest in better insulation than change their lifestyle. While structural improvements in presently owned housing may have only marginal effects, utility bills in most areas would not be a dominant cause for relocation.

(3) The average American living in large metropolitan areas drives a long distance to work: Atlanta, 9.8 miles, San Diego, 9.2. This is a function of road system and population size. In smaller areas (Springfield, Mass., Madison, Wisc.), the average trip is only 4.9 miles. However, the use of mass transit is declining somewhat, and so is carpooling.

#### MAJOR ISSUES IN DECLINING AREAS

Much of the infrastructure in central cities—roads, utility lines, schools and public buildings—was built in the 1920's and 1930's and requires extensive outlays to remain operational. As the population and local revenue of a city declines, it becomes difficult to obtain sufficient funds for maintenance. The cost of renovation or construction of new facilities tends to be higher in densely populated cities compared to outer areas. However, for a city to remain relatively competitive and retain its private business base, it is necessary that facilities be well maintained and when necessary, new ones added.

The cost of repaying for infrastructure already in place has to be shared among fewer persons, increasing the per capita burden on the remaining residents.

Population decline would not be a severe problem if outmigration would not be relative. However, to the extent that outmigrants tend to have a higher income and require fewer services compared to those remaining, the burden on those remaining rises.

Representative BOLLING. You encourage me. I have worried about my role in getting a compromise in the interstate highway bill for years. I am encouraged that it may have been a worthwhile effort.

Mr. MULLER. We just completed a study on the effect of shopping centers on central cities. It indicates that there is a strong and positive relationship between large shopping centers and the Interstate Highway System. Some of the downtown decline is attributable to the new malls that are so easily accessible to these interstate highways.

Representative BOLLING. Before I recognize our last witness, I would like to say that I am glad Congressman Brown of Ohio has joined us, and his placement at the end of the table is only a question of time and not of importance.

Representative BROWN of Ohio. I would be glad to testify if you would like.

Representative BOLLING. Our next panelist is Mr. Robert Theobald, president of Participation Publishers, consultant for the United Nations Control Data Corp.; Office of Technology Assessment; and Office of Economic Planning and Development in Arizona. He has spoken widely for any number of organizations. He did his undergraduate work at Cambridge University, his graduate work at Harvard.

His publications include "Economizing Abundance," "An Alternative Future for America's Third Century," and the "Failure of Success," and others.

We are glad to hear from you.

**STATEMENT OF ROBERT THEOBALD, PRESIDENT,  
PARTICIPATION PUBLISHERS, WICKENBURG, ARIZ.**

Mr. THEOBALD. As I listen, I feel like a statistic because I moved to Wickenburg, Ariz., in 1969, which is a small town. I seem to have done something which other people didn't catch up with until now. I should state another factor: I am really an economist and not a demographer. I will try not to wander too far.

Finally, I should perhaps state that I am English. I work in the United States because I keep on hoping that this is the country that will deal with these issues.

Representative BROWN of Ohio. Just hoping? Any encouragement?

Representative BOLLING. He is still here.

Representative BROWN of Ohio. But in Arizona.

Mr. THEOBALD. I am reminded of the manpower hearings we held in 1963 with the Senate subcommittee on that subject. In some ways it seems we have gone backward in our understanding of economic issues of that time.

I suspect that we are dealing today more with symptoms than we are with problems.

I would like to suggest to you that the central issue we should be considering is whether the neo-Keynesian model of providing a job for anyone who wants to work is a feasible model in 1978? It was the question I raised in 1963. I am not more certain it is possible in 1978 than in 1963. In fact, I am quite certain that it is not possible.

The sooner we raise this central issue the more chance we have of achieving progress.

I suspect that one of the real costs of the Vietnam war was that we lost track of fundamental trends that were underlying what was going on and that until we go back to it we are not going to make much progress.

This may be a strange way of approaching the regional issue, but I don't think it is. Because I think that this specific issue can only be effectively examined within the overall context.

Let me turn to the figures very briefly. I shall quote from Business Week:

Less than 3 years ago, the Commerce Department's Bureau of Economic Analysis published projections for 1980 and 1990 of the population, personal income and employment in each of the 50 States. By last year nine growth States, Arkansas, Louisiana, Mississippi, South Carolina, Arizona, Texas, Alaska, and Hawaii, had

already exceeded their 1980 projections in population and one State, New Mexico, had already surpassed the 1990 figure.

By the same token the shortfall in slower growing regions had been enormous. For example, New York was expected to grow by more than 1.1 million people from 1970 to 1980 but thus far has lost more than 100,000. Pennsylvania, slated to gain nearly 800,000 during the 1970's, has increased its population by barely 30,000 so far.

The best projections I found are in the study by the Joint Center for Urban Studies of M.I.T. and Harvard. They suggest population increases will be 3.3 million in the Northeast from 1975 to 1985, 4.6 million in the North Central area, 15.8 million in the South, and 7.2 million in the West. Those figures are fairly dramatic.

I personally have some question as to whether the relative South and West figures are accurate. Obviously, the move out West is going to continue. I would suggest to you that this leads us to a point where we are faced with the necessity to change some of our thinking. It is argued that the Founding Fathers gave us free rights to all movement but it is a little unrealistic to hope that the Founding Fathers would have understood this issue: It was a rather more empty country in those days.

I think it is best if people move because they think they will benefit themselves. But it does not follow that they necessarily will benefit themselves. In fact, one of the things that happens is that migrants send back very positive information about moves. They say, "We did very well." We can see this reality specifically in Arizona. People tend to move to my State because of the air and a more relaxed lifestyle. They soon discover that the summertime is as tough as the wintertime in the North and that the change in lifestyle tends to lead to intense social pressures. I am not devaluing my own State, but I think it is an unethical thing to force people to move if they are going to be worse off than before.

We still tend to assume that people will be better off when there is rapid growth. I agree with the last witness when he questioned whether the rapidly growing areas are capable of managing such rates.

We are worrying about that in my own town. I also find that more and more people, including utilities and governments, are arguing that maybe we do not benefit from rapid growth.

I therefore want to suggest to you that the regional question is a political question and not a question of statistics. The thing that worries me the most is how we argue the case with statistics. This is not a statistical problem. It is a question of what sort of country we want.

As I listen to the debate, it seems to me we have three different patterns. The Northeast, in general, still seems to be trying to make the dominant political and socioeconomic system work and is deeply disturbed by signs of breakdown in this pattern.

I see the South as trying to gain the advantages which come from economic growth and hoping that the unfavorable consequences which they see as happening in the Northeast can be avoided. The West is trying to limit Federal intervention far below present levels on the grounds that Federal policymaking cannot cope effectively with the degree of diversity in the country.

I think that the only way to cope with these issues is to recognize that we are moving away from an industrial, mobile society to a



communication-based culture. In doing this we must remember the impact of the telecommunication revolution which I consider the most driving force in our culture today.

To quote very briefly from an editorial in last year's *Science*:

Although destined to be of enormous importance, the electronics revolution has proceeded with comparatively little notice. The electronics revolution is now extremely dynamic. The dynamism of electronics is in sharp contrast to the slow moving, static or deteriorating situation encountered in energy, food, nutrition, and material.

Modern society has available a tremendous and increasing reservoir of scientific and technical knowledge. The electronics revolution is making that knowledge more readily available, extending intellectual powers, often by many orders of magnitude, while facilitating greatly the accumulation of more knowledge.

As the vigor of the Industrial Revolution fades, the electronics revolution will provide at least partial substitutes for the sense of power that the automobile has provided, one of these will be a feeling of enhanced intellectual power.

I think that we are going to have to create new directions. I want to state a few of them very briefly. We have to give up the idea that more is better than less. We have to accept the idea that enough is plenty. We have to recognize that people are not alike and accept the reality of diversity. We have to remember that religious values are necessary for the functioning of any socioeconomic economy.

I am really arguing that the current neo-Keynesian economic theories, which that eminently pragmatic man, Keynes, would certainly reject if he had lived this long, have been invalidated by the conditions which Keynesian theory brought into existence. We shall continue to make critical policy errors until we understand that recent economic theories, and the conclusions derived from them, are obsolete. I say obsolete rather than obsolescent advisedly. I am tempted to spend time enlarging on this statement, but it would be self-indulgent in this context. As members of the committee may be aware, I started my work in this area and have written widely on it, most recently my overall attempt to look at economic theory was in "Economizing Abundance: A Noninflationary Future."

I see stagflation as an addictive disease. We would like to be cured as long as none of us have to pay the cost. The most immediate cost would be to face reality squarely without the haze of rhetoric which we have allowed to grow up to obscure the harsh outlines of critical issues. I think if we did this, we would recognize that we would have to give up on our exaggerated hopes for further economic growth and face the problems of how to structure work and how to distribute resources in today's real context.

I think if we do this we should find that it is indeed possible to provide a decent standard of living and an improved quality of life to all citizens. Unfortunately, we are fond of our sacred cows. They perform the desirable function of preventing us from recognizing the magnitude of the changes we shall have to accomplish. I believe that the underlying question facing the committee is whether it will use its prestige and summon up the necessary courage to inform the country about the truly fundamental changes which are necessary if we are to continue to fulfill the American dream.

[The prepared statement of Mr. Theobald follows:]

## PREPARED STATEMENT OF ROBERT THEOBALD

*The New Regional Debate in the Context of Changing Economic Realities*

"We shall be able to rid ourselves of many of the pseudo-moral principles which have hag-ridden us for two-hundred years, by which we have exalted some of the most distasteful of human qualities into the position of the highest virtues . . . All kinds of social customs and practices affecting the distribution of wealth and of economic rewards, which we now maintain at all costs, we shall then be free to discard."—John Maynard Keynes, "Economic Possibilities for our Grandchildren."

## THE NEED FOR NEW ECONOMIC THEORY

Almost exactly fifteen years ago, on May 21, 1963, I spoke on the second day of Senator Clark's hearings on "The Manpower Resources of the Nation." Senator Kennedy may possibly remember the occasion he was present as we tried to unravel the dilemmas of what we then called manpower policy and now call stagflation. I was asked at that time by Senator Clark if we could avoid massive unemployment in the sixties by any measure feasible within the conventional wisdom. I replied that it was not possible. I still believe that this answer was correct and that one of the primary costs of the Vietnam war was that it disguised our continuing and worsening unemployment dilemma.

Back in 1963, I was arguing that automation and cybernation would impact the job market in many significant and unpredictable ways. I believe that severe consequences have indeed developed and that they have radically decreased the growth in the number of "good jobs" in the society. The extent and seriousness of the problems we now face have been disguised by the fact that there has been at the same time a rapid increase in those jobs where wages tend to be low and the prospects for personal development are limited, or non-existent.

I would suggest to you, therefore, that the central economic issue is still, essentially, the same as it was fifteen years ago. Is our failure to achieve full employment, except in time of war, due to failures in policy or, alternatively, is the goal of Keynesian style full employment both undesirable and infeasible in today's conditions? I am one of the few economists who argues flatly that the evidence is now in to prove the need for a fundamentally new economic theory. Indeed I would suggest to you that your own studies of recent years actually support this conclusion.

I am aware that this will seem a strange way to start my testimony on regional migration patterns and their economic consequences. I must therefore make it clear that I believe that the specific regional issue can only be effectively examined within the overall context of your planned Special Study on Economic Growth. I am arguing that we cannot discuss these issues, let alone resolve them, without a new political and economic theory.

Indeed, I would not have accepted your invitation if I had not sensed a willingness to reconsider policy issues which have all too often been considered "off limits" for serious challenge. I have given testimony before Congress on a very limited number of occasions during the last fifteen years because my time/money constraints as an individual consultant are very severe and my hopes for significant impact from most sets of hearings are very low. I hope, and believe, that the time is indeed ripe for a fundamental examination of economic theory and practice and it is this perception which brings me here today.

I was only able to accept your invitation because of significant help and support that I have received from Arizona Institutions such as the Salt River Project, the Office of Economic Planning and Development, the Valley National Bank and others. None of these groups are, of course, responsible for my conclusions but I continue to be pleasantly surprised at the willingness to challenge sacred cows which exists when cooperating with business and government as compared to supposedly free patterns of enquiry at colleges and universities.

## THE CONTEXT OF THE REGIONAL ISSUE

I would suggest to you, in fact, that it is now urgent that we recognize that the new knowledge in our culture is not normally emerging from our educational institutions but from those engaged in the hurly-burly of practical situations. The implications of this reality have been far too little examined. According to our previously held concepts of political theory development, the universities would research trends in the national culture and socioeconomy and then carry out public, or at least published, debate in underlying philosophy. In fact, we are now witnessing the new phenomenon that the tasks of information supply, philosophical analysis and policy formation are all being carried out by a trio of "public servants"—

government, business and the media,—which are often unprepared for, and even unaware of, the implications of their new roles.

It is in this context that we may be able to recognize that the regional issue is one of "political economy" rather than of economic models. I use this old fashioned phrase to remind us that we need to consider basic issues rather than engage in a battle of statistics.

Perhaps the most extraordinary aspect of the present debate is that we are "surprised" by regional differences and argue that they must turn into a war wherever they exist. We apparently have come to believe that the country is so homogeneous that all regions of the country should think alike. While we expect and encourage passionate argument between the supporters of various interest groups: meaningful disagreements between regions are, on the other hand, seen as irresponsible and dangerous. Seeing the nature and the genius of the American political system, this is certainly strange.

Almost all media coverage on the subject of regional tensions appears to be provocative: it tends to report that "nobody" wants a war but continues to imply that one must inevitably develop. Even some of the active participants in the debate do little to discourage this conclusion—for example, John Moriarty of the North-west-Midwest Coalition is reported as saying: "If the debate evolves in an acrimonious way, so be it."

The questions we face are deep ones of diverging perceptions and political philosophies. We are trying to discover what our goals should be and how we could achieve them in a period of fundamental change. It seems to me that different regions have very different basic points of view:

The northeast is still trying to make the dominant political and socioeconomic system work and is deeply disturbed by signs of breakdown in this pattern.

The south is trying to gain the advantages which come from economic growth and hoping that the unfavorable consequences which they see as happening in the northeast can be avoided.

The west is trying to limit federal intervention far below present levels on the grounds that federal policy making cannot cope effectively with the degree of diversity in the country.

#### POPULATION GROWTH

Thus people approach the regional issue using very different sets of perceptions and evaluate the data in very different ways. How far will the statistics take us? We do know that population growth is very rapid in the South and West and that there have been actual declines in population in certain northeastern and midwestern parts of the country. (One may also reasonably believe that the two recent harsh winters may further enhance movement patterns.)

We know that the forecasters themselves have been surprised. In a special report written on May 17, 1976, Business Week stated: "Less than three years ago, the Commerce Department's Bureau of Economic Analysis published projections for 1980 and 1990, of the population, personal income and employment in each of the fifty states. By last year nine growth states—Arkansas, Louisiana, Mississippi, South Carolina, Arizona, Texas, Alaska and Hawaii—had already exceeded their 1980 projections in population and one state—New Mexico—had already surpassed the 1990 figure. By the same token, the shortfall in slower growing regions had been enormous. For example, New York was expected to grow by more than 1.1 million people from 1970 to 1980 but thus far has lost more than 100,000. Pennsylvania, slated to gain nearly 800,000 during the 1970's has increased its population by barely 30,000 so far."

The data is summarized in the following way by Dr. Adam Broner, Office of Economic Policy, State of New Jersey. "During the years 1970-75, population increased in the Sunbelt States by 8.9 percent (7 percent excluding Florida) and by 1 percent in the snowbelt region. At the same time the North experienced a net out-migration of its 1970 population while the South gained 4.6 percent of population through net in-migration." The longer-term data is set out in the table below:

NET MIGRATION BY REGIONS (1955-75)  
[Percentage change of base year population]

	1955-60 <sup>1</sup>	1965-70 <sup>2</sup>	1970-75 <sup>3</sup>
New England.....	-0.6	0	-0.5
Middle Atlantic.....	-1.6	-2.0	-2.0
East North Central.....	-1.2	-.8	-1.9
South Atlantic.....	+2.0	+2.6	+7.3
East South Central.....	-2.8	-1.3	+1.6
West South Central.....	-1.1	+ .5	+2.9
Mountain.....	+4.1	+1.1	+9.8
Pacific.....	+5.7	+2.5	+2.5

<sup>1</sup> U.S. Census of Population 1960, "Lifetime and Recent Migration" (U.S. Department of Commerce, Bureau of the Census) p. 16.

<sup>2</sup> 1970 Census of Population, "Lifetime and Recent Migration" (U.S. Department of Commerce, Bureau of the Census) p. 54.

<sup>3</sup> "A Myth in the Making \* \* \*" op. cit. p. 3, except migration rates for the Mountain and Pacific regions which are from "Estimates of the Population of States with Components of Change: 1970 to 1975" (U.S. Department of Commerce, Bureau of Census) series P-25, No. 640, p. 20.

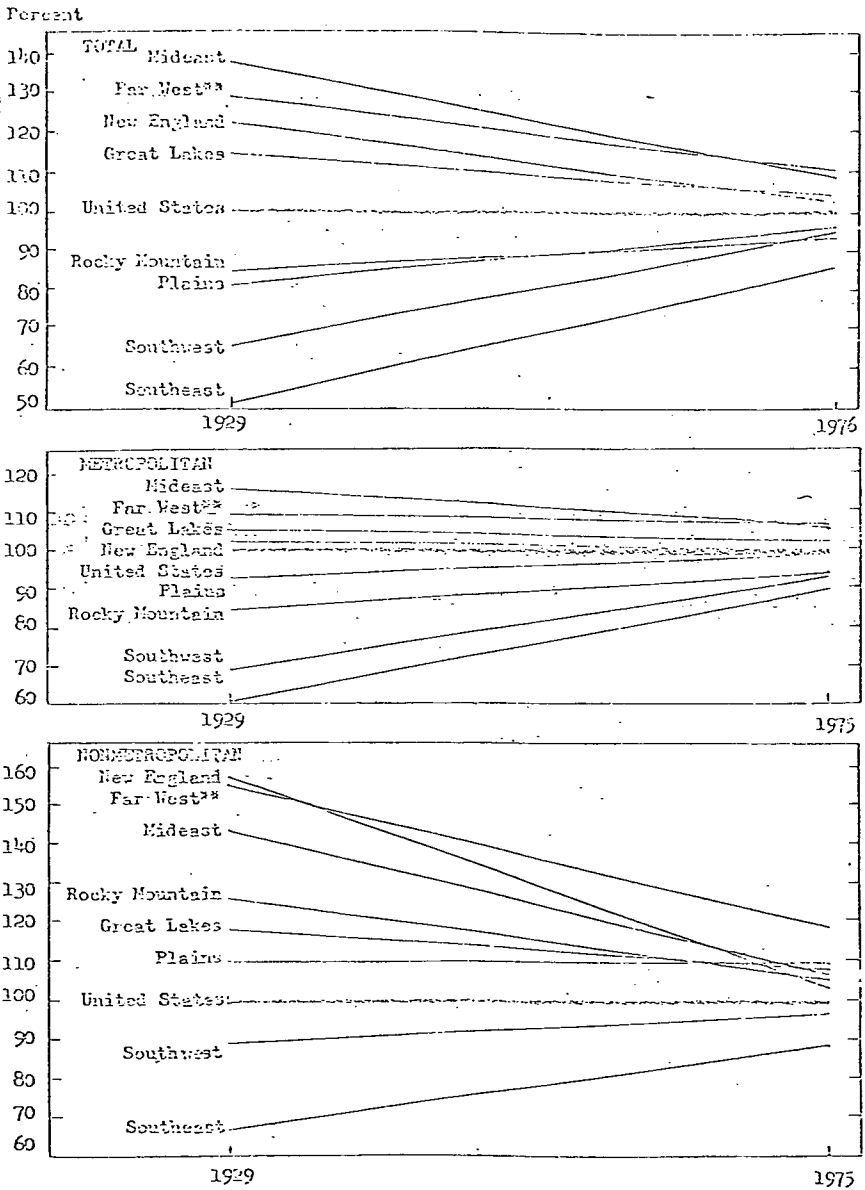
Examining the potential impacts in my home state of Arizona may help to bring home the magnitude of the impacts. The latest projections show population growing from 2,270,386 in 1976 to 4,168,064 in the year 2000—an 86 percent increase compared to a 21 percent increase as shown in the middle Census bureau projection for the whole of the country.

Arizona, like most quick growth states, is now uncertain whether the rapid rise in population is in its best interest. Little, is however being done for most of those who would want to change the dynamics are convinced that they cannot be altered. Development of an intelligent policy to ensure that people were aware of the implications of their movement would certainly have the support of much of the State's population.

#### REGIONAL INCOME TRENDS

We can now look at basic economic trends. The charts below show that the very large gaps in per capita income which existed in the past have been closing over past decades. As opposed to the past when there were very significant differences between various parts of the country which called for government action to reverse, we are now at the point where differences within states and regions are today far more important and significant than differences between them.

Regional Per Capita Personal Incomes Have Converge Toward The National Average



\*Per capita personal income is total personal income divided by population as of July 1.

\*\*Includes Alaska and Hawaii.

Once again we discover that the issues have changed far less over the last fifteen years than we normally believe. Senator Kennedy's primary question to me at the 1963 Manpower Hearings was in terms of how we could deal with the problem of depressed communities within prosperous states and regions. Regrettably, answers to this question have not been found, or even intensively sought, in recent years. I would suggest to you that given the relative equality in regional incomes at this time a heated debate about the theoretical problems of achieving regional equity will accomplish far less than a reexamination of what type of communities can be effectively helped by the federal government and how.

#### WHY WE SHOULD PREVENT MASS MIGRATION

Population trends and per capita incomes are two subjects where we have relatively adequate information. Regardless of all the caveats that can be raised, the information is relatively clear and meaningful. On the other hand, despite the spilling of much ink, we do not know much of significance about the detailed impact of federal policies and disbursements in various states and regions. In a paper "The New Regional Debate", prepared by Robert R. Rafuse Jr. of the National Governors Conference Center for Policy Research and Analysis, it is argued: "Setting aside the inflammatory rhetoric that characterizes much of the discussion, the fact remains that nothing approaching a consensus on the nature of dimensions of the problem currently exists. Indeed 'the problem' at issue in the regionalism debate is really a number of separate problems, although many of them are strongly interrelated. To an impartial observer, the existing literature appears to have generated far more heat than light."

Rafuse goes on to argue that our primary effort should be to refine the data. I, on the other hand, would make a fundamentally different point. I believe that more refined statistics will not resolve the primary critical points which must be raised at this time. Let me state clearly and bluntly that we can already show without any additional data that the present mass movement from North to South and from East to West is not in the interest of any region. Neither is it necessarily in the interest of the individuals involved in the movement.

#### THE HISTORICAL REALITIES OF MIGRATION

When considering the record of United States population movements we must be sure we are comparing our present reality with past reality and not with fictionalized history. Many of the nineteenth century Conestoga emigrants arrived at their destination only to find it was not their real goal—perhaps this is why they were then known as "movers". All too often our modern migrants arrive without any goals. They have left their motivations behind with their memories and their lifestyle and they somehow hope that a blue-print for living will be found in the brochure the real-estate developer dreamed up.

If it is true, as I believe, that people who move with realistic expectations of what they will find have a greater chance of settling in happily than those who are merely rejecting conditions existing in the place they came from, then it is vital that as much realistic information as possible be furnished to prospective migrants. If not, America will become a nation of mere movers.

Some people argue that nothing should ever be said or done to discourage movement on the ground that an absolute right exists in the U.S. Constitution. They would even object to attempts to improve the flow of information and to prevent misinformation. However, the term population pressure would be necessarily produce a different reaction today than 200 years ago. At the time of the founding of America it was possible to leave when crowding was excessive: it is my contention today that our only reasonable response today is to rethink and reorganize.

#### WHY WE SHOULD DISCOURAGE MASS MOVEMENTS

Let me go on, immediately, to try to prevent a basic misunderstanding that could develop at this point. I am not arguing that we should prevent or encourage movement through planned federal government policy. On the other hand, I do believe that it will be increasingly infeasible and undesirable to claim that all state and local constraints on movement are unconstitutional.

Many people now agree that large-scale movements of population inevitably lead to social disruption. It therefore makes sense for governments at all levels to lean against the tide of movement which otherwise tends to be self-reinforcing. Fortunately, intelligent policy-makers across the country are beginning to recognize this fact and would be willing to struggle with the situation if they were provided with the necessary space to seek intelligent solutions.

We are faced with the necessity to manage movement patterns in ways which were not required when there was plenty of room in America and the world. If we are to do this, we must understand why people move. We can do this best by starting from a tautology: "People move because they think that they will be better off after they move from where they were to where they are going than they were before the move." Unfortunately, people's hopes are often frustrated because their knowledge about the places to which they move is faulty.

Among the many reasons for failing to gain accurate information is that people who move are very unwilling to admit to people they left behind that they made a mistake. Thus the messages which migrants send back will tend to "accentuate the positive and eliminate the negative" to such an extent that the picture may be totally falsified.

One can see this reality specifically in Arizona. People tend to move here to obtain a better climate, lower utility bills and a more relaxed life-style. They discover that the summer climate in the Southwest is as tough as the winter climate is in the North, that their summer cooling bills are as shocking as their winter heating bills were in the North and that the change in styles often leads to intense social pressures: divorce rates in Tucson and Phoenix are among the highest in the nation. Finally, people are still coming to Arizona for health reasons: we have not yet made it clear that the vegetation patterns in Phoenix and Tucson are now such that allergy and respiratory problems can be very acute.

It may appear that I am devaluing my own state in saying this. I am not—we enjoy living in Wickenburg, a small town of about 4,000 people and the new communication technologies ensure that I am no more isolated than I want to be. But I do consider it unethical to draw people to the State on the basis of faulty information and thus damage their lifestyle and waste their resources.

#### CHANGING ATTITUDES TOWARD GROWTH

Problems of divergent rates of regional growth are assumed to be insoluble because, despite all the debate on limits to growth, we continue to think and act as though those regions achieving the most rapid rate of economic growth are necessarily the most fortunate. The spiral toward ever-increasing growth, which is caused, among other factors, by mass migration, is therefore presented by the conventional wisdom as highly positive.

The self-reinforcing dynamics which result from mass movement are easy to understand. The people who move into an area require new infrastructure development: this creates jobs and incomes and this in turn ensures needs for other types of services which create jobs and income—the end result is a growth spiral.

Until recently, most people saw this spiral as entirely favorable. Today, however, more and more citizens agree that we must aim not for maximum rates of economic growth but for optimum rates. It is in this context that total rethinking of the regional issue is both feasible and necessary for the challenges to maximum growth policies come not only from the people but from the establishment and, in particular, utilities.

For example, William R. Gould, executive vice-president of Southern California Edison, found himself in the awkward position of trying to explain to financial analysts who are accustomed to projections of rapid expansion why it was in the self-interest of utilities to struggle to moderate rates of growth. He argued: "We have found \* \* \* that 10 percent of our generating capacity was required to serve the so-called 'needle peak'—the time when demand was highest—even though this peak accounted for only one-tenth of one percent of our total consumption. So we are trying through load management efforts to flatten out the peaks and valleys of load demand. This should improve the effective utilization of existing generating capacity and defer the need for some future plant expansion."

Gould added: "Instead of the seven percent annual growth in kilowatt-hour consumption projected four years ago, we now estimate growth will be about four percent annually for the next ten years \* \* \* current average annual consumption for residential, commercial and industrial customers is below 1973 levels. Similarly, a Wall Street Journal study showed that Pacific Gas and Electric is projecting a four percent growth rate as opposed to a 6.5 percent earlier forecast. Potomac Electric which was growing 10 percent annually prior to the 1973-74 oil embargo, currently projects growth over the next few years of 3 percent to 5 percent. The Salt River Project, to which I am a consultant, has just embarked on a vigorous campaign to help people decrease their residential energy use.

Similarly, problems of land availability throughout the country—and water supplies in the west—are increasingly seen as reasons to challenge growth policies. Concern about destroying good agricultural land is increasingly voiced in different

parts of the country. Air quality is also recognized to be a function of population density.

Perhaps most importantly we need to be aware that attitudes are changing. A Harris poll taken last year showed that people are moving away from a desire for a higher standard of living toward a wish for a better quality of life. The implications of this shift are far more dramatic than has yet been realized for it seems clear that opposition to growth for its own sake—and the systems that make it necessary—will increase in coming years.

Because of these changing personal attitudes, states are altering their policies. Even a decade ago, the growing areas of the country would have done all that they could to ensure that very rapid growth continued and the declining areas of the United States would have had little leverage to prevent the continuing changes. In today's world, the reality of changing physical and technical realities coupled with new attitudes, could permit us to create intelligent compromises if we were prepared to work together to seek for new patterns. In my opinion, the relevant question for all of us and for all the regions is not whether such rethinking is required but whether we can summon up the requisite intelligence and leadership to ensure that it actually takes place.

#### THE SHAPE OF THE NEW SOCIOECONOMIC SYSTEM

I suspect that the reaction of many of you to the statement in the last paragraph is that it is totally unrealistic because the electorate is not really ready for change. You would be right so long as we only listen to people when they are talking for the record. However, there is at the present time a considerable gap between what people say when they know they may be quoted and what they admit when they are talking privately. For example, in my work with audiences of all sorts in recent years, I have been able to find few people who believe that we shall once again return to full employment in any meaningful definition—despite this perception, politicians feel that they dare not suggest that it is infeasible to maintain a full employment system.

There is an extraordinary and tragic irony here. Leaders will not talk about many of the key issues because they fear that people will react negatively if honest statements are made about the need for fundamental change. In reality, it appears that most of the population believes that government bodies at all levels trail the general public in understanding and acting on problems.

I cannot appropriately end this testimony without at least sketching some of the primary changes which I believe we should be urgently considering. We should recognize that we must move away from an industrial/mobile society toward a communication/community society. The shift will require modifications in our societal patterns which will be at least as great as those which occurred between the agricultural era and the industrial era but they will take place far more rapidly. Today's failures to agree on appropriate directions result in large part from the shockwaves of this transition.

One of the most worrying aspects of the present period is the failure to understand the speed and scope of the microelectronic revolution which will change so much of our lives over the next decade. Both the *Scientific American* and *Science* devoted special issues to this subject last year. Perhaps the best way to summarize the overall picture is to quote from the lead editorial in *Science*:

"Although destined to be of enormous importance, the electronics revolution has proceeded with comparatively little notice \* \* \*"

"The electronics revolution is now extremely dynamic \* \* \*. The dynamism of electronics is in sharp contrast to the slow-moving, static or deteriorating situations encountered in energy, food and nutrition, and material \* \* \*"

"Modern society has available a tremendous and increasing reservoir of scientific and technical knowledge. The electronics revolution is making that knowledge more readily available, extending intellectual powers often by many orders of magnitude while facilitating greatly the accumulation of more knowledge \* \* \*"

"As the vigor of the industrial revolution fades, the electronics revolution will provide at least partial substitutes for the sense of power that the automobile has provided: one of these will be a feeling of enhanced intellectual power."

I obviously cannot even begin to spell out the implications of the electronics revolution here. But two points must be made. First, it revolutionizes locational realities: more and more activities can be continued as well in the country as in the city—this accounts for some of the rural immigration. Second, it seems certain that the forms of knowledge which will be effective using on-line, real-time information systems will be quite different from those of the present time. Just as the book



moved us from an oral tradition to a print tradition, so the computer terminal is moving us to significantly new forms that we still only vaguely foresee.

What is in store for us if we create the communications era? First, our socioeconomic directions would need to be increasingly determined by personal beliefs and community goals rather than by the bureaucracies of large-scale public and private institutions. This will require replacing our present control models with communication institutions.

In addition, we shall have to give up our ideal that more is always better than less and replace it with the concept that enough is plenty. We shall need to recognize that people are not alike and accept the reality and consequences of diversity: we need to think of a richly-colored tapestry rather than a muddy-grey melting pot. We shall also need to understand that we are once again discovering that "religious" values are necessary for the functioning of any socioeconomy.

The current neo-Keynesian economic theories, which that eminently pragmatic man Keynes would certainly reject, have long since been invalidated by the conditions which Keynesian theory brought into existence. We shall continue to make critical policy errors until we understand that recent economic theories, and the conclusions derived from them, are obsolete. I am deeply tempted to spend time enlarging on this statement but it would be self-indulgent in this context. As members of the Committee may be aware I started my work in this area and have written widely on it—my most recent overall attempt to look at economic theory was in *Economizing Abundance: A Non-Inflationary Future*.

From my point of view, the increase in regional tensions is only one element in our worsening economic situation: You will hear about many others as the hearings proceed. Taken together these add up to a condition we call "stagflation": From my point of view a thoroughly inadequate label.

Stagflation is an addictive disease: We'd like to be cured as long as none of us has to pay the cost. The most immediate cost would be to face reality squarely without the haze of rhetoric which we have allowed to grow up to obscure the harsh outlines of critical issues. If we did this we would recognize that we would have to give up on our exaggerated hopes for further economic growth and face the problems of how to structure work and how to distribute resources in today's real context.

We should find as we did this that it is indeed possible to provide a decent standard of living and an improving quality of life to all citizens. Unfortunately, we are fond of our sacred cows. They perform the desirable function of preventing us from recognizing the magnitude of the changes we shall have to accomplish. I believe that the underlying question facing the Committee is whether it will use its prestige and summon up the necessary courage to inform the country about the truly fundamental changes which are necessary if we are to continue to fulfill the American dream.

**Representative BOLLING.** Thank you for a very stimulating hour: I might also thank you for staying reasonably close to 10 minutes. You all came out to about 15. I took longer in my opening statement than anyone else.

Congressman Brown, I made a very long opening statement, which will not be repeated for all the hearings.

**Representative BROWN of Ohio.** Was it extemporaneous or written?

**Representative BOLLING.** Both. It was more written than extemporaneous. In it I try to describe how we got here and how we would continue now that we were here. I would like to call on you if you have any questions to start the discussion, because that is what we seek, a discussion, not a hearing.

**Representative BROWN of Ohio.** I do have some questions. I want to go first to Mr. Beale and ask about what he considers to be a nonmetropolitan or rural county in terms of its size. That may be in your testimony.

**Mr. BEALE.** I am using metropolitan in the official, Federal definition as an urban area of 50,000 or more people. Then there are certain criteria for regarding neighboring communities as they are integrated with the urban center.

Representative BROWN of Ohio. A nucleus of 50,000 or more is a metropolitan area.

Mr. BEALE. Plus any surrounding neighborhoods or commuter communities. Everything else is nonmetropolitan. Nonmetropolitan is rural and small cities up to 50,000 and counties that lie beyond the major commuting zones of a metropolitan area.

Representative BROWN of Ohio. In your prepared statement you said something about the fact that many people take an actual reduction in income, substantial reductions of income in the process of moving to rural areas.

Does the rest of your testimony give us a figure for that?

Mr. BEALE. No. It is about one-fourth based upon the data that comes through the social security system.

Representative BROWN of Ohio. One-fourth of the people. What is the income cut?

Mr. BEALE. I don't have that figure, but I can get it to you. It is not a substantial income cut as such. We simply identified what the proportions of people making a move from a metropolitan area to a nonmetropolitan area who had lower earnings afterward.

Representative BROWN of Ohio. Is the income cut a cut in real income or is it a cut in dollar income which was because the person has moved to a rural setting which is actually an increase in real income? If he is in the Southwest and chooses to sweat in the summer rather than run his air-conditioner, he may have in fact cut his heating bill and live for a little less than he would have otherwise.

Mr. BEALE. Yes. I made the point that in regard to the income difference between metropolitan and nonmetropolitan areas, unfortunately we do not know how much the difference in income levels is offset by differences in cost of living. I think a number of people feel they have not taken any real income cuts. Some of them have accepted a real income cut but have personal or social objectives of a nonpecuniary nature. But it would be perfectly possible for people to earn a smaller income but to feel it goes further if their taxes are lower or housing costs are lower. These may be the two areas where they are likely to gain. They will invariably pay more for transportation though.

Representative BROWN of Ohio. I live in an agriculturally rich county which is located between a couple of metropolitan areas. One of the startling things that has happened is that we have had a number of people of wealth—executives and professional people—who have given up their professions and moved to the rural communities, bought an honest-to-God farm with cows and tractors and fields to be plowed and planted, and changed their entire lifestyle rather radically.

Mr. THEOBALD. I don't think that question can really be answered cleanly. I think most people who moved to Wickenburg would agree that their discretionary income had dropped but then you don't need as much discretionary income. It is only judgable as a lifestyle question.

I do think that another thing is happening. People are not only moving out of towns, but as we know from surveys, people are now running their businesses through telecommunication means. I am convinced that there will be a very rapidly growing trend there.

Telecommunications and computers will be a very significant factor in changes of lifestyle. I think not to look at that issue will be a major mistake.

Representative BROWN of Ohio. I guess we don't have anybody from the Department of Commerce.

Representative BOLLING. Not today.

Representative BROWN of Ohio. It occurs to me that we may want to suggest to the Commerce Department and their Census Bureau that in the 1980 census they may try to get a handle on the noneconomic reasons that people have relocated in nonmetropolitan areas. By noneconomic reasons, I mean where somebody has just chosen to quit where they are and go to another location for a change in lifestyle as opposed to a change in job. I am sure that is not the kind of question that the Census Bureau usually asks, but I think it might be helpful to see how many people have done that and then also to inquire as to the extent of change that you referred to in the dollar value or real income value.

Representative BOLLING. We will have a former director of the Census Bureau testify. The Census Bureau would be sensitive to a congressional question at this time because unless something has happened they are very worried that the subcommittee that deals with their budget request has cut them by \$25 million. There are other factors involved that might be of interest to you. There will be a hearing before the Rules Committee on original jurisdiction on a bill from the Post Office and Civil Service Committee which proposes to pass a law that will modify the way which the statistics are dealt with by Congress. The Rules Committee hearings are scheduled for June 2 and June 9.

Representative BROWN of Ohio. Is this a concern about the privacy issue?

Representative BOLLING. Not so much privacy as other matters. It is designed to improve the quality of work and sensitivity to this I guess is great in the Census Bureau. But we could talk to them with the hope of being heard.

Representative BROWN of Ohio. I would like to ask an economic question, but it perhaps goes beyond that and becomes almost silly. If the individual had more command of his own resources, in other words, if some of these programs that have been proposed for major tax cuts were to take effect, would you see any impact in either the movement, physical movement of populations or the change in lifestyles in the two-worker families or the low birth rate?

That is a pretty broad question, but I think it is a question worth asking because it seems to me the two-worker families are a response and the move to rural areas is an economic response not to job opportunities but rather to inflation. Cities are a place of high cost. So there is an effort to get away from this cost.

The two-worker family, husband and wife, whatever the relationship, is a response to increasing inflation. And, finally, the reduction in the number of children may in fact be a response to inflation. I think you can almost chart it if you look back historically. I will subside with that, as long as you give us a fascinating answer.

Mr. THEOBALD. The answer has to be, of course. There is no doubt in my mind that the increase in taxes has had an enormous

impact on family types and on patterns of migration. The question is what happens when you unscramble these eggs. It seems fairly unclear. I think the case for reducing taxes is very high. I think there are more and more people making that argument. I personally believe that the case for reducing the number of laws and regulations that are now imposed on people is also very high.

You are all aware of the backlash coming from businesses and individuals who feel they cannot cope with what they are being told to do by OSHA or under other sets of rules. I would have to argue that the first thing to do is to decide if we do need to cut back on regulation—I believe it is.

If we argue, as I do, that it is impossible to keep this commitment to provide a job for anyone who wants to work, this is a classic argument by Eli Ginzberg, then we must ask who should have jobs, how many jobs can we generate, how should income be distributed.

I will push that still further and say we can either continue a neo-Keynesian strategy or we can argue that our neo-Keynesian strategy is our problem, as I believe. We are not presently getting significant increases in the average individual's income. What we are getting is increases in the household's income. So if you cannot put a second person to work, or if you have a female head of household, your standard of living is at best stagnant or perhaps declining. In Hawaii, for example, you have to have two workers in the family to afford housing. We are moving more and more to that situation.

Mr. MULLER. If you look at the cost-of-living differential between metropolitan areas and nonmetropolitan areas, for example, New York City and Houston, about two-thirds is spent on local and State taxes and the second is by housing and property taxes on housing. To the extent that we have a lower cost of living, in some areas, which we do—the State of Florida maintains cost-of-living by counties.

We understand that taxes explain much of the differential. To the extent that there is a cost of living differential, there is no doubt that this affects some of locational decisions. In terms of a two-worker household, as was suggested, there is no question that some of the housing demand, which is in my view one of an investment choice being made by middle-income families in facing future inflation, is only feasible because two members of a household are working.

However, in terms of the birth rate per se, while I think there is an economic linkage between the two, I think there are other factors which are affecting this rate. It is unlikely that a tax reduction will be sufficient to offset other pressures. I believe it would have some effect but not be enough to turn the situation around. Even a very substantial tax cut would not change the birth rate drop.

Mr. MORRISON. I would agree with what Mr. Muller has said, particularly about the exogenous nature of these forces. That is, the demographics are of interest—the birth rate, choices about family size and whether to have a traditional family—with the wife working at home—or a two-worker family. But these are not matters that will respond to any variables that you gentlemen can

modify. These exogenous factors are significant not because they can be altered, but because they make for new kinds of adaptations to the constantly changing economic circumstances we face.

As we face increasing inflation of housing prices, we find a trend toward increasing female labor force participation, especially among young wives. Once they have started earning income, it is economically attractive to continue doing so. There is no small element of generational change here.

I have some data that describe the way first-year college students feel about the traditional female role. Not surprisingly, they don't buy the world that their elders once knew. Most are oriented toward the idea that females will work outside the home; the men expect their wives will probably work. They seem to have difficulty envisioning any other way of doing business. That is how they will buy their \$100,000 house.

Such changes, of course, open up all new sorts of possibilities for dealing with inflation, and they also give rise to new "impoverished" groups, such as families with only one middle-income worker.

Representative BOLLING. I would like to pursue one thing with Mr. Theobald.

I would like you to expand somewhat on what you mean by, in effect, a new era of telecommunications and what its impact is. I understand the regional point that you make and the dangers of increasing tensions, because I was born in New York and grew up in northern Alabama and worked in the city in which you live, although I went to college in the upper south, Tennessee, and grew up in northern Alabama, and I have represented Missouri for a long time. So I don't have any problem with the fundamental regions.

Maybe you will disagree, but I have been saying that I think the regions of our country are far more different than France and Germany, even though we have the same language and they speak different ones.

But I am curious about what you mean by communications. I want to be sure I understand.

Mr. THEOBALD. Of course, that could take a whole year. But let me try to be very brief. I really see the communications issue as having two aspects and they are both crucial. One relates to how we are now dividing questions. We need to get better communication rather than a one-way flow. We must get people talking to each other.

I think we have to find a way to listen to each other and then a way to structure knowledge that reflects that. A great deal of the work I now am doing is to find out how we can avoid having a discussion group with 27 different viewpoints and contentions and noise but rather begin to look at what the core issues are. One aspect then is better human communication.

I believe we are being forced in that direction in order to be able to make the decisions we are considering this morning. We don't know how to structure knowledge.

The second aspect is that of the technology, and it is horrifying in our present context. I have worked with a number of firms in

this area and they are always saying, if you blink your eyes, you miss a generation of technology.

The speed at which new telecommunications technologies are coming in are just unbelievable.

Representative BOLLING. Describe what you mean by technology.

Mr. THEOBALD. The technology is the linking of typewriter style equipment to computer-based knowledge sources or simply communications bases so that it becomes possible to run an office using telecommunications. The important and critical thing is that it is essentially a commercial opportunity as well as a technology with a very large number of potential benefits for the future.

The argument goes this way. When we put  $x$  amount of dollars into agriculture, it increased productivity by  $x$  amount. When we put  $x$  amount of money into a factory, we can expect  $x$  amount of productivity. If, therefore, we put  $x$  number of dollars into an office, we shall increase the product  $x$  amount of times. In my mind, there is no doubt that the process can be effective. We will see dramatic increases in productivity.

So where we shall use our labor force is very unclear. That is issue No. 1.

Issue No. 2 is what will happen to knowledge, because in my mind books, reports of hearings are obsolescence—

Representative BROWN of Ohio. Will you explain the subtlety?

Mr. THEOBALD. Obsolescence, we are talking about a process of becoming less relevant. Obsolete, we should recognize that our economics don't work. In my opinion, we will have to develop online, real-time information systems because more and more information is being developed on computers themselves.

Representative BOLLING. We don't even have a place to store the listing of all the studies made on a particular subject. We are not one step behind but four or five steps behind.

Mr. THEOBALD. I am not quite sure. I believe we need a conceptual jump. It is not a question of trying to make the library work, but it is a question of jumping to a new way of structuring knowledge. I guess I don't believe you can do that without those new technologies.

For instance, in the study that you are conducting here, I don't see how it would be possible to complete it successfully without using these technologies which would allow us to get in touch with each other. We know how to do it. I believe we could.

Representative BROWN of Ohio. I have two questions. Does the cost of the more sophisticated computer system raise the specter of larger economic units, more concentration and monopoly, or in fact open up the process that we may have more highly competitive activity?

Second, we are all familiar with the 1984 concept. Do you see a developing situation in communication making management by Government easier or less likely to be successful? Also follow it into the demographic changes.

Mr. THEOBALD. Why not?

Representative BROWN of Ohio. And try to limit your answer to 25 words or less. [Laughter.]

Mr. THEOBALD. I think the most important reality about the communication technology is that they have a decentralizing

impact. There is a great fear that they are centralizing. It is not true. What they can do, and it is fascinating to watch, as they are introduced to a management system is that they force the ending of hierarchies—in the sense that the guy at the top is meant to know everything and the guy at the bottom should not.

What one begins to see is a horizontal structure where competence begins to emerge. So the impact would tend to break up the very large concentrations of power. One can already see that happening. And it is more and more commonly understood among computer people.

Representative BROWN of Ohio. I am curious to know whether you all agree. If you don't agree, I would like for you to take him on.

Representative BOLLING. They should.

Mr. MULLER. When I was an undergraduate, one of the major studies that was going on in the early 1960's was the question of artificial intelligence, the concern that automation will reduce our labor force. What has happened since is not what one anticipated. I believe the most menial tasks have been eliminated from offices, and it is positive, but other jobs expanded. More information is now available and one tends to use the added information.

I do agree that there is a major change taking place if one looks at the miniaturization that has occurred. Today's \$10 calculator has the capability of a \$1,000 computer a decade ago. It will be a lot easier for people not to come to an office and be able to communicate with others. I don't envision a new revolution over the next decade. I envision small rates of change toward what Mr. Theobald is urging, partly because I think most people cannot react to the changes in the environment quickly.

Mr. THEOBALD. I think we have what I call "Little Brother" rather than "Big Brother." "Little Brother" is lots of Government agencies at lots of levels all feeling that they have a right to tell people what to do. I personally believe that the only hope of avoiding "Little Brother" is by developing these communication technologies as rapidly as we can, because if we do not we will see a further development of more and more programs controlled by more and more bureaucracies all believing they are doing the right thing but all impinging on people.

We will get telecommunications technology. If they are to benefit our society we shall need far more effective decisionmaking in this area than I have so far seen, particularly in Congress. I see no evidence, or very little evidence that this subject has been taken up with the seriousness it deserves.

Representative BOLLING. I would like to get everyone at the table into this discussion.

Mr. WALLACE. The "Special Study on Economic Change" is designed to look at basic changes, and each of the witnesses has cited different basic changes. Mr. Theobald says that Keynesianism is no longer capable of providing jobs for everyone; Mr. Muller has pointed to the growth of transfer payments as a very large factor in the increases in income; Mr. Morrison has pointed out that the proportion of working women has grown to nearly half of the labor force. We still want to do something about inflation and unemployment

and this study needs to examine what can be done if macroKeynesian policy will not solve our problems.

How do we go about cutting unemployment without increasing inflation? For one thing, we now have transfer payments that we didn't have in the thirties. This means that unemployment is not what it was then. It used to be people may have been starving if they lost their jobs. Now they have an income. It might also be that an unemployed husband has a working wife or vice versa. The effect of unemployment on the individual, then, is not what it used to be.

But how do you determine how to help those people without jobs who need it? You are saying, I assume, Mr. Theobald, that macro-policies will not do it. They will simply add to the inflationary pressures because they flood more money in to provide for more demand which provides for more inflation. Now what we need is more of a rifle shot approach, who should we be helping.

Representative BOLLING. I was going to ask that question in a different way and say that neo-Keynesian is not going to work but where do you go from there?

Mr. THEOBALD. I guess I would answer that at two or three levels. No. 1, you have to develop a new economic theory. I suspect it will not come from one man this time. The point I was making at the end of my statement was I was hoping it would begin to emerge from this committee work.

No. 2, as some of you know, I proposed the guaranteed income in 1963. It seems to me about time Congress got over what I can only describe as a hangup. We have, in effect, a guaranteed income in the United States. We won't let anybody starve. Congress seems unwilling to recognize that as a reality.

The consequences of not recognizing reality are huge slews of undesirable programs. So we have an energy program, and we have a hunk of it devoted to low-income problems. We end up with the thing so complicated that the poor don't even understand it. The bureaucrats don't understand it; the smart, cynical, clever, crooked people do very well.

Representative BOLLING. As Martha Griffith's study proved.

Mr. THEOBALD. We also have to recognize that our economic system is new, that Keynes himself knew his ideas would not work for very long and we would have to stop doing things because we have always done them, "always" being the last 30 years.

Representative BROWN of Ohio. Might I suggest that perhaps a new philosophy is evident then which is that the market system is sometimes more honest and even more rational than the Washington-managed system.

Mr. THEOBALD. I believe that we have to go back to the price system and the market system, both of which I proposed in my book, "Free Men and Free Markets," we have to adopt the guaranteed income and we have to look at what else has to be done.

I don't believe the market does it all. But Government should do as little as possible on top of the market so it has maximum impact rather than literally hundreds of thousands of programs which cannot have impact because they don't get through the complexities of the system.



Representative BROWN of Ohio. Are you suggesting that you have a few macroprograms or that you have a few programs administered at the local level?

I gather one of the complaints is that there are too many programs that become too confusing.

I am probably the only one at this table who has a community—this goes back 12 years—that repealed the law of eminent domain.

They did it by ab initio petition, which we have permitted in Ohio for years, being a very progressive State, because they got so frustrated with the Government.

The people in the community just said to their local elected officials, "You just don't deal with the Federal Government. We are taking away the right for you to use eminent domain with reference to that project."

Representative BOLLING. A precursor of what is going on in California or something like it?

Representative BROWN of Ohio. Well, we put it back. The local unions, chamber of commerce, and the people allowed the right of eminent domain to be returned when the programs began to be less Washington directed, and more locally directed.

But it was a hell of a fight to get it back because the reaction was just phenomenal. I think we are beginning to see a lot of that politically and to a great extent in our economy.

Representative BOLLING. Of course, the thing that disturbs me about the lack of seeing it soon enough is what happens to the price system if it has occurred because of its imperfections:

Representative BROWN of Ohio. Right.

Representative BOLLING. Now, if we are at the point where it will do a better job than the other, the vested interest in the current system is going to be just as difficult to deal with as was the vested interest of the price system.

Representative BROWN of Ohio. It may be the next economic and political revolution, however, which creates the demographic changes that we are talking about now.

Representative BOLLING. I don't deny that, but I think Mr. Theobald insists in his prepared statement more than he does in his oral statement that we ought to mitigate the controversy in a variety of ways. I think that is a theme in your prepared statement.

Mr. THEOBALD. Yes.

Representative BOLLING. It is terribly important because many of the difficulties that have occurred in recent years and the growth of prejudices that developed from the excesses first of the twenties and then of the thirties and then forties, fifties and so on. We have to be very careful in dealing with our excesses because if there is one way in which we as a Nation are peculiar, along with a very few other countries, we have had only one civil war and it seems to me that our present state of fragmentation is rather startlingly dangerous, because it is not only regional but it has to do with points of view stemming from different interest groups.

Representative BROWN of Ohio. Mr. Chairman, I would submit that we may have had only one civil war, but we lived the prediction of Jefferson: We have had a revolution about every generation

or so, maybe every couple of generations, either in economics or in—

Representative BOLLING. I am not going to argue the effect, but I am going to argue the word because "revolution" is something that is definable.

What we have had is a rather quick evolution, a series of evolutions and the point that is interesting is how seldom those changes have involved major resorts to force. That is the only point I am making.

I agree with you that there has been an enormous shift over the last 20, 30, 40 years in the country which is not well recognized in American history.

The critically important fact we have to deal with now is the potential for social conflict during this transition which is very, very high and it is terribly important to mitigate, which means that all of us I suppose are going to be extraordinarily careful with how strongly we state our case.

The interesting point about Mr. Theobald is that he is balanced all the way through. He states a very strong case for what some call an extreme position, but he modifies it constantly by warning of the dangers, if I understood it correctly. Is that correct?

Mr. THEOBALD. Yes, I try to have strong views but what I also try to do, Mr. Chairman, is to state clearly that they are mine.

I am more interested now in finding out how we could understand why people disagree so clearly and so strongly, than I am in my own view.

The work I have been doing recently centers around why it is that we can't get any agreement anywhere. For example, the energy bill seems to me to come from fundamentally deep disagreements as to what this country ought to be like and can be like 20 years from now.

So, you can't get the compromises you used to have. There were previously compromises about means and now we have disagreements about ends: one doesn't compromise goals and ends.

Representative BOLLING. This is really the kind of—as some people here know—the kind of speech I have been making to business and labor.

I think it is terribly important. Somehow we have lost our capacity to work together and we are working against each other in a very, very narrow way.

Representative BROWN of Ohio. Mr. Chairman, I would say that that is one of the things that can come out of this study. However, I don't want it to come out—

Representative BOLLING. Right now. [Laughter.]

Representative BROWN of Ohio [continuing]. In funny ways. Let me make the point, if I may.

I have said this to you privately and I have said it to some others publicly, I think that, for instance, the U.S. Congress, because of the age of its Members and so forth and their staying power, tends to be representative of a generation that was influenced economically by the depression, and the depression hasn't been our economic base now for about 30 years.

Nonetheless, Members of the Congress tend to think in terms of the depression. I was never struck by it quite so much as I was

when I was in Japan recently and all of the Members of the Diet, who were above a certain age, which meant they could remember vividly World War II, had absolute and total confidence that the United States would continue to maintain a defense umbrella over Japan.

The younger Members of the Parliament and the Diet were beginning to think the unthinkable, the idea that Japan should have its own defense system, its own army and navy because it might have to defend itself some day. They were just not that confident in the United States and also they didn't have any memory of the errors that had come from those patterns in the past. So, they had a different vision of it.

I think that is our problem and let me just conclude with the thought that we shouldn't run from the sharp changes that are appearing in demographics, the facts that the cities are turning black, that people are moving to rural areas, that communication makes us in many respects one Nation. That is why I asked the question about the size, whether we are encouraging monopoly or discouraging it by communication change.

Those are the facts that we have to use to plan the next 10 or 20 years rather than think in terms of facts that are no longer true.

Representative BOLLING. Well, I would like to comment on that only to this extent: I am delighted that my friend says that we shouldn't run from facts because I think that is what we all tend to do at any age in politics because the facts are usually more uncomfortable than the appearance.

Representative BROWN of Ohio. No question.

Representative BOLLING. I am delighted to share that view because it is a fact, you are the second generation of the Clarence Brown that I served with, as you know but not everybody else knows, Mr. Brown, the senior, was my great friend and benefactor, although he was a more rigid Republican than his son.

Representative BROWN of Ohio. And somewhat older. [Laughter.]

Representative BOLLING. Precisely. [Laughter.] You make the point so much more succinctly than I.

I hope we won't run from the facts, but I think it is going to be rather fun to see if we can achieve the ability to deal with them.

That, I suppose, is the challenge. I need more participation from other panelists otherwise I will have to get involved.

Mr. MORRISON. We demographers may appear like crocodiles, never allowing our eyes to get more than a few millimeters above the surface of our data; but I would like to put in a plug for the way demographers see all of this. Basically, we may kid ourselves into thinking we can affect these trends, but I doubt it. The context is one that we have to adapt to. Parts of it are inherently unpredictable, and as Mr. Beale says, we really don't know what will happen 10 years from now in nonmetropolitan areas. There are arguments on both sides as to why it might reverse back to the traditional rural-to-urban process. But there also are reasons why the present urban-to-rural trend might continue.

There is a definite informed perspective on the future that demographers have to offer. There is no better example of this than the circumstances that accompanied the birthrate's decline during the 1960's. At least one scholar—Allan Cartter—called attention to

the likely consequences: Too many teachers. We should have phased down teacher training in anticipation of declining enrollments, but we were institutionally unequipped to do so.

Representative BOLLING. That is a classic example, if I may interrupt, of the inability of the political process to stay even with the facts.

Mr. MORRISON. That is right.

Representative BOLLING. Because some of us who were still struggling to get a certain kind of aid to education recognized at the same time that if we were successful the demographic facts had changed the trends so that inevitably we were going to be wrong.

It was clear as a bell that we should have dealt with the problem 10, 12, 14, 16 years earlier, but of course that was politically impossible.

This is one of the things that makes it so enormously difficult to deal with facts.

You can see both. We have 10 minutes on a yea and nay vote of approving the Journal, an absolutely imperative vote. [Laughter.] In politics, it often happens that way and that announcement just tends to prove it but I don't want to interrupt you completely.

Mr. MORRISON. The challenge I am throwing out here is for the Congress to develop a more effective institutional means to make this technical knowledge that we have available more useful in these important policy areas.

Representative BOLLING. I couldn't agree with you more.

Mr. Little.

Mr. LITTLE. Picking up on what Mr. Morrison said, I guess what is of interest to me is how to get demographic data which is so overwhelming and get it into a size that you can deal with effectively.

Also, the hour of the day may make it too late now but it might be appropriate to ask for written commentary as to when does a demographic shift become significant.

How can Congress get a handle on it? Census data are always so thick in volume and you have to go through reams of data. You point out the need for Congress to use these data, Cal Beall points out most of this is surprising to us but it is there, but simply how can Congress establish a sort of monitoring system to begin to follow selected demographic trends rather than trying to follow everything?

Mr. MORRISON. There is one model I would call to your attention. That is the annual "Manpower Report of the President." It is a good model of how the factual material that the Census Bureau and others provide can be translated into a broad periodic review of what is happening, what it means, and how it relates to current issues of concern. That report is an important kind of social reporting.

Mr. THEOBALD. But the problem with that is that it translates it within a particular context, and if the context is wrong, then we have deep trouble. The one thing I am convinced of is that we are going to have radical change.

We are going to have radical change if only because of demographics, if only because of the bulge in the snake going through, et cetera, et cetera.

Our system is not designed to deal with change; it is designed to provoke stability. Our political system is designed to put things back as they were.

We have never developed a political theory to support dynamic change.

Now, I would suggest to you that the only way to do that is to produce information which really recognizes how wrong it can be as well as how right it can be.

In other words, if you look from a different viewpoint you will come out in a very different place.

To go back to energy, when we have statements of energy needs from say 200 quads down to 50 quads for the year 2000—clearly you cannot make policy that will fit all the possibilities within that range of projections.

That range is coming from disagreements as to what the United States can and should be like.

Until we settle that question, until we know why these differences do exist, we will not in my opinion make good policy.

So, the question, I think, goes deeper. How do we sort out opinions—fundamental opinions—about the future of the country. How do we decide which one do we want and how do we make policy to get it.

That would require a different knowledge structure than we have ever had. It would require people to come in and act differently.

It also requires us to deal with information overload problems differently. If you overload every Congressman so much that he can't possibly read what he gets, we all know what the results are.

Representative BOLLING. It may also have something to do with the willingness of politicians to admit that they don't know.

Mr. THEOBALD. Or any of us.

Representative BOLLING. I think that is true of everybody but it is technically—the mythology in politics is that you cannot admit to constituents, in elective politics, that you don't know the answer to everything.

Actually, from my experience, which has not been a very brief one, the exact opposite is true. The more you are prepared to say that you don't know something, the more likely people are to trust you as a person who, when he says he does know, might know. [Laughter.] But that has nothing to do with any of these subjects except maybe as a supplement.

Would anybody else like to get involved?

Well, I could and would, but I don't want to prolong the session.

I think it has been a very interesting one and a very good one to open with.

I am grateful for the people who set it up and I am grateful to all of you who came. I hope that some good will come of it. It is not a hearing. It was a discussion to a degree and I hope that your good example will be known and followed by your successors.

I thank you all.

Tomorrow we will be in the caucus room of the House, room 345 of the Cannon Building, at 10 a.m.

Thank you very much. The committee stands in recess.

[Whereupon, at 12:10 p.m., the committee recessed, to reconvene at 10 a.m., Thursday, June 1, 1978.]

# SPECIAL STUDY ON ECONOMIC CHANGE

THURSDAY, JUNE 1, 1978

## LONG-TERM DEMOGRAPHIC TRENDS

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, pursuant to recess, at 10 a.m., in room 345, Cannon House Office Building, Hon. Richard Bolling (chairman of the committee) presiding.

Present: Representatives Bolling and Brown of Ohio.

Committee staff present: Louis C. Krauthoff II, assistant director; L. Douglas Lee, professional staff member; Mark Borchelt, administrative assistant; and Mark R. Policinski, minority professional staff member.

Special Study on Economic Change staff present: Charles S. Sheldon II, research director; Robert Ash Wallace, research director; Richard D. Bartel, staff economist; Paula J. Dobriansky, research assistant; A. A. "Chip" Sayers, research assistant; and George D. Krumbhaar, Jr., counsel.

Also present: Dennis L. Little, Cynthia E. Huston, and Everett M. Kassalow, Congressional Research Service, Library of Congress.

Representative BOLLING. The committee will come to order.

I am blessed by not having to have an opening statement today. I made an opening statement yesterday, which is for all 13 days of the hearings. If anyone is interested, they can find a copy.

Our method of procedure will be as described. We will hear all of the witnesses. We hope that they will try to limit themselves to a summary statement of about 10 minutes. The prepared statements, and other documents as they come up, and as we decide, will be included in full.

We will not have any discussion, informal discussion, until each of the witnesses have been heard in our attempt to have not the classic hearing, but a discussion.

In that, I try to play the role of moderator and participant at the same time. Some times it works, and some times it does not.

We like to do that rather than having the standard brand of hearing. This is a discussion.

Our first witness is Mr. George Brown. He is corporate secretary and consultant to the president of the Conference Board, Inc., New York City. He has been Director of the Bureau of the Census; manager of research for Ford Motor Co.; consultant to Oak Ridge Laboratories, RCA Corp., and others.

He has been involved with the American Economics Association, the American Population Association. His education is an M.B.A. from Harvard University, Ph. D. in economics from the University of Chicago. He has a variety of honors.

We are glad to hear from you, Mr. Brown.

**STATEMENT OF GEORGE H. BROWN, SECRETARY, THE  
CONFERENCE BOARD, INC., NEW YORK, N.Y.**

Mr. BROWN. Thank you. Having spent a good deal of my career working with business organizations, and with business executives in long-range planning, I welcome this opportunity to give you a firsthand report on the private sector adjustment to long-range demographic and population changes, which I take it is the subject of our discussion this morning.

I want to point out that I am speaking strictly as an individual, rather than representing the Conference Board or any other organization.

I will focus my comments on the four demographic trends to which I address myself in my formal statement. Those four are the changing age distribution, the population mobility, the rising affluence of the population, and the postwar change in economic levels of the population.

Before I comment on these particular points, I would like to make a general statement about business planning. In my experience with it, it is essentially adaptive planning, and not what might be called causal planning.

The distinction is that in adaptive planning, you start with some event that is outside the organization, and then trace through the adjustments that are necessary to the new situation.

On the other hand, causal planning starts with some kind of internal objective, and then seeks ways by which you can reach your particular goal. Although a lot of business language sounds like it is causal planning, my own opinion is that most of it, not all of it, is adaptive.

A good example of adaptive planning is the adjustment that business organizations have to make to population and demographic changes. Those are clearly circumstances outside of the business unit itself. But I also think it is true of adjustments to changes in technology, and to the social and political environment. Even plans to increase sales or market shares, or many of the other objectives which are expressed as internal goals are actually adaptive planning because the individual companies do have to operate within well-defined constraints, and most of the progress is thinking of better and quicker ways of adapting to a particular market situation.

I will now talk briefly on how businesses have been affected, and what kinds of things they go through as a result of demographic change, because they do pay a lot of attention to it, and it is widely used in planning.

The age structure, which is one of the best known demographic changes, impacts business primarily in the rapid change in demands for goods and services as the population bulge that came out of World War II moves through the various age groups.

Usually it is possible to get an idea of what is going to happen, given the normal behavior of an age group and knowing in advance when these new cohorts will reach that particular situation.

On the other hand, there are a number of market changes which are much harder to predict. For example, the sudden boom in the demand for radios, records, record players, magazines, among young people; or more recently, the swing toward interest in sports equipment, jogging, leisure clothes and so forth while you can trace these back to the new age group, I don't think you could have predicted them.

The impact of these changes is forcing businesses to pay close attention to demography and to do a considerable amount of research, particularly among people in the early parts of the new age group. Usually, this provides enough lead-time, so it does put in a new demand for looking ahead.

In terms of population mobility, the impact here is basically on the geographic location of the business enterprise. The requirement that a business enterprise change its location to accommodate itself to an outside factor is clearly adaptive planning.

My own view is that the business community in general, with the possible exception of the real estate developer, has been rather slow to recognize population mobility, and has done very little planning that I am aware of. If anything, once you set your establishment, set your patterns of production, set your work force, it is a very hard to make a major change in location. Those that do occur are forced on the enterprise. Therefore, with respect to mobility, I think you will find that business organizations lag as they adjust to the change rather than being the leaders.

The third factor which I have picked is affluence. This factor is one of the most pervasive forces. It affects business very much through changing the products that are in demand, particularly for income sensitive items—travel, cars, watches, cameras, and things of that sort.

The point that has interested me, though, is that affluence itself is a product of both technology and the work ethic, that is, the number of hours of participation in the labor force.

In particular, I have seen no let up in the work ethic. Some years ago, I had thought that as our affluence increased we would see a steady shrinkage in the work week. That has not been the case.

On the other hand, we see all kinds of circumstances working in the other direction: women participating in the labor force, people holding two jobs, people going to school and working at the same time, and even the recent legislation to change the mandatory retirement age from 65 to 70. I think this is an important element for planning because it is likely to be with us for quite awhile.

The final factor I picked is education. Although it is not often mentioned, I believe it is one of the more important demographic changes that has taken place since World War II. It has a heavy impact on business in two ways: First, in personnel planning or organizing business to take advantage of an entry labor force which is almost entirely high school graduates or college graduates, a sharp contrast from the situation not long ago when almost half of the entry work force had not finished high school. The process of



adjustment to this particular change in the population will affect the whole business organization.

The second aspect is that business managers, particularly, are beginning to realize that a well educated, articulate, and sophisticated majority in the marketplace leads to much more demanding attitudes with respect to product information, product safety, product quality, and a whole set of factors which are generally called "the consumer movement." I also think that education underlies a good deal of the public interest in the impact of production on the environment. Clearly there have been major changes in the relationships of the business community to the marketplace, most of which has been heavily affected by the education process.

I will stop my comments with this particular point. I do have some comments in my prepared statement on the relationship of demographic changes to inflation, but to get into that subject would take me beyond my time.

[The prepared statement of Mr. Brown follows:]

PREPARED STATEMENT OF GEORGE H. BROWN

*Private Sector Adjustments to Long-Term Demographic and Population Change*

Having spent the greater part of my career assisting business executives plan for the future, I welcome this opportunity to report on business recognition of and adjustment to long-term trends in demography and population. While it is obvious I cannot speak for every one of the five million business organizations counted in the 1972 Economic Census, I am able to discuss the level of awareness and patterns of actions of hundreds of firms, big and small, purely on the basis of personal experience. As a teacher, consultant, business executive, government administrator, and an officer or director of two major national professional groups—the American Marketing Association and the American Statistical Association—I have been able to meet and know a significant number of executives and planners from a cross section of U.S. companies.

Drawing on this background, and speaking strictly as an individual, my remarks will focus on the awareness of and adjustments to four major demographic developments—the changing age distribution of the U.S. population; its mobility; its steadily rising affluence; and the post-war change in its education level. Although these do not exhaust the list of demographic changes that are taking place, they will serve to illustrate how these factors impact the business community and the way individual organizations have incorporated these factors into their long-range planning.

I would like to observe that all business planning is essentially "adaptive" planning as opposed to "causal" planning. By this I mean that the planning process starts with some outside event and traces the adjustments needed to meet the new situation, rather than starting with some desirable end and deciding what must be done to achieve it. This is quite clearly the case in adjustments to population and demographic factors. It is also true of business adjustments to changes in technology and the social and political environment because no single business unit is exempt from such forces. Even plans to increase sales, market share, and profitability for individual companies must be made within well-defined constraints and are normally based on more rapid or more effective adaptations to the market.

*Changing age structure*

No other aspect of U.S. demographic change has received as much attention as the dramatic shifts in age distribution. Labeled "the age of discontinuity" by Peter Drucker, this phenomenon has been the subject of numerous articles, speeches, seminars and discussion sessions directed to businessmen. And for good reason. As Mr. Morrison has already documented in his presentation to this session of the Committee, the absolute number of births fell from a level of 2.9 million in the 1920's to 2.4 million for the depression and war years 1931 through 1940. Not until 1942 did absolute births rise to its pre-depression level of 2.9 million, but for the next 19 years the absolute numbers rose rapidly, peaking at 4.3 million in 1961. This latter episode is the well-known "post-war baby boom." Since 1961, in spite of a steadily rising total population, the absolute number of births has fallen steadily,

reaching a low of 3.1 million in 1975—the less well-known “birth dearth” of the 1960’s and 1970’s. A 15-year period of high population growth sandwiched between two 15-year periods of low population growth has had a dramatic impact on all of our institutions, particularly private business. Fortunately for planners, however, once the births have been recorded, the shape of the age distribution curve can be predicted with almost pinpoint accuracy for the next 85 years. But while there is relative certainty about the number of persons in each age group once the birth has occurred, there is no certainty about the life style or future behavior of these children as they progress through their life cycle.

The most direct impact of the population shifts has been in the area of demand for goods and services. Many of these changes were quite predictable, such as the rise and fall in demand for space, equipment and personnel in hospital maternity wards, the production and distribution of baby foods and baby carriages, and all of the services related to the care and feeding of infants. This was also true for the boom in demand for elementary, secondary, and college level physical facilities and personnel. It was more difficult to predict the craze for radios, records, record players, magazines and comic books. But in 1950 no one could predict the great demand for sports equipment, jogging shoes, and leisure clothes as the war babies moved into their late twenties and early thirties. Close attention to the behavior of those persons on the leading edge of the population bulge ordinarily gives enough lead time for most business planning, but it is a never ending task. At the moment, the business community is preparing for an upturn in the demand for single family homes, stoves, refrigerators, garden supplies and automobiles, as the war babies slowly become parents of school age children.

In some cases, long-range demographic forecasts have been incorrect. One of the more conspicuous failures was the expectation of a second “baby boom” in 1965/80 as the large 1945/60 cohort moved into the child bearing age group 20 to 25 years old. The post-war population reached the proper age group right on schedule, but the marriage rate declined, the mother’s age at the birth of the first child lengthened, and the total number of children per married couple dropped below the replacement rate. Manufacturers with investments in long-lead-time plant and equipment to serve an expanded market for infants found themselves with unused capacity, higher operating expenses and lower profits. This is a classic case of being wrong for the right reasons.

In addition to its direct impact on the marketplace, the immense size of the “bulge” cohort and the sharpness of its leading edge captured the imagination of designers, writers, artists, musicians, business executives and the general public. The net result was a major shift in fashion towards the interests and tastes of the youth market. While I have no facts to document the point, it is likely there was a shift in emphasis towards selecting younger people in positions of leadership in all kinds of institutions—persons believed to be more in tune with the new and rising generation. To the extent this actually occurred, the beneficiaries would have been those who were born in the late 1920’s and early 1930’s—old enough by 1960 to have had experience, but still young enough to be identified with the new movement. The losers, if there were any, would be those persons born between 1910 and 1920—not old enough to have made it to the top, but labeled as out of date for understanding the new youth market. Gains and losses due to outside factors are a normal aspect of the career development of every individual. Even though the rewards and penalties are very real to the individuals involved, society as a whole does not win or lose so long as there is an adequate supply of talented and able persons for the limited number of leadership openings that exist.

From the viewpoint of economic policy, the major implication of the distortion in age distribution which began in 1943 and which will continue through 2040 (the year when all of the persons in the 1943/60 cohort will be 80 years of age or older) is the increased need for capital to finance the flood and ebb of plant, equipment, and trained persons required to meet constantly changing but relatively short-run distortions in demand. Economic policy objectives should be to increase both the flow of funds into capital formation and the flexibility with which such funds can be used to meet a built-in, but uncertain, source of change. Actions such as more rapid write-offs of assets devoted to the production and distribution of age-related products and services and quicker administrative decisions on rulings affecting age-related products or product investments are typical of the steps that might be considered.

#### *Population mobility*

Although age distortion and the youth movement have dominated the headlines dealing with demographic change, an equally pervasive and in many respects more troublesome source of change has been population migration. As already document-

ed in a statement to this Committee, there have been three concurrent migration patterns in the United States, each of which is decades old. First, there has been a migration to metropolitan areas from non-metro areas, particularly rural farm locations. Second, there has been a migration of the white population from the central city to the suburbs in most major cities, particularly those in the north east and north central states. Finally, there has been a general migration from north to south superimposed on an overall movement from the central areas of the nation to the coastal regions, particularly the far west and Florida.

The impact of these changes on an individual business organization has been slow but powerful. Those businesses with production or distribution operations located in areas of growth have seen their sales and labor supply increase faster than the national average. Those located in areas of population stability or decline experienced little or no growth in sales, profit, or employment. At first, the impact of these forces was masked by all of the other factors affecting sales and profits. In time, however, even the smallest units became aware of the underlying trend that was affecting them.

To the best of my knowledge, the business community in general was slow to recognize, much less plan for, these migrations. Many, if not most, organizations tended to resist the change when it was adverse, although they were quick to accept the permanence and potential where the trends were favorable. This applies particularly to the West Coast where a number of persons correctly predicted the migration and were surprised only by its timing. This also applies to Florida where a speculative land boom occurred in the 1920's in anticipation of a growth rate that did not really materialize until the 1950's. In contrast, there was no anticipation of migration from central cities to the suburbs. Here, households took the lead and business units followed.

At present, there is widespread recognition of the general migration patterns by business executives and planners. There is, however, no consensus about the future rate of change or its ultimate duration. In particular, opinions differ on the outlook for energy supplies and costs, as well as the eventual impact of these factors on population location. In the absence of a consensus, the business community at large, with the usual handful of individual exceptions, will no doubt continue to take a conservative outlook with respect to the rate of change in population location in the next five to fifteen years.

### *Affluence*

Another pervasive demographic trend has been the steady rise in per capita real money income of the U.S. population over the years. In theory, the citizens of this country could have taken all of the benefits of technology and productivity in the form of greater leisure rather than in more and more goods and services. While hours of work did decline from 10 hours per day, six days a week in 1890 to 8 hours per day, five and one-half per week in 1929, except for short work weeks in the great depression and longer work weeks during the World War II years, the 40 hour week has been remarkably constant since the 1920's.

If anything, attitude towards participation in formalized work situations appears to have strengthened rather than softened as per capita real incomes have increased. This is reflected not only in the steady rise in the percentage of women who participate in the labor force, but in the number of persons who hold two or more jobs and in the number who hold a full-time or part-time job while attending school. The recent legislation changing the mandatory retirement age from 65 to 70 years old is still further evidence of the continued strength of the work ethic as a demographic characteristic.

Planners in the business community are keenly aware of this trend. They are equally aware that upper income families have a different pattern of expenditure than lower income families, with some services, such as air travel for vacation purposes, and some products, such as 35mm cameras, highly sensitive to the amount of real income earned.

It is now almost routine for business planners to start with today's population and income distribution and allow for both population growth and growth in per capita real income to arrive at a description of the number of persons by income (in constant dollars) at a point in time 10 to 15 years in the future. With this matrix, it is possible to estimate purchase rates for specific products with sufficient accuracy for capacity planning, personnel planning, financial planning and other aspects of the business in question. In this connection, there has been a keen interest by business analysts in the detailed results of the Survey of Consumer Expenditures conducted for the Department of Labor for the purpose of updating and elaborating the Consumer Price Index. This data source gives more detailed information on purchase patterns by income than any public or private service.

### *Education*

The final factor in this list of demographic change of interest to business planners is the educational level of the total population. As recently as 1940, approximately three-fourths of the people in the U.S. had not graduated from high school. Moreover, less than 5 percent were college graduates. Thirty years later, over half of the U.S. population were high school graduates and slightly more than 10 percent were college graduates. More importantly, 90 percent of those born in 1945 or later (which includes the post-war "baby boom") have completed high school and one-fourth are college graduates.

Completion of high school, attendance at college and completion of college are strongly related to levels of voting, amount of money earned, amount of reading done and participation in community affairs. The educational process does indeed confer values upon people and it does change their behavior. After generations of struggling to achieve literacy and to get to high school, the changeover that occurred immediately after World War II has been nothing less than an explosion.

The business community has two interests in monitoring this development. The first interest is the matter of personnel planning. What changes in job content, work organization, and skill demands are appropriate for a work force that is entirely high school graduates or better, as opposed to a work force where less than half had achieved this educational level? What steps need to be taken to meet their expectations? How can these new skills be translated into higher productivity and lower real costs per unit of output?

The second area of interest is the changing nature of the consumer market. Not only does education affect buying behavior independently of income, but sophisticated buyers are more demanding with respect to product information, product safety, and product quality. The rise of the consumer movement, along with customer interest in the impact of production and consumption on the environment, can be understood and met when viewed against the background of the quantum jump in the educational achievement of the population.

### *Relations of demographic trends to inflation*

At first glance, there would seem to be little or no relationship between the rate of inflation and such demographic factors as population growth, age distributions, internal migration, and education. On a second look, however, there are at least three distinct and direct links between demography and inflation that are worthy of comment.

The first and most obvious relationship is the pressure of a growing market demand upon the fixed or slowly declining resources of the world. Whether the rise in demand is due to more persons, or more affluence per person, or both, the impact on prices is identical—the higher the demand, the higher the prices. It is, of course, possible to offset some or all of these pressures by new technology, by economies of scale, or by transfer of demand to substitute sources of supply. This was very clearly the case in the United States for the 200 year period 1765 to 1965 when prices rose and fell around a constant level in spite of a hundred-fold increase in population and an even more dramatic increase in resource use per person. But the pressures of population are relentless, and resources, except for technology, are limited. From time to time and from commodity to commodity, the impact of population on prices slowly makes itself felt.

A case in point is the price of energy. Thanks to technology, exploration and development, the world moved from wood to coal to petroleum to natural gas, each at lower and lower real costs of production. Then in the mid 1960's, the rate of increase in supply of natural gas and petroleum began to fall below the rate of increase in energy demand, setting the stage for the quadrupling of the world price of crude oil by the OPEC nations.

Because of technology, capital investment and human ingenuity, it is hard to know what products or materials will be next on the list. Foods, fibers, water, minerals and recreational areas are likely candidates for shortage induced price increases in the near-term future, although probably not with the abruptness of the price shift in petroleum and natural gas. Any slowing of the rate of population increase anywhere in the world, or any decline in the rate of increase in real income per capita, will lessen, but not eliminate, the pressure of population on resources and thus the pressure for higher prices.

The second relationship between demography and inflation lies in the nature of the planning process used by business organizations. Ordinarily, there is a moderate and fairly predictable year-to-year change in the growth of population, its age and geographic distribution, and its real spendable income per capita. At the same time, there is a heavy economic penalty for the existence of unused capacity, high inven-

tories and out of date equipment and facilities. As a result, U.S. business organizations operate fairly close to capacity, usually reserving 10 to 15 percent for seasonal, cyclical, and trend variations. The business system is, therefore, not well geared to handle sharp swings in total demand, either downward as in a recession or upward as in a sudden boom. Enough work has been done to identify the use or non use of credit by consumers or business units as a principal source of sudden spending or non spending sprees, although each use or non-use of credit can in turn be traced to deeper causal factors.

Sudden bursts of demand quickly absorb the limited excess capacity, setting the stage for shortages and bottlenecks. This in turn leads to allocations, price hikes, gray markets as businessmen struggle to get capacity into line with demand. A sudden, broad scale upturn in credit usage can create demand-pull inflation independent of any change in monetary or fiscal policy. A sudden, broad scale collapse in the use of credit by consumers and businessmen is out-and-out depression. The focus of attention for the Joint Economic Committee is obvious.

Anything the Joint Economic Committee can do to focus attention on the amplitude of credit based gyrations in consumer and business spending, or in the possibility of lowering the carrying costs for idle facilities, will be a major contribution to inflation control.

A third link between demographic change and the rate of inflation lies in the evidence with respect to the education level of the U.S. population. Sixty years ago, it would have been impossible to involve a majority of U.S. families in a discourse on inflation. Not only did the nation lack radio and television, but the educational level of the average family did not prepare them for economic analysis of any sort. Forty-five years ago, Franklin Roosevelt did wonders with his radio "fireside chats," using simple language and down-to-earth examples. Compare the opportunities today with those of the recent past. Practically every U.S. home is now equipped with a TV set as well as two or more radios. The great majority of families is reached by weekly or daily newspapers as well as by one or more magazines. More importantly, the listeners and readers now have a level of education and sophistication never before achieved for any society. People recognize that wage settlements in excess of productivity drive up costs that must be, and are, passed through to buyers in the form of price increases. People also know that profits are not the source of our current inflation. The opportunity for rational discussion and national consensus is greater than most people realize. The job at hand is to work out a consensus among the academic professionals on the several causes of inflation and the steps necessary to regain price stability. This consensus should then be communicated to the general public and to thought leaders in government, labor, and business. The decision to target these special hearings of the Joint Economic Committee on the subject of "stagflation" is clearly in line with this basic process. I am pleased to be part of it.

Representative BOLLING. Thank you very much.

Next up is Mr. Jerry L. Fletcher, currently a senior policy analyst in education in the Office of the Deputy Assistant Secretary for Education, HEW. He has taught school essentially at all levels, college, high school, and junior high.

He was vice principal of an experimental high school in Oregon for 5 years. He has trained school people in research and evaluation skills. He received his doctorate in education in 1969 from the Harvard Graduate School of Education.

**STATEMENT OF JERRY L. FLETCHER, SENIOR POLICY ANALYST IN EDUCATION, OFFICE OF THE DEPUTY ASSISTANT SECRETARY FOR EDUCATION (POLICY DEVELOPMENT), DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE**

Mr. FLETCHER. The committee has asked me to prepare testimony on four topics: Demographic information as it relates to the educational system in general in the country; the likely cultural and economic conflicts in rural educational systems as people migrate from urban to rural areas; the potential impact of new technologies on the education system and the labor market; and the

possible impact on the economic system of a successful human potential or self-actualization movement.

These topics obviously are not intimately related, but I think you will find in the testimony that there are a number of ways in which they are related.

The general thing I would like to say in advance is that I will speak separately of the formal public school system, and the broad educational systems that exist in general in our culture. It is very important to distinguish those.

As I go through my testimony, I will have things to say that relate one to the other.

There is now, as was mentioned in the hearings yesterday, an overall decline in the number of children in traditional schools. The pattern of decline is not universal. A number of areas are actually experiencing growth, such as a number of Sun Belt areas.

On the other hand, in the inner cities, the decline is very acute. Several have had declines of as much as 24 percent in student population. But while this overall decline is evident in terms of the traditional school age population, there is not a decline in overall enrollment in formal and nonformal educational programs.

To the contrary, more and more adults are enrolling in more and more education throughout their lives. In fact, to piggyback on Mr. Brown's statement, one thing that seems to be happening is that when you have a more highly educated public, they seek more education. That is a very major factor to take into account in economic planning. The professionals that deal with the traditional school age population can be expected to deal with this decline in several ways, to protect the jobs of teachers and to more fully utilize the physical school facilities.

There will undoubtedly be a push to expand the number of students who use our public school facilities either through the creation of some early childhood or day-care facilities (with the retraining of teachers to handle younger children); or through special programs to reduce the number of students dropping out (that is, to retain students longer), or through our formal school facilities to train adults.

I think that a second pressure that we will find is a pressure to use the school facilities to provide social services other than education. With the concern about the recreation of some kind of "sense of neighborhood" in cities and in rural areas, the creation of some center of the community, the use of the public school facilities as locations for health services, and other services, would create a center for the community.

Right now the locations of these services are very scattered. In rural towns, the offices are open 1 day a week and things like that. It is very difficult for people to obtain a lot of social services for which they are eligible. If they were directed out of a central location it would make a lot of sense.

The point that I would stress to the Joint Economic Committee is that there is probably a need to take a perspective on the declining school population that is broader than the one professionals in education tend to take. It is the fact that a great deal of education is presently carried on by institutions other than our formal schools. From the large training efforts carried on by corporations

to the educational impact of the mass media, our culture is information rich, and its citizens are constantly subjected to information stimulation. Each year adults spend a great deal of time teaching themselves.

New developments in information and communication technology, of which I will say more later, may increase dramatically the amount of education carried on outside the formal schools.

Since all predictions about the complexity of future life appear to demand a more highly educated populace, steps should be taken to look at the role of the formal school within the culture's network of educating mechanisms. If we have such a broad perspective, we could identify the kinds of knowledge and information best provided through each, and bring the various systems into a more integrated and complementary relationship than at present.

In terms of the direct impact on economic policy in the short term, I do think some effort to extend the age and use of facilities downward in early childhood education would make economic sense, because we know there is such a high level of poverty among single parent households, and they need to have some sort of daycare facilities.

The urban to rural migration has been mentioned a lot, so I don't have to go over the details. The key thing to say about that with regard to education is that the important distinction is whether the migrants are there because they want to be there, or because they had no alternatives. You can separate out the migrants for all reasons into those two broad categories. Those who are in rural areas and do not want to be there, who regard rural areas as beneath them, can be expected to want to urbanize the rural areas with services, economic development, culture and forms of education that are oriented toward urban life and values.

On the other hand, if they are in rural areas because they genuinely desire to be there, you can expect that they will want to preserve many of the small and rural town characteristics, and will work toward that kind of educational change.

There is quite a bit of research now suggesting that small schools have a number of advantages that we have not taken into consideration. We find in a lot of urban school districts that there are attempts to create smallness and smaller units of teachers and students.

There is reason to believe that we could quite readily produce a high quality education in smaller schools if in fact we deliberately set out to do that. But at the moment in most of our rural schools, the achievement levels of the students are substantially below that of urban schools. Depending on the mix of migrants in rural areas, you will either find a push toward creating a urban school in a rural area, or you will find an effort to preserve that ruralness, small size, and orientation of the education. The conflicts over that can be expected to be pretty acute, depending on the mix of the migrants.

From my personal point of view, with respect to economic policy, I think the major question is: Is it wise to have a general policy of rural resettlement and rural development, because we know that with more highly educated migrants coming out to the rural areas, we in fact have more of the skills, more of the sense of capacity to

affect their own lives, such that probably a program of rural development or rural redevelopment, is something that would take very well.

On the other hand, we also know that the migration has created severe problems in inner cities. So to have a rural development policy without some kind of effort to deal with the situation in urban areas does not make a lot of sense either. I think we need both.

You will find, I think, a lot of the migrants in rural areas demanding a much higher level of services than rural areas typically have received in our distribution system.

With respect to new technologies, I guess I want to set a context. The best way to understand new technologies with respect to education is to use communication terminology, to talk about linking humans to organized bodies of knowledge with multiple channels of access.

The task of education in this terminological sense is link human beings to organized bodies of knowledge. The goal is to enable individuals to connect their personal systems of meaning with the accumulated knowledge outside, so that their own sense of value of their own lives becomes deeper and richer.

In this sense, the best thing to say is that schools are inordinately technologically backward. The major form of organized knowledge in schools is textbooks, and textbooks as an invention are at least 100 years old.

Schools, then, are not able to link well to data bases. They tend not to be linked to other educational systems of the culture. They are also, frankly, technologically backward in terms of management of the system itself. They have very poor information about what in fact happens in a school, and what the effects are.

So the major conclusion I would have is that schools are unlikely to be a leader in the adoption of new technology. Rather, we can expect that the new technology will be available in the culture at large, and that schools will have to adjust.

I think, frankly, that the new communications technologies that are about to come on line will have a dramatic influence on this, and will force schools to adjust very radically in a way that most school professionals have no inkling at this time.

The four potentially revolutionary technologies are: Home computers; video disc technology; laser modulated fiber optics; and advanced satellites. All of these may have a very high impact first on the commercial home or mass market.

Essentially what will happen is that the role of schools as the basic provider of information and knowledge for children will no longer be viable. Teachers will no longer be a basic source of information, and will be forced to perform other functions. The information will be available elsewhere and in other ways that are far more powerful, and schools will need to rethink their relationship to this larger system of information and communication.

I don't think we know much about how to organize schools to be linked into a high technology, high communication culture, but I think it is critical that we do that if for no other reason than if students go to school and come out into a culture that has this



network system, they need to have some experience with it. The best way is to have the schools connected with the system.

The last thing I want to mention briefly is that there is a massive movement going on in the culture that is classified under the general title of human potential, or the consciousness movement. It is much more a mass cultural activity than something that has been recognized by Government agencies and Government bodies.

The main effect that this whole human potential movement has been having is an effect on the individual's sense of himself or herself, in the sense of motivation that they have.

There are a great many thinkers who have said, for a long time, that our human capabilities are not developed very much. We use 5 to 10 percent of our inherent capabilities. Since the late 1940's with the training of business executives in interpersonal skills, through the 1960's, and now in very major ways, there has been an effort to experiment with ways to enable people to use much more of their human potential than they usually do. Many today claim that the culture is on the verge of a radical transformation of this sort.

It has four characteristics, or four values that I would cite. One is that it takes a very holistic view of the human organism, the human being. We should encourage the development of all of the facets of a person in a balanced fashion, rather than overemphasis on a very few capabilities, such as reading or cognitive ability.

Second, there is a strong orientation toward self-responsibility—or in education, student motivation—and there actually have been a number of highly developed techniques of education to work directly on student or personal motivation. Third, it has a very high emphasis on self-knowledge. And fourth, there is a very strong orientation toward the capacity of individuals to reach a higher stage of development than we have now, to use much more than 5 or 10 percent of their abilities.

These educational experiences have been around now for 15 or 20 years. They are no longer experimental. Thousands of people have gone through these experiences. In fact, the bibliography of published articles on these techniques in schools number over 1,200 items.

However, there has been very little study of this as a cultural phenomenon. I think there should be much more.

To conclude, if we had a form of education that emphasized much more the issue of personal motivation and personal initiative, then economic policy would be oriented somewhat differently; that is, economic policy would encourage people to take more self-responsibility in what they do, rather than assuming we have to give things to people to solve problems.

To conclude very quickly, I think we must develop ways for people to look inward, to develop a strong enough sense of themselves so that they will remain the masters of technology, so that they will not succumb to the sense of powerlessness, anomie, alienation, and victimization, that so pervades the culture.

Economic policy has got to be linked to the quality of life, and life satisfaction of human beings. This does not mean a retreat

from technology. Voluntary simplicity will probably never appeal to a great many people.

But it does mean a concern about the human qualities of our economic policies, and that requires incentives for human beings to develop more than their material desires.

[The prepared statement of Mr. Fletcher follows:]

PREPARED STATEMENT OF JERRY L. FLETCHER\*

The Committee has asked me to prepare testimony on four main areas:

1. Demographic information as it relates to the educational system in general in this country.
2. The likely cultural and economic conflicts in rural educational systems as people migrate from urban to rural areas.
3. The potential impact of new technologies on the education system and the labor market.
4. The impact on the economic system of a successful human potential or self-actualization movement, particularly the issue of whether the labor market can absorb large numbers of competent people in the short and/or long run.

These topics obviously are not intimately related, and suggest more the range of concerns and ideas to which the committee is open. As I address each topic, I will suggest some of the ways in which the information might be useful in the formation of economic policy. Since hard information on the last three topics is very limited, this testimony will be more speculative than might be desired, but it should indicate kinds of information which would be valuable.

GENERAL DEMOGRAPHIC INFORMATION

While this century has been marked by a massive increase in the size of the school population, both through population growth and through increasing numbers of people remaining in school for longer periods of time, there is now an overall decline in the number of school aged children. The number of elementary and secondary students in public schools dropped by nearly 900,000 between 1970 and 1974, to 45 million,<sup>1</sup> and this decline is continuing. Projections suggest there will be a small boomlet in the early 1980's, followed by further decline, though projections beyond 1985 diverge, depending on the assumptions made.

While the overall trend is downward, the pattern of decline is not universal. A number of areas are experiencing dramatic growth in the traditional school-age population: some of the "Sun Belt,"<sup>2</sup> outer suburban areas to which many young families must go to afford homes in today's market;<sup>3</sup> and rural areas.<sup>4</sup> And, of course, certain school systems are experiencing much more rapid declines in enrollment. In city districts with a combination of shifts to private schools, "white flight," and the normal decline mentioned above, the resulting problems are even more acute.<sup>5</sup> Any policy which is fashioned will need to have the flexibility to apply differently to different conditions.

\*NOTE.—The opinions in this testimony are those of the author and no endorsement by HEW or the Assistant Secretary for Education should be inferred.

<sup>1</sup> National Center for Education Statistics. "The Condition of Education. 1977 Edition." Chart 2.04. "Elementary and Secondary Public School Enrollment, by State." p. 30

<sup>2</sup> The most comprehensive document on the relationship between demography and education can be found in the Hearings before the Subcommittee on Elementary, Secondary, and Vocational Education of the Committee on Education and Labor, House of Representatives. Part I: General Issues in Elementary and Secondary Education. May 10-11, 1977. Appendix 1, entitled: A Preliminary Analysis of Demographic Trends Influencing the Elementary and Secondary School System. Office of Technology Assessment, United States Congress. May, 1977. See Table 62 and Table 63, pp. 211, 213 of the appendix, pp. 494, 496 of the Hearings Record. Arizona and Florida have had massive increases in enrollment.

<sup>3</sup> Between 1970-75, on the average, for every 100 persons that moved into the city, 130 moved out. By 1970 the suburbs had become the most favored locale, and if present trends continue, by 1990 America will be a nation with a suburban majority. See the report by the Congressional Research Service, Library of Congress, entitled, "Some Past Trends and Future Demographic Projections for the United States." Cynthia E. Huston and Dennis L. Little. July 5, 1977. 77-162 SP. Pp. 16-17.

<sup>4</sup> There is a pronounced move to genuinely rural areas. From 1970-74, counties with the least commuting have experienced the most pronounced change in growth rates. See the Population Bulletin, "Rural Renaissance in America?" Population Reference Bureau, Inc. vol. 31, No. 3 October 1976. p. 11.

<sup>5</sup> The 27 largest cities in the country peaked in their total school enrollment in 1970-71 at six million. By 1975-76 enrollment had declined to the level of 1962-63, at less than five million. See *Hearings, Op. cit.*, p. 45.

While there is a decline in the traditional school age population, there is not a decline in overall enrollment in formal and non-formal educational programs. To the contrary more and more adults are enrolling in more and more education, either through institutions of higher education, through their place of work in job-related training experiences, or through "on demand" courses offered through many educational organizations.<sup>6</sup> The reasons for this are many. It appears that a more highly educated population in a certain sense creates its own demand for further education; the higher the education of the person, the greater likelihood of participation in further education. In addition, the desire for new skills to upgrade employment possibilities, to overcome job skill obsolescence, or to improve the quality of one's life creates a demand for further education.

#### EXPECTED EFFECTS

It can rather confidently be predicted that to protect the jobs of teachers and to more fully utilize the physical plant of the nation's public school systems, attempts will be mounted to expand the number of students. There are basically three ways to do this:

1. *Expand downward.*—Create early childhood/day care centers in existing schools, particularly with extended school days (until 6:30 P.M.). This fits well with the needs of working mothers, particularly single-parent families. There is already a small tax incentive for such day care, though it does little for the very poor. If a large-scale day care program is approved by Congress, there will be pressure to convert existing public school facilities and retrain teachers for early childhood education.

2. *Expand outward.*—Make additional efforts, through civil rights enforcement, the enforcement of legislation and regulations for special populations (e.g., the handicapped), and the creation of special programs to guarantee all children appropriate schooling and to retain those who now drop out.

3. *Expand upward.*—Provide educational experiences and programs for adults. These can be degree programs, job training or retraining programs, or merely the provision of educational experiences of all kinds that add an enrichment component to the life activities of people.

In addition to expanding the number of students, there will likely also be an effort to use the school facilities to provide social services other than education. In many communities, schools are an ideal site for community health programs, recreation programs, meetings of senior citizens, or cultural activities. Many individuals do not take full advantage of social service programs that are available, often because their various locations and conflicting regulations confuse the potential citizen-client. Providing all or many such services from a common location would strengthen the delivery of services and strengthen the neighborhoods and communities themselves.

All of the above approaches will be tried,<sup>7</sup> and which make the most sense for a school district, or even for a portion of a school district (a neighborhood) depends on local conditions. Any national policies must be flexible and provide appropriate incentives for local initiative.

While these two basic directions—acquire more students, or provide more services—seem the likely responses of school professionals, the JEC should probably take a somewhat broader perspective. It is a fact that a great deal of education in our culture is presently carried on by institutions other than our formal schools. From the large training efforts carried on by corporations to the educational impact of the mass media, our culture is information rich and its citizens are constantly subjected to information stimulation. Every year adults spend a great deal of time teaching themselves.<sup>8</sup> New developments in information and communication technology, of which I will say more later, may increase dramatically the amount of education carried on outside the formal schools.

Since a time of decline in the traditional school aged population is hardly synonymous with a decline in the need for knowledge and education in the culture—all predictions about the complexity of future life appear to demand a more highly educated populace—steps should be taken to look at the role of the formal schools within the culture's network of educating mechanisms. If we had such a broad perspective, we could identify the kinds of knowledge and information best provided through each, and bring the various systems into a more integrated and complemen-

<sup>6</sup> Between May 1969 and May 1975, enrollment in adult education courses for credit rose from 10.8 million to 11.9 million. Enrollment in noncredit courses, both job related and not job related rose from 9 million to 14 million. "The Condition of Education, 1977 Edition." op. cit. table 4.21, p. 205.

<sup>7</sup> Hearings, op. cit., pp. 525-555.

<sup>8</sup> The work of Allen Tough of Canada shows this, as cited in Hearings, op. cit., p. 552.

tary relationship than at present. I believe such culture-wide rethinking of the role of schools would be preferable to supporting, without such examination, the steps that educational professionals might recommend. In this larger and more systematic framework, alternatives for our schools other than those listed here might be generated. I am confident that in the broader picture, no one would allow the public school system to deteriorate.

#### LINK TO ECONOMIC POLICY

The above considerations appear to have a relationship to economic policy in several ways.

1. Insofar as economic policies or economic realities require mothers of small children to work, either because they are the sole support of a family, or because costs of living demand two incomes, some form of early-childhood education/day care would be very valuable. Since such conditions are found disproportionately among the very poor, the very ones for whom some form of early intervention appears to be a way to break the cycle of poverty, it would have major social benefits. With the capital investment in the form of buildings, and the surplus of trained teachers who could be retrained for early childhood teaching with relatively little expense, such a day care proposal seems opportune.

2. When all forms of education are taken into account, the size of the education sector of the economy is truly enormous. Adults of all ages are regularly involved in educational experiences or training programs. Economic policy should take more explicit advantage of the capacity and tendency of an educated populace to seek more education, by providing broad incentives for individuals to take such personal initiative. This would help support the shift of public school offerings in this direction.

3. The integrated delivery of human services is of critical concern to most of the helping professions. The additional space in school facilities, plus the neighborhood character of a school's attendance area, and the desire to strengthen neighborhood units in cities all suggest the value of such an approach. Numerous pilot programs are underway.

4. Given the size of the education enterprise, there is probably much room for eliminating redundancy and overlap through broad scale rethinking of the relationships between the various educational enterprises. A declining population of the traditional school age gives an opportunity to do this, and upcoming changes in the information and communication technologies require it.

#### URBAN TO RURAL MIGRATION

The urban to rural migration was mentioned earlier, as one of the basic demographic factors in public schooling. While it appears that people have been leaving SMSA's for some years, this was masked by the high birth rate during the late fifties and sixties; nearly all SMSA's in the 1950's and 1960's registered net gains. With the drop in birth rates in the 1970's, the out migration was suddenly noticed. Net migration gains occurred in nearly two-thirds of all non-metropolitan counties, including far distant non-metropolitan areas.<sup>9</sup>

The size of the migration, of course, varies greatly across the nation. Some metropolitan areas have actually stopped growing. In others the out-migration seems less severe, but of the twenty-seven largest cities, all have declined in enrollment, several by as much as 24 percent. Much of this is due to out migration.<sup>10</sup> Careful studies by rural sociologists of the effects of this outmigration to rural areas have only recently begun,<sup>11</sup> so it is not possible to be precise about the effects on rural education. However, a number of reasonable inferences can be made.

First, while the motivations of the migrants are varied: lower cost of living (cost-of-housing), white flight, job transfer, a desire for small community life, retirement, recreation, a better place to raise children, or a move to voluntary simplicity; the

<sup>9</sup> Population Bulletin, op. cit., pp. 3, 4, 8.

<sup>10</sup> Hearings, op. cit. p. 506. Of 85 city districts in the nation's largest cities, only 12 showed enrollment increases between 1970 and 1974—three in Florida, and two each in Texas and California. p. 503.

<sup>11</sup> Four studies are currently underway sponsored by the U.S. Department of Agriculture. The principal investigators are: Dr. Don Thomas, Dept. of Agriculture, Economics, and Rural Sociology, the Ohio State University; Dr. Don Voth, Department of Agriculture, Economics and Rural Sociology, University of Arkansas; Dr. Lloyd Bender, Montana State University; and Dr. Cornelia Flora, Kansas State University. These are careful sociological studies which will not be completed for some time. However, one inference that appears tenable at this time is that the urban migrants coming into rural areas appear to be a lot like the people already there in terms of demographic characteristics: education, income level, etc. That is, people appear to be migrating to rural areas where they will find others like themselves.

key distinction is whether the migrants are in rural areas because they want to be there, or because they had no other alternative. Which group predominates in any given rural area varies from place to place.

#### EXPECTED RESULTS

Those migrants in rural areas who, for whatever reason, do not want to be there and regard it as beneath them, can be expected to want to "urbanize" the rural area by demanding services comparable with urban areas, roads, economic development, culture, and high quality education on an urban model.

While these demands, if translated into constructive political action, could do much to strengthen rural communities and win for them a fairer share of the country's services, the effect on education if not on the rural area, is likely to be negative. While recent research suggests that the educational advantages of small schools are substantial and that there are many ways to take positive advantage of smallness, the educational quality of most rural schools is presently below urban and suburban schools.<sup>13</sup> The standard approach of the last fifty years—school consolidation, or the structuring of the curriculum around the subjects and emphases of urban employment—are likely to be foremost in the minds of most new migrants. Loss of a school to consolidation substantially reduces the viability of rural communities, thus running counter to possible social service improvements in rural areas. And an urban-oriented curriculum continues to promote the loss of young people from rural areas.

On the other hand, there are a large number who migrate to rural areas because they prefer the life and life style of a small community, particularly as a place to bring up children. They tend to value the local rural schools, particularly for the social activities which are centered around them. They can be expected to work for improvements in the local schools, but ones consistent with the life in a rural community.

Since schools are a central social, as well as educational institution in rural areas, they can be expected to be a battleground of the conflicts in values that are represented in the community. School Board elections can be expected to be hotly contested, there will be fights over the offerings in schools, and fights to upgrade the quality of teaching. The long-time rural residents, who can be expected to be, in general, less well educated, poorer, and older, will find such conflicts unsettling.

#### LINK TO ECONOMIC POLICY

Among other things it would be wise to determine at a national level whether rural resettlement and rural redevelopment are things which are desirable. "Educational improvements alone cannot solve the rural/nonmetro development problem."<sup>14</sup>

For the past century Federal farm policies have encouraged mechanization of farming and other occupations, in many ways encouraging the destruction of rural communities through the loss of jobs. With better educated, more politically wise, more demanding people now in rural areas, policies which encouraged rural economic development, social and cultural development, and rural control over many of the services delivered to them, would do much to take creative advantage of the present situation. To move now to recreate viable rural community life would seem an appropriate response.

Some see the schools as logical centers of such rural redevelopment efforts. Social services of a wide variety could more effectively be provided through school facilities than at the present scattered locations; social and cultural activities could be encouraged; and some pilot efforts are about to get underway to use schools as rural development corporations.

On the other hand, Federal policies have in many cases exacerbated the decline of urban areas, and much of the migration stems from the deterioration of city life. Cities are increasingly left with the least educated, the very poor, the non-English speaking, etc., all of whom demand much more costly social services and can pay little of the expense.

<sup>13</sup> See "Education in Rural America: A Reassessment of Conventional Wisdom." Jonathan P. Sher, Ed. Boulder, Colorado: Westview Press. See also "Rural Education and Rural Labor Force in the 1970's," by Frank A. Fratoe. USDA/ESCS/EDD. (Mimeo) To quote from the summary and implications of the latter, "rural/nonmetro residents: . . . are more likely to: enroll in school later, progress through school more slowly, complete fewer school years, score lower on national assessment tests, and become functional illiterates . . . They are less likely to: complete four years of high school or more, plan a college education, enter college, receive vocational training, or enroll in adult education programs." P. 59.

<sup>14</sup> Frank A. Fratoe. *Ibid* p. 59.

To cite just a few statistics, the minority percentage of total enrollment in school systems of the twenty-seven largest cities grew from 48.8 to 67.1 percent between 1970 and 1974. The percentage of students below the poverty level was one-third in 1975.<sup>14</sup>

Any economic policy should simultaneously promote the development of jobs in rural areas, as well as in urban areas.

#### THE POTENTIAL IMPACT OF NEW EDUCATIONAL TECHNOLOGIES

Assessing the potential impact of new technologies on education requires establishing some frames of reference. The most powerful way to view education in relation to technology is to view our formal education system in terms of information or communication terminology. The task of education, seen in this light, is to link humans to organized bodies of knowledge, with multiple channels of access. The goal is to enable individuals to connect their personal systems of meaning with the accumulated knowledge outside, so that their own sense of the value of their own lives becomes deeper and richer.

Seen in this manner, schools are technologically backward. The invention of textbooks approximately a century ago was a major technological breakthrough, but it is still the predominant form of "organized knowledge" available, and then in most cases the school system owns and keeps the textbooks. Libraries are available in most schools, so other books are available for loan, much as in library systems outside.

Films, filmstrips, and overhead projectors are used regularly in schools, though generally they are used not as integral parts of some curriculum but as individual pieces selected from catalogues. A few of the large-scale curriculum development projects of the 1960's did design a curriculum around carefully chosen films.

Television, with either direct reception from commercial transmissions, cable transmission from a central video-tape file, or in a few places, reception from satellite transmissions, is now available in some schools.

Computer assisted instruction is not widespread, despite early enthusiasm about ten years ago when programmed instruction seemed the coming thing.<sup>15</sup>

If schools are backward in their use of technology for instruction, they are even more backward in the use of technology to assist in the performance of many of the school's functions. Schools are, by contrast to almost any institution in the culture, information poor. Most school systems do not organize budgets so that direct comparisons of the costs of similar instruction in different buildings can be made. Data on pupil performance is scattered: student scholastic records are found in one place, disciplinary actions in another attendance in another, individual teacher assessments of performance in another, and sometimes standardized test data in still another. Achievement data is collected irregularly, sampling a very limited range of student performance indicators. Schools collect almost no information about what actually goes on in classrooms.

With such little information about the ongoing operation of schools, it is not surprising that schools are not set up to use systematic information. Even if data does become available, there is often no way to use it.<sup>16</sup>

Given these conditions it seems unlikely that schools will be leaders in the adoption of new technologies in education. Rather, we can expect that as new technologies become available in the culture at large, schools will adopt them, or adapt, as best they can.

Yet within this framework, new technologies are likely to have an absolutely massive impact on the way schools function. In the history of communication, the really revolutionary changes have come through technology, as, for example, when the telegraph eliminated the pony express. Communication technologies under development and destined to come "on-line" very soon promise a revolution almost as complete. While predicting when they will come on-line is very hazardous—no one can predict that with accuracy—the ones I will discuss below appear likely to be widely available commercially with the time frame encompassed by these hearings.

The four potentially revolutionary technologies are:

1. *Home computers.*—Individual, programmable, interactive, capable of storing and allowing the manipulation of large amounts of information.

<sup>14</sup> Hearings, op. cit. Pp. 507-509.

<sup>15</sup> See the book "Run Computer Run" by Anthony Oettinger for a sobering assessment of the problems of utilizing computers in education.

<sup>16</sup> See "Information Systems and Performance Measures in Schools" by James S. Coleman and Nancy L. Karweit. New Jersey: Educational Technology Publications, Inc. for a detailed proposal for overcoming this.

2. *Video-disc technology*.—Allowing the playing on one's home television screen both the sound and video of everything in the huge film and videotape libraries of film companies and television companies.

3. *Lazer-modulated fiber optics*.—Optical cables, using modulated light beams, allow the transmission of far more information than present cables, enough to provide for multiple transmission of different programs on request to different terminal points.

4. *Advanced satellites*.—Capable of transmitting to different locations so precisely as to bypass cables or long-distance lines.

While it may be true already that schools are information poor in relation to the outside culture, if these four technologies become widely available in the home appliance commercial market, the role of schools as the basic provider of information and knowledge for children will no longer be viable. Teachers will no longer be a basic source of information, and will be forced to perform other functions.

While children will continue to be brought to a central location—a school—for custodial purposes, the relatively cheap cost of, for instance, the proposed video-disc technology, and the power of the channels to organized bodies of information, suggests that schools will need to link into the culture-wide information/communication networks.<sup>17</sup>

#### EXPECTED RESULTS

Such a change will not come easily to the schools. There will be widespread resistance. Yet if mass marketing brings about the wide adoption of these devices, schools will be forced to adjust. The capital investment to convert schools to these new technologies will be large by school standards, as will be the cost of preparing high quality instructional programs and of retraining teachers. These, more than anything, will slow the rate of adoption.

Once many of the instructional tasks are taken up basically by technology, schools actually have the potential to become much more human places. Freed from the basic task of organizing instruction, and bolstered by enormously richer and more varied programs to meet student needs, teachers can shift more to the role of helper, advisor, facilitator; and schools will become more of a place where students, through discussion and other forms of reflection, are better able to make personal sense of what they are learning.

#### LINK TO ECONOMIC POLICY

Since the first few high technology educational environments will be very expensive to create, the deliberate support of experimentation and demonstration schools would be an important activity. Support for the concept of high technology schools would stimulate the software development, and the associated teaching approaches, to go with the technology.<sup>18</sup>

In an economic sense broad based information sharing is one of the most important activities to support. The economics of information sharing are such that the value increases with distribution, the opposite of that for other commodities. Much of the technology for information sharing mentioned above will be widely used in the economy at large before it will filter into schools. In this sense, building the technology into schools will provide basic training to students for the broad information sharing technologies that will increasingly be found in the economy and in the culture.

#### A SUCCESSFUL HUMAN POTENTIAL OR SELF-ACTUALIZATION MOVEMENT

Just as new communications technology may so reduce the impact of geographic distance as to make the problem of providing high quality education in rural areas relatively simple to solve, the last of the four questions I was asked to address is

<sup>17</sup> John Goodlad calls for a comprehensive "ecology of education in which each of an array of institutions—home, school, television, computerized education centers, and so on—does what it can do best in an educative society." Phi Delta Kappan, February 1977, p. 454.

<sup>18</sup> Support for the technological developments is likely to be fully provided by the commercial sector because the size of the mass market and the training market in industry (\$100 billion annually) are more than ample to recover the costs of development. Creating schools that are in some sensible way integrated into the rapidly developing systems of communication and education that are developing outside will be expensive, as will the preparation of appropriate curricula. Many different configurations are possible. In line with the argument above, it would be better to wait until the technological developments in the culture at large force a restructuring of schooling than to move prematurely. But careful planning and studies of how to do it should begin now.

related to the previous three. To quote from an article entitled, "What Technology Cannot Do," by Ralph W. Tyler:<sup>19</sup>

"Learning is an active process on the part of the student. If he does not want to learn what the school seeks to teach and sits passively during the presentation, he does not learn. Many school problems are attributable to lack of motivation."

The human potential or self-actualization movement is of critical importance precisely because it focuses directly on increasing human motivation.

With the migration of people from urban to rural areas, urban areas are increasingly left with the least educated, the poorest, those least capable of helping themselves. In addition, those people in rural areas often suffer from the same problem: the sense that they cannot help themselves, that the decisions that affect them are made far away, that they are victims. Yet even if it is objectively true that people are victimized, acceptance of that frame of mind is self-defeating. Those in the worst of circumstances most need educational experiences that give them a sense of their own worth, a sense that they can have an effect on their own lives, a belief that they need not always be victims. The human potential movement, though originating among the more affluent, is now coming to see the strong contribution it can make to the problems of the most victimized parts of our society.

That there are a great many human capabilities that remain undeveloped in our culture has been suggested by a great many thinkers: Carl Rogers, David Riesman, Abraham Maslow, Margaret Mead, to name only a few. Experimental work with educational and psychological methods to enable people to regularly use more of their human capabilities began at least as early as the late 1940's, with small group training experiences in interpersonal sensitivity for business executives offered by the National Training Laboratories.<sup>20</sup> By the early 1960's there was much wider experimentation, particularly on the West Coast, and today many would claim that we are on the verge of a rather radical culture transformation: "Holistic Health" was the subject of a large conference recently held in Washington, sponsored by several of the National Institutes of Health;<sup>21</sup> the "self-help" literature occupies a large section of nearly every bookstore; the Association for Humanistic Psychology lists over 400 growth centers in the U.S.A.;<sup>22</sup> and many different colleges, universities, extension services, and community colleges offer courses in the various theories and techniques, while some have departments and degree programs;<sup>23</sup> a number of companies have created what can best be described as "second generation" human potential programs which are readily available to the general public.<sup>24</sup> Two years ago a bibliography of adaptations and applications of human potential techniques and theories to public school education contained over 1200 references.<sup>25</sup>

A different way to view the human potential movement is to look at its underlying values. I would suggest there are four:

1. *Holism*.—A view of the human organism as having a wide variety of different facets and abilities, and that we should encourage the development of all of these, in a balanced fashion, instead of the overemphasis on a very few capabilities (e.g., reading, cognitive abilities).

2. *Self-responsibility*.—The notion that individuals are largely responsible for the way they view and act upon their own reality, and that often they can through changing the way they view themselves, substantially improve their own lives. In education, this is seen as radical improvement in student motivation, and the more

<sup>19</sup> "What Technology Cannot Do." Ralph W. Tyler. Phi Delta Kappan. February 1977. P. 455.

<sup>20</sup> See Kenneth D. Benne, Leland P. Bradford, Jack R. Gibb, and Ronald O. Lippitt, Eds. "The Laboratory Method of Changing and Learning." Palo Alto, California: Science and Behavior Books, Inc. For a more interpretative history see Roger Harrison, "Problems in the Design and Interpretation of Research on Human Relations Training." NTL Institute for Applied Behavioral Science, associated with the National Education Association. 1967.

<sup>21</sup> Holistic Health: A Public Policy. Washington D.C. April 21-25, 1978. The sponsoring organization was the East West Academy of Healing Arts, San Francisco. Co-sponsors included the Bureau of Health Planning and Resources Development; the Health Services Administration; National Center for Health Services Research and Development; National Institute for Drug Abuse; National Institute of Mental Health; and other non-government groups and organizations.

<sup>22</sup> AHP Growth Center List. 1978. Available from the Association for Humanistic Psychology, 325 Ninth Street, San Francisco, Cal. 94103.

<sup>23</sup> Schools List: A Listing of Humanistic Colleges and Universities, Departments and Programs, 1977-78. Association for Humanistic Psychology, 325 Ninth Street, San Francisco, Cal. 94103.

<sup>24</sup> Jerry L. Fletcher. "Human Potential Education and Public Schooling." Session Title and Paper presented at the American Educational Research Association Annual Conference: Toronto, Canada. March 29, 1978.

<sup>25</sup> Thomas B. Roberts. "Transpersonal Education Bibliography and Resource Guide." (Mimeo). 1976. Available from the Department of Education, Northern Illinois University, DeKalb, Illinois.



effective educational applications of the human potential movement appear to have the critical power of improving the motivation of students to learn.

3. *Self-knowledge*.—The development of the knowledge of a person about his or her inner self, to go with knowledge of the external world. Effective education has always demanded that knowledge of the objective world connect in some way with the personal experience of the learner or the learning was of little value or utility. Through the deliberate use of some of the human potential exercises, people become skilled at making personal sense out of what they learn.

4. *Higher levels of development*.—The belief that people are capable of literally transforming themselves, so that they are able to use much more of their capacities in an integrated way. Abraham Maslow coined the phrase "self-actualized" for such people.

Educational experiences are in use now aimed at each of these four values or goals. While the range is extensive, a brief review of some of the educational experiences will probably be informative:<sup>28</sup>

#### *The physical self*

In this category there are developments of many new and different forms of exercise. "New Games" which stress cooperation, trust, and fun, rather than competition and winning; and exercises to become more aware of the different senses.

#### *Relaxation*

In this category are many different methods for calming the mind and body and focusing it on the learning tasks. A particularly well-known popular approach is the use of biofeedback.

#### *Movement and dance*

Here we find many approaches to preserving and encouraging other means of expression that those usually found in schools, through the use of folk dances and other movement training.

#### *Self-concept and values clarification*

Various approaches are employed in this category to engender in students a sense of belonging, a sense of competence, and a sense of being worthwhile. These appear to form the basis for a healthy motivation in life.

#### *Fantasy and imagination*

It has been found that through the deliberate use of a child's natural ability to imagine and fantasize, much more rapid learning of many of the traditional school subjects can take place. Numerous exercises employ this basic idea.

#### EXPECTED RESULTS

While the "back-to-basics" movement dominates much Federal thinking about educational policy, it represents in any large sense a particularly constricted emphasis. In any reasonable view of the kind of society this generation of children will face, an eighth grade reading level and the ability to do simple writing and mathematics does not approach adequate preparation. This is not to down play the importance of reading or cognitive skills. Rather, research suggests that a balanced development of the full range of human capabilities improves reading and cognitive learning.

In a scattered and unorganized way much of the educational methodology has already been developed to bring about far faster learning to far higher levels of competence, in a far wider range of outcomes, and to give that learning more personal meaning than anything done at present. These methods are also not elitist. They have in a great many cases been developed through work with inner city youth, for whom no other educational approaches appear to work.

#### LINK TO ECONOMIC POLICY

The quality of education has a direct economic link. If we allow a generation of children to be educated in a way inappropriate to the reasonable demands of the future, we face the economic consequences of a great many dysfunctional people, and the economic costs of additional education, training, or services.

On the other hand there has long been concern that we could have an over-educated population so that we cannot create jobs commensurate with the level of education. In a view of education that equates completion of a certain number of years of school with entitlement to a certain type of job, this might be true.

<sup>28</sup> This information is adapted from an article by Jack Canfield and Paula Klimek, "Education in the New Age." *New Age Journal*. February 1978.

However, in a form of education that emphasizes personal motivation and personal initiative, this is less likely to be so. Economic policy would in the latter case be oriented toward providing incentives and support for people taking initiative. The encouragement of entrepreneurial activities has always had a great deal of success in the U.S., and it would be in this direction that I would encourage the JEC to move.

#### CONCLUSION

In conclusion I would like to raise four questions which are suggested by this testimony:

1. Can we manage the decline of the school age population so as to bring about a much more integrated set of linkages between schools and the other educational mechanisms in the culture?

2. Can we preserve the advantages of smallness and ruralness, indeed even relearn the advantages of smallness in our urban areas, while also providing jobs and a fully satisfying life to our citizens?

3. Can we manage the technological revolution in information and communication to create a more human and humane world, rather than one more depersonalized?

4. Can we find ways to support the development of the inner human being to balance our incredible capacity to develop the outer world?

I have little doubt that we must develop ways for people to look inward, to develop a strong enough sense of themselves that they will remain the masters of technology, that they will not succumb to the sense of powerlessness, anomie, alienation, and victimization that so pervades the culture. In spite of the promise it carries for resolving many of these problems, there has been almost no research support for the human potential movement, let alone any support for applications of the methods and techniques to our more pressing problems. There should be a substantial amount.

Economic policy has got to be linked to the quality of life and life satisfaction of human beings. This does not mean, in my view, a retreat from technology. Voluntary simplicity will probably never appeal to a great many people. But it does mean a concern about the human qualities of our economic policies, and that requires incentives for human beings to develop more than their material desires.

Thank you.

Representative BOLLING. Thank you very much.

Next we have Mr. Mayer Zald, professor of sociology and social work at the University of Michigan. Previously he was chairman of the sociology department at Vanderbilt University.

He has edited or authored 10 books and monographs, and has served as advisory editor of the journals of *Social Forces* and *Administration and Society*.

The center of his work is focussed on the organization issue. He teaches a course at the University of Michigan on the future of the welfare state.

He is not a demographer, but is interested in what demographic trends may mean to the future of the welfare state.

#### STATEMENT OF MAYER N. ZALD, PROFESSOR OF SOCIOLOGY AND SOCIAL WORK, UNIVERSITY OF MICHIGAN

Mr. ZALD. I think it is clear that in the last decade and a half, we have completed—or completed is too strong a word, but perhaps, moved to complete the legislative agenda of the welfare state. Obviously, that is the outstanding issue, some may still call us a welfare-lagger. But nevertheless, I look at the Federal budget of the last decade and a half, the process of legislation, and see that the agenda of the 1930's was taken powerfully forward.

The welfare budget broadly conceived has increased enormously. What is less often noted is how that legislation integrates with the demographic trends and what the future of those demographic

trends are or implies for the society. I would like to address some of those implications.

During the last decade, the changing composition and size of the American population has attracted increasing attention. It is widely known that our population is aging, that divorce rates are up, birth rates down, single-headed households more prominent, black birth rates higher than white, and so on. Moreover, the implications of specific demographic facts and trends for social welfare and social problems is often noted. The rise in the crime rate is sometimes attributed to the bulge in the size of the 15- to 24-year-old cohorts, the most crime prone age. Increases in the eligible elderly require us to change the OASDI tax rates. Less often noted is that demographic trends affect demands for specific goods and services, the supply of different kinds of labor, and the ability of social policy and Government allocations to effectively achieve their ends.

I want to illustrate these implications or these general interrelationships by talking about three different aspects of the demographic composition: Aging and medical cost inflation, changes in family composition, and trends in youth cohorts and their implications for youth unemployment.

We can already say with pretty good confidence how many people there will be in the United States over the age of 65 in the year 2042; they are already born. Predicting the percentage of the population over 65 is another matter, for it depends upon fertility rates, which are much more unstable.

If we predict the percent of the population over the age of 65 and as a ratio to the population age 20 to 64, we get the aged dependency ratio.

Let us think of the year 1995 as one point and then the year 2030. In 1995 we will have an aged population 7 million larger than our present 23 million. From then until 2010 the aged population increases only slightly. And then, as the children of the post-World War II baby boom reach 65, the aged population increases dramatically, to over 50 million by the year 2030.

We have spent a great deal of time in the last year talking about the implication of this for social security. I think it has been a major agenda item, but we have not spent any time talking about the aging trends for medical costs.

In the paper I have presented, my prepared statement, there are some tables. I will not read them but I will just give you a feel for them, particularly in medical expenditures.

Persons aged 65 or over are less than 10 percent of the population but one-third of our medical expenditures are for people over 65. In 1975, per capita personal health expenditures were \$212 for persons under age 19, \$472 for persons age 19 to 64, and \$1,360 for persons age 65 and over. It appears that as our population gets older, we have a continuing massive increase in our health care expenditures.

Wilbur Cohen speculates that when the aged population reaches about 17 percent, in about the year 2030, unless there is some significant reduction in the utilization or cost of health and medical services by the aged, about one-half of all personal health expenditures might be expended on the aged. Total costs of health

and medical services might represent about 12 to 15 percent GNP as compared to 8.6 percent in 1976, roughly a 50-percent increase in the percent of GNP that goes to medical services.

I could go on with such items. Let me point out a couple of things that you have to consider when you are looking at the economic side. Not only is there the sheer use of medical services but the ancillary services as well. So the whole nursing home industry and construction of nursing home care will be expanded quite a bit. Let me point out, incidentally, that our current cost—constraining measures may be counterproductive. I don't want to stress this too strongly but we are now trying to slow down the construction of hospital beds in order to contain inflation in medical care. If we are going to have 7 million more elderly by 1990, we may be in a situation where we need to have a crash program to increase construction in these areas. If our planning does not take into account the demographic trends by regions and cities then we will be in trouble.

Let me turn to another aspect of the age composition and the demographic composition, our family and household composition. Between 1960 and 1976, the number of white households grew from 48.8 million to 64.6 million, the number of black households from 5 million to 7.5 million. Two main trends within this growth are especially important: The growth of single-person and unrelated individual households, and the growth of female-headed households.

Recently Suzanne Bianchi has shown that households with related individuals have grown at an average rate of 1 to 2 percent a year. Starting from a much lower base, since 1960 unrelated individual households have grown at an annual rate of between 5 and 7.

So we are more and more moving toward a single culture and that phrase does not mean singles as younger people but singles as older people as well. It is true that it is most prominent among young males and among older women, but the trend is also pronounced among blacks 45 to 64.

More people are living alone or with friends rather than with relatives. That has come partially as a consequence of welfare policy. One of the unforeseen consequences of adequate welfare benefits is that people can afford to live alone.

You can ask the question, and I think it should be asked. I am not sure of the answer, but is that something you want to encourage. It happens to be an effect of welfare policy.

I think the more important trend to focus on, however, is the growth of female-headed households. Bianchi shows that between 1960 and 1970, the number of white female-headed households grew by an average rate of 2.6 percent a year, between 1970 to 1976 by 4.6 percent a year. Black female-headed households have increased even more rapidly, by 5.4 percent a year between 1960 and 1970, and by 7.8 percent between 1970 and 1976.

These trends have quite profound implications for the household composition in which children are raised. Between 1970 and 1977 the number of children under 18 in white husband-wife households declined from 52.3 million to 44,900,000, while the number of white children in female-headed households increased from 4,100,000 to

close to 6 million. In other words, while one is going down by 20 percent the other has increased by 50 percent. The same trends held for black families. Children under 18 in black husband-wife families declined from 5,300,000 to 4,300,000, while those in female-headed households grew from 2,500,000 to 3,500,000.

Stated another way, by 1977 over 1 in 10 white children were in female-headed households, and over 4 out of every 10 black children were in households so constituted.

These trends have a relationship to the economy. Postponement of marriage and fertility declines in marriage typically occur during downswings of the economy. Setting up separate households takes money, and both the rise of separate households among the elderly and among females with children is related to the availability of resources.

At one time if you were a woman with children you went back to your home of origin. Now you set up a separate household. But I think the important point is the relationship to poverty. It is one of the clearest things we can say, that female-headed households are poor. Whether the mother is employed or not these households have incomes well below that of male-headed or husband-wife households.

In 1973, for instance, median family income among white husband-wife families was \$14,225; among female-headed households with mother employed \$6,899, and among those not in the labor force \$3,791. Among blacks the figures were \$10,446, \$5,397, and \$3,779 respectively.

For female-headed households, poverty is a way of life, and AFDC provides a major source of funds. In recent years, as female-headed households have increased, so have AFDC rolls and payments. In 1960 there were 3,073,000 recipients receiving \$994,000,000. By 1970 the figures were 9,659,000 recipients receiving \$4,857,000,000, and by 1975 there were 11,389,000 recipients receiving \$9,348,900,000.

You will note that I have not attempted to spell out projections to the year 1990 and beyond here. That is a risky business. It intrigues me that demographers project lots of things but do not want to project female-headed households. One possibility is that that is too scary to look at.

Let me turn to my third area of concern which is youth unemployment in the 1980's and 1990's. You will be hearing testimony on that topic tomorrow. I will not spend too much time on it. I just want to make one or two points.

Basically, the teenage unemployment has, since the mid-1950's, been above 12 percent of the teenage labor force. It peaked at 17.2 percent in 1963, declined to 12.2 percent in 1969, and climbed again to 19.9 percent in 1975. The interesting thing is, of course, that teenagers have been increasing as a proportion of the total population, the result of the baby boom of the 1950's and 1960's.

Using these same projections we could expect declines in the teenage unemployment in the 1990's. For instance, there were 14,800,000 teenagers aged 16 to 19 years old in 1970, 16,274,000 in 1975. There will be an absolute decline in 1990 to 14 million. That suggests that there should be a decline in the unemployment problem for youth because there is still an increase for—McDonald's

needs lots of teenagers to work. There will be a demand for cheap entry-level labor.

Therefore, in general we could expect here is a case where we have a problem solved at first blush, a decline in the teenage unemployment problem. That makes some sense for the white population. One cannot be so sanguine about black unemployment prospects.

In the last couple of years, for instance, there has been a decline in white youth unemployment from 17.9 to 15.4. During the same time, nonwhite unemployment has increased from 36.8 to 38.3 percent. So in the first instance it seems that black youth unemployment is not responding to changes in the economy. Second, jobs are moving away from the inner cities and therefore, potential opportunities are declining for black youth. Third, whether we are talking about inner cities or outer cities, the black unemployment rate remains twice as high as the white. Whether you are talking about inner city unemployment or suburban unemployment, black youths stay unemployed at much higher levels.

So the first look at demographic composition by itself leads you to an objective conclusion but when you get into the complicated picture of the distribution of jobs, discrimination, and so on, the demographic trends do not tell you that much, at least for one important problem.

Let me conclude by making a general point which is that as we have expanded the welfare state we have paid the least amount of attention to the indirect side effects. Nobody wants to, I think, increase single-headed households as a matter of social policy. I say that a little cautiously, some may want to say that is a good social policy, but that certainly was not the intent of increasing AFDC payments, for instance.

One of the side effects of our social policy often is to bring in negative effects that we might want to avoid. It may well be that we ought to spend more time trying to think about the indirect effects of some of our welfare policies as we look at the direct effects as well.

Thank you.

[The prepared statement of Mr. Zald follows:]

PREPARED STATEMENT OF MAYER N. ZALD<sup>1</sup>

*Demographic Change, Economic Change, and Welfare Policy*

INTRODUCTION

During the last decade, the changing composition and size of the American population has attracted increasing attention. It is widely known that our population is aging, that divorce rates are up, birth rates down, single-headed households more prominent, black birth rates higher than white, and so on. Moreover, the implications of specific demographic facts and trends for social welfare and social problems is often noted. The rise in the crime rate is sometimes attributed to the bulge in the size of the 15 to 24 year-old cohorts, the most crime prone age. Increases in the eligible elderly require us to change the tax rates on employers and employees in order to fund OASDI without using general revenues. Less often noted is that demographic trends affect demands for specific goods and services, the supply of different kinds of labor, and the ability of social policy and government allocations to effectively achieve their ends.

Our central thesis is simple: The size and composition of our population when combined with specific governmental programs and expenditures has direct and

<sup>1</sup> With the assistance of Kathryn Grasso.

indirect effects upon the economy. I will illustrate by discussing three specific trends and their potential consequences: aging and medical cost inflation, changes in family composition, and trends in youth cohorts and their implications for youth unemployment.

#### TRENDS IN THE OVER 65 POPULATION AND DEMAND FOR MEDICAL CARE

Assume that life expectancy will increase only slightly in the years ahead. Then we can already say with pretty good confidence how many people there will be in the United States over the age of 65 in the year 2042; they are already born. Predicting the percentage of the population over 65 is another matter, for it depends upon fertility rates, which are much more unstable.

Tables 1 and 2 present projections of population growth with special attention to the percent of total population over the age of 65 and as a ratio to the population age 20 to 64 (aged dependency ratio). Table 2 is based upon a model of the population approaching stability around the year 2050. In 1995 we will have an aged population seven million larger than our present 23 million. From then until 2010 the aged population increases only slightly. And then, as the children of the post-World War II baby boom reach 65, the aged population increases dramatically, to over 50 million by the year 2030.

A great deal of attention has been paid to the implications of these trends for the funding of and demands upon our social security system. I want to focus instead upon their implications for demands upon the provision of medical care. Everyone is aware that medical costs have increased dramatically in the last decade, leading the rise of the consumer price index. Some component of that increase is due to the large increase in demand for medical services evidenced by the elderly and the poor, once Medicare and Medicaid were enacted. Table 3 below (from Andersen, Lion, and Anderson, 1976) gives utilization and price increases obtained from national samples in 1953, 1963, and 1970. Medicare and Medicaid had their impact between 1963 and 1970, and it is clear that the elderly and poor increased their use of health services much more than other groups.

The next set of tables shows the relation of age to health care expenditures and the trends in medical expenditures—public and private—for various age groups.

As Table 4 indicates, a disproportionate share of health care expenditures are spent on the elderly. Persons age 65 and over are less than one fifth as numerous as those age 19 to 64 but have health bills more than half as large as this intermediate age group. This group is about one third as numerous as those under 19 and spent about two times as much on health care. These figures reflect the more frequent illnesses of the aged and the greater expenses involved in their care (mostly hospital); the aged are hospitalized at two and a half times the rate for persons under age 65, and their average stay is almost twice that of such persons (Mueller and Gibson, p. 18).

As can be seen from Table 5, per capita personal health care expenditures for hospital and physician services in 1975 were about two and one half times those in 1967. The fastest growth occurred in spending for the aged and those under 19.

Per capita health expenditures for all services vary even more widely by age, partly because the aged are the major users of nursing home care (see Table 6). In 1975, per capita personal health expenditures were \$212 for persons under age 19, \$472 for persons age 19 to 64, and \$1,360 for persons age 65 and over. The per capita expenditure for persons of all ages was \$476 (Cohen and Westoff, p. 42).

If our population does become "older" (i.e. greater percent distribution for 65 and over), it appears that health care expenditures will also disproportionately increase for this group, given current trends. Wilbur Cohen speculates that when the aged population reaches about 17 percent [in about 2030], unless there is some significant reduction in the utilization or cost of health and medical services by the aged, about one half of all personal health expenditures might be expended on the aged (Cohen and Westoff, p. 43). Total costs of health and medical services might represent about 12 to 15 percent GNP, compared to 8.6 percent in 1976 (Cohen and Westoff, p. 43).

As Table 6 indicates, expenditures for hospital care, the largest single item of health care expense, represented 45 percent of all personal health care expenditures in 1975; it was also the largest single item for those 65 and over at 44 percent. Nursing home care is second at 25 percent. Two items thus account for 69.5 percent of expenditures for the aged. In 1975, 72.2 percent of the 89.9 percent paid for hospital care for the aged by public monies was paid by Medicare (Mueller and Gibson, p. 25). Of total expenditure, 42 percent of the 65 percent paid by public monies was paid by Medicare. Moreover, Medicare and Medicaid provided funding for almost half (49 percent) of nursing home residents. A greater proportion of elderly represents a further demand on the economy for provision of nursing home

services—not only in actual provision of services (staff, drugs, etc.), but also nursing home construction.

I have treated in great detail the relation of age to types of medical care expenditure in order to highlight the many ways in which an older population will impact upon continued and pervasive demand for medical services. In the short run, as our aged population approaches 30 million, we can expect increased demands for services, for hospital beds and for nursing homes. Indeed it is possible that current attempts to contain medical spending by slowing down the rate of adding hospital beds may lead to further cost explosions down the road. If, for instance, our estimation of bed needs doesn't adequately take into account age trends, rapid construction may be required later. I need not remind you that next to medical costs, construction costs have been increasing faster than almost any other sector of the economy. As long as we remain committed to adequate medical care for the aged, we are likely to have increased Federal spending for it, escalating demand and inflationary pressures.

#### FAMILY AND HOUSEHOLD COMPOSITION: RECENT HISTORY AND IMPLICATIONS

As our population has grown larger, so has the number of households. Between 1960 and 1976, the number of white households grew from 43.8 million to 64.6 million, the number of black households from 5 million to 7.5 million. Two main trends within this growth are especially important: the growth of single-person and unrelated-individual households, and the growth of female-headed households.

In an unpublished dissertation, Suzanne Bianchi has shown that households with related individuals have grown at an average rate of 1 to 2 percent a year. Starting from a much lower base, since 1960 unrelated-individual households have grown at an annual rate of between 5 and 7 percent (Bianchi, 1978). (This holds for both blacks and whites.) The increase is most prominent amongst young males (ages 20 to 34) and amongst older women, though amongst blacks the trend is more pronounced for those 45 to 64 as well. More people are living alone or with friends rather than relatives. The trend to smaller households created by people living alone as well as by lower completed family size has implications for the demand for housing types, and for the equity of taxation systems, and for the kinds of supportive social services needed by the elderly.

However, I want to focus upon the second trend mentioned above: the growth of female-headed households. Bianchi shows that between 1960 and 1970, the number of white female-headed households grew by an average rate of 2.6 percent a year, between 1970 to 1976 by 4.6 percent a year. Black female-headed households have increased even more rapidly—by 5.4 percent a year between 1960 and 1970, and by 7.8 percent between 1970 and 1976. These trends have quite profound implications for the household composition in which children are raised. As can be seen in Table 7, between 1970 and 1977 the number of children under 18 in white husband-wife households declined from 52.3 million to 44,900,000, while the number of white children in female-headed households increased from 4,100,000 to 5,990,000. The same trends held for black families; children under 18 in black husband-wife families declined from 5,300,000 to 4,300,000, while those in female-headed households grew from 2,500,000 to 3,500,000. Stated another way, by 1977 over 1 in 10 white children were in female-headed households, and over 4 out of every 10 black children were in households so constituted. These trends are created by the rise in the dissolution of marriage, the decline of births in marriage, the rise in the number of births outside of marriage, and the tendency of mothers with children to set up separate households (instead of living with their own families of origin).

The trends also have some relationship to the economy and to welfare programs. Thus, postponement of marriage and fertility declines in marriage typically occur during downswings of the economy. Setting up separate households takes money, and both the rise of separate households amongst the elderly and amongst females with children is related to the availability of resources. The elderly with social security pensions and other sources of retirement income can be independent of their children; females with AFDC can cope separately from relatives or parents.

The relation of female-headed households to poverty deserves special attention here. First, female-headed households are poor. Whether the mother is employed or not, these households have incomes well below that of male-headed or husband-wife households. In 1973, for instance, median family income amongst white husband-wife families was \$14,225, amongst female-headed households with mother employed \$6,899, and amongst those not in the labor force \$3,791. Amongst blacks the figures were \$10,446, \$5,397, and \$3,779 respectively (Waldman, 1975). Beverly Johnson has recently noted that:



"More than half of the 10 million children living in families with incomes below the poverty level were in these single-parent homes. In 1976, as in 1970, 52 percent of children under age 18 in families headed by women were living below the poverty level. In contrast, about 8.3 percent of children in husband-wife families were living below the poverty level.

"The incidence of poverty was greater among black and Hispanic families than among white families. This was especially true for those with children—about three-fifths of the black and Hispanic families with children were living in poverty, compared with less than two-fifths of the white families headed by women (Johnson, 1978: 37)."

For female-headed households, poverty is a way of life, and AFDC provides a major source of funds. In recent years, as female-headed households have increased, so have AFDC rolls and payments. In 1960 there were 3,073,000 recipients receiving \$994,000,000; by 1970 the figures were 9,659,000 recipients receiving \$4,857,000,000, and by 1975 there were 11,389,000 recipients receiving \$9,348,900,000 (Social Security Bulletin Annual Supplement, 1975). Ross and Sawhill (1975) trace these increases to less restrictive eligibility criteria, to greater take-up by eligibles, and to increases in welfare payments (Ross and Sawhill, 1975: pp. 94-99).

You will note that I have not attempted to spell out projections to the year 1990 and beyond here. Some of the trends do seem likely to continue. It seems unlikely that divorce rates will decline, but whether they will continue to increase is difficult to predict. Nor can we predict trends in the setting up of separate households, although increased labor force participation trends and AFDC payments are likely to continue to increase. Is the decline in fertility rates likely to continue; will married couples continue to postpone having children; will there be a change in abortion rates, etc? Certainly, however, for the short run, say the next 5 to 10 years, we can expect our impoverished population to continue to be made up of female-headed households, and we can expect some increase in single-parent households.

#### A PROBLEM SOLVED? YOUTH UNEMPLOYMENT IN THE 1980's AND 1990's

Stemming from their Malthusian origins, demographers practice a dismal science. And certainly the trends discussed above imply continued and increasing demands for governmental support of needy groups, continued press upon medical costs, and a large group of children and mothers existing below the poverty level, whose minimum level of well-being is dependent upon governmental support. Yet, in one area at least, that of teenage unemployment, demographic trends by themselves suggest a declining problem.

Since the mid-1950's, teenage unemployment has regularly been above 12 percent of the teenage labor force. The teenage unemployment rate peaked at 17.2 percent in 1963, declined to 12.2 percent in 1969, and climbed again to 19.9 percent in 1975 (Table 8). The demographic component of teenage unemployment has been that teenagers have been increasing as a proportion of the total population, the result of the baby boom of the 50s and early 60s.

But teenagers will be a declining proportion of total population throughout the eighties and nineties. Population projections based upon an increase in fertility rates from their present lows lead to a teenage population in the year 2000 of about the same proportion as today. Projections based upon continued low fertility rates have the under-18 population declining from 34.8 percent of the population in 1960 to 22.8 percent of the population in 2000. Honing in upon the age group 16-19 years old, there were 14,766,000 in 1970; 16,274,000 in 1975. In 1990 there will be 13,997,000 in this age group. Assuming reasonable economic conditions and the continued expansion of the service sector, which uses a lot of unskilled and first-entry labor, one would expect increasing demand for the smaller number of teenagers.

Although such an optimistic forecast might apply to white youths, they are likely to be far wide of the mark for non-white. The fact of the matter is that black youth unemployment has been growing in relation to white youth unemployment. Walter Williams (1977: p. 14) has shown that ever since the end of World War II the ratio of black youth unemployment to white has become larger. Up to 1955, black youth unemployment rates were actually lower than whites; from 1955-66 they tended to be 50 percent higher; and since then they have been more than twice as high. In the last three years, while the average white youth unemployment rate has declined from 17.9 to 15.4 percent of the youths in the labor force, nonwhite unemployment has increased from 36.8 to 38.3 percent of those in the labor force.

The causes of these differences are not clear. Walter Williams attributes the difference to the negative effects of the minimum wage laws. Arguing that black youths are often less desirable workers than white youths or adults, each increase

in the minimum wage law only forces employers away from a population group with assumed low productivity. But the economic studies in this area do not always support Williams. Another theory is that black youths live in inner city areas while jobs have fled to the suburbs. It is true that teenagers have a higher rate of unemployment than do adults in the central city or elsewhere (2.6:1), but a study by Westcott shows that the ratio of black to white youth unemployment remains high (2:1) for blacks living in suburban and rural areas (Westcott, 1976: pp. 5-6).

Moreover, though black as well as white fertility rates have declined in the last decade, black fertility rates have remained higher. So the black teenage population will not have declined as much as the white teenage population by 1990 and 2000 (U.S. Bureau of the Census, 1977a: Table 7). The evidence I have reviewed leads me to believe that although white teenage unemployment will decrease sharply in the 1980's and 1990's, possibly declining to the levels of the 1950's, no such happy prospect is in sight for black youths. Given the disadvantaged starting point that many of them have, coming from impoverished female-headed households, they are likely to fall even further behind.

#### CONCLUSION AND IMPLICATIONS

In broad sweep we have tried to draw out some implications of demographic trends for the welfare of the population in the next two decades and for the economy. Demographic trends combine with political processes and allocations and the changing operation of the economy to create demand for specific goods and services, to affect household arrangements, unemployment conditions, and so on. Each of these effects in turn has implications for social problems and policy.

Analysis of these trends, while not providing definitive answers to questions of policy, does provide a vital input when considering the economic and social costs and benefits in the future of policies and programs being considered now. As has been suggested in this paper, there is a definite interface between demographic trends—e.g. the age composition of the population, and other social and economic facets of society—e.g. differences in health care expenditures and the implications of such differences. It appears that comprehensive social policy planning must at least take these demographic factors into account if planning is to provide more than stopgap, fragmentary solutions to problems which portend continuance.

One must note, however, that while analysis of demographic trends should be brought to bear in policy decisions, government policies have indirect effects upon demographic trends. One doubts that advocates of increased AFDC payments intend to encourage divorce, or that advocates of female participation in the labor force want to encourage female poverty. Yet increased AFDC benefits and affirmative action policies may have, in part, produced the unintended side effects of increased divorce and more participation of poorly paid women in the labor force. One doubts that advocates of social security pension raises wish to encourage the setting up of separate households, though they may want to decrease the elderly's dependence upon their children. Or, again, the advocates of minimum wage increases do not intend to encourage black youth unemployment, but they may be doing so. Just as there are iatrogenic disorders in medicine, disorders caused by the unhappy side effects of medical treatment, so too there are sociogenic disorders of social policy that must be considered. The most rational approach to social policy appears to plan for present needs and demands but with an eye towards the future.

TABLE 1.—ESTIMATES AND PROJECTIONS OF POPULATION AGE 65 AND OVER: 1950-2000 (POPULATION IN THOUSANDS) BASED ON 3 DIFFERENT ASSUMPTIONS OF COHORT FERTILITY

Year	Number	Percent distribution		
		Series I	Series II	Series III
1950.....	12,397	8.1		
1955.....	14,525	8.8		
1960.....	16,675	9.2		
1965.....	18,451	9.5		
1970.....	20,085	9.8		
1974.....	21,815	10.3		
1975.....	22,330	10.5	10.5	10.5
1980.....	24,523	10.9	11.0	11.1
1985.....	26,659	11.0	11.4	11.7
1990.....	28,933	11.2	11.8	12.3
1995.....	30,307	11.1	11.9	12.6
2000.....	30,600	10.7	11.7	12.5

Source: Current Population Reports, Population Estimates and Projections, Projections of the Population of the United States 1975-2050, series P-25, No. 601, October 1975.

TABLE 2.—PROJECTIONS OF THE U.S. POPULATION BY BROAD GROUPS 1985-2050

Year	Population in thousands as of July 1				65 and over as—	
	Under 20	20 to 64	65 and over	Total	Percent of total	Ratio of 20 to 64
1985	70,754	141,512	26,741	239,006	11.2	0.189
1990	71,929	147,457	28,789	248,176	11.6	.195
1995	74,264	152,261	30,015	256,540	11.7	.197
2000	76,333	157,038	30,214	263,585	11.5	.192
2005	76,349	162,970	30,580	269,898	11.3	.188
2010	76,222	167,432	32,662	276,316	11.8	.195
2015	67,990	168,840	36,917	382,747	13.1	.219
2020	78,561	167,873	42,061	288,494	14.6	.251
2025	80,030	165,608	47,448	293,087	16.2	.287
2030	80,768	164,636	51,227	296,632	17.3	.311
2035	81,202	166,502	51,879	299,583	17.3	.312
2040	81,989	169,501	50,806	32,296	16.8	.300
2045	83,213	172,462	49,257	304,931	16.2	.286
2050	84,462	173,843	49,352	307,657	16.0	.284

Source: "1975 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Fund, May 6, 1975," House Document No. 94-135, 94th Congress, 1st session, House Committee on Ways and Means (Washington, D.C.: Government Printing Office, 1975).

TABLE 3.—AVERAGE ANNUAL PERCENT INCREASE IN EXPENDITURES (14) PER PERSON IN PRICE AND USE FOR ALL PERSONAL HEALTH SERVICES BY SELECTED CHARACTERISTICS OF THE POPULATION: 1953-63 AND 1963-70

Characteristic	Annual percent increase				Mean 1970 expenditures (14)
	1953-63		1963-70		
	Price <sup>1</sup>	Use	Price <sup>1</sup>	Use	
Age (1):					
0 to 5	3.3	1.5	5.5	5.2	\$106
6 to 17	3.1	1.5	5.3	1.0	96
18 to 34	3.4	1.4	6.6	2.1	246
35 to 54	3.3	2.7	6.2	— 4	244
55 to 64	3.2	1.7	6.0	5.0	379
65 and over	3.3	2.1	5.9	5.1	429
Sex (54):					
Male	3.2	2.3	5.9	4.7	213
Female	3.3	1.2	6.2	2.6	260
Family Income (25):					
Low	3.2	3.1	6.4	6.2	280
Middle	3.2	1.1	6.2	3.3	216
High	3.2	.6	5.8	2.8	239
Race (49):					
White	( <sup>2</sup> )	( <sup>2</sup> )	6.0	3.5	245
Nonwhite			6.6	3.7	166
Residence (52):					
Urban	3.3	1.2	6.0	3.9	259
Rural, nonfarm	3.3	.9	6.2	3.0	202
Rural, farm	3.3	1.0	6.1	4.7	184
Total	3.3	1.5	6.1	3.6	238

<sup>1</sup> Price increases are adjusted according to the mix of services purchased by each group.

<sup>2</sup> Information not available in 1953.

Source: Ronald Andersen, Joanna Lion, and Oden Anderson, "Two Decades of Health Services: Social Survey Trends in Use and Expenditure" (Cambridge, Massachusetts, 1976, p. 107).

TABLE 4.—ESTIMATED PERCENT DISTRIBUTION OF THE POPULATION AND PERCENT SPENT ON HEALTH CARE FOR 3 AGE GROUPS

Age	Health expenditures		Population	
	1974	1975	1964	1975
All ages	100.0	100.0	100.0	100.0
Under 19	15.3	14.9	34.1	34.7
19 to 64	56.1	55.6	55.7	55.3
65 and over	28.6	29.4	10.2	10.0

Source: Marjorie Smith Mueller and Robert M. Gibson, "Age Differences in Health Care Spending, Fiscal Year 1975," Social Security Bulletin, June 1975, p. 18.

TABLE 5.—ESTIMATED PER CAPITA PERSONAL HEALTH CARE EXPENDITURES, BY TYPE OF EXPENDITURE AND SOURCE OF FUNDS FOR THREE AGE GROUPS, FOR SELECTED YEARS—FISCAL YEARS 1967-75<sup>1</sup>

Type of expenditure	All ages			Under 19			19 to 64			65 and over		
	Total	Private	Public	Total	Private	Public	Total	Private	Public	Total	Private	Public
1967												
Hospital care.....	84.09	42.16	41.93	21.80	12.32	9.48	103.75	67.31	36.43	223.58	19.50	204.08
Physicians' services.....	48.39	41.36	7.03	30.35	28.13	2.22	50.54	45.90	4.65	108.97	68.90	40.07
1969												
Hospital care.....	108.87	51.15	57.72	26.99	15.01	11.98	125.03	79.04	45.99	335.76	34.14	301.62
Physicians' services.....	57.67	44.66	13.01	37.43	33.89	3.54	59.23	52.20	7.03	127.49	43.93	83.56
1971												
Hospital care.....	139.03	66.84	72.19	40.70	22.48	18.22	153.36	96.97	56.38	418.55	61.60	356.95
Physicians' services.....	72.05	56.31	15.74	47.92	43.34	4.59	73.10	64.16	8.94	154.37	60.14	94.23
1973												
Hospital care.....	169.65	81.01	88.64	52.74	26.48	26.26	181.65	113.08	68.57	508.93	93.05	415.89
Physicians' services.....	82.15	63.48	18.68	51.69	45.61	6.08	83.44	71.93	11.51	180.74	78.60	102.14
1975 <sup>2</sup>												
Hospital care.....	215.12	96.74	118.38	71.23	42.17	29.05	229.82	135.74	94.07	602.89	61.75	541.14
Physicians' services.....	102.02	74.99	27.03	69.99	61.02	8.98	99.91	80.77	19.14	217.66	88.96	128.69

<sup>1</sup> Expressed in dollars.

<sup>2</sup> Preliminary estimates.

Source: Barbara S. Cooper, Nancy L. Worthington, Mary F. McGee, "Compendium of National Health Expenditures Data," U.S. Department of Health, Education, and Welfare, SSA Office of Research

and Statistics, DHEW Pub. No. (SSA) 76-11927, January 1976, pp. 100-101; and Marjorie Smith Mueller and Robert M. Gibson, "Age Differences in Health Care and Spending, Fiscal Year 1975," Social Security Bulletin, June 1976, p. 20.

TABLE 6.—PERCENT OF HEALTH CARE EXPENDITURE BY TYPE OF EXPENDITURE AND AGE: 1975

Type of expenditure	Age			
	All ages	Under 19	19 to 64	65 and over
Total.....	100.0	100.0	100.0	100.0
Hospital care.....	45.2	33.6	48.7	44.3
Physicians' services.....	21.4	33.0	21.2	16.0
Other professional services.....	9.3	13.0	11.5	3.3
Drugs and drug sundries.....	10.3	13.1	10.4	8.7
Nursing home care.....	8.7	1.6	2.0	25.2
Other health services.....	5.1	5.9	6.3	2.6

Source: Marjorie Mueller and Robert M. Gibson, "Age Differences in Health Care Spending, Fiscal Year 1975," Social Security Bulletin, June 1976, p. 24.

TABLE 7.—CHILDREN UNDER 18 YEARS, BY AGE, RACE, TYPE OF FAMILY, AND LABOR FORCE STATUS OF MOTHER, MARCH 1970 AND MARCH 1977

(In thousands)

Item	Children under 18 years		Children under 6 years		Children 6 to 17 years	
	1970	1977	1970	1977	1970	1977
Total Children <sup>1</sup> .....	65,755	60,584	19,606	17,117	46,149	43,467
Mother in labor force.....	25,544	28,892	5,590	6,431	19,954	22,462
Mother not in labor force.....	39,550	30,885	13,923	10,582	25,627	20,304
Husband-wife families.....	58,399	50,279	17,920	14,780	40,479	35,499
Mother in labor force.....	21,982	23,341	4,947	5,411	17,035	17,930
Mother not in labor force.....	36,417	26,938	12,972	9,369	23,444	17,569
Families headed by women <sup>2</sup> .....	6,695	9,499	1,593	2,233	5,102	7,266
Mother in labor force.....	3,562	5,551	643	1,020	2,919	4,532
Mother not in labor force.....	3,133	3,947	950	1,213	2,183	2,735
Families headed by men <sup>2</sup> .....	661	807	93	104	568	702
White children total.....	56,903	51,500	16,904	14,574	39,963	36,926
Mother in labor force.....	21,194	23,915	4,459	5,191	16,735	18,724
Mother not in labor force.....	35,244	26,894	12,424	9,305	22,820	17,589
Husband-wife families.....	52,336	44,932	15,975	13,208	36,361	31,724
Mother in labor force.....	18,865	20,206	4,083	4,553	14,782	15,653
Mother not in labor force.....	33,471	24,727	11,892	8,656	21,579	16,071
Families headed by women <sup>2</sup> .....	4,102	5,878	908	1,288	3,194	4,589
Mother in labor force.....	2,329	3,710	376	639	1,953	3,071
Mother not in labor force.....	1,773	2,168	532	650	1,241	1,518
Families headed by men <sup>2</sup> .....	465	690	57	78	480	613
Black children total.....	8,054	7,905	2,391	2,144	5,673	5,761
Mother in labor force.....	4,015	4,360	1,031	1,062	2,984	3,299
Mother not in labor force.....	3,849	3,439	1,315	1,056	2,534	2,383
Husband-wife families.....	5,335	4,318	1,683	1,205	3,652	3,113
Mother in labor force.....	2,810	2,597	775	694	2,034	1,903
Mother not in labor force.....	2,525	1,721	908	511	1,617	1,210
Families headed by women <sup>2</sup> .....	2,529	3,482	663	913	1,866	2,569
Mother in labor force.....	1,205	1,763	256	368	949	1,935
Mother not in labor force.....	1,324	1,718	407	545	917	1,173
Families headed by men.....	190	106	35	26	155	80

<sup>1</sup> Children are defined as "own" children of the family head and include never-married sons, daughters, stepchildren, and adopted children. Excluded are other related children such as grandchildren, nieces, nephews, cousins, and unrelated children.

<sup>2</sup> Widowed, divorced, separated, and never-married family heads.

Note.—Because of rounding of sums of individual items may not equal totals.

Source: Allyson Sherman Grossman, "Children of Working Mothers, March 1977" Monthly Labor Review, vol. 101, No. 1, January 1978, pp. 30-33.

TABLE 8.—UNEMPLOYMENT RATES FOR TEENAGERS COMPARED WITH NON-TEENAGE UNEMPLOYMENT RATES IN THE UNITED STATES, 1950-75

Year	Age 16 to 19 (1)	Age 20 plus (2)	Difference (1)-(2)	Ratio (1)÷(2)
1950	12.2	4.8	7.4	2.5
1951	8.2	3.0	5.2	2.7
1952	8.5	2.7	5.8	3.1
1953	7.6	2.6	5.0	2.9
1954	12.6	5.1	7.5	2.5
1955	11.0	3.9	7.1	2.8
1956	11.1	3.7	7.4	3.0
1957	11.6	3.8	7.8	3.1
1958	15.9	6.2	9.7	2.6
1959	14.6	4.8	9.8	3.0
1960	14.7	4.8	9.9	3.1
1961	16.8	5.9	10.9	2.8
1962	14.7	4.9	9.8	3.0
1963	17.2	4.8	12.4	3.6
1964	16.2	4.3	11.9	3.8
1965	14.8	3.6	11.2	4.1
1966	12.8	2.9	9.9	4.4
1967	12.9	3.0	9.9	4.3
1968	12.7	2.7	10.0	4.7
1969	12.2	2.7	9.5	4.5
1970	15.2	4.0	11.2	3.8
1971	16.9	4.9	12.0	3.4
1972	16.2	4.5	11.7	3.6
1973	14.5	3.8	10.7	3.8
1974	16.0	4.5	11.5	3.6
1975	19.9	7.3	12.6	2.7

Source: George Iden, "Policy Options for the Teenage Unemployment Problem," Washington, D.C.: U.S. Congressional Budget Office, background paper No. 13, Sept. 21, 1976, p. 4.

TABLE 9.—SELECTED UNEMPLOYMENT INDICATORS—1975-77 UNEMPLOYMENT RATES

Selected categories	Annual averages		
	1975	1976	1977
Total, all workers	8.5	7.7	7.0
White, total	7.8	7.0	6.2
Men, 20 years (plus)	6.2	5.4	4.6
Women, 20 years (plus)	7.5	6.8	6.2
Both sexes, 16 to 19	17.9	16.9	15.4
Black and other, total	13.9	13.1	13.1
Men, 20 years (plus)	11.7	10.6	10.0
Women, 20 years (plus)	11.5	11.3	11.7
Both sexes, 16 to 19	36.8	37.1	38.7
Married men, spouse present	5.1	4.2	3.6
Married women, spouse present	7.9	7.1	6.5
Full-time workers	8.1	7.3	6.5
Part-time workers	10.3	10.1	9.8
White collar workers	4.7	4.6	4.3
Blue collar workers	11.7	9.4	8.1
Service workers	8.6	8.7	8.2
Farm workers	3.5	4.5	4.6
Nonagricultural private wage and salary workers	9.2	7.9	7.0
Construction	18.1	15.6	12.7
Manufacturers	10.9	7.9	6.7
Durable goods	11.3	7.7	6.2
Nondurable goods	10.4	8.1	7.4

Source: Gloria P. Green, Richard M. Devans, and Bob Whitmore, "Employment and Unemployment Trends During 1977." Monthly Labor Review, vol. 101, No. 2, February 1978, p. 16.

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Representative BOLLING. Thank you.

Our next witness is Mr. David J. Bjornstad, group leader for regional economic analysis, energy division of the Oak Ridge National Laboratory in Tennessee. He received his Ph. D. from Syracuse University in economics. He has published, in the areas of local government finance, regional economics, and energy economics.

**STATEMENT OF DAVID J. BJORNSTAD, GROUP LEADER, REGIONAL ECONOMICS ANALYSIS GROUP, ENERGY DIVISION, OAK RIDGE NATIONAL LABORATORY, OAK RIDGE, TENN.**

Mr. BJORNSTAD. My comments today will be focused on the issue of projecting future regional concentrations of demographic and economic activity for energy policy studies, with particular reference to energy policy as it relates to technology deployment; the need for these projections; the uncertainties associated with them; and the limited evidence at hand to judge whether energy activities will significantly modify regional settlement patterns. With regard to this latter topic, I will rely primarily on research now underway at Oak Ridge, with the disclaimer that much additional work is underway elsewhere.

In the course of these comments, I would like to share with you three concerns I have regarding the study of energy and regional socioeconomic issues. My first concern centers on the general lack of a national perspective in viewing regional energy issues, in other words, the lack of a growth policy perspective. My second concern lies in the basic need for improving projections of socioeconomic activity that go into energy studies, or at least in recognizing the

frailty of projection series as time periods and geographic specificity increase. My third concern lies in the increased demand for knowledge as to the probable impact of energy policies on future regional settlement patterns, and the limited quantity of knowledge available to meet these demands. Because of these limits, most responses to these queries have been speculative, and I will add to this speculation by suggesting that based on my own limited research, things may not change greatly at the regional level as a result of energy price changes and coal developments. But let me also emphasize that what is needed is systematic inquiry into the range of possible energy development on regional growth and change. In this area, researchers have only begun to scratch the surface.

Although energy policy issues range from the very short run, for example, natural gas availability next winter, to the very long run, the introduction of fusion technology, it is perhaps safe to say that the major portion of policy options under present scrutiny lie in deploying technologies over the mid to long term, perhaps from 1985 to the turn of the century, or perhaps to 2020. Thus it is the length of the time horizon, rather than the need for projections, which distinguishes energy policy analysis from other such analysis. This time period arises from the long leadtimes necessary to put large capital facilities in place and also from the lag times associated with market penetration of small-scale technologies currently available. The year 1985 may be the earliest point at which current policy will make a substantial impact and the year 2000 is perhaps a better reference point for taking stock of accumulated impacts. However, over time periods this length many things can change. It is therefore reasonable to ask how well we can project regional change and what steps we should take to factor uncertainty into the analysis. Although policy is formulated at the national level, it tends to be implemented at the regional level. If for example, we wish to deploy energy production or distribution apparatus to meet the needs of a growing region, can we do so, confident that this growth will occur, or should we lay our plans with circuit breaker provisions that will provide a red flag, if not an alternative course, if our conception of a specific growth path is faulty. A simple example may illustrate this.

If one decomposes national energy consumption changes in the residential/commercial sector between 1960 and 1970 into components due to changes in per capita consumption and due to population change, it is clear that significant changes in consumption behavior have occurred. This is true to the degree that if we tried to predict 1974 consumption based on the trends in population increase observed during the 1960's the error due to consumption shifts would overwhelm any error due to change in population growth rates. But, if the same data are examined at the State level, for perhaps 20 percent of the States, population shifts that deviate from the 1960 trends are nearly as important as energy shifts. For several States, change in population growth patterns exceed deviations from per capita energy consumption trends.

Thus, while "on average" changes in subnational population and economic activity concentrations are regular, enough exceptions occur that this issue must be as much the subject of energy analy-



sis as energy behavior itself. Moreover, I sense a growing demand for projections of even finer spatial definition to conduct water analysis, pollution analysis, and economic analysis at levels well beneath the State level. In fact, we at Oak Ridge produce a number of such series.

I believe that to use projections effectively, one should neither consider spatial units in isolation nor projection series individually. Instead, one should seek a range of alternative forecasts that indicate deviations which could reasonably occur. However, recognizing that these shifts may occur suggests that flexibility must also be built into energy development plans. We might even wish to rank technologies as to their sensitivity to this type of change. For example, the possibilities for power exchange make electrical generating facilities less sensitive than crude oil handling facilities, but nonetheless more sensitive than soft technologies that individual households may implement.

I would like to turn now to the question, will energy activities and policies modify future regional settlement patterns?

Energy activities influence regional development both in the economic activity they stimulate when produced and in the manner in which their price and availability influences the location of firms and households who consume energy as an intermediate product. Conventional wisdom suggests that the availability of particular fuels in large quantities is a primary factor in regional development. More recently, at least one regional economist has suggested that fuel prices are a major determinant of the resurgence in Southern development. President Carter, in fact, asked just this question regarding Southern development of one of our regional economists who spoke to him during his recent visit to Oak Ridge. But one may as well ask how environmental restrictions associated with energy will modify development patterns; how increased conservation efforts, increased solar utilization, cogeneration, coal conversion or waste heat recovery systems will modify regional development. Perhaps more appropriately, one might ask how these factors will interact to bring about change. The simple answer is, there is no simple answer. And, for many such questions, there is no firm answer at all. Nonetheless, I would like to share with you preliminary results from two studies currently underway at Oak Ridge, both of which lend support for my own speculative response to this question. This response is that energy changes will probably not cause major new trends in regional development. But they may well cause areas prime for development to grow more rapidly than they otherwise would have. And they may also cause the opposite.

My first example derives from the fact that when other factors permit, firms will seek out lower costs. This also holds for energy, and we have evidence that firms will respond to energy price change. The question is, will they relocate to new areas rapidly in response to energy cost change.

To understand this issue, it is useful to examine the components of cost for the average manufacturing firm. For this average firm in 1974 direct labor costs comprised 40 percent of total costs; capital costs, profits, and indirect labor costs comprised 46 percent and energy costs excluding feedstocks, 4 percent. Thus, for this average firm, a 50 percent increase in energy costs would increase total

unit costs by 2 percent. Stated differently, the average plant manager should be indifferent to a 10-percent increase in labor costs and a 100 percent increase in energy costs, since they would each affect his overall operating costs identically.

There is surprising stability in these percentages across regions and gross industrial classifications. Thus, although it may be a oversimplification, I conclude there does not appear to be a major cost impetus for firms to relocate in general due to energy costs, but I qualify that by saying surely certain high energy using industries, such as aluminum, will be more sensitive. There are also other factors I have not taken into account.

My second example is drawn from a series of simulations we conducted examining a high rate of growth in coal production versus the slow rate projected at the beginning of the decade. Simply stated, our computerized model told us that the major impact would be a general tightening of labor markets in areas that would receive large influxes of coal employment, but that with few exceptions, no mass migrations of people or jobs would occur, even in the sparsely populated West.

In many cases coal employment would replace other employment opportunities. And, in a number of cases, nearby regions linked economically to producing regions would benefit.

Again, these findings are limited, and they address only a few of the many complex questions surrounding energy development and policy, and then only in a most simple manner. But they do suggest that one must consider energy policy in the light of traditional determinants of economic growth, and regional growth, and I believe this is an appropriate conclusion.

Finally, how should we address energy planning issues? Two common methods of analyzing the impacts of energy development are now being used. The first lies at the national level where macroeconomic and other national and global issues are addressed. This is an appropriate starting point. However, as I stated earlier, policies are usually formulated at the national level, but implemented at the regional level. It is at the regional level where most impacts will be visible. To address regional energy issues a second method, one provided by the National Environmental Protection Act, is usually applied.

Simply stated, this method assumes a point source of pollution, economic activity, water consumption and the like, and asks, "How will the relevant environments be affected?" In principle, this approach could provide the gaps in knowledge I indicated before. But, in general, I believe this approach is better suited to analysis of the physical environment than the socioeconomic environment. The primary reason for this belief lies in the fact that the NEPA format tends to deal with regions and technologies in isolation, and in terms of small units.

Physical science is better equipped to grapple with the distribution of such elements as pollution and water consumption at this level than are the social sciences. For this reason, all too often, these latter components receive only a cursory treatment.

It is therefore my belief that regional analysis for national policy might better be conducted by viewing the Nation as a system of regions and asking whether certain regions will be benefited at the

expense of others as policies are developed. Once developed, trends in socioeconomic patterns should be tracked and modifications made if over time the patterns diverge from historic trends.

I do not mean to suggest by this that the strictly local issues identified through the NEPA format, such as the assaults to an isolated community of opening a massive strip mine are unimportant. I instead suggest that we must factor out national-regional issues from the more local issues and deal with each separately.

[The prepared statement of Mr. Bjornstad follows:]

PREPARED STATEMENT OF DAVID J. BJORNSTAD

*Regional Economic-Demographic Projections for Energy Policy Analysis*

ABSTRACT

This paper examines the importance of adequate population and employment projections for regional policy analysis related to energy and asks whether energy policy may significantly modify existing trends. It is concluded that energy is less likely to create new subnational socioeconomic tendencies than to enhance or retard existing trends, but that to analyze these circumstances a growth policy format is desirable. It is emphasized that a lack of past experience with many new energy technologies will make impact analysis difficult. For this reason, attempts should be made to anticipate possible impacts well in advance of technology deployment.

I. INTRODUCTION

Recent changes in energy supply conditions have spawned a great deal of expert commentary regarding the manner in which trends in regional distributions of people and jobs will influence energy policy needs as well as how these trends may themselves be modified by strategies modifying energy consumption and supply. They have also spawned a perhaps equal amount of speculation, expert and otherwise, simply because of the limited knowledge available to predict future regional settlement patterns. That these matters are important is unmistakable. The long lead times of technology development and capital emplacement required in the energy arena means plans are frequently laid across decades rather than years.

It is unlikely that in the near future a broad consensus will develop over how existing regional changes in economic and demographic activity will affect energy policy, nor how energy policy will modify existing patterns. The material in this paper retains an element of speculation, since it attempts to characterize work-in-progress regarding subnational distributions of socioeconomic activity and their relation to energy policy. Discussion is centered around two questions:

Do we understand the forces governing regional shifts in economic and demographic behavior well enough to focus solely on the market-related determinants of energy consumption when making plans to deploy technology or otherwise implement energy policy?

Should we expect energy conditions and policy to cause marked change in the patterns and trends in regional socioeconomic activity distributions we have recently observed?

In each case, the evidence presented argues for a qualified negative. Regarding the first issue, it is clear that at the national level population change is much more regular and predictable than energy change. But as the spatial grid of interest becomes finer, it is apparent that changes in human settlement patterns may outweigh changes in energy consumption patterns.

The second issue hinges on how one defines "marked change" and with what confidence one is willing to infer future behavior from that which was observed in the past, sometimes under quite different circumstances. It would appear that energy price changes alone may be insufficient to modify industrial location patterns in the foreseeable future; yet there is still little reason to believe one can predict changes that will accompany new technologies with which there is little or no past experience. The advent of the automobile, for example, demonstrated conclusively the manner in which technological change can alter socioeconomic activity distributions in unexpected ways over a relatively brief period of time.

Moreover, it should be noted that in a very real sense regions compete with one another to attract new activities. To the extent one region grows, more rapidly than the nation as a whole, a second region (or group of regions) must grow more slowly, or even decline. This points to the insufficiency of assuming development will

automatically accompany a decision to deploy capital facilities, even though numerous single region studies do just this. It is therefore argued that a regional systems approach explicitly constraining the sum of regional activity to a consistent national total provides an appropriate format for systematic impact analysis.

The bottom line to this discussion is that when attention is focused on how national policies impact on individual segments of the nation, one must take utmost care to outline the range of feasible outcomes. When substantial uncertainty exists, it should be factored into this range. With current knowledge, choosing a "most likely" time path on which to base policy within this range will remain speculative; but the eventual outcome will not be entirely surprising.

## II. PROJECTING SUBNATIONAL ECONOMIC AND DEMOGRAPHIC CONCENTRATIONS FOR ENERGY POLICY

The importance of generating long-term regional distributions of demographic and economic activity for energy policy analysis lies in the long lead times required for technology deployment and the importance of assessing the environmental and social impacts of this deployment. For example, one difficulty that arose in analyzing the Administration's energy plan of April 1977 was that in the short run (i.e., through 1985) little change could occur through technological innovation.<sup>1</sup> This means that 1985 may be a starting point rather than the terminal point for many energy-related projections. Moreover, it is an accepted practice in environmental and water impact analysis to concern oneself with relatively small spatial units, for example, air quality control regions or water subareas. One might therefore ask if the uncertainty associated with the assessment process is compounded by uncertainty in where people and jobs will locate in the future, or if one can say with some assurance these distributions can be projected with reasonable confidence. This is a particularly important concern, since frequently analysts simply state the projection series used and go on to conduct their analyses. Stated differently, can we build pipelines to serve growing regions of the country, confident that this growth will occur, or should we lay our plans with circuit-breaker provisions that provide a red flag and an alternative path if our conception of a specific time path proves faulty but our knowledge of the range of time paths secure. This issue may be illustrated by examining population change and energy consumption change at the state level over the recent past.

Energy use in the residential/commercial sector of the economy grew from 11.2 quadrillion Btu (quads) to 16.9 quads between 1960 and 1970 and to 17.5 quads between 1970 and 1974.<sup>2</sup> Population growth was a significant determinant of this change as the nation increased from 180 million persons in 1960 to 204 million in 1970 and 211 million in 1974. In per capita terms, energy use increased from 62.4 million Btu in 1960 to 83.1 million Btu in 1970 but dropped to 82.8 million Btu in 1974. Thus, over the period 1970-74, a period spanning the oil embargo, an abrupt shift in energy consumption patterns occurred.

This shift is reflected in the growth rates of energy consumption relative to population. Population increased at an average rate of 1.25 percent per year during the decade of the 1960's but declined to 0.92 percent per year between 1970 and 1974. This change was partly dictated by the age structure of the population but also resulted from a decline in birth rates which is still under study by demographers. A part, but not all, of the decline in energy consumption growth can therefore be related to change in population. In contrast, the rate of growth in energy consumption by the residential/commercial sector was 2.9 percent per year between 1960 and 1970. This growth fell to 0.80 percent for the 1970-74 period, which, because it was below the population growth rate, yielded a per capita decline in consumption.

For practical purposes, this means the following: If one has perfect knowledge of energy consumption changes, applying the population growth rate of the 1960's would yield a 1.33 percent error in predicting 1974 energy consumption. If, on the other hand, one knew 1974 population levels and applied the per capita consumption growth rate from the 1960's, an error of 8.58 percent in predicting 1974 energy consumption would be generated. Thus, when the concern is to predict national energy change, the analyst may deal confidently with population change.

<sup>1</sup> See for example, J. E. Dobson et al., "A Nationwide Assessment of Water Quality Impacts of the National Energy Plan," vol. 7, Summary and Conclusions, Oak Ridge National Laboratory Report ORNL/TM-6098, December 1977.

<sup>2</sup> The energy data in this section were taken from Bureau of Mines Information Circular 8704, "Historical Fuels and Energy Data, 1960-72," and Bureau of Mines Information Circular 8739, "Fuels and Energy Data: United States by States and Census Division, 1974." The population data were taken from Bureau of the Census, Statistical Abstract, 1977.

This conclusion follows from the fact that at the national level population change is primarily dictated by births and deaths, phenomena which over time bear relatively stable relationships to the age and sex characteristics of the population. Immigration tends not to introduce instability into the rate of change because it is closely regulated. However, at the subnational level, movements of people and jobs may be much more volatile and as the spatial unit under concern grows smaller, may outweigh changes in energy consumption. If this occurs, the importance of employing carefully considered projections of demographic and economic change increases. This prospect may be demonstrated by examining these same data at the state level.

For the sake of this exercise, we will pose the general question, given trends in population and per capita energy consumption during the 1960's, how well can we predict 1974 per capita consumption? Three calculations will be made to address three questions:

Given actual 1974 per capita energy consumption, how well does the average population growth rate of the 1960's predict 1974 consumption?

Given actual 1974 population, how well does the average energy growth rate of the 1960's predict 1974 consumption?

Given the population growth rate of the 1960's and the per capita energy growth rate of the 1960's, how well can we predict actual 1974 consumption?

Each of these series will be compared with the actual 1974 consumption data. Based on the national data, one should expect that uncertainties associated with per capita changes should once again lead to the conclusion that understanding energy change is more important than population change, and, indeed, this is the conclusion that results. However, for some states it would appear that changes in population trends can lead to projection errors as large as do those associated with per capita energy consumption shifts.

For the average state, trended population and actual per capita consumption levels yielded a 3 percent error in predicting 1974 energy consumption in the residential sector. The error ranged from 0.15 percent in Alaska to 7.32 percent in Idaho. This error is substantially exceeded by the average 15.6 percent error that would be generated using the average per capita consumption figure from the 1960's and the actual population level. Here the errors range from 0.49 percent to 57.33 percent. When the trends in both population and energy are used to project population, the errors begin to average out. Here, the consumption level for the average state is in error by an average 15.52 percent.

It is not surprising to find that the recent volatility in per capita energy consumption carries through to the state level. Nor should it be unremarkable to suggest that the energy consumption analyst would do well to focus his attention on predicting how consumption behavior will change apart from population.

What is somewhat surprising, however, is the degree of overlap between the errors from each source. For example, for Arizona a 15 percent error is generated from projecting 1974 energy using both trended population and energy per capita. Of this, 6 percent can be attributed to population and 9 percent to energy behavior. For California, a 12 percent total error can be decomposed into 5 percent due to population and 7 percent due to energy behavior. In Connecticut, Minnesota, Nevada, and Rhode Island, the error due to population would exceed that due to energy behavior change. What this suggests is that, on the average, the analyst may deal with energy behavior and draw a population number from a convenient projection series to complete his calculations. But, for perhaps 20 percent of the states, this practice may hide the fact the population shifts will approach and in some cases exceed variation in energy consumption behavior. Failure to account for these shifts may lead to ill-considered policy at best and perhaps inappropriate policy.

Of course the analyst need not simply choose a single off-the-shelf projection series; a variety of series are available which sometimes give quite different answers. If, for example, the 1960 to 1970 and 1970 to 1974 population trends are extrapolated to 1985 and compared with several available projection series, these differences become evident. This exercise is equivalent to measuring differences in projected 1985 energy levels, if the same energy per capita measure is used in each case. It should also be noted that the extrapolated trend is used as a basis of comparison and not a standard. Each projection series provides substantially more information than the simple population number, and one would in general attach more credibility to the formal series than to the simple extrapolation.

The result of carrying out these calculations is shown in Table 1. As this table shows, the recently prepared DOE and ORNL<sup>3</sup> projections more closely resemble the 1970-74 trend, while the older Census and OBERS projections appear to follow the trends of the 1960's. The range of largest differences, however, points to the need to conduct more detailed analysis than the simple trend extrapolation would permit.

TABLE 1.—PERCENT DIFFERENCES BETWEEN STATE PROJECTION SERIES FOR 1985 AND 1960-70 AND 1970-74 BENCHMARK EXTRAPOLATION

	1960-70 extrapolation			1970-74 extrapolation		
	Average difference	Largest difference	State of largest difference	Average difference	Largest difference	State of largest difference
Census <sup>1</sup> .....	4.6	30.2	Nevada.....	11.8	34.8	Arizona.
DOE <sup>2</sup> .....	8.4	26.3	do.....	4.4	16.5	Colorado.
ORNL <sup>3</sup> .....	8.6	27.5	do.....	4.2	17.8	New Hampshire.
OBERS <sup>4</sup> .....	7.3	37.1	do.....	11.0	32.1	Arizona.

<sup>1</sup> U.S. Bureau of Census, "Current Population Reports," series P-25, No. 477.

<sup>2</sup> Unpublished series.

<sup>3</sup> Multiregion projection series TOPS.R2.OBERS72.

<sup>4</sup> U.S. Water Resources Council, 1972 OBERS Projections: Economic Activity in the United States, U.S. GPO April 1974.

The conclusion one should draw from this discussion is that as the degree of regional specificity increases, the importance of understanding changes in socioeconomic variables also increases. At the state level, a number of states showed greater deviation from population growth trends than energy consumption trends. If attention were focused beneath the state level, it is likely that this issue would grow in importance.

Moreover, although population was used as the current example, it is probable that the same results would obtain for other sectors of the economy. What this means is that if targets are set for energy consumption at the regional level, changes in socioeconomic activity may directly affect whether or not targets will be achieved. It would be unfortunate if the choice of a particular projection series would in itself place a ceiling on regional growth by limiting total available energy to a level beneath that which would be necessary to support the level of growth the market would provide.

### III. ENERGY POLICY IMPACTS ON EXISTING REGIONAL SOCIOECONOMIC PATTERNS

Despite the relatively small amount of analysis which has addressed the issue of energy policy and regional change, a great amount of speculation has been focused on whether or not energy policy will cause significant changes in regional settlement patterns to occur. Once again, the importance of this issue is unmistakable. If policies that are adopted to combat energy difficulties have serious implications for the spatial distribution of people and jobs, some portions of the nation will be benefited at the expense of others.

Until recently, the technological issues embodied in energy policy were largely considered the domain of scientists and engineers. In such a circumstance, engineering efficiency is given priority over social efficiency. Once a decision to deploy is made, the impacts of the technology on the area in which it will be sited are assessed, usually through the NEPA process. To the extent undesirable outcomes occur, modifications to the system to lessen impacts may be necessary. In many cases local socioeconomic impacts are also addressed within the NEPA format. The environmental issue is, simply stated: Given a point source of pollution, how will the local (or perhaps broader) physical environment be affected? A natural extension becomes: Given a point source of economic activity, how many jobs will be created? How many people will migrate? How will local schools be affected? Unfortunately, the NEPA format is not well suited to address the larger, and perhaps more important, question: Given a national policy for energy that impacts unequally on regions, how will the relative distributions of people and jobs change? To the extent that significant interregional change may occur, it may be reasonable that growth policy, rather than engineering optimality, should receive priority attention in technology deployment.

To address this issue, it is useful to note that energy holds three distinct roles in regional development. First, it is a final demand product. Households and commer-

<sup>3</sup> The methodology for the ORNL projections is described in R. J. Olsen et al., "Multiregion: A Simulation-Forecasting Model of BEA Economic" Area Population and Employment, Oak Ridge National Laboratory Report ORNL/RUS-25, October 1977.

cial activities consume it for its direct benefits. This use of energy as an impetus to locational decisions will not be discussed at this time other than to note that the close locational ties between household locations and commercial locations suggest the two should be studied in unison. Second, it is an intermediate product. Industrial firms consume it as a means to an end rather than an end in itself. To the extent that these units behave rationally, they will seek out favorable energy supply markets if other considerations permit. Favorable supply markets can be further decomposed into two conditions: energy availability (i.e., the assurance of continued supply), exclusive of price; and energy price, the cost which a consuming unit must pay for energy. To consider how intermediate product use decisions may influence socioeconomic concentrations, we will briefly examine the possible impact energy prices and, implicitly, price policies may have on industrial locations.

The third role energy plays is that of basic regional development, where basic development implies the opening of firms which produce energy products for resale. To the extent that energy products are tied to natural resource formations, the regional impact of choosing one energy form over another will have distinct implications for regional development. In the simple case, the decision of whether or not to build a single project, such as Oak Ridge's well-known breeder reactor, is important in a local sense, but not really of great importance in the larger regional sense. A decision to substitute coal for imported oil, however, might have more far-reaching implications for broad regions since large, new coal mining areas must be developed. To illustrate basic developmental impacts of energy policy, we will examine the coal issue and question whether significant regional change is likely to occur.

#### *Energy price impacts on industrial location*

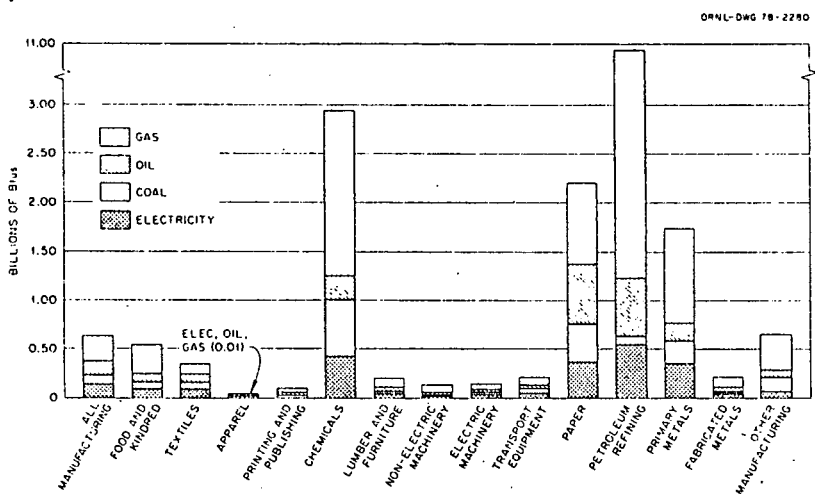
The justification for asserting that energy prices will play a more important role in the future than in the past in determining industrial location can be succinctly stated. Firms engage in enterprise to make profits, and profits grow when costs are reduced. Increasing energy prices should, therefore, cause firms to locate in areas where energy prices are lowest when other considerations permit.

Taken on face value, this argument is logical, but one might question whether this impetus is sufficient to, as some have suggested, play a major role in the shift of industrial location from snowbelt to sunbelt<sup>4</sup> or if certain regions may simply be limited in their ability to attract energy-intensive industry in the future.<sup>5</sup> It is usually assumed that energy-intensive industries will respond most quickly to energy price changes. Energy intensity, however, is an elusive concept. One method is to simply rank industries as to which uses the most energy. However, based on this criterion the conclusion one would derive could well be simply the result of which industry was the largest. A relative measure is, therefore, more desirable since this would control for size and would, moreover, better approximate the firm's desire to consider relative costs.

<sup>4</sup> W. H. Miernyk et al., "Regional Impacts of Rising Energy Prices," Regional Research Institute, West Virginia University, August 1977, p. 2-1.

<sup>5</sup> S. Sacks et al., "Energy Costs and Use and Patterns of Economic Activity in the Northeastern United States," Syracuse Research Corp. SRC TR 76-606, December 1976, p. 42.

Figure 1



National fuel use per worker for heat and power, 1971 (billions of Btu's).

Bureau of the Census: Annual Survey of Manufactures, 1972

One such measure of relative energy intensity is shown in Fig. 1. These data measure the average quantity of energy per worker for heat and power (i.e., excluding feedstocks) for the manufacturing sector in 1971. Thus, petroleum refining is shown by this measure to be the most energy intensive, chemicals the second most energy intensive, paper the third, and so on. The information in this figure could potentially lead one to a number of policy-relevant conclusions, for example, that the chemicals industry would be perhaps 12 times as sensitive to overall changes in energy costs than would be the fabricated metals industry. Unfortunately, this information is only partial, since firms hire additional factors as well in the production process and respond to changes in relative costs rather than making decisions based on absolute relationships. For this reason, a still better measure of energy intensity is desirable.

This alternative measure is shown in Fig. 2. Here, value added by manufacture, divided into labor costs (direct payrolls), energy costs (for heat and power), and capital costs (including worker benefits and indirect costs, profits, and taxes), is displayed, and a much different picture of the role of energy in the firm's decision to locate emerges.<sup>6</sup> The significance of this breakdown can be explained in the following way: From the point of view of the firm, total factor costs (including profits) are equal to value added, and a factor's share of value added multiplied times the change in the price of that factor indicates to the firm the degree to which its average costs will increase as factor prices increase. For the average manufacturing firm, where energy accounts for 4 percent of total costs, a 50 percent increase in the cost of energy would cause a 2 percent increase in total costs. Thus, a manager can reduce his average costs by 2 percent if he is willing to relocate his plant in an area where energy costs half as much as his current location, assuming capital costs and payroll costs are equal. But, what if other things are not equal? Again, using the average firm, because payroll costs are 40 percent of total costs, the plant manager should be roughly 10 times more sensitive to labor costs than to energy costs. Stated differently, the plant manager would be indifferent to a 10 percent savings in payroll costs and a 100 percent change in energy costs, since each would affect the average unit cost of his product equally. Viewed in this light, it is clear the firm may have an incentive to seek out lower energy costs, but clearly, this component may not be the overriding issue when relocation is contemplated.

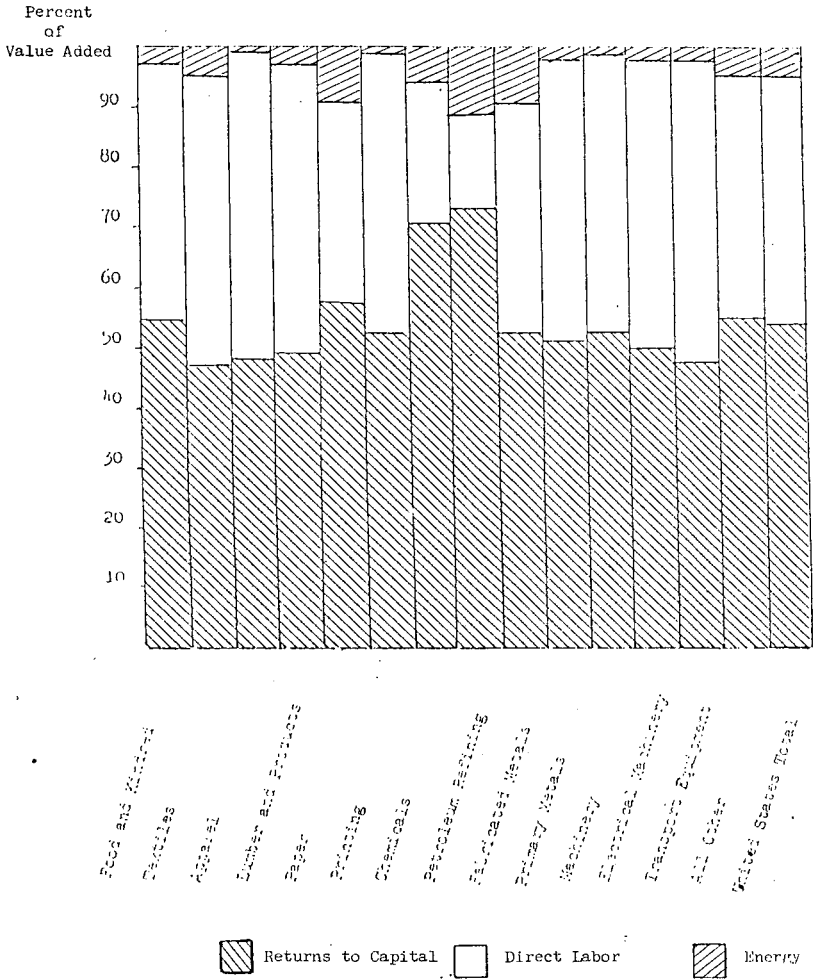
<sup>6</sup> Note that traditional measures of value added frequently omit energy on the grounds it is a material input.



Figure 2

United States

Components of Value Added



Source: Bureau of the Census, Annual Survey of Manufactures, 1975

Also evident from this figure is the fact that measures of energy intensity can be misleading. The share of energy costs in value added ranges from 1 percent to 11 percent, while in Fig. 1 the range of energy quantity per worker was much larger. This simply says that the choice of statistics is important and potentially misleading. Fabricated metals, shown by the per worker measure to be relatively nonenergy intensive, is shown by the cost measure to be among those industries most sensitive to energy cost.<sup>7</sup>

Because of historical differences in energy prices among regions, one might expect substantial differences in the share each component comprises of total costs in each region. However, Figs. 3 and 4, which present this same data for the oil- and gas-producing region (Texas, Louisiana, Oklahoma, New Mexico, Arkansas) and New England, indicate this does not appear to be the case.

For New England the share of energy cost of total costs is 3 percent as opposed to 5 percent for the oil- and gas-producing region, an outcome largely accounted for by the presence of the petroleum refining industry in the latter region. For several industries the energy share of value added in New England exceeds that of the oil and gas region. Note, however, that this share is composed of two components: the price of energy and the quantity of energy consumed. Since prices in New England have historically exceeded those in the South, the tendency may be to use a somewhat larger quantity in the South.

How should we interpret this? Based on the information presented, it would appear that the incentive for manufacturing industry to relocate due to changing energy prices is easily overstated. To be sure, industry will respond to higher energy prices; we have mounting evidence to this effect.<sup>8</sup> And, highly specialized energy users, such as aluminum producers, may have added incentives to respond. But rather than seeking out new trends in industrial location, it may be wiser to study existing trends to determine if energy policy will enhance or retard ongoing developments.

The final form which energy policy will take remains uncertain, and policy-induced shifts are therefore difficult to predict. It is, however, worth noting that, as well as increasing oil and gas prices somewhat, current policy is attempting to substitute coal in large amounts. Coal is a relatively inexpensive fuel in terms of purchase price, but one which will require additional capital outlays to meet environmental standards. Thus, one outcome of energy pricing policy might be to modify capital costs upward, while raising one portion of energy costs through tax levies, but lowering another portion through the forced movement to a less expensive fuel.

<sup>7</sup> It should be added that this incentive assumes "other things are equal." If, for example, the capital intensity of this industry precluded mobility, it might be more accurate to limit this characterization to the opening of new firms.

<sup>8</sup> See for example, D. P. Vogt, "The Structure of Regional Demands for Energy in the Manufacturing Sector," presented at the annual meeting of the Western Economics Association, Honolulu, Hawaii, June 24, 1978.

Figure 3  
New England  
(Federal Region 1)

Components of Value Added (1974)

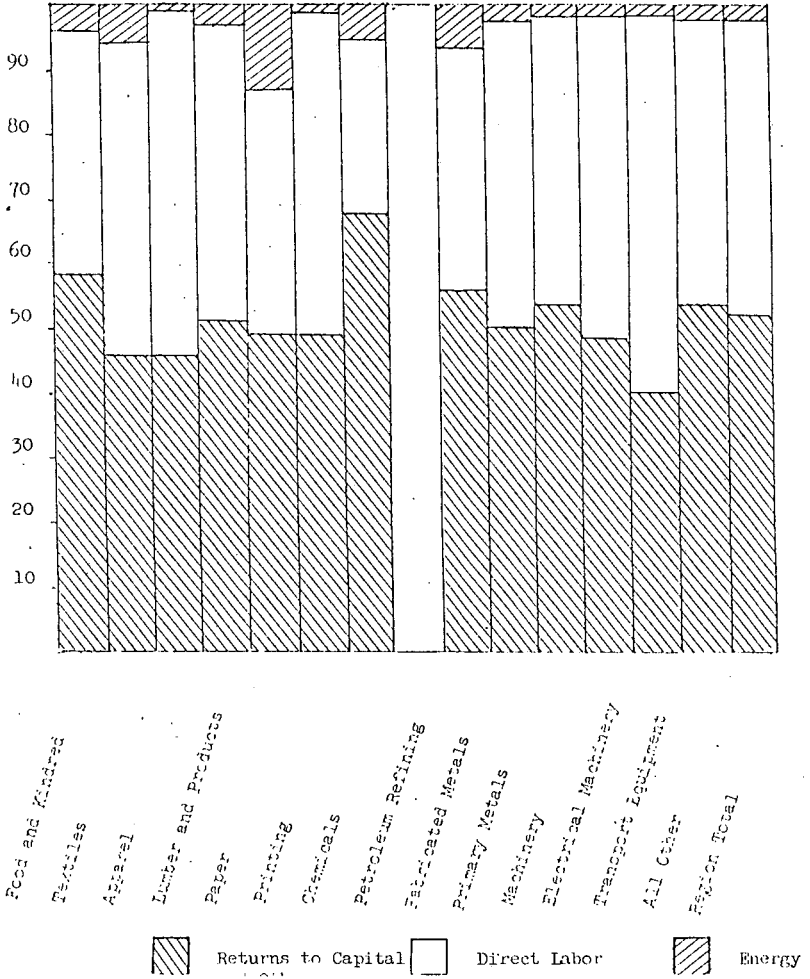
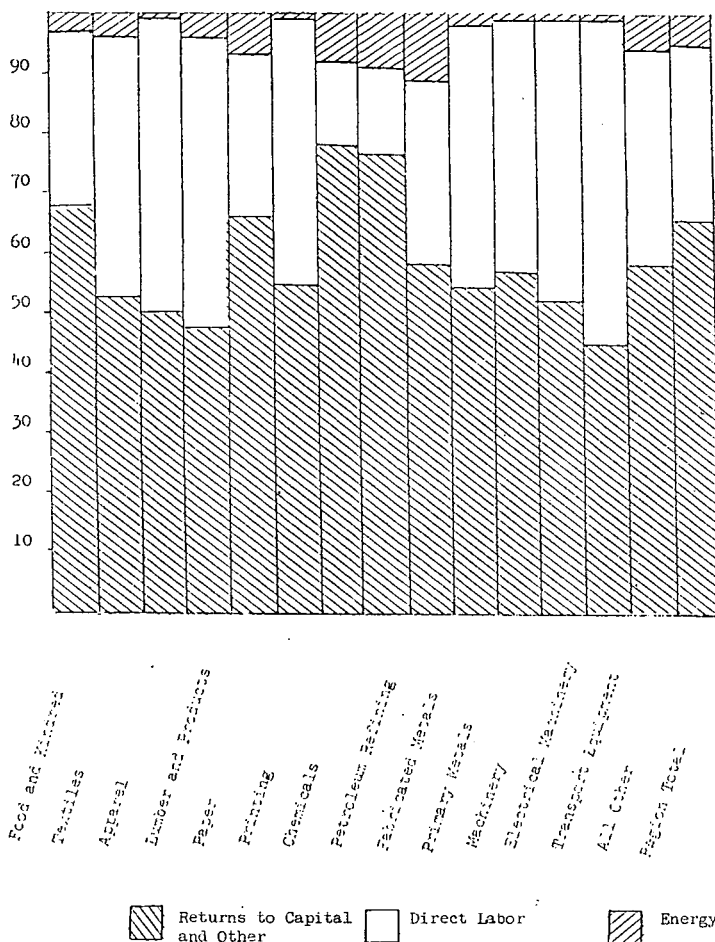


Figure 4  
Oil- and Gas-Producing Region  
(Federal Region 6)

Components of Value Added (1974)



Source: Bureau of the Census, Annual Survey of Manufactures, 1975

### *Coal production and regional growth*

To meet the Administration's goal of substituting significant amounts of coal for oil and natural gas will require heightened levels of coal mining in traditional mining centers and rapid opening of new western mining centers. One consequence of this activity could be to bring about substantive changes in population and employment patterns in favor of areas with coal reserves. An extension of the analogy that links economic development in Texas to the development of an oil industry might project a new, coal-dominated Houston on the site now occupied by Billings, Montana. However, it is well to note also that many oil-producing areas did not experience this type of development. Thus, systematic analysis should be undertaken to discover if significant pressures for economic development will accompany western coal development.

The overall impact of coal production is dependent on a number of factors, including where coal will be mined, what mining techniques will be used, and how rapidly development will occur. An additional consideration is the economic condition of the area itself and its proximity to other regional centers. With regard to regional economic conditions, it is noteworthy that many eastern areas remain relatively depressed from the bust that followed the last great coal boom. In contrast, western areas with coal reserves have frequently been subject to out-migration, as increased farm productivity has left fewer opportunities for agricultural employment. A final issue concerns whether or not resource-laden areas are currently experiencing rapid in-migration. Once again, we may be well advised to view energy policy as holding the potential to enhance or retard existing trends but perhaps less likely to initiate new ones.

As a first look at the possible impacts of coal development on various regions, the Oak Ridge National Laboratory (ORNL) has generated projections of population and employment based on two sets of coal development assumptions, using an ORNL-developed population/employment simulation model referred to as Multiregion.<sup>9</sup> The results at this time are tentative and intended to illustrate the direction rather than the level of change; they are nonetheless instructive.

The first assumption of coal development we examined was that total national coal employment would decline over time, but that the national share in each region would remain constant. This is admittedly a simplistic assumption, but one in which is perhaps a not too unrealistic depiction of how the coal mining industry was evaluated at the beginning of the decade. Our second assumption regarding coal development was that extraction activities would increase rapidly. Much of the new coal in this case would come from western strip mines, but eastern activities would also be substantially expanded. In essence, this assumption is designed to parallel the Administration's projections through 1985 and to extrapolate from these projections through 2020. Neither assumption represents an attempt to forecast the future. The simulation model into which we programmed these assumptions operates on groups of counties called BEA functional economic areas, with the U.S. divided into 173 such areas. The overall purpose of the exercise is to compare the resulting levels of population and employment that emerge from the two "scenarios" in terms of direction of change and overall development implications.

Perhaps the major impact evident from this analysis derives directly from the input assumptions. This is the shift of certain major coal centers from the east to the west. As is shown in Fig. 5, the 11 largest coal employment regions under the low coal case are centered in Appalachia and the East. Under the high coal case, four of the eastern mining areas are replaced by western centers.

The model-derived conclusions from this analysis are somewhat mixed. The major common impact is a general tightening of labor market conditions in mining areas. In other words, total employment relative to available labor supply increases, and the economic health of the region increases. This is not a surprising finding. What is, however, at least a nonintuitive finding is the degree to which various regions respond differently to increased coal activity.

<sup>9</sup> R. J. Olsen et al., op. cit.



The largest induced employment/population effect appears to occur in the Grand Junction region (BEA 149), where total employment change doubles the level of new coal employment and population change is nearly three times larger than the coal employment increase. Lesser employment increases in the West are evident in the Billings, Albuquerque, and Las Vegas areas. These results suggest that a major outcome of coal mining activities may be to replace other employment opportunities which would have occurred, except in special instances. The circumstance that differentiates Grand Junction is the rapid rate of growth that was projected in the absence of coal activity. The model is therefore telling us that this type of employment stimulus will tend not to bring about major new employment centers unless forces are already at work in this direction.

In the East, the same general findings appear. However, in this instance, major employment centers that are linked economically to coal-producing areas seem to receive significant stimulus. The Williamsburg region, for example (BEA 11), receives an employment impact that far exceeds that attributable to coal mining changes, as does the Philadelphia region. However, increased out-migration is evident in several regions even as employment rises. These results are summarized in table 2.

Whether or not the absolute changes that were produced through this simulation exercise are realistic, they contain an important lesson. Because the nation operates largely as a closed socioeconomic system, one region can increase its population share or employment share only at the expense of others. Thus, from the standpoint of regional economics, it is not sufficient to assume that an economic stimulus will automatically trigger successive rounds of economic growth; other factors, such as proximity to other regions, general migratory and development trends, and the economic composition of the region all enter into the regional development equation. It is quite easy to be overly sanguine about the development possibilities of any single region, particularly if one examines the region in isolation.

These findings, however, should be tempered by two additional considerations. First, as was seen by the rapid change in migrating patterns between the 1960's and the 1970's, behavior changes can occur, and it is difficult to simulate this type of shift. Thus, the trends of the 1980's and 1990's may not wholly resemble those of the 1960's and the 1970's, and to the extent they do not, the actual pattern of development in 2020 may not resemble those of our computerized model. In this regard, we are limited by the data we observe.

The second caveat regards the distribution of activity within regions. Clearly, the advent of new coal mines may cause significant shifts in the location of towns and individual settlements. These will cause severe economic and social pressures in many instances, and no attempt is made here to minimize the importance of this issue. What is important to recognize, however, is that development of entire regions is a separate issue from development of towns and villages, and we should tread carefully as we attempt to predict a major reorganization of the spatial distribution of people and jobs for the nation as a whole.

#### V. POLICY IMPLICATIONS

Energy planning requires long lead times. The year 1985 is likely to mark the initial period of analysis. Beyond this it is difficult to suggest a terminal year. Effective technology planning requires assaying probable futures beyond the turn of the century, perhaps to 2020.

TABLE 2.—PROJECTED COAL EMPLOYMENT IMPACTS ON SELECTED COAL-PRODUCING REGIONS FOR 2020

BEA No.	Name	Coal employment change	Total employment change	Total population change
11	Williamsburg.....	250	4,946	5,275
13	Wilkes-Barre.....	-937	-218	-1,476
15	Philadelphia.....	1,760	4,846	-8,129
50	Knoxville.....	6,007	5,226	2,500
51	Bristol.....	217	1,359	-3,528
52	Huntington.....	42,855	14,021	28,805
53	Lexington.....	13,505	5,133	6,346
55	Evansville.....	42,602	6,295	16,290
65	Clarksburg.....	17,960	5,506	7,322
66	Pittsburgh.....	30,935	17,607	16,130
95	Billings.....	34,840	11,810	28,606
114	St. Louis.....	26,445	24,159	17,866
146	Albuquerque.....	13,069	3,998	7,281
149	Grand Junction.....	18,629	32,697	55,078
161	Las Vegas.....	21,512	4,573	10,488

The tendency of many energy analysts to focus mainly on energy consumption behavior as a guide to policy appears not to be justified. When the focus turns to subnational portions of the country, the role of changing socioeconomic distributions becomes an increasingly important portion of the analysis. At sufficiently fine levels of spatial detail it is not unreasonable to suggest that they will become the prime determinant of energy needs. Thus, bounding the range of possible growth paths that socioeconomic activity will follow is necessary.

Despite commentary to the contrary, energy supply changes may modify regional concentrations of economic and demographic activity only marginally. The data presented above suggest that existing trends will likely continue to drive regional growth and development. It therefore appears most useful to analyze energy policy in terms of how existing trends may be influenced and modified. While it is clear that industrial development, energy and otherwise, will cause redistribution within regions, the evidence for broad regional shifts is more elusive. Nonetheless, our research indicates that very different regional responses can occur in the face of ongoing movements of people and jobs, and these movements should be taken into account.

It therefore appears that a broad understanding of regional change deriving from energy policy can only be gained by conducting analysis within the format of national growth policy. While it is possible to consider the role of the individual region in a system of regions within the NEPA format, experience indicates that this will not be the case. NEPA-type analyses tend to view socioeconomic change resulting from policy change only at the local level and then with "multiplier-type" tools which abstract from the fact that growth in one region's share of activity must come at the expense of other regions. Although the "point source" of economic activity mode of analysis is indeed likely to yield information useful for local planning, it will probably not provide the proper information for circumspect policy analysis.

Finally, our simulations indicate that certain induced employment stimuli, such as from coal mining, may replace other employment opportunities, and employment time paths with increased coal activity may not differ greatly from those without new coal activity. This is a rather controversial finding, and one that should be re-examined for both coal and the larger range of other energy-producing activities. For many of these technologies, we simply have no past experience.

**Representative BOLLING.** Thank you very much.

**Congressman Brown.**

I suspect the bells are for a rollcall vote. We will check and find out, but you go ahead until we decide to run over there.

**Representative BROWN of Ohio.** Thank you, Mr. Chairman.

I would like to ask the other Mr. Brown what effect the age distribution has on the rates of savings and investment?

**Mr. BROWN.** I don't think I can give you a quick answer to that except to say that the amount of savings is age-related. As you get older you are inclined to put aside more of your income than you do in the years when you are having your family and are struggling to make both ends meet.

**Representative BROWN of Ohio.** Do any statistics exist on that?

**Mr. BROWN.** Yes, there are data on savings rate by age but I have not seen any projections of what is likely to happen as a result of the known changes in age cohorts.

**Representative BROWN of Ohio.** Could you get that for us?

**Mr. BROWN.** Yes, sir, I can do that.

**Representative BROWN of Ohio.** Thank you.

[The following information was subsequently supplied for the record:]

A quick review of the literature indicates that estimates of personal savings by age of head of household are not currently published. However, an approximation of the savings rate can be derived from the Consumer Expenditure Survey Series: Interview Survey, 1972-73, Report 455-4, U.S. Department of Labor, Bureau of Labor Statistics, pp. 64-5. These data produce the following information:



ANNUAL FAMILY INCOME AND EXPENDITURES, 1972-3<sup>1</sup>

Age of family head	Family income after taxes	Current consump- tion expenses	Income over (under) expenses
Under 25.....	\$5, 773	\$5, 906	(\$133)
25 to 34.....	9, 969	8, 474	1, 495
35 to 44.....	12, 114	10, 131	1, 989
45 to 54.....	13, 069	10, 163	2, 906
55 to 64.....	10, 277	7, 740	2, 536
65 and over.....	5, 764	4, 734	1, 030

<sup>1</sup> All families and single consumers.

As these data indicate, the potential for savings begins with the age group 25 to 34 and rises to a peak for age group 45 to 54, declining slightly for age group 55 to 64 and dropping sharply for the age group 65 years and older. Focusing on the 45 to 64 age segment as a major source of savings, we know that the size of this segment will be low during the years 1975 to 1990 because of the low birth rates in the years 1930 to 1945. Beginning in 1990 and continuing through 2020, however, children born in the post-war baby boom of 1945 through 1960 will move into the years of high savings.

While this is the direction of the impact of the age distribution distortion on savings rates, the magnitude of the influence is not very large. For example, if the U.S. population in 1985 had the same age distribution as it did in 1970, the potential for savings would be 6 percent higher than will actually be experienced. This is not large enough to offset the influence of the higher and higher proportions of our population moving into upper income groups, and thus higher savings groups, as a result of steady increases in real per capita gross national product.

Representative BROWN of Ohio. Does the rise in affluence and education level mean the people are less interested in economic growth as a goal?

Mr. BROWN. My observation was that people are at least holding constant and if anything increasing their interest in economic growth.

What I call the work ethic is just another way of talking about economic growth because each individual vies to improve his own well-being through work, this in turn creates growth for the society as a whole. The amazing thing to me has been the degree, not only in the United States but worldwide to which there has been a persistent interest in growth, not per se, but in terms of the degree to which individuals enter organized work, stay in organized work, and take on additional burdens on their own initiative.

Representative BROWN of Ohio. We heard yesterday that you could move to a rural area and still run your business by a communications systems.

Currently, there seems to be a great move toward the development of recreational patterns. Recreational areas are good investments because we are living in an aggressive athletic society.

If the demographics change in the future and the older age group increases relative to the rest of society it seems to me that that sort of thing may very well change without necessarily encouraging an increase in work. It is just that you sort of grow through that phase of activity.

Do you have any comment on that with reference to the prospect of people being more dedicated to either the work ethic or the enjoyment ethic?

Mr. BROWN. My only comment would be that the use of recreational areas and travel, in general—for example, vacationing and

so on—are really expressions of affluence and are done without really changing the work ethic.

Prior to World War II, it was characteristic for large masses of the population to stay at home. This was the accepted way of spending a vacation or time off or whenever you were not engaged in your work. To a society in which there is rising affluence, large masses of people can and do move to different locations and they also engage in organized and fairly institutionalized types of recreational activity. I think the affluence factor is much more important than the age factor—although the age factor does have an influence, too.

Representative BROWN of Ohio. Mr. Chairman, maybe we had better break. I would like to hear the comments of the other panelists on some questions that I have.

Representative BOLLING. All right.

Representative BROWN of Ohio. Or should I go on over and come back?

Representative BOLLING. You go over and come back, if you will, and as soon as you come back you will be recognized.

One question occurs to me and I think Mr. Fletcher might be the person to ask. I may have been totally misled by my own personal experience, but has there been, or not, a significant change in the number of people who take up a form of work which, in the current context, is almost an art form, or may be an art form, and if that is so, is it or is it not related to affluence?

Let me give you two examples and this is as bad an example of just a straight personal experience as you can have.

I went to a little town in Maryland last weekend and saw for the first time in a long time a very fine blacksmith at work and he was, I would guess, younger than any of us at this table, considerably younger.

I would think his age was approximately 30. I happened to know for a variety of reasons, a very large number of relatively young people who are very much involved in music and it is a method of earning income but not necessarily their only method of earning income.

Now, my sense of the situation—again, qualifying it by my understanding that it is very badly based because it is personal—is that there are significant numbers of people who are both full time and part time going against what you might call a mass production trend, people who may be very much interested in the approach of fuller development of themselves but perhaps unconsciously.

Mr. FLETCHER. Yes, that is right.

Representative BOLLING. Is that a definable group, and if it is a definable group, how large a group is it and what kind of influence is it likely to have?

Mr. FLETCHER. Like you, my sense is that it is very, very significant, that in fact it may be one of the more powerful influences going on in the culture right now, but so far as I know we know nothing about it.

It is as ignored a trend in terms of national data as I know of. There are some Gallup poll data that occasionally refer to it, but I tried very hard in preparing this testimony to find any evidence about how much people had been involved in the various growth

centers, for instance, that are around the United States. There are well over 400 of them, and these are centers where people pay \$150, \$200, \$250 of their own money in advance to take a weekend workshop.

We know from community college offerings that carpentry, blacksmithing, weaving, all kinds of things like this are among the more popular courses being offered.

But, so far as I know, there are no data. There is a category called personal development courses but it tends to include all kinds of things like writing, speaking, that really don't allow us to sort out human potential education too well.

My sense of what is happening—and, again, other than the fact that I do spend a fair amount of time studying these activities so I might have a wider personal experience than you do, I have no data—is that with the higher level of education, which is typical of our population now, work means something different to people.

Not only do we find in organization after organization that employers have to treat employees differently in order to get them to work, and to get them to produce at high levels, but also what employees are looking for in their jobs are things that in some way are personal and meaningful.

While lots of people work in jobs which they don't regard as personal and meaningful, they say so. They say that their work isn't.

So, I do think there is something very important going on there and so far as I know we don't know much about it at all.

Representative BOLLING. If anybody has a comment on it, I would be glad to have it.

Mr. BROWN. Mr. Chairman, there is some statistical evidence. If I understand your question, it is whether or not there has been sort of a move toward self-employment or single person occupations as opposed to collective or organized work.

If that was the point that you were making—

Representative BOLLING. In essence, somewhere between that and the highly organized, because you can have a musical group that includes some organization.

Mr. BROWN. As far as size of business organization, information has been assembled by the Census which comes from studies of manufacturing, retailing, wholesaling and series of that sort. Going back over the data for the last 15 or 20 years, I found that the percentage of people who are self-employed or engaged in small operations, has not changed. The numbers are larger because the population is larger but they do not seem to reflect the changing age composition.

When you put it altogether and count the total number of enterprises, the total number of people at work in enterprises of various sizes, the striking thing is that the percentages have been remarkably constant over the last 15 or 20 years.

Representative BOLLING. We know very little about the difference in composition, I suspect, of the groups which turn out to be roughly the same percentage.

Just to use sort of a simple-minded illustration, you might, for example, have a lot of people who were counted as self-employed when they ran a mom and pop grocery store 20 years ago, and

there were a good many 20 years ago, they might have almost disappeared for reasons that I suspect are relatively obvious, and have been replaced by people who were doing an entirely different kind of thing and you still get that set of statistics.

Mr. BROWN. We do have information on occupations while it isn't absolutely precise, it would distinguish between persons who are engaged in retailing and people who are engaged in manufacturing. I think what you are seeing is what has been taking place in both small and large enterprises, which is the move toward service industries.

My look at the evidence is that given the demographic changes that we have talked about, and which you have been listening to, the impact on self-employment seems to be smaller than we might have expected.

Representative BOLLING. Yes.

Mr. LITTLE. The Stanford Research Institute has what they call a business planning group out there and their largest seller was an article they did on voluntary simplicity, which is far broader than your question, but it dealt with such things as redeveloping the skills, how to can, weave, for both personal and economic reasons, and they determined that some 50 percent of the population was involved in some form of what they termed "voluntary simplicity."

By way of Mr. Sheldon, I will be sure you get a copy of that.

Mr. KASSALOW. A lot of this is hidden in growth of services employment, as Mr. Brown said, but it is generally true that the scale of employer unit, whether it is self-employed or not, is generally lower in service industries than it has been in manufacturing or transportation or construction and to that extent, this sense of what may be going on is correct.

Services can include all sorts of low, menial types of work as well as work in what Mr. Fletcher called a high degree of self-actualization.

The growth in service employment I think would support the feeling you have of an increase in the numbers of people who are doing more of their own thing either in small groups or on their own.

If we get a continuation, as most everyone extrapolates, of the growth of the service sector, this will be an outlet for that kind of development.

Representative BOLLING. Before I ask Congressman Brown to proceed with his line of questioning, is there any way that we could even get a hint as to whether this aspect of the growth of service was directly connected with affluence?

Mr. KASSALOW. We will have, as you know, Mr. Chairman, the session at the very end with one of the leading experts on development of a service economy.

Eli Ginzberg also on the same day will address that. I will raise the question with both of them to see if they can disaggregate the data and give us some sense of what is going on within the services area.

Representative BOLLING. Thank you.

Congressman Brown.

Representative BROWN of Ohio. Thank you, Mr. Chairman.

This is for Mr. Fletcher.

What do you see as potential conflict areas between migrants to rural areas and the long-time rural residents?

Mr. FLETCHER. Do you want me to speak specifically with respect to education or—

Representative BROWN of Ohio. Education and other services where changes may be required by the new people coming in.

Mr. FLETCHER. The major point that I would make is that—and this is based on the judgment of a number of people who are studying this migration—well, there are a number of studies underway in the Department of Agriculture now by sociologists but they have not been completed yet.

I spoke with several of the people. The major distinguishing characteristic seems to be whether the people who migrated to the rural area are people who want to be there or are people who regard it as in some way being sent to the boondocks, as beneath them, and depending upon the mix of those two kinds of people, you get very different kinds of conflicts going on.

People from urban areas who would have preferred to stay there or be in suburban areas so they had access to city kinds of services can be expected, when they come to rural areas, to try to bring in many of those urban characteristics, from social services to development, to medical care, to an urban form of education which has the net effect of training children for urban occupations and they leave rural areas.

People who come to rural areas because they are dissatisfied with the urban environment, want to get away from it and want more of a rural life, can be expected to work for changes which will be much more acceptable to the population that lives out there.

The thing that I think is important in education is that there has been a pretty radical reassessment of the knowledge that suggested that what we ought to do is consolidate rural schools, that what we ought to do is do away with them, that we ought to have urban oriented education everywhere. Conant popularized this idea in the early 1950's and a relook at that data suggests that small schools can be very good places to educate children. In fact, they have a lot of advantages, and we are quite capable now of designing educational experiences to take creative advantage of smallness. We in fact could have much higher levels of achievement in rural areas if we took advantage of the nature of the small schools.

We see in a lot of urban areas and a lot of suburban areas now attempts to break down the size of very large schools. Very large schools have become like factories and prisons. When they become very large organizations, most of the effort goes into running the organization or controlling the number of bodies that you have.

Since we are seeing that in urban areas we are also suggesting that a lot—

Representative BROWN of Ohio. Is that real?

Mr. FLETCHER. Yes.

Representative BROWN of Ohio. I live out in a suburban area and our little school is to be closed in another year because it is uneconomical, we are told, given the number of children.

Mr. FLETCHER. Yes.

Representative BROWN of Ohio. So, as the number of children shrinks, that school will be closed. Formerly it was a school filled up but still quite small.

The assumption is that when it is filled, it is economic but as it starts to shrink those children are going to be consolidated into a larger building which is more economical to operate.

But you are saying it is happening—

Mr. FLETCHER. What I am saying is that that is the predominant belief presently in American education, that larger schools are more efficient.

All I am saying is that those of us who have reexamined those data suggest that if we take into account a broader range of educational outcomes that tends not to be true.

I don't know your particular situation so it could be—

Representative BROWN of Ohio. We are talking about the suburbs.

Mr. FLETCHER. If you are in an area of declining enrollment, of course, we have to close some buildings. We can't keep them all open.

But, the major point is still the same. One piece of data, for example, is that it appears that in large schools, particularly in urban areas, a great deal of classroom time is spent in control and one of the explanations for the fact that after 3 or 4 years in an urban school a lot of the students are 3 or 4 years behind is that they have had 3 or 4 years less instructional time because so much of the effort went into the effort of controlling the children.

In smaller schools that tends not to happen. You get a much, much higher percentage of classroom time that goes into instruction.

All I am saying is that some data like these suggest that if we look at the broader range of educational outcomes and indeed found ways to design curriculum to take advantage of smallness, we could do a better job of educating in the smaller schools. The conventional wisdom says you need  $x$  number of kids to be economical for a certain program, et cetera, and that is what your small school is acting on.

Representative BROWN of Ohio. Let me ask a final question, if I may, to the panel participants, and if they want to comment on the other responses to the other questions I have asked, fine.

In particular, Mr. Brown, and to Mr. Zald, and perhaps Mr. Bjornstad would like to speak to this, too: Does the demographic evolution through which we are going—and I noticed that many of you did not include the decline in produced products employment, as opposed to service employment, in your discussions of demographic change—but do these changes imply a reduction in the workweek as one social answer to the problems of declining production employment and a decline in work force in relation to the total population?

Mr. ZALD. Well, I think Mr. Brown can speak to that better than I can. I am struck by two things in that—

Representative BROWN of Ohio. It is not a judgment I wanted you to make. I want to ask both of you, and I will decide later. [Laughter.]

Mr. ZALD. One is every time we get recession we get increased pressure for reducing the workweek as a way of reducing unemployment, to keep more people at it.

I am struck also by the immense expansion of our labor force over the last two decades. If you would talk to people in 1955 about what the size of the labor force would be in 1975 they would not nearly have believed it.

The immense ability of the economy to absorb millions of women into the labor force that we never believed, you know—they were not predicted at all. It is a satisfactory change.

If you look at those statistics from 1900 through now and look at the changes of percentage of women in the labor force at all ages, it is just enormous.

As far as I know no social scientist predicted it.

My general judgment is that, given reasonable economic growth with no major recession or depression, our population seems able to create new work mainly in service sectors. Employment in the manufacturing sector stays fairly stable or even declines slightly. Our ability to expand the labor force is really very, very impressive.

Representative BROWN of Ohio. Mr. Brown.

Mr. BROWN. I think the statistics on that subject are fairly good. The trends were striking enough so that I did pay some attention to it in making my formal statement. I looked particularly at the changing workweek because it has dropped rather steadily from 1890 through 1930, starting out at 10 hours a day, 6 days a week in 1890, which was typical, dropping down, to essentially a 40-hour or 44-hour week, 8 hours a day, 5 days a week, and half a day on Saturday.

While the Great Depression took the workweek down and World War II took it up as we went all out for the war effort, when you take those two disturbances out the workweek has held pretty close to 40 hours a week since the early 1930's.

Efforts to reduce the work week have been made but the interesting thing is that if you do in fact get the workweek down, people tend to take two jobs.

An added dimension has been the entry of women into organized work, a trend which has been going on all through this same period. If we hold the hours of work constant and increase the percentage of the population that is engaged in work, you get what I call the work ethic and what you call economic growth.

The production of services versus the production of goods seems to me primarily a matter of affluence because as you get more affluent, you tend to consume a higher proportion of your expenditures in the form of services. There has been a steady rise in per capita income over time. For the Nation as a whole, higher affluence translates to a higher and higher percentage of the population employed in the service industries.

This, it seem to me, is the market at work; the free choices of what is consumed directing the efforts of the private sector. This has been going on for years. It is a natural and understandable development.

The underlying factor is the high desire of people to engage in organized work and to devote up to 40 hours a week in that

particular use of their time. This is the key element in the whole operation and I see no evidence of any change.

Mr. KASSALOW. Can I continue this line of inquiry for a moment, Mr. Chairman?

Mr. Brown, I don't disagree with what you say but taking a somewhat different view, could you put it this way, that from 1900 or 1890, as you say, to about 1940 or 1950, we have strong and steady reductions in work time from 60 to 40 hours in effect; that from throughout most of the postwar period, especially for male workers—female workers do work a good deal on a part-time basis, so the data are not as good—you have striking increases in productivity, but no significant increases in worktime to compare with the earlier period, that is, you get the maintenance of a 40-hour workweek in spite of development of paid vacations and paid holidays.

But, is it possible there were some special circumstances at play in the period since World War II which may lose some of their force or effectiveness and you might get a kind of illusory image on worktime?

The demographers have called our attention to the great increase in birth rate after World War II, which greatly increased the costs of raising families.

They now tell us that this is down and presumably will stay down so that some of the pressure for income or for increased income may taper off.

Related to that has been the great increase in the number of youngsters going on to higher education. There is some evidence that this is also tapering off, too, as a cost pressure on families.

The third possibility is that we had a tremendous boom after World War II in the production of consumer durable goods. Most anybody's projection into the 1980's now seems to be for somewhat less steam in the labor market while there is some hope for recovery but even the present administration takes until 1983 or so to trace a return to full employment.

Is it possible under these circumstances that you may get renewed interest in—and also the rise of a two wage-earner family you do get pressures on family time—is it possible that you might get some renewed interest in reducing the worktime?

I don't know what form it might take. There has been little movement toward more personal holidays to handle the pressure of family business.

You could either look at it as a trend since World War II as being the trigger or as an interruption in a way in cuts in the worktime.

I just raise that as a possibility. Or, should there be a simple extrapolation of passing it up through the decades?

Mr. BROWN. Looking into the future is also hazardous as an occupation.

Mr. KASSALOW. Yes.

Mr. ZALD. The evidence I see which I tried to report in my prepared statement is that while it could happen, the current evidence indicates that it is not taking place and you can sketch out scenarios that would go either way.

But the overriding element has been the entry of women into the work force.



There has actually been a decrease in the percent of men in the work force, but it has been small in comparison to the increase of participation by women.

Now, given a long enough time period so that you accommodate this trend toward women participating in the work force rather than just staying at home and raising families, and there is an efficiency, and a productivity, and social meaning, if you will, from organized work as opposed to cottage industries from that point of view.

Other people can say: "Well, your lifestyle and what you get out of it is a different thing." That is going to go on as far ahead as I can see, and then I think when you are way out to the 2030's and 2040's and that area, you may then begin to see the kinds of things that we have been expecting for the last 20 or 30 years to begin to materialize.

I think the current evidence says that it is not here yet and that such evidence we do have is there is still quite a proportion of women yet to be brought into and made a part of the labor force, and they are coming in at the rate of 1 or 2 percent per year, and have been for some time.

Representative BROWN of Ohio. I don't want to interrupt you, Mr. Zald, but I want to pursue this point just a bit and ask you both to comment on it.

I think this is very interesting. Never mind predicting the future, let us look back and reach this conclusion if we can. We have had a very dynamic expansion of the number of people employed in the service industry rather than in the manufacture of products.

Perhaps that is the result of affluence and I have a question there.

If our produced-products base shrinks, would that threaten our affluence and therefore the service industries, and create a sort of double whammy effect causing the service industry to shrink suddenly?

Beyond that, during that period of time, it appears that a conscious decision was made by our society to cut out the old folks from the work force by retiring them.

We set up a system to retire them, and we cut out the blacks by our social attitudes along with the teenagers. So, we had to absorb that need for additional working people and it came from women.

Now, my question is as follows: In the future, if we have more people retired, less young people, and don't improve our ability or our social awareness of the problem of hiring blacks, then we have blacks concentrated in the cities and industries moving out to the rural areas or smaller communities to find jobs and training.

Now, doesn't that indicate some change in course for us in terms of trying to broaden the work base to include more teenagers, more old people, more blacks, or the unskilled elements of our society?

It is an economic matter and it is a demographic matter.

Mr. ZALD. I guess I really don't think that the teenage problem—well, I think the teenage black unemployment problem is most serious.

I think the white teenage problem, as I said, is going to be solved.

I think there is going to be change, obviously, in the employment of the elderly, but there is one issue here that is kind of interesting.

How many of you—I don't know how many of you are in joint, two-person working families where the wife and the husband both work.

Your home is probably dirty or dirtier than it used to be. The issue of personal services, cutting the lawn—I think that if you ask which options you want, reduced workweek, I don't think we are headed to reduced workweeks, I think we are heading for increased demand for household and personal services and we are not prepared—we don't have a very well structured way of any industry really moving in.

You see the newspaper clipping about somebody who sets up a household cleaning service where you—

Representative BROWN of Ohio. Let me interrupt you there. I think that one of the good investments now is Chemlawn or Greenlawn or all these other things that have come into suburban communities to take over the care of the outside of the house.

Mr. ZALD. And I think there are a number of those services. That is a part of the service sector that will grow faster; it is just beginning.

Everything from window washing to anything has real potential. It is interesting, but I don't think there will be a reduction in the workweek; rather, there will be an enhanced requirement in the service sector around the house.

Representative BROWN of Ohio. I don't want to get in trouble with chauvinistic remarks, but many of the things you mention used to be called "women's work."

We used to get that service without paying for it. [Laughter.]

Now it employs strong men to do that work because the woman is in the factor or in the business office earning a higher income than she earned at home doing so-called "women's work."

I believe that is the answer.

Mr. Brown.

Mr. BROWN. Yes, I think there were two points that you alluded to. One of them was the concern about the increasing proportion of employment in the service sector as opposed to the goods producing sector.

The only comment I would make on that one is that I think that this is purely a reflection of consumer choice. More fundamentally, the association of a durable or tangible product with a service is a matter of technology. What we are really interested in is the service of that tangible commodity. In this sense the whole output of production is a set of services.

Some services are tied very closely to a particular product. Others are not, such as banking, or education, or police protection, and things of that sort. It isn't because you can easily see and touch a particular product. It is the value of the particular service that you get that is important.

The other point concerns the choking off of employment of older people through early retirement and, if you will, delaying the entrance of children into the labor force by a whole series of child

labor laws, requirements to complete an education and things of that sort.

Both of these are products of the Great Depression when there was a very serious effort to create employment by eliminating the competition from older and younger individuals. Since that time there has been an increasing awareness of the importance of access to the work force as far as the older population is concerned. At the same time, it seems to me that the social policy with respect to the education of young people is certainly consistent with an affluent society.

Representative BROWN of Ohio. But we are changing that.

We changed it here in the Congress with respect to forced retirement at 65. I guess my question is: Aren't we going to have to change it if we are going to have demand for people in the work force?

Presumably if we don't change it we are not going to have demand for more people in the work force. And we will go back to the idea that it might be socially unacceptable for women to enter the work force as aggressively as they have.

Mr. BROWN. The point you have is correct: Should we get into a situation where we would have to reduce the labor force, then the kinds of things you are talking about would take place.

So, we do have all the technology on our side and developments will occur which will take us in the direction of leisure rather than organized production of goods and services. The problem is not so much expanding or contracting the work force as it is a matter of organizing and accommodating to the needs of society. Our goal is to meet the needs of all the people who wish to join organized work and to maximize the benefits you can get from organized work.

There are benefits from organized work that are social as well as economic. I have been very much impressed by the degree to which the participation in the labor force continues to hold even though total income from the household rises. So it is not a matter of just economic necessities and pressures. I use the words "work ethic," but there are definite satisfaction both economic and psychological to participation in organized work, whether in small groups or larger groups.

This has been going on for years, and we have accommodated, I think, remarkably well. I would keep my eyes focused on making sure the machinery continues to move properly because further accommodations will be needed.

Mr. FLETCHER. Could I respond to that?

Representative BOLLING. Yes.

Mr. FLETCHER. One of the things I think is important is that if you take the new career education programs which are now very strong, the way teenage youth are being educated about employment has a lot to do with training them to create the kinds of jobs they want.

What that means is students are trained to show more initiative and more capacity to affect the nature of the work than they might think they can. I think rather than the traditional notion that you join a company or some organization and stay with it through your life, there is much more of a sense that you are going to be shifting between jobs many times in your life. There is much more orienta-

tion toward exposing teenagers to very wide ranges of occupations on purpose so that they can make some kind of choice and specific job training will actually take place at the place of employment.

Just to piggyback this on previous statements, it seems to me there is a very strong work ethic in the sense that doing something with your life, working at something, is an important part of what life is about. I don't think that that will ever drop substantially below what it is now.

On the other hand, the whole attitude seems to be very different when you have an educated population. What we need much more than economic policies that simply provide jobs, that create in many cases dead end or make-work jobs, is some economic policy that encourages the kind of initiative and creation of meaningful work that the education system is beginning to train people to expect.

Representative BROWN of Ohio. Thank you.

Mr. KASSALOW. Congressman Brown, while it is true, as you say at either end in the labor force, we seem to discourage teenagers and older people, but as far as the older people are concerned, you do find a strange tendency. In spite of the fact that we have pushed up the number of years that people go to school on the average, in spite of the fact that we have a social security system that encourages retirement, when you take into consideration the extension of the longevity of life factor, people are working more years now, on the average during their lives, than was true in the past. That is, the average individual with all of these changes is, nevertheless, putting in more years of work life because of the extension of the length of life itself.

So, we have both trends going.

Mr. LITTLE. This is all true but what bothers me, and I don't know what role economics plays in it, is that when you look at the suicide statistics for the children 16 to 24 years old, although the base was very low, they are up something like 250 percent over the last 10 to 15 years; and then you look at the suicide rate for the elderly, it is up significantly, although I don't have that number.

What bothers me is why. What role does economics, the lack of opportunity, alienation, early retirement, play in this?

I don't think we have any of those data to deal with it, but the numbers are still there and we just all read the Sunday paper and shiver and stop there.

Representative BOLLING. Tell me, without for a moment mitigating the increase at either end, what are our comparative statistics with other developed countries?

Mr. LITTLE. I can probably find that. I don't have it as of now.

Representative BOLLING. I would be interested to get that.

Mr. KASSALOW. Incidentally, we are one of the few countries that experiences such a bulge in teenage growth. In other words, no European country really had the explosion in the birth rate that we have gone through.

So, our experience with the teenage labor force among industrialized countries is sort of unique.

Representative BOLLING. In particular the suicide rate is what I am getting at.

Representative BROWN of Ohio. You are talking about birth rate, not just suicide.

Mr. KASSALOW. Birth rate, yes.

Representative BROWN of Ohio. Which would imply the birth rate was not a product of everybody coming home and finding something better to do; but rather they came home and found a job and emotional security and growth of the family size was part of that security; wasn't it?

Mr. KASSALOW. Well, let the demographers answer that one. I don't know how to explain it.

Representative BROWN of Ohio. I do want to get back to that because to me that population change—let me make this statement and you can challenge it if you will—the population changes on the negative side come with downside economic factors, the depression, and sharp inflation. High birth rates come from affluent societies and societies where they are on the edge of starvation and it is a matter of trying to keep some kind of immortality going through having eight children because four or five of them are not going to survive because of starvation.

Is that a fair statement?

Mr. ZALD. You have to separate short-term from long-term trends.

The long-term trend in the past 100 years, birth rates have gone down as affluence went up. If you take 1850 to 1970, fertility rates have gone down, but within that time the short-term cycles—

Representative BROWN of Ohio. Wait a minute. That doesn't relate to affluence as much as it does to changing technology. Back in the 1850's what you had to run the farm with was strong backs and percheron horses.

Now you have tractors and you don't need the percheron horses and you don't need the strong backs. You used to count wealth in sons and livestock, not necessarily in that order.

Mr. ZALD. It may be a spurious correlation but on the correlation you are right, there was a different need for kids; also, no contraception or there was a lower use of contraceptive techniques.

We know that fertility rates tend to decline over the long haul.

Representative BOLLING. There was no other cheap energy, I should throw that in there.

Mr. ZALD. In the short-term cycle you are definitely right. We know that recessions, when the business cycle turns down, age of marriage goes up, birth rates go down, but you have to separate the components.

Somebody recently said that once you treat the baby boom of the fifties as the anomaly rather than treating our current low birth rate as the thing to be explained, treat the baby boom of the fifties as the thing to be explained, arguing over the long term that our current low birth rate is a continuation of the long-term trend.

The idea of separating the short term from the long term is very important in this.

Mr. LITTLE. The lower birth rates are still a function of economics right now.

What happens is when you get with Mr. Zald's comments, when you get two generally speaking white upper income families, two persons within that family working and the lower income frequent-

ly being of the minority population, particularly in your urban centers, that factor then where the birth rate is still higher, may cause over the long haul the income differentials between whites and blacks to widen rather than to level off or decline as it has according to some set of statistics.

Representative BROWN of Ohio. Thank you.

Representative BOLLING. Yes.

Mr. WALLACE. I would like to ask Mr. Zald a question. We are in this Special Study on Economic Change and all of the witnesses have pointed to significant changes which have occurred.

One of the ones which you mentioned, which I would like to pursue, is the increase in the number of people living alone and the increase in single heads of household.

There are two things which may have influenced this and I would like your opinion as to which and how much.

One is the increase in the proportion which the Federal Government spends for transfer payments which are payments like social security or welfare for transferring funds from one group to another without any services being involved. That proportion has risen from, I think, something like 24 to 42 percent of the budget.

Now these increases in transfer payments might be one way that people can afford to live alone whereas before they may have had to depend on someone else.

The other is the tremendous increase in the participation rate of females in the labor force.

So, I see these two questions involved. One is: Are we paying for a growing number of heads of household through higher transfer payments? The other is whether it is a natural phenomenon because of the increase in the female participation rate?

Mr. ZALD. Well, you know, it is strange in a way that there is next to no research on this subject. There is hardly any. I know one or two people who have taken seriously the issue of what causes female heads of households or what causes single-person households.

Actually, there was testimony before a subcommittee of this committee several years ago that addressed that slightly. It would seem obvious you can't live alone unless you have some financial support and the transfer payments, AFDC, social security income, is essential.

You might add the transfer payments within families—that is, if you have a more affluent—as affluence in the middle class has grown, they can afford to help mother in her late sixties to keep a separate apartment and keep her happier and them happier than having her live with them.

So, there is a little bit of research on the extent to which the middle-class families—the continuation of extended family network even though you don't have extended family households.

Children support transfer of income to parents in old age. So, that is a part of the story.

There is also a slight decline in the rate of remarriage; it used to be that people got divorced and remarried. That is going down. That will increase, add to the problem.

How much of that is based upon transfer payments is very hard to say.

So, all we do know is that the female head of household tends to be poor even though they are in the labor force. It is the fact that most women are not bankers.

The New York Times had an article recently with all these women in high professional positions, but that is not true for the majority of household head females—they are generally poorer.

This whole idea of the outcome of the welfare state is an unresearched area and an important trend area.

Mr. WALLACE. One other question on the welfare area. There has been an increase in the number of disability retirements without any change in the law.

Do you have any indications as to why this is occurring?

As I understand it, the tremendous jump in disability retirements represents one of the larger increases in the cost of social security.

Mr. ZALD. I don't have a really good handle on that.

Mr. WALLACE. Thank you.

Representative BROWN of Ohio. It may contradict the thrust of Mr. Brown's work ethic statements.

Mr. BROWN. Obviously, there are millions of people who have not and are not going to participate in the labor force, but I have to give you the figures for the total population. I did say that there had been a reduction in participation in the labor force by men which had been more than offset by this steady and larger participation by women and for society as a whole.

Representative BOLLING. There is another factor, and that is—I have not looked at this in particular but it may be a question of administration.

Representative BROWN of Ohio. It may also be, I would submit to you, a result of affluence. Let me give you this true story.

In one of the communities in my district I visited a factory at the time of the so-called Johnson boom in 1967 and 1968 when unemployment was down to 3.4 or 3.6 percent in the country. In this particular community it was down to a great deal less than that, 2.2 percent, as I recall.

The manager of this company, which was pulling in employees from a very wide geographic area, said that they were getting now the dregs. He had to institute a plan for a full physical examination of everybody they hired because he says what he was doing was getting the guys with bad backs, with the dental problems, with mental problems, with other things that this rather alert manager found. This caused them to have more cost ultimately than benefit because what they were finding was that as soon as the guy with the bad back reached over to pick up a little motor, his back went out and he was a workmen's compensation case. Then he had a claim for the rest of his days or at least a major claim for a short period of time against the company. It was uneconomical for them to hire such people, so they were screening them out by means of this full physical examination.

Someone less sophisticated in management technique than that probably would not have screened them out and would have opened up the possibility of that kind of person winding up with a major workmen's compensation or unemployment compensation

claim because of some reason that was not necessarily under the control of the company.

Representative BOLLING. Mr. Little, did you have something to say?

Mr. LITTLE. I was going to say that I worked at social security for a while, and the administrative part of that is tremendously complex.

The definitions intended when a law is passed may be quite different from the definitions of what is a disability for various people later in administrative practice.

If a doctor loses his arm, could he still be a teacher at one of the universities versus the baker who loses his arm?

They have some situations in the disability offices where 80 percent of the cases they know would be reversed on appeal but they can't get any standards to deal with that question.

The problems of environmental health questions, the problems of changing nature of the economy, administrative law plus statutory law are just driving them bananas.

Representative BROWN of Ohio. It may be a result of the increase in congressional staffs. We have more secretaries to write followup letters for those people. That may put pressure on social security to accept them as a worthy recipient after all.

Representative BOLLING. Mr. Zald, I am going to ask you a question that is not really related to all this, although it possibly could be.

Are you familiar with the study former Representative Martha Griffiths did for this committee some time ago on welfare?

Mr. ZALD. Yes, not in detail, but I have some sense of it.

Representative BOLLING. Do you have a feeling that it was a relatively good, effective study or a relatively bad, ineffective study?

Mr. ZALD. It has a good reputation.

Representative BOLLING. Your statement makes it very clear that—as I think it already was before your statement—that our welfare system and our social security system, in a sense, are no longer rational in terms of the realities of society.

I should hasten to say that I have consistently supported the changes, including the two changes that Mr. Nixon proposed simply because I felt that it was essential to move in on the situation in such a way that we restored public confidence in what we were trying to do with transfer payments.

That is a big bite, but that is my motivation.

Am I right in thinking that this remains at least an urgent problem, if not a terribly urgent problem, that we rationalize this system?

I don't mean in the way we have been dealing in recent months with it.

Mr. ZALD. The question is rationalized from whose perspective?

Representative BOLLING. Well, I will beg out of that by saying exactly what I mean, from the national interest perspective, that the only way you can get at the problems is by balancing off a very great number of interests, beyond any one of the special interests that have been dominating the scene.



Mr. ZALD. We have had this massive infusion of transfer payments in the last decade and a half.

We may still have a lot of poverty in this country but it is not what it was.

The forms of it—well, we have had a lot of poverty in this country but the forms of it or level of welfare—go and look at the way children dress in the ghetto. I look at it—

Mr. ZALD. And it does not.

Representative BOLLING. I guess not.

Mr. ZALD. It looks a lot better. The nutrition levels are better.

Representative BOLLING. Am I missing something somewhere?

Mr. ZALD. There is a chaos in the system that is—it is not that we have not done an enormous amount. At least my opinion is that we have done enormous levels of improvement in the benefit levels across the country and although there are pockets that are unconscionable, if you look at the general level, you would say we made a major effort.

I have a table in my prepared statement on utilization rates, not just payment rates of medical care, but utilization rates for the aged, and the poor.

There is a major increase. So, those are things we all ought to be proud of.

The question is: Is the inconsistency in the orderliness of the system?

Now, it depends on your toleration for inconsistencies. From the standpoint of the fair and equitable view, in general there are lots of loopholes in it.

Representative BOLLING. That is the reason I asked about Mrs. Griffith's study, because the study proved there were people that preyed on the system in an unconscionable fashion but it also proved there were quite a few people who were still virtually starving to death in this country.

That was a number of years ago, and I have forgotten how many years, 6 or 8.

Representative BROWN of Ohio. Six.

Representative BOLLING. And since that time there has been this further jump in transfer payments and while I don't pretend to know exactly except my own district intimately in terms of knowing the people, where they are and who is in trouble, my impression is that what the system needs now is some kind of a rationalization and that the problem is related to the relationship with the States.

Mr. ZALD. I would agree with that. There are certainly those great differences between States.

Representative BOLLING. That is what I am getting at.

Mr. ZALD. There are great differences between States in cost of living.

Representative BOLLING. Right.

Mr. ZALD. So, mere balancing out of payments would lead to the benefit—you know, if you just reduce those inconsistencies, you would end up being overly fair to those States that had really low cost of living. So that some way of both rationalizing, getting rid of inconsistencies but using some reasonable relationship to differential cost of living seems to me to be part of the problem.

Representative BOLLING. I think that is one of the key problems we face in all kinds of matters in the Federal Government, the inability to deal with fair differential treatment based on cost of living.

Mr. ZALD. What the decent formula should be.

Representative BOLLING. That is right. We too often decide those questions not on the basis of reality but on the basis of who has the political power, who is the chairman of what committee, and that is an irrationality that doesn't continue for very long in that particular forum but comes up again in another forum.

I thank you for that.

Does anybody feel moved to make a comment?

Mr. KASSALOW. I would like to ask Mr. Fletcher one question which would get us toward our next hearing on manpower.

You stressed the necessity for, I guess you call it a greater sense or ability of people to achieve self-actualization in their work.

I really address this question to you and to Mr. Brown. Any of the manpower projections that we have are not very optimistic in that sense. They seem to suggest that when you look at the jobs that have been created in recent years and those that may be created in the years to come in the services and elsewhere, we may almost be having an overeducated population at present rates of job development of the kinds of jobs that will be forthcoming. How do you see that problem in terms of relating the educational system to work life, or work life to the educational system?

Mr. FLETCHER. I think that is a very good question, one I don't have an easy answer to at all.

It does seem to me, though, that one of the reasons for a lot of the human potential movement that I talked about is a real dissatisfaction with the belief that increased material welfare, increased standard of living in our traditional economic sense really contributes much to human satisfaction.

There is simply an awful lot of dissatisfaction with the satisfaction of material affluence. That is a cultural myth which a lot of people have lived out, and found wanting.

I mean, they have become affluent now and find it doesn't have a whole lot to say to them as a person, doesn't add a whole lot to the significance of their lives.

The answer to the question involves something about a reorientation of the way people think about work in relation to the rest of what they are as a person, what their life means. Jobs that don't fall within the cultural myth that we have of having power and a high salary have been seen as menial, have been seen as unimportant.

There may well be ways to change the way people think about that kind of job and the way they then do it.

So long as people regard themselves as not worth much because of the job they are doing indeed they are not going to have much satisfaction—they are going to regard those jobs as very dead-end jobs.

If what happens is a very major change in the way people think of themselves and think of work in relation to who they are as a person, you could have very different attitudes toward an awful lot

of the work; in fact, a lot of the work might get done better and people would have a much richer sense of their own worth.

But that transition is something we are either in the middle of or just beginning.

What is very clear is, as I said earlier, that in living out the myth of becoming affluent an awful lot of people found that it was not very satisfactory at all and the kind of cultural and value change that is going on right now that I alluded to in my comments is really a very major transformation in the way in which we think about work. That change appears to be going on in a very broad and searching way right now, and most economic statistics wouldn't pick it up.

Representative BOLLING. Yes.

Representative BROWN of Ohio. I just want to pick up on that point for just one minute.

I belong to a group that recently had a seminar on the question of terrorism. One of the common denominators of terrorism which is not common to all nations equally was that the people who became terrorists were those who were trained from the middle class for administrative or professional or quasiprofessional jobs, but found no market for this talent.

You know, plumbers and electricians do not become terrorists.

Representative BOLLING. Except in a very small way. [Laughter.]

Representative BROWN of Ohio. They perhaps terrify us by not showing up, that is the problem; they just don't show up.

But the people who become terrorists are people who have been trained as lawyers or public administrators or something and then can't find a position doing that and feel that society is unfair to them.

The balancing of our educational system with the future job needs of society therefore becomes very important.

It seems to me that our ability to assess and identify early job needs and fill those needs is a significant factor in the social peace, if you will, of our society.

The thing that concerns me is—and I would like to find out somewhere along the line and maybe we need some labor people in here—you used to be able to rely on people in the work force training other people in the work force for that particular career.

Now we are doing this in public schools or specialized schools.

My question is: Are there enough statistics to know whether that is working as opposed to the guy going on the job and being a journeyman apprentice for somebody for 4 years, learning how to be a printer or plumber or carpenter or electrician?

Mr. FLETCHER. If there is any major trend it is that public schools are getting out of training people for particular jobs.

That simply—it never has been particularly—

Representative BROWN of Ohio. The new development in Ohio education is vocational training schools.

In other words, you have a high school but you have a vocational training school that covers maybe a dozen or half a dozen high schools in the geographic area. We also have now developed a lot of technical colleges in Ohio.

Is that an aberration?

Mr. FLETCHER. There is no orientation toward a cluster of jobs at each of the training schools? You are not training a child for a particular occupation any longer, a particular skill, but you train for one of a cluster of electronic skills, say, or—

Representative BROWN of Ohio. No, I don't think that would be true here. We are training auto mechanics, carpenters, masonry people—

Representative BOLLING. It is uneven State to State.

Mr. FLETCHER. I was not aware of the Ohio situation, so it is uneven State to State.

The general direction is that what schools can do best is provide a foundational education and they expect employers to actually do the specific job training, but it obviously varies from State to State.

Mr. KASSALOW. One of our later witnesses has been particularly concerned in the training of the craftsmen and whether it is being done sufficiently, and Mr. Ginzberg will be one of our closing witnesses.

Representative BROWN of Ohio. It would be good for the staff to ask him, in advance of his testimony, to address the question of whether in industrial circumstances people are really being trained as much as they once were by the apprentice-journeyman relationship.

Mr. KASSALOW. Yes, we can do that.

Representative BOLLING. If that is all for today, we will recess until Tuesday, June 6, at 10 a.m., and we are moving again.

The next hearing will be at 10 a.m., room 318, Russell Senate Office Building. We are giving everybody a fling, the Capitol, the House, and the Senate.

Thank you all very much, gentlemen.

[Whereupon, at 12:21 p.m., the committee recessed, to reconvene at 10 a.m., Tuesday, June 6, 1978.]

# SPECIAL STUDY ON ECONOMIC CHANGE

TUESDAY, JUNE 6, 1978

## EMPLOYMENT PROSPECTS AND PROBLEMS

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, pursuant to recess, at 10 a.m., in room 318, Russell Senate Office Building, Hon. Richard Bolling (chairman of the committee) presiding.

Present: Representatives Bolling and Brown of Ohio.

Committee staff present: Louis C. Krauthoff II, assistant director; Thomas F. Dernburg, and Deborah Norelli Matz, professional staff members; Mark Borchelt, administrative assistant; and Charles H. Bradford and Mark R. Policinski, minority professional staff members.

Special Study on Economic Change staff present: Charles S. Sheldon II, and Robert Ash Wallace, research directors; George D. Krumbhaar, Jr., counsel; Richard D. Bartel, staff economist; Paula J. Dobriansky and A. A. "Chip" Sayers, research assistants.

Also present: Everett M. Kassalow, Congressional Research Service, Library of Congress.

Representative BOLLING. The committee will be in order.

Before I begin the meeting proper, I have a dilemma and the lengthy opening statement that I used only in the first day, I don't repeat each time. But it said, hopefully, that it would be nice if the members of the panel could summarize their statements in about 10 minutes.

I will be called away in about an hour, an hour and 15 minutes. I want very much to have an opportunity to ask some questions, so I would reinforce that request, that you try to summarize your statement in 10 minutes, by my desire to be able to participate. If a member of the committee is here when I leave, whether he be a Democrat or Republican, he will take over. And if not, Charles Sheldon will take over.

A word of explanation: This happens to be a day that the Rules Committee of the House has to listen to the first of eight or nine requests for special rules on all of the appropriations bills. So I have to go to the Rules Committee at some point.

Our first witness is Karl E. Taeuber, professor of sociology and assistant director of the Institute for Research on Poverty at the University of Wisconsin, Madison. He did his undergraduate work

at Yale, his graduate work at Harvard and the University of Chicago. His Ph. D. was received at Harvard in 1960.

He has been connected with the National Cancer Institute, the University of Chicago, the University of California at Berkeley, before moving to Wisconsin in 1964. He joined the Institute for Research on Poverty in its founding in 1966 and served as sociology department chairman in 1970 and 1973. Between 1969 and 1970 he was on leave at the Rand Corp., Santa Monica, Calif.

He is coauthor with E. M. Taeuber of "Negroes in Cities" and the "Number of Juveniles." He has written on Negro populations, migration in the United States, and recent social trends. His current research includes the demographic impact of school desegregation and a project prepared as a public use sample with data from the 1940 and 1950 census.

If I mispronounced your name, I apologize.

**STATEMENT OF KARL E. TAEUBER, PROFESSOR OF SOCIOLOGY AND ASSISTANT DIRECTOR, INSTITUTE FOR RESEARCH ON POVERTY, UNIVERSITY OF WISCONSIN**

Mr. TAEUBER. You did very well. Thank you.

When a professor tries to summarize a written statement extemporaneously, he usually takes longer than he would have if he read it. But now that I am supposed to summarize it even faster, I will try to make a bridge between those two techniques.

Demographers often arrange people into cohorts according to year of birth or year of some other important event. Although I was born in the Depression, I began my professional training in demography during the height of the baby boom, that awkward phenomenon that so nastily disrupted the consensus of professional demographers that the U.S. population would peak at 150 million and would by now have settled into a period of slow decline. This professional birth trauma has left me perpetually cautious about projections.

I do not intend to suggest that similar efforts to foresee the future are anything other than a vital ingredient of the vital public policymaking process. But I would like to concentrate in the few minutes of my opening statement on my views on demographic projections, particularly manpower projections.

Manpower projections are informed guesses about the future. The typical basic projection is constructed by assuming that recent trends will continue into the future. If the projection reveals certain emerging problems, a policy process may be initiated. An effort will be made to alter one or more of the assumptions underlying the projection. If the policy intervention is successful, the original projection will not be realized. Deliberate "falsification" of projections is the very purpose of the enterprise. Projections are an early warning system that, by alerting us to dangers and consequences, help us foresee and, it is to be hoped, avoid or mitigate problems. Projections are a tool to assist policymakers to intervene in an effort to create a better future. These projections are a tool and I don't think should be regarded as an unconditional forecast of what the future holds in store. This view of projections as being a tool, a flexible tool, if developed further, as I will in a minute, conflicts with the administrative view that rational planning re-

quires a kind of agreement among various agencies on the best or most likely forecast.

If the various components of economic policy are to be consistent, those agencies that make aggregate economic forecasts should all share certain common assumptions about population and labor force. Projections of new housing starts, based in part on projections of new household formation, should be consistent with projections of family formation, marriage rates, fertility, educational needs, the demand for day-care facilities and the number of women who will be seeking work. Certain shared assumptions are essential if the varied community planners are to function with a minimal degree of harmony.

The need for a consistent set of projections of future population and manpower has not led to an appropriately high degree of consistency in the reproductive and work behavior of Americans. Every few years since World War II, the Bureau of the Census has made a new set of projections of birth rates, and every time they have done so, the actual birth rates in the next few years have risen far above or have fallen far below the assumptions. Labor force behavior, particularly the continuing rise in female labor force participation, has similarly failed to conform to projections even for three or four years into the future. Such unpredictability in human behavior calls into question the validity of any single projection, but paradoxically renders it all the more necessary to try to anticipate the future. Recent experience tells us to expect major change. To assume that the future will repeat the recent past is often the most fallible projection of all.

About a year ago I reviewed for the National Commission for Manpower Policy current demographic and labor force projections. Let me comment very quickly on each of the major components of change, fertility, mortality, migration.

If the birth rates go up, this will affect housing demand, day-care demand, the demand that will be put on the educational system, first at the lower level, later at the higher educational levels. It will affect labor force entry in 15 or 20 years and beyond that it will have a great impact on the ratio between the number of newly retiring workers and the dependent aged, the people drawing on the social security system, in relation to the number of productive workers we have. The number of productive workers depends on what the birthrates will be in 20 or 30 years, as those people will be in the labor force as the baby boom cohorts leave.

Some say birth rates will go back up, that the United States has a tradition of fairly high fertility; family and home continue to be very important. Some economists share this expectation, from a perspective on trends, long-term cycles, and the relationship between the economic circumstances confronting young householders as they make their family decisions and the conditions they encountered earlier as they were growing up.

The Census Bureau projects a high rate, a low rate, and a medium rate, and a casual observer will take the medium rate. I happen to believe the low rate, a replacement or below replacement level fertility, is most likely. But the main point is not to argue which is "best," but to note that the difference between the low and the high is very, very great in terms of subsequent effect

on the population and, hence, in terms of the effect on policies and programs that might be appropriate.

We have continually projected mortality as being something that will gradually get better. Again, I just might mention that it is quite possible to have unexpected trends. In the last couple of years we worried about flu epidemics and the potential in the 1970's of a 1918-style epidemic. We can't be sure that nature will not pose a threat of a new, severe, uncontrollable influenza epidemic, while both our medical ability and our social governmental ability to avoid disaster may be in question.

Legionnaire disease could have been much more virulent, much more contagious, and we had no way to counter it.

We are also dependent on the National Institutes of Health trying to achieve major breakthroughs in cancer and other disease control. We have all learned we cannot expect those in any given time. But if there were, say, a major reduction in the cardiovascular diseases, this could have a profound impact on the total age structure of the population over the next 50 or so years, would affect greatly the whole question of what do we do about retirement and nursing homes and all of that.

International migration is very important. We tend to project the future level as being 400,000 net immigrants per year because that is pretty well fixed by legislation. But the nice smooth curve of this was affected some years back by immigrants from Cuba, Hungary, and more recently from Vietnam. It is affected by the unknown illegal immigration that you have heard a lot of talk about, and which we have not gotten around to measuring or estimating very carefully.

The future of this, again, is subject to all sorts of conflicts, not all of which are predictable because we have had a whole history of ups and downs in migration affected by policy events that cannot be foreseen.

Also, we may note that the 400,000 per year would be about 2 percent per year. Those are not distributed randomly among the population. So when one gets to regions or metropolitan forecasts for particular areas, some are more affected than others.

With respect to internal migration, I believe last week there were panelists that talked about the regional migration shift, what may be called a fairly sustained Sunbelt shift. The very, very, long-term move toward metropolitan concentration has come to an end in the past few years. The great nonmetropolitan turnaround is an extraordinary turnaround that perhaps should have been foreseen but was not and took us by surprise early in the decade.

The other major shifts of internal migration have been talked about by previous panelists. The other one is suburban migration. Many think this, too, has run its course, that our central cities emptied out enough, that the energy crisis will help lead to a major revitalization of cities.

My own reading of the data up to now and for the future is that I simply don't see this. I think it far more likely, if we are a little more active in the housing area of civil rights movements, that we will have a massive black suburbanization which will feed into a large white suburbanization. The business and professional services and all of the core functions that we have seen as holding a city



together are being decentralized, and it is finally getting to the point that more of that growth will be outside of the cities.

So in that sense I am very gloomy about the prospects. But some other social scientists would disagree. The search for the best or more likely projection is basically quixotic. I think we need to adopt some of the policies of modern management, where instead of trying to project a single best future in terms of what we know about it, we have to give way to more complex models of contingency plans for multiple alternatives for the future. No single manpower projection or labor force projection can lay much claim to our confidence. We cannot bar the future from differing from the past.

The alternatives that various people see as possible should be considered. We should go through all the calculations to see the effects of these, to see what is the full range of possible consequences of a variety of alternatives. The office responsible for manpower projection does not currently include any closely articulated, continuing research effort. But to make any projection, even the best guess, requires a lot of assumptions about demographic trends and labor force behavior, each of which depends on other assumptions.

For instance, trends in the labor force behavior of young women depend on assumptions about birth rates, college attendance, marriage age, reproductivity outside of marriage, wage rates for those who do obtain jobs, and so forth. Demographic trends must intertwine with more general social and economic trends. Manpower projectors cannot be expected to solve the problems of social science in unraveling this complex web but should have the auxiliary research resources to trace out the most important trends, to identify what is known and what is not known about the consistency among assumptions and to ascertain the principal indirect effects of each assumed trend or condition.

The Nation has been extraordinarily well served by its statistical agencies. These tend, in many countries, to become very traditional and old-fashioned collectors of esoteric data. In our country we have been very well served. The Bureau of Labor Statistics and the Bureau of the Census and other agencies have been in the forefront of development of tools. However, the research and analysis needs and responsibilities of these agencies, both in-house and through extramural grants and contracts, have not yet been sufficiently recognized. If we are to develop a continuing capability to respond to continuing change, new attention and resources must be given to the process by which we assess the past, monitor the present, and project the future.

This is a bit methodological. In one more minute I would like to call your attention to the very last page of my prepared statement which has a graph, which is the best I have found for illustrating the startling trends in women's employment.

This graph portrays labor force participation for women born in different years as they go through their lifetimes. This is a typical demographic way of representing that experience. It shows, for instance, for the bottom two lines, the career pattern of women for the older cohorts of women. It shows that there was a traditional American pattern in which before marriage and childbearing a

moderate proportion of women worked. But along with family responsibilities came permanent departure from the labor force for the vast majority of women.

More recently, there has been a greater tendency to enter the labor force before marriage and childbearing age, a lesser tendency to drop out of the labor force after marriage, and a greater tendency to reenter the labor force after the children are in school and after they are grown up.

This chart, I think, is worth looking at, because I think it shows a continuation of both intergenerational change and career change within lifetimes. Labor force participation has changed among a whole set of successive cohorts of women. This pattern is so consistent that it defies any simple interpretation.

The employment opportunities created by the economic boom of World War II have been viewed as responsible for the increased participation of women in the labor force. In this view there was a shortage of males, women began to work, families got used to the extra income, and so forth. But the trend started before World War II and has accelerated since then. The trend has continued through times of depression and times of economic boom, through periods of great fluctuation in families as indicated by marriage trends and trends in the birthrates.

I think this discussion illustrates the need for a greater expansion, a greater utilization of social science as a basis for projection. There are massive, persistent social trends that can only be detected by examining the data and studying them. These are trends that seem responsive to deep, underlying forces rather than to short-term fluctuations in economic circumstances or political rhetoric. Concentration on these major trends is perhaps a partial solution to the policymaker's predicament that the future is unknowable.

I cannot claim that even these trends—which have continued through three-fourths of a century in female labor force participation—are immutable.

[The prepared statement of Mr. Taeuber follows:]

PREPARED STATEMENT OF KARL E. TAEUBER\*

In his opening statement on May 31, Chairman Bolling referred to the last twenty or thirty years as a period of relative stability when economists could take some satisfaction in having found effective guidelines to policymaking. Recently, "economic, social, political, international, and technical conditions have changed, and are still changing markedly," so that conventional wisdom and established economic tools may not be equal to meeting contemporary and future needs.

I began my professional training in demography during the height of the baby boom, that awkward phenomenon that so nastily disrupted the consensus of professional demographers that the U.S. population would peak at 150 million and would by now have settled into a period of slow decline. This professional birth trauma has left me perpetually cautious about projections. As politicians have learned since the Literary Digest prediction of the 1936 election, no amount of improved data and analytic technique enables us to put confidence in close predictions about the future. Individual and social behavior is too delightfully changeable and in my

\*NOTE.—I have taken ideas and paragraphs from my report, "Demographic Trends Affecting the Future Labor Force," published as Chapter III of "Demographic Trends and Full Employment," National Commission for Manpower Policy Special Report No. 12. The final section also quotes from a report co-authored with James A. Sweet, "Family and Work: The Social Life Cycle of Women," Chapter 2 in Juanita M. Kreps, ed., "Women and the American Economy," Prentice-Hall.

opinion will remain to some degree beyond the interpretive grasp of the social sciences.

But I do not intend to denigrate the accomplishments of the social sciences, nor to suggest that systematic efforts to foresee what the future may hold are anything less than vital ingredients of the policy formulation process. In this brief statement I should like to concentrate on my views on projections, particularly manpower projections, and then skim over a few particular aspects of social and economic policy that are illumined by manpower projections.

Several decades ago, when demographers were first applying the powerful techniques of their newly developing science to practical social issues, formal population forecasting began. The aim in those early efforts was to choose the most likely path for future population change, and to recognize limits to the accuracy with which the future could be foretold by providing higher and lower "outer limits" around the "best" forecast. There was confidence in the ability to forecast, and the emphasis was on the resulting numbers rather than on the process by which they were generated.

Population forecasts enter into a variety of aspects of social and economic policy-making. If the various components of national policy are to be consistent, it seems obvious that all agencies should adhere to the "best" national population forecast. For example, projections of new housing starts may be based in part on economic forecasts but also in part on forecasts of new household formation. The numbers of new households expected should be consistent with estimates of family formation, marriage rates, fertility, educational needs, the demand for day-care facilities, and the number of women who will be seeking work. Thus there is perceived to be a vital governmental interest in a standard population projection for the nation.

The need for a consistent set of projections of future population and manpower has not led to an appropriately high degree of consistency in the reproductive and work behavior of Americans. Every few years since World War II, the Bureau of the Census has made a new set of projections of birthrates, and every time they have done so, the actual birthrates in the next few years have risen far above or have fallen far below the assumptions. Labor force behavior, particularly the continuing rise in female labor force participation, has similarly failed to conform to projections even for three or four years into the future. Such unpredictability in human behavior calls into question the validity of any single projection, but paradoxically renders it all the more necessary to try to anticipate the future. Recent experience tells us to expect major change. To assume that the future will repeat the recent past is often the most fallible projection of all.

No matter how quixotic the quest, the search for better projections must be made. In the literature on organizational management and program administration, older and simpler models of rational forecasting and intervention have given way to more complex models of contingency planning for multiple alternative futures. No single projection, no matter how careful and sophisticated, can lay claim to much confidence that it portrays the future path. Policies need to be adjusted to changing circumstances, and so do projections. The activity of projection should be continuous and it should be focused on the delineation of multiple alternatives. The alternatives should represent varying perspectives on what is likely to happen and on what may happen as the result of various deliberate policy interventions.

The same conclusion about the need for continually assessing multiple alternative futures emerges from an analysis of the uses of any particular type of projections. Manpower projections, for example, resemble other projections in that they are informed guesses about the future. The typical basic projection is constructed by assuming that recent trends will continue into the future. If the projection reveals certain emerging problems, a policy process may be initiated. An effort will be made to alter one or more of the assumptions underlying the projection. If the policy intervention is successful, the original projection will not be realized. Deliberate "falsification" of projections is the very purpose of the enterprise. Projections are an early warning system that, by alerting us to dangers and consequences, help us foresee and, it is to be hoped, avoid or mitigate problems. Projections are a tool to assist policy makers to intervene in an effort to create a better future.

Innumerable governmental policies affect labor force behavior, and these policies form only part of the complex mixture of social and economic forces that influence manpower. Not all of these forces are known and understood, most are subject to rapid and often surprising change, and few can be projected with confidence into the future. No single manpower projection can serve the need for continuing assessment of whither we are headed. No single manpower projection can serve the need for careful assessment of the likely impact of the many alternative policies that might be adopted.

The policy analyst has an interest not only in a basic "continuation of current trends" projection, but in various special-purpose projections. To the policy analyst, a projection is not an unconditional forecast of what will happen, but an indicator of what may happen given certain conditions or assumptions. Projections may be designed to indicate the likely consequences of various contemplated actions, such as a revision in the Social Security retirement age. Projections may be designed to indicate the likely consequences of various possible future events or changes in trend, such as a marked increase in the birthrate. The analyst may be more interested in the process by which an alternative assumption affects the forecast than in the resulting numbers themselves.

The current national manpower projection effort does not include a closely articulated continuing research effort. The execution of a single manpower projection requires making a large number of assumptions about demographic trends—fertility, mortality, migration—and about labor force behavior. Each of these trends and behaviors is, in turn, dependent upon other assumptions. Trends in the labor force behavior of young women, for example, depend upon assumptions about birthrates, college attendance, marriage age, reproductive behavior outside of marriage, wage rates for those who do obtain jobs, and so forth. Demographic and manpower trends are intertwined with more general social and economic trends. The manpower projector cannot solve all the problems of social science in unraveling this complex web, but should have the auxiliary research resources to trace out the most important strands, to identify what is known and what is not known about the consistency among assumptions, and to ascertain the principal indirect effects of each assumed trend or condition.

The nation has been extraordinarily well served by its statistical agencies, and in this context I refer specifically to the Bureau of Labor Statistics and to the Bureau of the Census. Unfortunately the research and analysis needs and responsibilities of these agencies, both in-house and through extra-mural grants and contracts, have not yet been sufficiently recognized. If we are to develop a continuing capability to respond to continuing change, new attention and resources must be given to the process of which we assess the past, monitor the present, and project the future.

To illustrate the necessity for retaining openness and flexibility in the forecasting process, I shall comment on change in several demographic processes that vitally influence labor force problems and policies: fertility, mortality, international migration, and migration within the United States. For each of these topics, I shall limit my remarks to illustrations of the unpredictability of future trends.

In the long run, the age composition of the population is determined primarily by the successive annual birth rates. The force of mortality is relatively low and regular, until the old ages, and hence the number of people entering the population each year is the crucial fact. The crucial influence of age composition may be illustrated with a long-run example and a short-run example. The long-run viability of the social security system is currently much debated. As the baby boom cohorts reach retirement age, the ratio of aged to persons in the productive ages will increase sharply. How sharply depends to a great extent on what happens to the birth rate in the next two decades. If the birth rate moves up and stays up, the future old-age dependency burden, expressed as a ratio to active workers, will be far lower than if the birth rate remains low. A short-run example of the effect of the level of fertility could focus on the likely AFDC caseload in the coming decade, or on the influence of the birth rate on the female labor supply. Currently, mothers with very young children are only about half as likely to be in the labor force as are mothers with no pre-school children.

The coming trend in the birth rate is a hot topic of scientific debate, with the leading students of fertility presenting quite plausible rationales for quite divergent futures. Is last-year's small rise in birth rates the beginning of a new boom, or only a minor fluctuation around a persisting sub-replacement fertility pattern? Some economists foresee repeated large long-term cycles in birth rates. The explanations are complex, but may be simplified by noting that young persons growing up in the depression faced relative prosperity as young adults and proceeded to have lots of babies. By contrast, the baby-boom children found great competition for space in college and in the job market, were less able in early adult life to reproduce the prosperity of their own adolescence, and had small families. The leading scholar of this mode of interpretation sees economic and demographic cycles as again conducive to a rising birth rate. A sharp rise in fertility is also expected by some sociologists who perceive American values as basically favoring family, child-rearing, and the single-family home. They see the baby bust and the anti-natal rhetoric of recent years as a temporary aberration, and they discern pro-natalist forces still deeply

embedded in the organization of family, social, and economic life and in particular economic policies such as the tax system.

Other social scientists, cognizant of the historical decline in fertility throughout the industrial world, regard the size of the baby boom in the United States as the consequence of an unusual set of circumstances (depression, war, etc.) and they see contemporary society as placing high costs but providing a low rate of return on child-rearing. Low fertility is also expected by those who perceive that deep and lasting changes have been occurring in the roles of women and in the values of men and women regarding reproduction and family life.

I share the last two perspectives and believe that low fertility will continue. The official projectors at the Census Bureau throw up their hands and give us three choices—high, medium, or low fertility. Lest one take the medium projection as obviously the most conservative or reasonable choice, or even accept the high and low projections as reasonable outliers, note that the official projections published in 1949 understated the 1950 census count, and projections published in 1967 overstated the 1970 census count. Any projection involves assumptions about future behavior, and the confidence placed in the projection should be based on the confidence that can be placed in the assumptions. Our track record on fertility projections is very poor. One reason that this is likely to remain the case is that those who will be bearing children a decade from now are not currently able to provide us much basis, verbal or behavioral, for forecasting their behavior. My 15 year old son and 11 year old daughter will soon be entering the prime reproductive ages, and if you think you can predict their marital and reproductive behavior you have more confidence than I do in psychodynamic theory, mid-range economic forecasting, and the prognostication of social trends. Our projections must be based on general trends and prospects, not on a composite forecasting of the behavior of individuals, and like the meteorologists we confront an immensely complex field of forces and don't know how to make firm predictions.

In population projections, and hence in labor force and other economic projections, mortality is assumed to follow the same rather smooth course it has in the past, and hence to be of little interest. There is reason to question whether the trend of mortality will continue to be a smooth, slow, downward trend. Some years ago a demography wrote a book about the likely demographic consequences of an atomic attack on the United States. Although personal bomb-shelters have fallen out of favor, I hope that some degree of tentative planning for possible major disasters is still going on someplace within government. The nation has recently witnessed the threat of a new severe uncontrollable influenza epidemic and both our medical ability and our social-governmental ability to avoid disaster have been questioned by many experts. The rather minor outbreak of "Legionnaire" disease was another reminder that we have not yet conquered nature.

The possibility of a sharp improvement in mortality rates should also be noted. Certainly the many billions of dollars invested in medical research might bring some sort of longed-for but elusive "breakthrough." The conquest of cancer, for instance, would have a surprisingly small impact on average life expectancy, but it would have a large effect on the character and burden of other illnesses, on the health care industry, and on disability and retirement programs. A major reduction in cardiovascular mortality would call for a total reevaluation of retirement and social security policies.

The same failure to accept our inability to foresee the future is apparent with respect to international migration. With the recent drop in fertility, net immigration has come to represent a substantial portion of total national population growth. To assume that net immigration will continue indefinitely at 400,000 per year may be the best single guess, but it flies in the face of our knowledge of the 1975 influx of Vietnamese refugees and the likelihood of further changes in immigration laws and trends. Immigrants, whether from Vietnam, Cuba, Hungary, Jamaica, or the Philippines, pose special issues for manpower policy. Concentrating on the best single projection of the future tends to direct attention away from the fact that special issues are a recurring event.

The migration of persons across the border between the United States and Mexico has been of enormous concern to agricultural and urban manpower policy for generations. The sad fact about recent movement across this border is that no one knows its magnitude. Many knowledgeable persons believe that there are several million illegal aliens living and working in the United States. To date, neither Census Bureau projections nor the derivative BLS manpower projections take this into account. The effect on national aggregate data is sizable, while projections of the Mexican-American minority are at best exceedingly unreliable.

Internal migration within the United States was historically dominated by three long-enduring patterns—the westward movement, an interlocking pattern of redistribution from farms and small towns to metropolitan centers, and a suburban dispersal within metropolitan areas. Because young adults predominate in most large migration streams, the reproductive potential for future generations is transferred by a mass migration, and hence the origin and destination circumstances that gave rise to the migration are changed by the migration process itself. Hence all large-scale migration trends eventually come to an end. Previous panelists in this series of meetings have discussed the transformation of the regional migration flow from its historic westward pattern to the current sunbelt pattern. Other panelists have reported on the great nonmetropolitan turnaround, the subsidence of the centuries-long net migration from countryside to giant metropolis. I shall confine my remarks to the third of the historic trends, and the question of whether mass suburbanization has also run its course. Many commentators think so, citing the middle-class renaissance of areas such as Capitol Hill, the smaller families and changing lifestyles that are suited for high-density urban living, and the potential high costs of commuting expected as the energy crisis worsens. My examination of data up through the mid-1970's leads me to disagree. Small counter-trends are evident, but I think the dominant trend is continued mass suburbanization.

Central city population loss has spread from the largest cities to the next largest, and the general slowdown in metropolitan growth has not yet altered the net flow from cities to suburbs. Movement of workplaces to the suburbs continues, and the employment centers already in the suburbs are growing more rapidly than those in the cities. Suburban growth outpaces city growth even for such functions as have been thought to be particularly suited to central business districts: finance, business and professional services, and public administration. The black population, largely excluded from the new suburbia of the 20th century, has since 1970 shown a rapid upturn in suburbanization. This process bears close watching to see if there is any lessening of the highly segregated racial residential patterns that up to now have prevailed in suburbs as well as central cities, and to ascertain if the nation's large central cities are beginning to experience a "black flight" of comparable character to the better known "white flight." All of these indicators suggest that the momentum of suburban growth may yet be increasing. The urban and metropolitan crises will remain in the forefront of domestic policy issues for the foreseeable future.

Has the decentralization of employment opportunities had adverse effects on the economic well-being of central city workers, particularly the minority poor whose residential choice has been so tightly constrained? A review of evidence on the job/residence mismatch is supportive of the need for manpower policy analysts to consider these issues. Black men who live and work in the suburbs or who commute from city to suburbs have higher earnings than those who live and work in central cities. Central city residence does seem to hamper earnings. Black women and youth are probably more severely handicapped by the job/residence mismatch, for long-distance commuting especially impedes the flow of information about vacancies and limits the chances of obtaining and holding part-time or low-wage employment. Monitoring of trends in migration of persons and of jobs thus becomes essential to the formulation of civil rights aspects of manpower policy, whether that policy takes the form of targeting firms for equal employment compliance review, of lending Department of Labor support to residential desegregation efforts, of strengthening employment services, or of other actions.

My assigned task on this panel on employment prospects and problems was to talk about demography and the labor force. I have touched on many prospects and problems, but have dwelt mainly on the difficulties of assessing prospects and the dangers of formulating policy on the basis of any single "most likely" future. If the full value of projection as a method in applied (and basic) research is to be realized, added resources and proper organization are necessary. Greater fiscal and managerial commitment is essential if projections are to be used effectively in policy analysis, policy formulation, policy implementation, and policy evaluation.

But I cannot end on this methodological note, and the underlying tone of the weaknesses of the social sciences. I should like to share with you one of the most remarkable graphs that I have encountered, one that describes a startling process of change in one of the central manpower issues of our generation—womanpower. At the back of my paper is a figure drawn up by one of my Wisconsin demographic colleagues, James Sweet, portraying age patterns of employment for birth cohorts of women. The vertical axis shows the percent of women in the labor force at the age specified on the horizontal axis. The elementary demographic trick that gives this graph its power is to allow the lines on the graph to represent the experience of

birth cohorts—women born during the specified years—as they progressed through the life cycle.

The age profile of labor force participation rates for women born in 1886-90 is flat. At all ages, only a small minority of this cohort sought employment outside the home. Taking this cohort as a reference point, we see among subsequent cohorts two separate patterns of change, each of which has been remarkably persistent for more than half a century. One pattern is for each successive cohort of women to begin their working ages with greater participation rates. The cohort of 1946-50 demonstrates a particularly sharp rise above previous employment levels, and this cohort also delayed marriage and sharply reduced childbearing. The early evidence indicates that the 1950-54 cohort is also participating in the labor force at extraordinarily high rates.

The type of change noted, in which each successive cohort begins a process with higher rates than the preceding cohort, may be called generational change. A second type of change is portrayed by the changing shape of the age-curve for successive cohorts. This may be designated life-cycle or career change. For labor force participation, career change is evident in the rising slope of the lines up to about age 40. The dropoff in employment during the child-bearing years has diminished in degree and length for each successive cohort.

The career pattern of employment for the oldest cohorts in the figure conform to a traditional American family pattern. Before marriage and childbearing, a moderate proportion of women worked, but along with family responsibilities came permanent departure from the labor force for the vast majority of women. After children entered school, even after they grew up and left home, women stayed out of the labor market unless confronted with dire necessity.

It is this traditional career pattern that has shifted with each succeeding cohort since the turn of the century. The drop-off in labor force participation as women move through the early stages of family formation and care for preschool children gradually diminished, so that for recent cohorts labor force participation at ages 30-34 is nearly as great as at ages 20-24. As women move into the later stages of family maturation, in which all of the children are in school and the oldest are leaving home, participation rates rise from their minimum levels, and the amount of that rise has been increasing.

The continuation of both generational and career changes in labor force participation rates among so many successive cohorts defies any simple interpretation. The employment opportunities created by the economic boom of World War II and the shortage of male civilian workers may have accelerated these changes, but the changes were evident before the war, in times of depression and in times of economic boom. The changes in participation rates persisted throughout periods of great fluctuation in familism—as indexed by marriage and fertility rates. The changes continued despite the steady decline throughout this period in the employment of women in the old "women's work" of domestic service and caring for other women's children.

I shall not reverse myself at this stage and suggest that the trends portrayed in Figure 1 are immutable. I do wish to emphasize that there are massive, persistent social trends, of enormous consequence to employment prospects and problems, that seem responsive to deep underlying forces rather than to short-term fluctuations in economic circumstances or political rhetoric. Concentration on these major trends is perhaps a partial solution to the policy-maker's predicament that the future is unknowable.

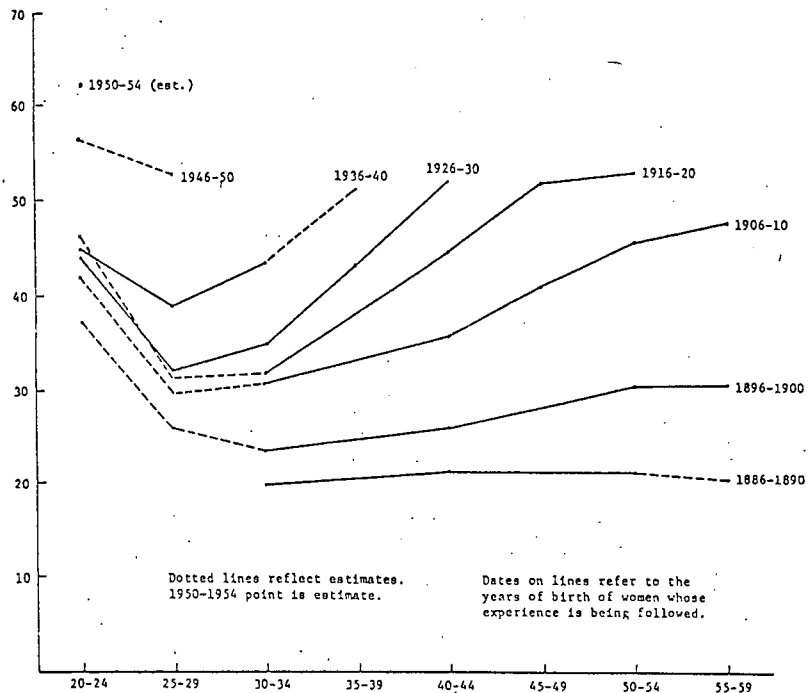


FIGURE 1. -- AGE PATTERNS OF EMPLOYMENT FOR BIRTH COHORTS OF WOMEN.

Source: Sweet, J. A. (1973) Women in the Labor Force. New York: Seminar Press, p. 58-60 AND U.S. Bureau of Labor Statistics, Special Labor Force Report #164, "Marital and Family Characteristics of the Labor Force, March 1973."



Representative BOLLING. Thank you very much.

Our next witness is Mr. Arnold Packer, Assistant Secretary of Labor for Policy, Evaluation, and Research. He was the chief economist for the Senate Budget Committee, senior economist for the Committee on Economic Development, and economist for OMB. His Ph. D. is from the University of North Carolina.

We are glad to hear from you.

**STATEMENT OF HON. ARNOLD PACKER, ASSISTANT SECRETARY FOR POLICY, EVALUATION, AND RESEARCH, DEPARTMENT OF LABOR**

Mr. PACKER. Thank you. I will attempt to also keep within your 10-minute rule.

As you know, when this administration took office last year, the unemployment rate was close to 7½ percent. That unacceptable unemployment rate was attacked with a number of policies, many of which are mentioned in the Humphrey-Hawkins bill. They included appropriate fiscal policy actions, a tax reduction, as well as labor policies, doubling the size of the public service employment programs being the most important of those.

The policies worked as they were anticipated to and the unemployment rate dropped by 1.3 percent to the place where it is now at 6.1 percent of the labor force.

In some sense, the policies worked somewhat better than we anticipated because the labor force grew more rapidly than we had expected. While the number of unemployed declined by somewhere around 900,000 people, over 4½ million persons entered the labor force. Thus, from January of last year until the most recent month we had an increase in the number of employed of 5½ million persons. But the most mysterious aspect in the employment picture has been the drop in productivity which has accompanied it. And at this moment it is unknown why employment has grown so rapidly and productivity has fallen so far short of what we have had before.

But even with this rapid growth in employment the situation is unclear for demographic groups.

It is an old story. The unemployment rate for nonwhites has remained over 12 percent while the white rate dropped from 6.7 to 5.2 percent and the teenage rate stayed high, especially for nonwhite teenagers, which is still very close to the 40 percent figure that we started with.

A part of that is not as discouraging as it might seem because employment has grown very rapidly. The employment of nonwhite teenagers has grown by 18 percent in the last 12 months. What we have had is a reversing of a trend in which nonwhite participation rates in the labor force has been dropping. They have now jumped back up, and a rapid growth in job opportunities has brought about an equal growth in young minority persons looking for jobs.

The problem grows and the solution grows along with it. If we are going to reach the goal of the Humphrey-Hawkins legislation of getting unemployment down without reaccelerating inflation, we have to solve the problem that is so difficult to solve, of reconciling those two objectives.

Currently, one sees that in the macrosense, with the unemployment rate at 6 percent, inflation seems to be accelerating, surely in the food sector, perhaps elsewhere, too. We saw it in a microsense, in a policy sense of designing welfare reform where one tries to assure jobs for everyone.

It is easy to do but not easy in figuring out the wage rate. Then it becomes much more cyclical. We have come to a solution that balances those two in that area.

But in the macro area we still are very far from being able to reconcile the two goals. We think manpower policies can affect the reconciliation by training, providing more skills, by coordination to make sure job opportunities are filled more rapidly, by public service employment targeted very specifically on those who cannot find jobs otherwise, by youth programs that help to facilitate the transition from school by better labor market information, and by enforcement of antidiscrimination legislation. This leaves a very important and as yet unsolved problem, that of limiting the entry of undocumented workers. We will not be able to solve the unemployment problem if literally millions of persons come in from outside attracted by our higher wages and better working conditions.

Table 1 in my prepared statement is an indication of how this 6.1 percent unemployment rate broke down among demographic groups in 1978. You see a 12.3-percent rate for blacks and others compared to 5.2 percent for whites, which is completely unacceptable. You see the higher rates for young people which may never be completely eliminated. The rate for women of either race is higher than the corresponding male rate.

If we are going to reach the 4 percent goal, those differentials will have to be eliminated, or at least moderated, by micro policy which will drive the overall rate down somewhat, too. That is the only way we are going to avoid the bottlenecks which otherwise would show up. Hopefully, they will not show up at 6 percent, but they will undoubtedly show up when you get to 5 percent unemployment.

Table 2 in my prepared statement is an indication of what the current structure would give us if by 1983 macro policies could get us down to 4.8 percent. This is as low, we think, as you can go without creating inflation if you do not have—and I want to emphasize that—do not have successful structural policies that moderate the differences between race, sex, and age.

If you do not have those policies and you get down to 4.8 percent for the total, 16 years and over, the rate for blacks and others would be 9.2 percent. So the remaining structural policies necessary to get the 4.8 down to 4 must concentrate on other than white males.

Let me just mention what could be achieved that way. That 1983 ratio shows that black unemployment is two and two-tenths times the white unemployment rate. That is the ratio of 9.2 to 4.8. If you could reduce that to 1.5, that is the ratio of blacks to whites, from 2.2 to 1.5, you could knock 0.4 out of the unemployment. If it is 4.8, it would fall to 4.4. If we could halve the differential between those 16 to 24 and those over 24, you could knock out 0.6 of a percent.

Some of this is overlapping, but not very much. If the female unemployment rate could be reduced from a ratio of 1.3 times the male rate to a ratio of 1.15, the overall unemployment rate would fall by a quarter of a percentage point. If you do that with structural policies, it would not be inflationary.

Let me just close by referring to a statistical problem that we have and that is pervasive in some ways. And that is the tendency to use these demographic, simple demographic classifications. People, of course, are not statistics and there are blacks that have no problems getting jobs and there are whites who have substantial problems getting jobs. Some people forget that all of our problems are not just one group of people who have a severe structural problem.

I think it is politically impossible, but I find it socially unacceptable to ignore the problem because they happen to be in a certain group. For example, if we lowered the unemployment rate for adult white males, if we got it down to an unemployment rate of 3.1 percent without the structural problems, that still includes some groups that have trouble.

For example, white adult males over 20 with less than high school education had an unemployment rate two times that for those with a high school degree or better. Last March, 11 million workers were in that group, and 825,000 of them were unemployed. So there are substantial pockets of people with structural problems who fall into the white male category.

In sum, with macro policies pushing the unemployment rate as low as is consistent with nonaccelerating inflation, with programs to stem the entry of undocumented workers, and with structural policies already announced by the administration, we believe that we can make the Humphrey-Hawkins goal of 4 percent in 1983. That will require that we are more successful with macro policies than we have in the past. We will have to be much more successful with antidiscrimination and with labor policies and structural policies than we ever have been in the past.

Thank you.

[The prepared statement of Mr. Packer follows:]

#### PREPARED STATEMENT OF HON. ARNOLD PACKER

Mr. Chairman and members of the committee, I am happy to be here today to discuss the path to full employment in the years ahead. Before I discuss the gains in employment which we hope to achieve in the next five years, I think it is important to look briefly at how far we have already come in the last 17 months. When this Administration took office last year, we were immediately faced with a 7.4% unemployment rate. This level was totally unacceptable to both the Administration and the Congress. Both the Congress and the Administration were cognizant of the enormous economic and social costs associated with unemployment rates of such magnitude. Working together, we took appropriate fiscal policy actions, such as the tax cut, the doubling of the size of the public service employment program under the Comprehensive Employment and Training Act, the expansion of the emergency local public works program, the enlargement of countercyclical revenue sharing, and the adoption of the employment tax credit.

It is largely due to such stimulative policies that we have succeeded in reducing the national unemployment rate by more than 1.3 percentage points from 7.4 percent in January of 1977 to 6.1 percent in May of this year. During this time, not only has the total number of unemployed persons decreased by 917,000, but the labor force has absorbed an additional 4 ½ million persons. The net effect of these two factors is that about 5.5 million more persons are employed today than in

January of last year. This is the largest peacetime increase in total employment since we began recording employment statistics in 1940.

While our overall performance record has been remarkable, there are segments of our society who have not shared equally in this recovery and who have historically suffered disproportionately during cyclical swings. During the past year, the unemployment rate for nonwhites has remained about the same at 12.3 percent, while the rate for whites dropped from 6.7 percent to 5.2 percent. Teenagers of all races are experiencing unemployment rates of 16.5 percent, with the nonwhite teenage rate at a totally unacceptable level of 38.4 percent. Unemployment is particularly high in central cities and remote rural communities. For these localities, lack of adequate job opportunities has a permanent, structural character which persists in both good times and bad.

During the coming years, it will be essential that the Congress, the Administration, and the Federal Reserve pursue moderate fiscal and monetary policies so that we can further reduce the overall unemployment rate towards our full employment goal without stimulating undue inflation.

It is clear, however, that macroeconomic policies, by themselves, are not sufficiently precise to solve specific structural labor market problems without causing unacceptable inflationary side effects.

Selective labor market policies, on the other hand, are more flexible and can be used to achieve dual goals. They make possible the targeting of resources on those groups with the most serious labor market problems and can help to alleviate inflationary pressures on the way to full employment. They can address specific barriers to the matching of workers and jobs which are relatively unaffected by changes in the level of economic activity such as lack of training and inadequate job market information. Selective measures are also more cost-effective than macroeconomic policies in solving structural problems; they provide an opportunity for lowering the unemployment rate by helping to match workers with existing job opportunities. When special job creation policies are needed during recessionary periods, there is evidence—according to the Congressional Budget Office—that countercyclical public service employment programs have a relatively greater employment impact, at a given level of expenditures, than tax cuts, Government purchases or other fiscal measures.

During a time of increasing risk of accelerating inflation, targeted employment and training programs can also play an important role. First, since PSE jobs targeted to the structurally unemployed do not attract workers with skills likely to be in short supply, it is less inflationary to expand PSE employment than to induce equivalent expansion in private employment by increasing aggregate demand through a tax cut or other form of macro stimulus. Second, successful training programs increase the pool of skilled workers from which firms may draw, and thus can help to eliminate labor market bottlenecks and inflationary wage pressure in the private sector.

The Administration's economic stimulus program adopted in the spring of 1977 emphasized both fiscal policy and structural labor market measures in order to achieve strong economic growth. As the Administration continues to move forward in implementing its overall full employment policy, the burden of stimulating the economy must shift increasingly to structural labor market programs. At present, there is no evidence that excess demand is generating an acceleration in the rate of inflation. However, sharp increases in the cost of beef, and other exogenous price increases have contributed, at least temporarily, to an increase in the rate of inflation. Such increases can have a ripple effect as they move through the economy. In the next several years, it will be important that demand management policies move moderately to prevent a repeat of the boom/bust scenario we experienced from 1973 through 1975.

The Humphrey-Hawkins bill has as its stated goal the attainment of an unemployment rate of 4 percent by 1983. We still feel that appropriate macroeconomic policies, (including countercyclical PSE) can bring unemployment down to 4% percent without having any serious inflationary consequences. Reductions in the unemployment rate below 4% percent, however, must rely on targeted structural employment policies.

These targeted structural employment policies include the following:

*Training.*—To lift workers from unskilled low wage markets, where employment opportunities are limited, into the mainstream of the work force in order to alleviate shortages that might otherwise arise.

*Improved coordination with private firms.*—To encourage them to hire hard-to-employ workers and to provide them with on-the-job training.

*Public service employment.*—To provide job experience for those who have not been able to obtain an unsubsidized job in the past.

*Youth programs.*—To help youth make the transition from school into productive employment.

*Labor market information.*—To better enable workers to find the best possible job and to reduce the time workers spend between jobs.

*Anti-discrimination enforcement.*—To break down artificial barriers that can create artificial excesses and shortages.

*Limiting entry of undocumented workers.*—To tighten unskilled labor markets. These general policies must be aimed at improving the employability of a variety of specific groups that appear to have difficulty in finding work. The Labor Department will continue to propose changes in targeting programs to enable us to better reach those groups.

The challenge for these structural approaches can be seen from the existing pattern of unemployment. In May, when the overall unemployment rate was 6.1 percent, the rate for adult white males was 3.6 percent. The nonwhite unemployment rate was 137% larger than the white rate. The unemployment rate for adult females was 1.8 times the rate for white males. The rate for teenagers was more than 2.7 times the adult rate. Table 1 shows the underlying unemployment data for May 1978.

TABLE 1.—UNEMPLOYMENT RATES FOR VARIOUS DEMOGRAPHIC GROUPS<sup>1</sup>

	May 1978	
	Rate	Number
Total, 16 years and over.....	6.1	6,149,000
White.....	5.2	4,619,000
Men, 20 years and over.....	3.6	1,728,000
Women, 20 years and over.....	5.4	1,720,000
Both sexes, 16 to 19 years.....	13.8	1,171,000
Black and Other.....	12.3	1,467,000
Men, 20 years and over.....	8.8	505,000
Women, 20 years and over.....	10.9	558,000
Both sexes, 16 to 19 years.....	38.4	404,000

<sup>1</sup> Table 1 is taken from the Bureau of Labor Statistics May 1978 release on the unemployment situation.

The high differential between the unemployment rates of black and white teenagers continues to be most disturbing. Demographic trends have been a significant cause of continuing high rates of black teenage unemployment. For a number of years, the black teenage population has been rising much more rapidly than the white teenage population. In the 10 year period 1967-77, the white teenage population increased by 20 percent, while the black teenage population grew twice as fast. For this reason alone, one would expect that it would be very difficult to reduce the differential between the black and white rates for teenagers. There are also, of course, several other factors, including a drop in the kinds of low skilled jobs for which most teenagers are qualified, and shifts in population and commerce centers, which have contributed to high unemployment rates for black youth.

Unless structural policies are adopted, these differentials will create serious bottlenecks in the attempt to reach 4 percent unemployment in 1983. As I stated previously, we have estimated that an overall unemployment rate of about 4% percent will be attainable without accelerating inflation in 1983, if the structure of the labor market remains unchanged. Table 2 shows what the pattern of unemployment would be in 1983, at the overall rate of 4% percent, if there are no structural policies. The black unemployment rate would still be 2.2 times the white rate; the female unemployment rate would still be 1.4 times the male rate, and the teenage unemployment rate would still be 2.9 times than the adult rate.

These wide differentials in employment experience are unacceptable, as is the overall unemployment rate of 4% percent reported in that table. If the differentials can be reduced, the overall unemployment rate can be reduced further without adding to inflationary pressures. As I stated earlier, this is because structural policies can increase the supply of skilled workers thereby minimizing bottlenecks that could otherwise arise.

TABLE 2.—HYPOTHETICAL UNEMPLOYMENT RATES FOR VARIOUS DEMOGRAPHIC GROUPS IN 1983

[Assuming an overall unemployment rate of 4¾ percent and no change in the historical structure of the labor market]<sup>1</sup>

	1977	1977
Total, 16 years and over.....	7.0	4.8
White.....	6.2	4.2
Men, 20 years and over.....	4.6	3.1
Women, 20 years and over.....	6.2	4.2
Both sexes, 16 to 19 years.....	15.4	11.0
Black and Other.....	13.1	9.2
Men, 20 years and over.....	10.1	7.2
Women, 20 years and over.....	11.7	9.4
Both sexes, 16 to 19 years.....	38.3	22.1

<sup>1</sup> Table 2 gives the simulated distribution of unemployment rates by demographic group if macroeconomic policy succeeds in reducing the overall unemployment rates to 4¾ pct. The simulation procedure uses the average relation over the business cycle from 1954 to 1977 between the unemployment rates for various demographic groups and (1) the unemployment rates for males between 25 and 55 and (2) the fraction of the population 16 and over which is between 16 and 19. This is the same procedure followed by Michael Wachter in "The Changing Cyclical Responsiveness of Wage Inflation," Brookings Papers on Economic Activity, 1976:1, p. 115-167.

A few examples can indicate the potential gain to be achieved by reducing unemployment through targeted programs.

If, by structural programs, we are able to reduce the 1983 ratio between the black and white unemployment rates from 2.2 to 1.5, the overall unemployment rate would fall by 0.4 of a percentage point.

If we develop programs which halve the differential between the unemployment rate of those aged 16-24 and the unemployment rate for those over 24, the overall unemployment rate would fall by 0.6 of a percentage point.

If the adult female unemployment rate could be reduced from a ratio of 1.3 times the male rate to a ratio of 1.15, the overall unemployment rate would fall by a quarter of a percentage point.

These illustrations in no sense limit what may be attempted. The unemployment rate for adult white males is projected to be 3.1 percent in 1983 in the absence of any structural programs. While this number is low in comparison to the rates we have seen recently, even this number hides large pockets of disadvantaged, hard-to-employ workers as well as some easily employable workers who are between jobs. In particular, this number includes many who are handicapped, who have little education, who live in isolated locations or who have medical or emotional problems.

Last March, for example, the unemployment rate for white adult males (20 and over) with less than a high school education was two times that for those with 12 or more years of schooling. This group included 11 million workers, 825,000 of whom were unemployed. Thus, even the white adult male unemployment rate can be reduced substantially by targeted programs.

By establishing carefully tailored and targeted employment and training programs and by coordinating these structural policies with fiscal and monetary policies, I believe we will be able to achieve 4% unemployment in 1983. However, if we are to meet this goal, the performance level of our structural programs must be enhanced, anti-discrimination programs must be tightened, and the illegal flow of easily exploitable low wage workers from abroad must be reduced.

Beyond 1983 we will face many new and different challenges to the formulation of employment policies. The composition of the population will be in the midst of change, as those born during the post-war baby boom reach middle age. The proportion of young people will be lower, while the proportion of middle aged and older persons in the population will be higher. We anticipate further shifts in participation rates, and some decline in the rate of increase in participation for women as their participation rates approach those of men. Changes in the structure and concept of the family will also affect the nature of labor force participation and thus, employment policies. It also seems reasonable to expect changes in the nature of work itself—more job-sharing, flexitime, sabbaticals, educational leave, and other forms of work flexibility. As these changes take place we will have to adjust and develop innovative new policies to help us achieve and maintain low unemployment rates in the post-1983 years.

Representative BOLLING. Thank you.

Our next witness is Mr. Bernard E. Anderson, associate professor of industry at the Wharton School, University of Pennsylvania. He has conducted research and written widely on labor market issues

including youth unemployment and the economic status of minorities. He currently serves as chairman of the National Council on Employment Policies.

**STATEMENT OF BERNARD E. ANDERSON, ASSOCIATE PROFESSOR, INDUSTRIAL RESEARCH UNIT, THE WHARTON SCHOOL, UNIVERSITY OF PENNSYLVANIA**

Mr. ANDERSON. Thank you very much. I am delighted and honored to have an opportunity to come today and discuss with you the employment problems of youth in the coming decade. I must say that when I heard from Mr. Kassalow, and he told me what you wanted us to discuss today, it made me feel somewhat like a mosquito in a nudist camp. There was so much there I hardly knew where to begin.

It seems to me youth unemployment is one of the major issues on the Nation's social policy agenda. It seems that not a week passes when there is not a major conference, seminar, workshop, symposium, or seance on the issue. These meetings are dutifully attended by the best experts in the field, and their deliberations are regularly reported in the Nation's leading newspapers and magazines. Like the first viral infection of the spring season, youth unemployment simply will not go away.

I find one of the more interesting aspects of the problem is that it was not foreseen by labor market analysts prior to the 1960's. Despite the changes in the demographic characteristics of the work force, and the obvious increase in the birth rates, during the 1950's, most labor economists did not take cognizance of the youth employment problem until the 1960's, the period during which it was most serious.

In my comments I would like to assess the labor market experiences of youth during the next decade, which will, in my view, affect unemployment in the decade ahead.

I think that when one looks at youth unemployment today there are perhaps five factors that one can identify which account for the high youth unemployment rate.

The first is, I think—and these are not presented necessarily in their order of importance—but the first is that many young people, especially teenagers, are in school and looking for part-time jobs. Because of insufficient numbers of part-time jobs, young people are in and out of the labor force quite frequently, and that is what the labor economist would call frictional unemployment, which is significantly higher for youth than for others. Some have identified the minimum wage as a major factor generating youth unemployment, and while the evidence is not entirely conclusive, nonetheless I think one may conclude that higher minimum wages do, to some degree, contribute to youth unemployment.

I think another factor is the insufficient growth of the economy and the relatively high rate of unemployment during the past several decades. The fact is that we have not had full employment in more years than we have had full employment. The high rate of unemployment among adults during slack labor markets certainly has an affect on the job opportunities of youth. Some observers, like Dan Yankelovich, have identified changing attitudes toward work on the part of young people which would seem to make them less interested in accepting some of the jobs that might be availa-

ble and somewhat less aggressive with respect to the search for jobs, having somewhat less seriousness of purpose in the labor market, rejecting many undesirable and unchallenging jobs.

I think though that one of the major factors that accounts for high youth unemployment that we have seen is the sheer numbers of young people who have come into the labor market over the last 10 years. Between 1960 and 1970 the number of white youth aged 16 to 24 increased by 6.3 million, 56.2 percent. The number of blacks of similar age increased by 59 percent. That is a very significant increase in numbers.

The rate of labor force expansion among youth was two and one-half times that for the work force at large. That increase in the number of youth also occurred at a time when there was a significant increase in the labor force participation of women. I think that those two groups have been in very serious competition for available jobs and the evidence would seem to suggest that young people were at a competitive disadvantage. This helps explain their high unemployment rate.

I think without doubt the most disadvantaged group in the labor market has been black youth. Let me remind you that the black youth unemployment rate has been above 25 percent for each of the past 20 years. At no time during that period was the unemployment rate among white youth higher than about 13 percent.

So we very clearly have a situation where black youth have sustained very high rates of unemployment for a long period of time. In addition to that high rate of unemployment and not unrelated to it, is the fact that a large group of them have simply withdrawn from the market, so the 38 percent reported rate of unemployment understates the full extent of joblessness within this group.

I would put the real number about 55 percent, if you consider all of those who, in fact, might be counted as looking for work. What are the reasons for that? It seems to me there are several. Certainly general economic conditions contribute to the black youth unemployment problem. I think a structural imbalance in the labor market plays a significant role. Another major factor, in my view, is the fact that a disproportionate number of black youths are concentrated in low income sections of urban areas where the job opportunities have declined steadily in the past several decades.

What this means, I think, is that the black youth unemployment problem is very closely tied up with the urban crisis and the solution to one will depend very heavily on the efforts to deal with the other. But I don't think that location offers a full explanation for black youth unemployment, because if you look at the black youth in suburban areas where it is said that a much larger pool of jobs exist, you find very high rates of unemployment in those communities among black youth as in the cities. It is not quite as high but the difference in the two unemployment rates, depending on location, is not nearly what one would expect if location was the primary factor. And this leads me to the conclusion that perhaps discrimination is also a factor that should to be taken into consideration.

When we look toward the decade ahead, what do we see and what can we expect? I think the major news is that the youth



group in the 1980's is expected to decline in number. From 1975 through 1990 there is an expected reduction of 1 million persons aged 16 to 24, which will reduce the share of the labor force below aged 24 by 6 percentage points. The absolute and relative decline in the number of young workers is likely to have economic consequences affecting job opportunities, wages, and other conditions of the labor market.

One expected result is a downward drift in youth unemployment rates stemming in large part from the smaller number seeking work. But the demographic change alone will not solve the problem of youth employment. Equally important, demographic changes may not contribute much to the amelioration of black youth unemployment.

I call your attention to the numbers in table 1, of my prepared statement, which compare the expected labor force growth for young people 16 to 24 from 1970 to 1985, and looking at the blacks and whites by sex within those categories. There you see a very sharp divergence in the rate of growth, in the number of youths in those groups showing that there is very little expectation that the number of youth in the black labor force will moderate anywhere near the degree that can be expected among whites.

So what we will have is continuing, highly significant increases in the number of black youth through 1985 and I think that will have an important impact on their unemployment rates.

I would also point to the fact that there is very little expectation that those young people will be located in places different from where they are today. I don't expect any massive exodus of blacks into the suburbs or other communities. They will be in the cities. They will be heavily concentrated in the depressed areas, and to the extent that those areas have the same depressed condition of today, I see no reason to expect that the changes in the numbers will have any salutary effect on reducing black youth unemployment.

I think the problem that exists today and will continue to exist and will call for a continuation, a persistent kind of targeted effort, which Mr. Packer mentioned a moment ago and which I also subscribe to in this paper.

There is another implication of this which I think should be called to the attention of those interested in what we can expect. Bear in mind that we have now coming into the young adult years a large number of black youth who were unemployed during their teenage years. What I think will happen is that a large number of those who are part of what we call that generation which had no work experience are going to have serious difficulties as young adults.

We may have speculated about this before without any evidence, but now I am pleased to report to you that we have some evidence. The national longitudinal study conducted by Herbert Parnes and his associates at Ohio State University began interviewing youth at the age of 14 about 7 years ago and every year has looked at the same cohort of individuals.

What they find is very interesting. I will only briefly summarize. They find that those young people who during their teenage years had some work experience, some involvement in the labor market,

even in jobs we would call undesirable jobs, in their young adult years had higher earnings, more employment stability, more upgrading and progress measured by the traditional labor market indexes than was true of those that had no experience. While that evidence is not as rich as many would like, I think it does suggest that there will be some difficulties among a number of minority youth who are now reaching the young adult years and will continue to reach the young adult years who when they were teenagers had absolutely no attachment to the labor market.

I am emphasizing this because the argument is often made that if we sit back and wait for youth to age, this will solve the problem. I think nothing can be further from the truth. Certainly this is not likely to be the case with reference to minority youth in the labor market.

Let me point to one other issue. One of the policy implications of what I have suggested here is that the changing composition of the work force and the expected competition among youth and women suggests that we must achieve and maintain full employment in order to insure the availability of ample job opportunities for those wanting to participate in the labor market.

Some labor market experts have expressed strong reservations about the prospects for creating enough jobs and of fully absorbing even the smaller number of youth, because of an expected surge in labor supply as the economy approaches full employment. For example, in a recent article in "Scientific American," Professor Eli Ginzberg suggested that perhaps 24 million additional persons would take full-time jobs in a full-employment economy. Other analysts have placed the number as high as 27 million. I think those estimates grossly overstate the extent to which the labor force is likely to expand as full employment is approached.

One of the methodological problems of such estimates is that they look at the labor force as stock rather than as a flow, for as many people—perhaps not as many but certainly individuals both come in and others withdraw from the labor market. We really do not have enough data on the dynamics of the labor force to know that all of the discouraged workers who say they want jobs will in fact seek jobs as we move toward full employment.

I think the labor supply expansion will be manageable and we will not have the kind of difficulties achieving full employment that would be suggested by the gross number of overhang on the labor market.

Second, I think that the demographic changes do not suggest that remedial employment and training programs will be less necessary in the years immediately ahead than they are at the present time. If anything, they suggest such programs will be more necessary. I think we will need continued Federal support of measures to ease the transition from school to work, to provide skills and training for the disadvantaged, and to improve the functioning of labor markets through better information, counseling, and career development. I think that these programs will have to be more heavily targeted on the areas and persons in greatest need, including the minorities, the youth unemployed.

I think also that the type of programs that are likely to be necessary as we move into the years ahead will be the skilled

training, on-the-job training type of programs rather than public-service employment. I would think that these numbers suggest that as we move forward toward a changing demographic mix, as we attempt to expand the opportunities for youth employment, especially minority youth employment, that the type of programs we will need are those that are heavily oriented toward the investment in human capital.

So I think it would be desirable as we move ahead, assuming we move toward full employment, to shift the composition of these programs from the public-service employment type of program to the skilled training and an investment in human capital types of programs.

Thank you very much.

[The prepared statement of Mr. Anderson follows:]

PREPARED STATEMENT OF BERNARD E. ANDERSON

*Issues on Youth Employment in the Decade Ahead*

Youth unemployment is one of the major issues on the nation's social policy agenda. It seems that not a week passes when there is not a major conference, seminar, workshop, symposium, or seance on the issue. These meetings are dutifully attended by the best experts in the field, and their deliberations are regularly reported in the nation's leading newspapers and magazines. Like the first viral infection of the Spring season, youth unemployment simply will not go away.

Among the more interesting aspects of the problem is that it was not foreseen by labor market analysts prior to the 1960s. Despite the wide knowledge of the post World War II baby-boom, little thought and planning were devoted to the labor market effects that might have been anticipated, and which the nation has been struggling with for a decade. Even when attempts were made to project the change in youth labor force participation, the estimates were often wide of the mark actually achieved in later years. This experience is enough to make any reasonable person cautious about the value of labor force projections, but the rational response is to improve the quality of the projection rather than despair of the future.

In the following comments, an attempt will be made to assess the likely changes in the labor market experiences of youth during the next decade. The approach taken here is to identify the major changes that occurred during the past decade, and to sketch some of the likely changes in the demographic, economic, and institutional environment that, at this time, seem most likely to influence youth opportunities in the years ahead.

Some of the likely changes can be expressed with a sense of confidence born of the recognition that they are merely a continuation of present trends. Other changes will be more difficult to project, and can be advanced only as speculation.

A special emphasis of this paper will be the potential status of black youth in the decade ahead. On this score, no matter what the level of confidence in the projections of change, there will be important policy implications if a continuing goal of American society is the attainment of economic equality.

*Composition of the labor force*

Of the 96 million persons in the labor force in 1976, almost one-fourth were between 16 and 24 years of age. Among the 22.9 million youth in the labor force, 19.5 million were employed, and 3.4 million, or 14.7 percent, were unemployed.

In recent years, American youth have experienced relatively high levels of unemployment, and many labor market analysts have suggested varying explanations for youth joblessness. Certainly increased schooling is an contributing factor, with many teenagers seeking part-time jobs to earn the income necessary to enjoy a modicum of pleasure in a highly affluent, but inflation-prone society. Some economists have suggested that minimum wage regulations, occupational licensing, and other labor market constraints have contributed significantly to youth employment problems. Still other observers have identified persistent slack in the economy as a factor which exacerbates the job problems of youth. Although these and other factors undoubtedly play a role in determining the rate of youth unemployment, a major factor must surely be the sheer numbers of youth who entered the job market during the past decade.

Between 1960 and 1970, for example, the number of white youth aged 16 to 24 increased by 6.3 million, or 56.2 percent, while the number of blacks of similar age increased by 880,000, or 59.4 percent. The rate of labor force expansion among youth was about two and one-half times that for the workforce at large. Moreover, the large influx of youth into the labor market occurred at the time women were increasing dramatically their labor force participation. Indeed, over three-fifths of the growth in the total work force from 1947 to 1976 was the result of the increased female participation in the labor force. Thus, youth and women represented competing sources of labor supply during the past decade, and the statistical evidence suggests that youth were at a decided disadvantage.

#### *Special problems of black youth.*

Perhaps the most disadvantaged group was black youth. During each of the past twenty years, the unemployment rate among black teenagers has exceeded 25 percent, while that among whites of similar age never rose above 15 percent. Further, an increasing number of black youth, especially young black men, have dropped out of the labor force. As a result, the measured rate of unemployment among black youth—percent in May—understates the full extent of joblessness within this group.

The unfavorable position of black youth is explained in part by general economic conditions, especially the failure of labor demand to expand sufficiently to drive down significantly the unemployment rates of black adults. But structural imbalances in labor markets also contribute to the employment problems of black youth. A disproportionate number of black youth are concentrated in low-income sections of urban areas where job opportunities have declined markedly in the past several decades. Such areas also display neighborhood deterioration reflecting high crime rates, poor social services, and inadequate public schools. The plight of the inner city is reflected in the demise of many small businesses and other commercial establishments which in the past comprised a major source of jobs for youth, including part-time jobs for youth attending school. Black youth unemployment is tied closely to the urban crisis, and a solution to one depends upon efforts to deal with the other.

But location is not the full explanation for black youth unemployment. The evidence shows that young blacks in suburban communities where jobs are more plentiful than in the inner city, experience unemployment almost to the same extent as their city brethren. It is difficult to escape the conclusion that in addition to all other factors, racial discrimination continues to play a major role in limiting the labor market options available to black youth.

#### LOOKING TOWARD THE DECADE AHEAD

A review of the factors discussed above can be helpful in tracing the outline of forces likely to affect youth in the labor market of the 1980s.

#### *Demographic change*

Perhaps the major news concerning youth in the 1980s is the expected decline in their numbers. From 1975 through 1990, there is an expected reduction of 1 million persons aged 16 to 24, which will reduce the share of the labor force below age 24 by 6 percentage points. The absolute and relative decline in the number of young workers is likely to have important economic consequences affecting job opportunities, wages, and other conditions of the labor market. One expected result is a downward drift in youth unemployment rates stemming in large part from the smaller work.

But the demographic change alone will not solve the problem of youth unemployment. Equally important, demographic changes may not contribute much to the amelioration of black youth unemployment.

For example, the projected changes in the size of the youth population, according to the U.S. Bureau of Labor Statistics, diverge sharply by race, as shown in table 1.

TABLE 1.—PROJECTED CHANGE IN YOUTH LABOR FORCE AGED 16 TO 24, 1970-85

	Number	Percent
Black male.....	582	42.2
White male.....	825	7.9
Black female.....	455	46.3
White female.....	-135	-1.9

From 1970 through 1985, the number of black youth is expected to continue rising at rates comparable to the 1960s, while, the growth in the white youth labor force will decline sharply from the last decade. If black youth continue to be heavily concentrated in urban areas with limited job opportunities, there is little reason to expect a significant improvement in their employment experience.

#### *Schooling and work experience*

But even more than that can be said. During the past decade, black youth made important gains in educational attainment, measured by years of school completed. Indeed, the gap between median years of school completed was virtually closed by 1976, when blacks reported 12.3 years compared with 12.6 among whites. Gains in schooling at both the high school and college levels are expected to continue through the 1980s and more minorities may be expected to enter the job market better prepared to compete for improved job opportunities.

The expected gains based on improved education for many black youth, however, should be weighed against the expected difficulties of young adults who during their teenage years experienced persistent unemployment and less than adequate education. Many interested observers have asked what the impact of prolonged joblessness among youth might be on young adults. Some evidence on this question is now available from the longitudinal studies conducted by Herbert Parnes and his associates at Ohio State University. In a recent analysis of the longitudinal data specifically on black youth, the results showed that those who had no work experience of any kind during their teenage years, had lower earnings and higher unemployment as young adults, in comparison with other youth who had some attachment to the labor market in the earlier years.

This evidence suggests continuing labor market problems for the black youth who are part of the generation to reach adulthood without ever having a job. Considering the severe employment problems in many urban (and rural) areas where numerous black youth reside, one cannot be optimistic about the prospects for the next decade, short of a major improvement in the economic conditions of low income, inner-city and rural communities.

#### *Changing job market*

Projections for the changing occupational structure of the labor market suggest a continuation of rapid growth among white collar workers, especially those in the professional and technical fields, and much less growth among unskilled and semi-skilled workers. The service-producing industries are also expected to continue their rapid expansion in employment, followed by the finance related industries and trade.

These industries have been in the forefront of employment growth for the past decade and their continued rapid growth has implications for the earnings potential for new labor force entrants. The industries that have grown most rapidly during the past several decades have wage levels among the lowest of all in the private sector. Because these industries will be the major centers of job demand, the youth workforce might experience limited earnings progression during the next decade, despite their smaller numbers.

#### *Some policy implications*

The policy implications of the expected trends in the youth labor force seem to run along several lines. First, the changing demographic composition of the workforce and the expected competition among youth and women suggest the need to achieve and maintain full employment in order to ensure the availability of ample job opportunities for those willing to participate in the labor market. Some labor market experts have expressed strong reservations about the prospects for creating enough jobs and of fully absorbing even the smaller number of youth, because of an expected surge in labor supply as the economy approaches full employment. For example, in a recent article in "Scientific American," Professor Eli Ginzberg suggested that perhaps 24 million people would take full-time jobs if they were available. Other analysts have placed the number as high as 27 million.

I think such estimates overstate the degree to which the labor force is likely to expand as full employment is approached. Such estimates give insufficient attention to the dynamics of labor force behavior which include both withdrawals as well as entry into the workforce. The estimates are also based on unverified assumptions concerning the behavior of discouraged workers, many of whom will enter the labor market only under special circumstances concerning wage levels and working conditions, although when asked by census enumerators, such persons say they would accept a job if they thought one was available. In short, because we have insufficient knowledge about the incentives necessary to increase the labor force participa-

tion of many discouraged workers, we cannot accurately judge how many might enter the job market, and remain there, during the next decade. It would be more prudent to remain optimistic about the prospects for achieving full employment assuming a pattern of labor force adjustment similar to that experienced in the recent past.

Second, the changing demographic trends do not suggest that remedial employment and training programs will be less necessary in the years immediately ahead than they are at the present time. In fact, just the reverse is true if one considers the expectation of continued labor market difficulties for minority youth.

Federal support of measures to ease the transition from school to work, to provide skills training for the disadvantaged, and to improve the functioning of labor markets through better information, counseling, and career development will continue to be necessary, especially for youth concentrated in low income areas that are slow to change in their economic conditions.

During the last year, the Administration launched the \$1.0 billion Youth Employment and Demonstration Projects Act in an effort to find more effective ways to ease the youth unemployment problem. It is much to early to assess the impact of the new programs, but early evidence is encouraging in many communities. Enrollment of disadvantaged youth, many of whom are minorities, has proceeded at a rapid pace in the Youth Conservation Corps, the entitlement program, the youth community improvement projects, and the comprehensive youth employment and training programs. Also, important progress has been made in designing and implementing new forms of institutional cooperation, including the greater involvement of public school systems in programs specifically designed to enhance the labor market experience of youth. An especially promising effort is the private sector initiative toward youth employment, but specific programs in this area are as yet, incomplete in their development and implementation.

Continued efforts to develop national policies to achieve full employment without inflation will be on the nation's agenda for some time, to come. But at the same time, targeted employment and training programs, especially for disadvantaged youth will also be necessary for the foreseeable future. Changes in the numbers of youth may ease the adjustment process somewhat, but there is little reason to believe the market process alone, unassisted by well designed public policies, will minimize the youth unemployment problem, and contribute significantly to a reduction of economic inequality.

Representative BOLLING. Thank you.

Our next witness is Mr. Edward A. Robie, senior vice president of the Equitable Life Assurance Society of the United States. He has been at Equitable since 1953 and has been in personnel administration for the past 35 years, except for 2 years as legislative assistant to Senator Alexander Smith of New Jersey. He was educated at the Phillips Academy in Andover, Westminster School in London, England, received a B.A. in public and international affairs from Princeton University.

He has served as chairman of the Conference Board's Council on Management and Personnel Research, the Personnel Roundtable, and Princeton University's Personnel Advisory Council. He is a member of the boards of the American Arbitration Association, the Harlem School of Arts, and the National Child Labor Committee. He also is associated with the New School in New York City where he teaches graduate courses in human resources management.

**STATEMENT OF EDWARD A. ROBIE, SENIOR VICE PRESIDENT,  
THE EQUITABLE LIFE ASSURANCE SOCIETY OF THE UNITED  
STATES**

Mr. ROBIE. Thank you. I, too, consider it a privilege to have an opportunity to appear and try in a small way to represent the private sector.

As you indicated, my experience has been primarily as a practitioner in the area of human resource management. While I have

had a variety of jobs in personnel administration over a period of 35 years, the past 25 of those years have been spent almost exclusively in personnel work in one company in principally urban locations.

In 1953, when I began work there, our total income was about \$1 billion and our assets were about \$7 billion. And, 25 years later our income had increased at an average rate of 7 percent per year to about \$5.25 billion and our assets at a rate of 5.4 percent to about \$25 billion.

The balance of my presentation is to cite briefly those changes in the labor market that seem important to me. Then, I shall discuss briefly how the work force requirements of our business have changed, and how we have tried to match our demand to the available supply. Finally, I shall conclude with what seem to me the most important emerging issues for future consideration of both the public and private sectors.

There are nine labor market changes that seem of primary importance:

One: The emergence of women—and especially of married women—as a major source of labor supply beyond traditionally stereotyped female jobs.

Two: The emergence of minorities as a significant source of labor supply in major urban locations for other than the lowest level labor jobs.

Three: The increase in the average educational level of the labor force.

Four: The emergence of new attitudes toward work and career goals.

Five: The shift in the age distribution of the work force.

Six: The increasing concentration of the work force in large urban, suburban, and semiurban corridors.

Seven: The sheer growth in the work force and in the number employed, and the unpredictable variations over time in numbers of workers and numbers of jobs available.

Eight: The increased protections to the rights of individual members of the work force through Government regulation.

Nine: The continuous presence of substantial inflation, coupled with the continuing expectation of growing affluence.

At the same time, there have been several important changes in the character of our demand for labor. I have already alluded to the expansion of our business. This has led to an increase in salaried employment from 10,000 to 15,000 over the past 25 years, while the size of our commissioned sales force stayed relatively constant, at about 7,500.

We have required a more skilled and better educated work force, somewhat more professionally oriented; just in the past 5 years the proportion of people doing routine clerical work in our parent company has declined from 45 percent of our work force to 36 percent, a very sharp decline that began a number of years ago.

Generally speaking, we have used conventional techniques in recruitment. Located as we are, principally in urban areas, there has always been a reasonably ready supply of employees of varying skills and experience. The very substantial increases in educational levels, and particularly in people with graduate and professional

training, has usually well matched our need for people with special competencies. Ironically, although our clerical needs have been decreasing, the most difficult recruitment has been in that area. The reasons for this are well known and obvious: Urban populations have radically changed in composition and urban school systems and the related cultural and environmental systems have simply not been able to provide adequate supports for inner city people.

We need people who have good basic skills in reading, writing, and numbers, who want to work and to grow within the American enterprise system. Inner city populations and public schools have simply not been an effective resource.

The growing importance of women and minorities in the work force has required new management sensitivities and techniques, broadly described by the term affirmative action. My most important observation on the long run effects of affirmative action is that it reveals systematic weaknesses in management skills and styles that clearly have application to the entire work force, and the improvement of which should broadly improve both productivity and job satisfaction.

Much of the pressures for these programs has, to be sure, come from legislative requirements, and speaking generally, I would say that this has been an entirely legitimate area of government intervention, if not always an efficient one. The most successful affirmative action programs include the following carefully planned and monitored features. I suggest you take special note of the broad scope of these features.

Establishment of full utilization goals and timetables based on organizational needs and labor market analysis; training for managers and supervisors to secure management understanding and commitment and to improve skills; training for affected classes of employees to help them compete within the system; targeted external recruitment programs and emphasis on programs to improve internal mobility, especially upward mobility; improvements in appraisal systems covering selection, compensation and promotion; and improvements in career development and career planning systems.

More recently, additional categories of employees have come under legislative purview: Veterans, the handicapped and the elderly, and management is now just beginning to learn how to cope with the special needs of these affected classes. In my judgment, the protected rights and the related demands of the elderly have a potential well beyond what has been experienced so far with women and minorities. I fear it may be impossible to rationalize every compensation decision and every promotion decision in a way that will satisfy judges operating under laws that appear to require fully objective and validated criteria for such decisions.

One of the characteristics of American business is its orientation to problem solving. The influx of women into the work force has encouraged the introduction of important innovations in work scheduling that have, eventually, affected everyone. Work schedules have become much more flexible, ranging from 4-day weeks to so-called flextime variable arrivals and departures, and to greatly increased use of part-time workers. These scheduling arrangements



respond not only to the needs of married and divorced women with children, but also to the needs of the large number of students desiring work and to the increasing number of people who want a better match between the work segment and the other segments of their lives.

The problems of the growing gap between job qualification requirements and the basic skill level of the new teenaged entries to the urban labor force has been one of the factors encouraging many employers to move away from central cities. Although important, this is not, to be sure, the only factor in such decisions. Others include the great expansion of government workers in urban areas, frequently offering total compensation packages well above private sector levels for lower level jobs, and a wide variety of well-publicized power, transportation, communication, and tax disadvantages.

In our case we have maintained our headquarters office in New York and a substantial presence in other major cities both for what we consider to be sound, shortrun business reasons; and because we believe that in the long run the health of the country is ineluctably bound to the health of the cities:

We have developed or participated in special programs to provide training and job opportunities to those with marginal skills and motivation, and to assist the schools and the other agencies to deal with urban problems that many believe have reached crisis proportions.

In the concluding section of my prepared statement I shall deal with what I will refer to as "emerging issues." I have chosen four such areas to focus on: One, due process versus management control; two, job satisfaction versus productivity; three, inflation versus unemployment; and four, urban rehabilitation versus competitive survival.

It may be questionable whether the issue of due process is an employment problem within the context of these hearings, or rather an employee-relations problem. But it is so pervasive in its ramifications as to deserve emphasis. Briefly stated, employers must now contend with a quantum increase in attention to individual and group rights in dealing with employees and potential employees. Some of this is forced by Government regulation, as in antidiscrimination laws, OSHA, ERISA, and, potentially, privacy and disclosure.

Much of it is the result of changes in employee attitudes and the increased ability of employees effectively to exert pressure on management to obtain attention to perceived rights, regardless of unionization. Actually, the plateauing of unionization has, in itself, been a factor in emphasizing the importance of other types of pressure for due process. Undergirding these due process pressures is a growing amount of litigation, to the extent that in some areas, such as reverse discrimination and the extension of the mandatory retirement age; there is a great deal of uncertainty about what rights belong to whom under what circumstances.

One other aspect of Government activity that diminishes management control is the apparently emerging growth of programs financed by payroll taxes and the constant broadening of the taxability of various forms of compensation. This affects management

in two ways: Not only does it increase the cost of labor, but it decreases management flexibility in determining the most effective compensation packages.

Uncertainty is the enemy of the kinds of rational planning and control procedures that are critical to good management. Employers are dealing with this uncertainty in a variety of ways. Some are merely awaiting clarification and hoping for the best. A number are pressing litigation. Some are trying to forge new management approaches and experiment with new management styles that more fully protect employee and applicant rights. I would judge Equitable's approach to be in the last of these categories. Our president has adopted as a principal objective what he terms "coming right with people," and this is reflected in a high degree of line commitment to all aspects of affirmative action, to career development, to stressing collaboration with special interest groups and Government agencies rather than an adversary posture.

The next of the emerging issues I mention is that of job satisfaction versus productivity. There is evidence that our traditional productivity edge on much of the rest of the world has greatly diminished. There is also some recent evidence of increasing dissatisfaction with many aspects of work and the workplace. Our own surveys of employee opinion corroborate this. The relationship between job satisfaction and productivity has been heavily researched over the years, but remains controversial.

My own experience, confirmed by the best research of the last 25 years, indicates that while the relationship is an extremely complex one, it can be summed up in this not very surprising statement: If you exercise all your management skills in an optimum way, you can achieve both a high degree of productivity and a high degree of job satisfaction. While this may sound like one of the Mad Hatter's not very helpful pieces of advice to Alice, I think it is, as Alice ultimately found the Mad Hatter's advice to be, a rather important insight. Managing human resources is thus a system in which all the parts and all the actions must be consistent and compatible to achieve desired goals. In management, as in other areas of our lives, we are too often taken in by fads of the moment, mistaking bromides for panaceas.

The third of the emerging issues that I cited is inflation versus unemployment. Among its other negative effects, inflation erodes management's ability to compensate employees in ways that people have come to expect and that they perceive to be fair. And if it is true, as has been the case during most of the last 25 years, that inflation and unemployment are inversely related, how much job insecurity can we put up with? Job security has not been a serious problem in our expanding business which is somewhat insulated from cyclical movement in the economy. Even the introduction of computers caused few actual layoffs in insurance companies. But there are companies in much more volatile businesses, such as air transportation and autos, that have invented ingenious ways to maintain stable employment.

That group of the unemployed that is the most persistently troublesome is the chronic or hardcore unemployed, many of whom appear even to be unemployable by any reasonable qualification standard. This is principally an urban problem, and an inevitable

result—or is it a cause—of urban deterioration. I mention urban rehabilitation versus competitive survival as one of the emerging issues for management because I consider urban decay as a disease, a malfunctioning of the economic political and social system within which private enterprise operates. It resembles cancer, since its causes are not yet understood, therapies not yet developed, and it has potential for the destruction of the healthy tissues of our society.

In my company, we have decided to take a more serious and aggressive look at this problem than ever before. We believe that without substantially more private sector effort the cities will continue to deteriorate. We think that the public and private sectors working together are already having a substantial effect in some cities, and we want to be sure that our resources are marshaled in the best way to join in that effort. Late last month I was assigned this task as a full-time concern and given the support of a high-level committee of senior line and staff executives.

Let me say again, Mr. Chairman, we appreciate the opportunity to appear before this committee to express our views about managing the changing labor force. We hope that these views will be of some help to the committee as it seeks to understand better the economic consequences of marked changes in demographic factors, employment, and inflationary problems. We will look forward to the opportunity provided by the committee for all of us to get a better understanding of impending changes and thus to improve our ability to manage them.

[The prepared statement of Mr. Robie follows:]

PREPARED STATEMENT OF EDWARD A. ROBIE

*Managing the Changing Labor Force*

As I looked over the list of speakers and topics for your hearings during the next two weeks, it was evident to me that most of what you will hear about labor and human resources will be from the point of view of highly skilled researchers and observers. And that is as it should be, for the committee is primarily concerned with the policy implications of broad trends and emerging issues.

My experience has been primarily as a practitioner in the area of human resource management. While I have had a variety of jobs in personnel administration over a period of 35 years, the past 25 of those years have been spent almost exclusively in personnel work in one company in principally urban locations. While I have tried to keep abreast of broad trends and emerging issues in the labor market, my nose has stayed fairly close to the grindstone of a large white-collar financial institution in an urban setting. So, compared with your other speakers, who have a bird's eye view of things, mine may be described as more of an ant's eye view.

Yet even an ant must be alert to the environment if he is to survive and prosper, and I am happy to report that my company, The Equitable Life Assurance Society of the United States, has not only survived for 119 years, it has also prospered reasonably well. In 1953, when I began work there, our total income was about \$1 billion and our assets were about \$7 billion. Twenty-five years later our income had increased at an average rate of 7 percent per year to about \$5.25 billion and our assets at a rate of 5.4 percent to about \$25 billion.

The balance of my presentation is to cite briefly those changes in the labor market that seem important to me. Then, I shall discuss briefly how the work force requirements of our business have changed, and how we have tried to match our demand to the available supply. Finally, I shall conclude with what seem to me the most important emerging issues for future consideration of both the public and private sectors.

There are nine labor market changes that seem of primary importance:

1. The emergence of women (and especially of married women) as a major source of labor supply beyond traditionally stereotyped female jobs.

2. The emergence of minorities as a significant source of labor supply in major urban locations for other than the lowest level labor jobs.

3. The increase in the average educational level of the labor force.

4. The emergence of new attitudes toward work and career goals.

5. The shift in the age distribution of the work force.

6. The increasing concentration of the work force in large urban, suburban and semi-urban corridors.

7. The sheer growth in the work force and in the number employed, and the unpredictable variations over time in numbers of workers and numbers of jobs available.

8. The increased protections to the rights of individual members of the work force through government regulation.

9. The continuous presence of substantial inflation, coupled with the continuing expectation of growing affluence.

At the same time, there have been several important changes in the character of our demand for labor. I have already alluded to the expansion of our business. This has led to an increase in salaried employment from 10,000 to 15,000 over the past 25 years, while the size of our commissioned sales force stayed relatively constant, at about 7,500. Of course, this salaried expansion would have been much greater had it not been for technological change: in our case, principally the application of the computer. In addition, we have required a more skilled and better educated work force somewhat more professionally oriented; just in the past five years the proportion of people doing routine clerical work in our parent company has declined from 45 percent of our work force to 36 percent. While the computer is a major reason for this change, contributing factors have also been the increase in the number of jobs necessary to cope with increased regulation, and the increased complexity of our business as a result of competitive pressures.

With this summary of background supply and demand factors, let me now comment on some of the ways in which we have tried to optimize the balance between them through effective management. Much of what I shall describe is, I believe, rather representative of many businesses.

Generally speaking, we have used conventional techniques in recruitment. Located as we are principally in urban areas, there has always been a reasonably ready supply of employees of varying skills and experience. The very substantial increases in educational levels, and particularly in people with graduate and professional training, has usually well matched our need for people with special competencies. Ironically, although our clerical needs have been decreasing, the most difficult recruitment has nevertheless been in that area. The reasons for this are well known and obvious: urban populations have radically changed in composition and urban school systems and the related cultural and environmental systems have simply not been able to provide adequate supports for inner city people. We are often asked by educators and government specialists what kind of preparation is needed for successful transition to lower level entry jobs in business. The answer is much easier to articulate than to activate. We need people who have good basic skills in reading, writing and numbers, who want to work and to grow within the American enterprise system. Inner city populations and public schools have simply not been an effective resource. We see this as a critically important problem that stubbornly resists change.

The growing importance of women and minorities in the work force has required new management sensitivities and techniques, broadly described by the term affirmative action. But I think my most important observation on the long run effects of affirmative action is that it reveals systemic weaknesses in management skills and styles that clearly have application to the entire work force, and the improvement of which should broadly improve both productivity and job satisfaction. I am referring to more objective and valid systems of selection, compensation and advancement, and to more effective systems of human resource planning, career development, career planning, and communication.

The anatomy of affirmative action is too familiar to this committee to warrant any detailed discussion here, but it is important to emphasize that affirmative action programs have been one of the major responses of employers to labor market changes of the past two decades. Much of the pressures for these programs has, to be sure, come from legislative requirements, and speaking generally, I would say that this has been an entirely legitimate area of government intervention, if not always an efficient one. The most successful affirmative action programs include the following carefully planned and monitored features:

Establishment of full utilization goals and timetables based on organizational needs and labor market analysis.

Training for managers and supervisors to secure management understanding and commitment and to improve skills.

Training for affected classes of employees to help them compete within the system.

Targeted external recruitment programs and emphasis on programs to improve internal mobility, especially upward mobility.

Improvements in appraisal systems covering selection, compensation and promotion.

Improvements in career development and career planning systems.

More recently, additional categories of employees have come under legislative purview: veterans, the handicapped and the elderly, and management is now just beginning to learn how to cope with the special needs of these affected classes. In my judgment, the protected rights and the related demands of the elderly have a potential well beyond what has been experienced so far with women and minorities. I fear it may be impossible to rationalize every compensation decision and every promotion decision in a way that will satisfy judges operating under laws that appear to require fully objective and validated criteria for such decisions. Employers can and should improve the appraisal processes underlying such decisions, but for many jobs a high degree of subjectivity is inevitable. Furthermore, it is extremely difficult to validate potential, which currently is an important factor in compensation and promotion decisions.

One of the characteristics of American business is its orientation to problem solving. The influx of women into the work force has encouraged the introduction of important innovations in work scheduling that have, eventually, affected everyone. Work schedules have become much more flexible, ranging from four day weeks to so-called flex-time variable arrivals and departures, and to greatly increased use of part-time workers. These scheduling arrangements respond not only to the needs of married and divorced women with children, but also to the needs of the large number of students desiring work and to the increasing number of people who want a better match between the work segment and the other segments of their lives. And for those hard-hit by inflation and still desiring improved living standards, flexible hours offer a convenient opportunity for carrying a second job for which the term "moonlighting" is no longer as appropriate as it used to be.

The problems of the growing gap between job qualification requirements and the basic skill level of the new teenaged entries to the urban labor force has been one of the factors encouraging many employers to move away from central cities. Although important, this is not, to be sure, the only factor in such decisions. Others include the great expansion of government workers in urban areas, frequently offering total compensation packages well above private sector levels for lower level jobs, and a wide variety of well publicized power, transportation, communication and tax disadvantages.

In our case we have maintained our headquarters office in New York and a substantial presence in other major cities both for what we consider to be sound short run business reasons and because we believe that in the long run the health of the country is ineluctably bound to the health of the cities. A number of employers, including The Equitable, have developed or participated in special programs to provide training and job opportunities to those with marginal skills and motivation, and to assist the schools and the other agencies to deal with urban problems that many believe have reached crisis proportions. But in a competitive environment, such activities must necessarily be kept within reasonable cost limits and the problems have proven to be both stubborn and complex.

In the concluding section of my paper I shall deal with what I will refer to as "emerging issues." The division between issues that have already emerged and been reacted to, which is what I have been talking about so far, and those that are newly emerging and pose special challenges for the future, is an arbitrary one. Issues do not emerge suddenly, nor are they usually promptly recognized, confronted and coped with. But I think it is a useful exercise to try to identify the issues that seem relatively new and that appear to have substantial potential impact over the next decade or two.

On this basis I have quite subjectively chosen four such issues, and have deliberately refrained from discussing them earlier in this paper. These issues are: (1) Due process versus management control; (2) Job satisfaction versus productivity; (3) Inflation versus unemployment; (4) Urban rehabilitation versus competitive survival.

It may be questionable whether the issue of due process is an "employment problem" within the context of these hearings, or rather an "employee relations" problem. But it is so pervasive in its ramifications as to deserve mention. Briefly

stated, employers must now contend with a quantum increase in attention to individual and group rights in dealing with employees and potential employees. Some of this is forced by government regulation, as in anti-discrimination laws, OSHA, ERISA and, potentially, privacy and disclosure. Much of it is the result of changes in employee attitudes and the increased ability of employees effectively to exert pressure on management to obtain attention to perceived rights, regardless of unionization. Actually, the plateauing of unionization has, in itself, been a factor in emphasizing the importance of other types of pressure for due process. Undergirding these due process pressures is a growing amount of litigation, to the extent that in some areas, such as reverse discrimination and the extension of the mandatory retirement age, there is a great deal of uncertainty about what rights belong to whom under what circumstances. Also worth noting is a growing range of enforcement responsibilities thrust on government agencies already hard pressed to reduce high backlogs of unresolved issues and cases.

One other aspect of government activity that diminishes management control is the apparently emerging growth of programs financed by payroll taxes and the constant broadening of the taxability of various forms of compensation. This affects management in two ways: not only does it increase the cost of labor, but it decreases management flexibility in determining the most effective compensation packages.

Uncertainty is the enemy of the kinds of rational planning and control procedures that are critical to good management. Employers are dealing with this uncertainty in a variety of ways. Some are merely awaiting clarification and hoping for the best. A number are pressing litigation. Some are trying to forge new management approaches and experiment with new management styles that more fully protect employee and applicant rights. I would judge Equitable's approach to be in the last of these categories. Our President has adopted as a principal objective what he terms "coming right with people," and this is reflected in a high degree of line commitment to all aspects of affirmative action, to career development, to stressing collaboration with special interest groups and government agencies rather than an adversary posture. Some companies have gone well beyond us in experiments with radically different ways of managing so as to enhance the quality of work life, a topic which you are scheduled to hear more about from at least two experts in that area, Jerome Rosow and Ted Mills.

This leads me to the next of the emerging issues I mentioned, that of job satisfaction versus productivity. There is some very recent evidence that our traditional productivity edge on much of the rest of the world has greatly diminished. There is also evidence of increasing dissatisfaction with many aspects of work and the work place. Our own surveys of employee opinion corroborate this. The relationship between job satisfaction and productivity has been heavily researched over the years, but remains controversial. My own experience, confirmed by the best research<sup>1</sup> of the last 25 years, indicates that while the relationship is an extremely complex one, it can be summed up in this not very surprising statement: if you exercise all your management skills in an optimum way, you can achieve both a high degree of productivity and a high degree of job satisfaction. While this may sound like one of the Mad Hatter's not very helpful pieces of advice to Alice, I think it is, as Alice ultimately found the Mad Hatter's advice to be, a rather important insight. For it means that managing human resources is best viewed as a system in which all the parts and all the actions must be consistent and compatible to achieve desired goals. In management, as in other areas of our lives, we are too often taken in by fads of the moment, mistaking bromides for panaceas.

The third of the emerging issues that I cited is inflation versus unemployment. Among its other negative effects, inflation erodes management's ability to compensate employees in ways that people have come to expect and that they perceive to be fair. And if it is true, as has been the case during most of the last 25 years, that inflation and unemployment are inversely related, how much job insecurity can we put with up? Job security has not been a serious problem in our expanding business which is somewhat insulated from cyclical movement in the economy. Even the introduction of computers caused few actual lay-offs in insurance companies. But there are companies in much more volatile businesses, such as air transportation and autos, that have invented ingenious ways to maintain stable employment. A special case of the former is Delta Airlines, which has managed to implement an unusual degree of job security while remaining one of the profit leaders in an industry beset with ups and downs.

<sup>1</sup> See "Work Productivity and Job Satisfaction: An Evaluation of Policy-Related Research" by Raymond A. Katzell and Daniel Yankelevich, published by Harcourt Brace Jovanovich, Inc., 1975.

That group of the unemployed that is the most persistently troublesome is the chronic or hard-core unemployed, many of whom appear even to be unemployable by any reasonable qualification standard. While this is not entirely an urban problem it seems to me to be principally an urban problem, and an inevitable result—or is it a cause—of urban deterioration. I mention urban rehabilitation versus competitive survival as one of the emerging issues for management because I consider urban decay as a disease, a malfunctioning of the economic political and social system within which private enterprise operates. It resembles cancer, since its causes are not yet understood, therapies not yet developed, and it has potential for the destruction of the healthy tissues of our society.

In my company, we have decided to take a more serious and aggressive look at this problem than ever before. We believe that without substantially more private sector effort the cities will continue to deteriorate. We think that the public and private sectors working together are already having a substantial effect in some cities, and we want to be sure that our resources are marshalled in the best way to join in that effort. Late last month I was assigned this task as a full-time concern and given the support of a high level committee of senior line and staff executives.

We appreciate the opportunity to appear before this committee to express our views about managing the changing labor force. We hope that these views will be of some help to the committee as it seeks to understand better the economic consequences of marked changes in demographic factors, employment and inflationary problems. We will look forward to the opportunity provided by the committee for all of us to get a better understanding of impending changes and thus to improve our ability to manage them.

Representative BOLLING. Thank you very much, Mr. Robie.

Representative BROWN of Ohio. Mr. Chairman, thank you.

I would like to pick on Mr. Anderson for a little bit and ask some questions, asking those who are here to comment on either my questions to him or his responses, and then Mr. Robie.

I am struck by one thing you said, Mr. Anderson. I think it is on the very first page of your prepared statement, or a couple of pages into it. I guess it is on the third page. Is there a relationship between women working and teenagers seeking employment?

Mr. ANDERSON. I believe there is. I think in many service-type jobs, certainly part-time service-type jobs, that there is evidence that there may be direct competition between the two.

Representative BROWN of Ohio. I was thinking more of the question of the teenager who has a mother in the work force and therefore no one at home and the ambition and encouragement of both parents working causing him to go out and look for a job earlier.

Mr. ANDERSON. You mean the demonstration?

Representative BROWN of Ohio. The demonstration. There is no one at home so the youngster has a choice of being out in the street, at home alone, at home with other children, or out looking for a job and maybe he finds that more productive than not being employed.

Mr. ANDERSON. I think that probably would be a reaction. I don't have any direct evidence of that.

Representative BROWN of Ohio. In a later spot in your prepared statement you talk about—well, let me ask the question directly. Is there a further reservoir of workers even beyond the unemployed minorities that we now have listed or that we now have as an unemployed person in our society?

In other words, you talk about discouragement. Do you think there are really more people out there that would be drawn into the labor force if we could bring about policies to make a dent?

Mr. ANDERSON. I think there are, yes. There are several things. First, I think we will continue to see an increase in the labor force participation of women. There are also others, for example, such as the elderly workers, some of whom may otherwise be retired who I think remain in the labor market who might not otherwise have been there. There may be other individuals who are not now participating in the labor market who would participate if we, in fact, move toward full employment and they perceive that jobs are available.

The point I want to make is that with all of that I very much doubt that the numbers we are talking about are anything like the 24 to 27 million that are now being estimated by some experts in the field. In order to get those numbers, the 24 to 27 million, one has to look at the current population survey and take all of those individuals, for example, who are now counted as not seeking work, want a job and not seeking work because they think a job is not available, or individuals who are taking care of the home, and so forth. I think it is highly questionable that all of those individuals, even with the best economic conditions, could even then seek jobs.

We don't know what set of wages and other employment conditions are really necessary to encourage those individuals to seek work. I would rather be a great deal more cautious about estimating what the number of that set may be to search for work rather than arbitrarily assuming that if we had more job opportunities that all of those individuals would come into the labor market.

We have one of the best experts in the country on this right here, and I don't think there is any evidence at all in the studies of discouraged workers that suggest that all of them will be looking for work under any circumstances.

Representative BROWN of Ohio. Let me ask another question that may be more radical than yours.

Mr. ANDERSON. Far be it from me to be radical.

Representative BROWN of Ohio. I tend to agree with you that 27 million say they are looking for work, or there is an indication they may be looking for work; we discussed this at a previous meeting. Many of those are physically or perhaps psychologically unable to enter the labor force for one reason or another.

Before a question, just to stir a little comment: Is there, in fact, a problem with any upper limits on the labor supply in the United States? The reason I ask that question is that we had a very dynamic and changing economy in the period up to World War II and even after. We got our increasing work force from immigration. We are getting an increasing work force all the time from illegal immigration at this time.

It seems to me when we have a positive, dynamic economy as we had after World War II, although you could argue that that was the cause, that we had an increasing birth rate and, therefore, an increasing supply of labor down the road. But the European economies, the industrial economies in Europe that have experienced "full employment" have imported labor.

Let me go back to the basic question. Is there, in fact, a problem, a limitation on the upper ends of the labor supply in the United States if we want to follow certain policies?



Mr. ANDERSON. I suppose there is a limitation and that limitation certainly would be embodied in the size of the population. If you have fewer people, then that itself would place a limitation on it. But I think we have to look at what is happening in participation. Participation rates of men, I believe, are falling and the participation rates of women are increasing. I don't know what the upper limits might be on the participation rate of women. I very much doubt that it would stay at a point equal to that of men, certainly not at a higher level of 85 to 90 percent now for adult male workers. It is conceivable, I guess, that overtime, these rates would continue to converge so that you might come out to equality at something like 80 percent. That is conceivable. But I don't know that that will be the case.

I believe, though, that when you consider the potential for the growth of the American economy over the next decade, I very much doubt that we are going to be confronted with a labor shortage of any kind, which is a comment that is now being advanced by a number of observers, that we will be faced with a labor shortage. We not only have to look at the growth of jobs, we also have to look at other characteristics of our economy, including transfer payments which create incentives not to participate in the labor market.

One of the big differences today with the earlier period that you cited is that we now have a full panoply of programs, transfer payments and so forth, which I believe are related to nonparticipation in the labor market. If we continue that, or if we improve that, or if we enrich that in any way, that will have the effect of limiting the growth in the labor market.

So I come out with a big I don't know with respect to your answer.

Representative BROWN of Ohio. Let me state this in a slightly different way, and I would like to ask Mr. Robie to participate, and the other gentleman if they care to.

The possibility exists that you might limit the transfer payments and in effect put a cap on the discouragement to enter the work force that is provided by transfer payments—I think that is what you are saying. And if we could do whatever it requires to stimulate the American economy, which would mean among other things, more trade abroad and an increasing American living standard so that we became a more productive society in terms of goods and services produced and therefore had a greater demand for labor, it would seem to me only proper that we would provide the social benefits first to our citizens and not want to bring in either the illegal alien or an increased number of legal aliens. But in fact, if we want to reverse the trends that we have had on the limitation of immigration in the past few years, we could provide all of the labor in this country that we would ever need to provide by just simply opening up the doors and letting the people come in, as the Germans have done in terms of bringing southern Europeans in to meet any potential work force shortage.

The predicate I am trying to lay is that a work force shortage is not our problem. And even if we develop a domestic work force shortage we still will not have a shortage of labor if we have an

economy that will be dynamic enough to absorb additional working population.

Mr. ROBIE. That proposition certainly makes sense to me, yes. I would agree with that.

Representative BROWN of Ohio. In the process of that we would have absorbed those who are disallowed from work at this point. That is kind of where I am getting at. If we can find a way to use up the 35 percent unemployment among teenaged blacks, we still don't put an upper limit on where we could go.

I want to press one other point with you, Mr. Anderson. We have learned, I think, so far in our hearings that the cities are becoming increasingly black, increasingly less industrial; that is, relatively the industries are moving to the suburbs or out into the rural areas. Whites and a number of blacks influenced by inflationary increases in the cost of living, are moving to less expensive, nonurban areas of the United States. Not just suburbs but in some cases rural areas are growing—rural Pennsylvania, say, or suburban Pennsylvania or Maryland where there are now apparently more jobs becoming available.

In a way that kind of leaves the blacks standing behind the door in the cities again. The question is, Is there a peculiar lack of ability on the part of blacks to move to where the jobs are and is this a problem that ought to be addressed in a different way than trying to keep industry in the cities to attract employment?

Mr. ANDERSON. On the mobility question, I think you have evidence that suggests that there might not be a peculiar reluctance on the part of blacks to move. Between 1940 and 1950 most of the period after World War II, 1.6 million blacks left the South, mostly the rural areas of the South for other sections of the country. Between the entire period of 1910 to 1940 only about 1.3 million left. So I think that that demonstrates that there is no reluctance on the part of people to move but we have to, I think, look at what motivates individuals to move from one place to another.

I feel terribly deficient discussing this issue in the presence of Mr. Taeuber, who is one of the country's leading experts on this. Perhaps he may want to expand on this.

My impression is that when people perceive the availability of jobs, when they have reason to believe that those opportunities will be made available to them, they will in fact move. It is difficult to explain today the presence of blacks in Philadelphia and Detroit. Why would any black want to leave Mississippi where it is warm most of the year to go up North to a city where you have 2 feet of snow every other day in the winter? The point is that people moved to get a job in the automobile industry and other industry low-level jobs, nevertheless they were available. Someone in their family got a job there. They had every reason to believe if they went North they would get a job. I think that is what the big difference is today. There is not the perception among certain groups living in the cities that if they move anywhere else they will be any better off.

In fact, a number of blacks moving out of the cities are not structurally unemployed, the low-income disadvantaged. It is those who have the higher levels of education. They are the educated college graduates, professionals and technical people who know full

well there will be a job for them in Houston or Atlanta. These are the aspiring people who have skilled training and who have experience and so forth. They are highly mobile, but those left behind are those who did not have many options either where they are or anywhere else they might go.

Representative BROWN of Ohio. Maybe it is time to tack up signs saying, get out of town before it is too late, in some of these black ghettos and major cities. If the opportunities don't exist in the cities, it seems to me there is a better chance, not necessarily in the South but in some other parts of the country than they may have in some of the urban and rural areas.

You make the comment, in your prepared statement, "the evidence shows that young blacks in urban communities where jobs are more plentiful than in the inner city, experience unemployment almost to the same extent as their city brethren."

I am curious to know about the evidence, other statistical studies.

Mr. ANDERSON. There was an article in a journal, the Monthly Labor Review, last year. I forget the exact month. I can provide that for you. It compared youth unemployment by location and it did show in fact that the differential in the unemployment rate for blacks living in cities versus blacks living in metropolitan areas outside the city was not a difference of the same degree as for whites who live in the cities compared with whites living in the suburbs.

That suggests to me that the prospect of moving, to improving one's position, did not seem as great for blacks as it may be for some others.

I would say, I am not aware that there are a lot of jobs for the unskilled, persons with limited basic education in Colorado, Oklahoma, or other places like that. If that is the case, maybe tacking up a sign may have an effect. But my impression is that when you look throughout the length and breadth of this country you find very limited job opportunities for people who are poor, who have little basic education, no skilled training, and all of the other kinds of deficiencies in human capital investments that we talk about when we talk about the structurally unemployed.

Representative BROWN of Ohio. Maybe the idea would be to get the upper income brackets out of the cities. This is a radical thought, but to get them out of the cities there would be upward mobility then in the cities and we would begin to develop more opportunities for blacks in the cities. I will let that pass without comment. I am not sure it is worthy of comment.

Let me ask a couple of other questions to Professor Anderson and then we can move on to the rest of you. Have you done any detailed analysis or studied any analyses by others on the impact of the minimum wage laws on employment in black and teenage unemployment areas? You mention the problem in your testimony but I am not sure that you came to a very firm conclusion on the problem in your testimony.

Mr. ANDERSON. I have not conducted any independent research of that, but I have written a paper in which I attempted to assess the literature on that issue. I can say two things about it.

First, some of the recent work in this area I think is very illuminating in part because it uses sophisticated econometric techniques of analysis and using current population survey data more creatively than was true of some of the cross-section studies of the past which convinced me that the minimum wage is in fact a factor which contributes to a higher level of unemployment among youth than would exist in the absence of the minimum wage.

Now these studies, however, have been somewhat inconclusive in the sense that it really does not show how much the minimum wage is responsible for the higher unemployment rate in relation to other factors, such as the degree increase in the number of youths, that youths looking for part-time jobs, changing general wage inflation, changes in productivity, and so forth.

I think that I have never read a study that convinces me that absolutely the minimum wage is the single most important factor responsible for youth unemployment.

Representative BROWN of Ohio. That is not my suggestion, but I want to know the degree to which it may be a problem.

Mr. ANDERSON. I am not sure of the degree to which the minimum wage might be responsible for the unemployment rate among youth based on the studies that I have seen. I am convinced, though, that these studies show in my view that the minimum wage is one of a number of factors that contribute to unemployment.

Representative BROWN of Ohio. I have two other questions, and then hopefully I can end. I have to advise you that Chairman Bolling has been obliged to go to the Rules Committee so we will perhaps be at this until noon. You will be spared my questioning if another Member comes in or if the staff feels moved to get into the act, and they are welcome to do so.

Would you, Professor Anderson, agree with the Committee for Economic Development which suggests that subsidies or work credits should be used in increasing training for the structurally unemployed? You make a statement which led me to write in the margin that the first job may be the most vital job anybody can get. Once you get that first job then the opportunities to go from there may be highest. It may be a lot easier than if you fail to get that very first job.

Again, the question is do you feel that subsidies and credits may be used in view of your comments on the minimum wage and the fact that there is an increasing level of minimum wage lying ahead of us over the next few years? Do you think that would be helpful?

Mr. ANDERSON. Yes. I supported that for some time, and I was very pleased to see the CED report in part because it seems that every 10 years we rediscover the private sector. We have done that again now and we have come forward with a \$400 million program to stimulate the private sector to be involved in hiring the disadvantaged.

The CED report shows that the private sector has been doing quite a few things for quite some time, that they never disappeared, that they have been doing some interesting and effective things with respect to the kinds of things that we have been discussing here this morning. I think my preference would be—I don't know what you would call it—wage subsidy would probably

not be acceptable to organized labor, so perhaps we should call it something else, call it a training subsidy or an investment in human capital account or something of that type. But the purpose of it would be to reduce to the private sector the cost of hiring the structurally unemployed, specifically youth. I think we should do that and we should do it for the purpose of providing specific training to the young people.

One of my criticisms of the job program that started in 1968 is that in many cases firms were given Government grants to employ people in jobs where those people did not get any training at all that was worthwhile. I think if we could have a program where an individual could come into a job, get on-the-job training, that would provide some investment in human capital, develop marketable skills, such as Mr. Robie described a minute ago. It would be very wise and good public policy to support that kind of a program. I hope that is what we do this time.

Representative BROWN of Ohio. It seems to me that years ago when labor was more individualized—tradesmen, craftsmen—you had the subsidy for training within the labor movement itself through the apprenticeship program. A man was apprenticed for 4 years, 7 years, whatever the traditional apprenticeship was in that particular craft and he was in fact subsidized by his working companion rather than by the industry or Government. Now we have gotten to an industrial situation that does not permit that side-by-side work situation, with the possible exception of the building trades who still lean on that a little.

The question is whether or not it can be stimulated in some way by either Government encouragement, industrial interest or the unions so that it can be acceptable to everybody and we can get a reasonable result.

Would you comment on whether or not the CETA program has been successful in doing that?

Mr. ANDERSON. The CETA program—what I think you are describing is an on-the-job training program and a relatively small proportion of all CETA, title I persons were not in on-the-job training programs. It seems to me in order to develop this type of a thing on a broad scale you have to move pretty much in the direction that the administration is now moving and that is to establish a quasi, separate program in which the private sector itself is in control, certainly in cooperation with organized labor and with the CETA prime sponsors. But my impression in talking to people in this community and others is that this kind of effort does not seem to work well unless the private sector has its own separate initiatives, whether they are pretty much in control of it, whether they had a substantial influence over both what is done and the way it is done. That would be my thought, that in fact it is unlikely that anything of this type can be done adequately working within the constraints of the CETA system.

If by that we mean prime sponsors must take the lead in developing contracts with industry and so forth, I don't think that would work.

Representative BROWN of Ohio. Mr. Robie, let me ask you to comment on Mr. Anderson's answer.

Mr. ROBIE. Just a few comments on the CETA program. I think the new initiative is the title 7 that has just been authorized will give us an opportunity to involve the private sector a good bit more in the CETA program than has been true in the past. I know in New York City the organized business community is already getting set to deal with the addition to that title and to take some of the programs that have not gone too well in the past and see if they can refurbish them.

The second observation is that for many of these young people the biggest job opportunity is with the small employer. There are all kinds of difficulties in working with—

Representative BROWN of Ohio. Would you elaborate on that? I agree with you 100 percent. I want you to say it because if I say it, it doesn't count. I would like Mr. Anderson to also comment.

Mr. ROBIE. I say it because this is where the majority of jobs are. They say in New York 80 percent of the jobs are with companies with 100 or less employees; or maybe it is 50 or less.

Representative BROWN of Ohio. Even in New York.

Mr. ROBIE. In New York City. So if you take New York as one example of an area with a high youth unemployment and high minority unemployment, there are simply not enough jobs with large employers. Large employers keep getting called on but when it is limited to the top 50 employers, even if they were to take 50 or 100 such people—you have not even scratched the surface. You have to get the 80 percent of the employers who are small shops. Beyond that the opportunity for the kind of one-to-one apprenticeship or semiapprenticeship arrangement you talk about seems to be better with small companies. A great big huge employer with a 40-story building is a pretty scary place for someone to start out. Even though it is divided into cells, the whole thing is much more difficult for a youngster to relate to than the small 2, 3, 4, or even 50 employee business.

So my second point would be we have to be more successful in designing systems in such a way that the smaller employers are included.

Representative BROWN of Ohio. Let me interrupt you. Staff has given me a note. I think they are a little bit off on the figures, but the question is if in fact only one-half of the 10 million small businesses, and I think that is a bit high, would hire one employee and adequately train them, would it more than solve our employment problem.

Mr. ROBIE. It sure would. This is not to mention all kinds of administrative difficulties of monitoring and controlling that. But that is where the jobs are and that is the atmosphere that would be conducive to the youngsters' needs.

Most of the small businesses could easily use a few more hands to do this or that.

Representative BROWN of Ohio. They not only need that but they need, going back to my comment about the effectiveness of labor unions years ago, they need someone's hands—the employee in training needs someone's hand on his shoulder. If a small business makes only one investment of that nature, they are sure to keep their eye on that employee, particularly if they only have 5 or 6

employees in the shop, or 10, or 12. That is my comment. You have to agree or it does not count.

Mr. ROBIE. I do agree. The final point I would add is that I am not sure why it has been that apprenticeship programs in this country have deteriorated to the degree they have. I have seen in some European countries that the apprenticeship program has been protected in various ways by the unions, employers, and government. It seems to me the principle of the apprenticeship system is very important to getting a youngster started with the kind of skills that will enable him to make a respectable living without getting up to the professional level to which many youngsters don't aspire.

I would be interested in comments from other experts on what might be done in reviving the apprenticeship program which has kind of gone by the board.

Mr. PACKER. Secretary Marshall has been very interested in the apprenticeship program and agrees fully with your comments. It has been difficult. I think part of it may be that different sense of attachment to a company in this country as compared to the Europeans with the high degree of mobility of American workers. But it is something the Secretary is quite interested in. We have tried to expand it in other industries with varying success. We will make some progress in the health industry, for example, with the apprenticeship approach—

Representative BROWN of Ohio. In what way? Who will be apprenticing?

Mr. PACKER. Youngsters will be apprenticed in nursing homes or hospital situations in which they can move into nursing activities in an apprenticeship fashion.

Mr. TAEUBER. Strictly on the apprenticeship issue, I cannot comment. If you wish, I would like to go back to a couple of issues that were mentioned earlier which have to do with the location of blacks, location of jobs, and throughout this period, as Mr. Anderson mentioned, of blacks moving from the South where there were not jobs and moving into the cities where there were jobs. Even in that period, even though we had a mishmash of poor, uneducated blacks in the cities, during that period it was not so much the poorest of the poor and the least educated, it was the most educated who were becoming aware of opportunities to pick up and move and try out a new style of life far away from their experienced situation.

Those down and out were least able to think about, least likely to get information to go someplace else. During the same period tens of millions of whites were leaving the rural countryside and farm areas and moving to the cities and we never identified that as a problem. That is part of the northern urban growth.

To some extent what is happening in the suburbanization move these days, I guess, has two components. One is that since 1966 there has been more rapid black urbanization than whites. This is very highly concentrated in a few cities; Washington, Los Angeles, New York City, and Atlanta. It is not spilling over generally into the major new urban areas that whites are inhabiting. Blacks are moving into old areas which do not have the characteristics of

expanding shopping centers and new office buildings, and all those nice new jobs out there.

Many suburban blacks are not leaving the basic circumstances that are the problem. They have limited opportunities for teenaged kids to go find a part-time job after school. Some blacks are dispersing since the 1968 Supreme Court decision (*Jones v. Mayer*) and the Federal fair housing law. There seems to be a reduction in the severity of housing discrimination. It tends to be the well-to-do blacks, middle-class blacks, that are moving out there, and in many cases old families who are using both the husband's and wife's income, as most of us have to do, to be able to afford housing these days.

That is a very small numerical pattern to date and it is not something that can be seen as yet as affecting employment policy. There is some aggregate evidence that the black male workers in the suburbs do get higher incomes than those who work in the cities. Some of these suburbs are central city types of cities. If you could partition them out of the data, it would be the case that suburbs do benefit the black families that take advantage of them.

The pattern, if really pursued, would be somewhat like the area redevelopment pattern in the late 1950's, early 1960's. If you filled up the information network and took a strictly economic view that it is easier to move a worker to where the jobs are, then you will drain the core areas of most economic activity and the most educated, most aggressive people who are seeking out these opportunities.

I have alluded to this in my testimony. I don't see we yet have an effective program to address what is happening in the cities, revitalizing the Capitol Hill area, bringing in middle-class whites and displacing old whites and poor blacks in the cities—this just sort of spreads the problem in somewhat a similar way as the urban renewal projects did. We have not figured out what to do.

These people come to the cities or their fathers or grandfathers came to the cities and there were better economic opportunities in the cities. Now it is not clear where they can go.

Representative BROWN of Ohio. Let me interrupt you just to make this comment. I have to tell you that I come from an aberrational area—and I reject this idea in Mr. Anderson's testimony. I found much to agree with in your testimony but I found a few things to disagree with, and the one thing I disagreed with the most is the idea that there is perhaps less or only an equivalent opportunity for blacks in the rural and suburban areas.

I happen to come from an area in Ohio—as a matter of fact, my congressional district straddles the underground railroads that brought the blacks out of the South. I have a relatively small black percentage in the demography of my district, probably in the area of 5 to 8 percent. But practically everyone in my community knows of prominent black public officials. I guess all public officials are prominent.

I am talking about mayors, or school board presidents, or county commissioners, or something of that level elected in that community with 5 to 8 percent. That is not quite Cleveland where the press gets excited when 46 percent of the community is black and they suddenly have a black mayor. I think I understand that and the result is not quite as impressive as having 5 to 8 percent electing a



black mayor. I think opportunities in parts of the country, Colorado may be an example, do exist. I do not mean political opportunities but business opportunities for the black community.

I think, for example, a mixed marriage is more successful in a small community than in a metropolitan area. I am sure there are a lot of people who do not think that is a substantial argument, but I am sure they are testifying from bias rather than statistics. I would like to see those statistics.

Mr. TAEUBER. Coming from Madison, Wis., I find it somewhat strange that more of the blacks in the black cities do not choose the smaller towns and communities with a smaller percentage, where there have been much fewer of these problems. One of the reasons, of course, is that the discrimination has been reduced only in the last few years. It is a fairly recent change for there to be a high degree of racial acceptance.

In my own community, if you go back to the early 1960's there was still housing discrimination.

Representative BROWN of Ohio. I guess we can only say what Bob Dylan said, that "the times they are achanging." I would just like to see some statistics.

Mr. TAEUBER. Too many of our views of the situation of black teenagers and of racial problems are derived from what is happening in the major cities. A high share of the blacks live in the major centers, but there are a lot elsewhere and the problems are very, very different in Madison and the small Iowa towns and elsewhere. And I don't think we should forget that there is a locus of the situation there that is part of our national problem and we need to address not just solely New York City and Washington.

Representative BROWN of Ohio. Can I throw out another generalized comment? And then I have to leave in about 5 minutes.

Mr. Anderson, Mr. Robie commented on this in his remarks but to what extent does our teenaged unemployment problem result from the effectiveness or lack of effectiveness of the U.S. educational system?

Mr. ROBIE. I guess I can comment that I think in general for the inner city black youngsters of New York City the school system is a disaster. It just seems to me that it cannot help but contribute to the unemployment problem of that group if they are not qualified in the most basic way for jobs, so that employers are encouraged to make technological changes, or to go unmanned, or to work a lot of overtime, or to move out of the cities. I think it cannot help but be a significant contribution to the problem.

My feeling is that in New York City young people will not get anywhere else unless they are given a better opportunity to learn, an opportunity that is more effective.

Mr. ANDERSON. I would agree substantially with that and add one additional observation. In Philadelphia, as you may know, we have a fairly large parochial school system. And the archdiocese of Philadelphia has made a conscious choice to keep open most of the schools in predominantly black areas despite the fact that most are not Roman Catholics. I find it very interesting that a much larger proportion of the graduates of parochial schools do better than the graduates of the public school system. The main reason is the difference in the quality of education.

The parochial school system is strict in discipline. There is a great emphasis on education and the kids come better qualified for the jobs that Mr. Robie has discussed.

Representative BROWN of Ohio. This is what motivated CORE to support the tuition tax credit. I understand they have. I cannot cite it but I saw that the Congress on Racial Equality—CORE—supported the tuition tax credit for elementary and secondary schools which is, of course, a controversial piece of legislation, particularly among those such as the school teachers' union.

I don't remember the statistics, but Philadelphia is not unique. I was told that in St. Louis 80 percent of the parochial school students are blacks—that is, the population in the schools—and about 65 percent are Protestant or non-Catholic. So apparently this is happening in core cities.

If you will excuse me, I just found out that I have to handle some legislation on the floor. The House meets at noon. I will now turn over this meeting to Mr. Sheldon who will continue.

Mr. SHELDON. I think perhaps we might turn to Professor Kassalow since he is our resident labor economist and has had a major hand in planning this part of our hearings.

Mr. KASSALOW. I would like to get back to something Mr. Robie commented on in response to a question by Congressman Brown. Mr. Anderson put emphasis upon programs that in the future would work closely with the private sector, with the private sector in an effort to assist young black employees in a way that at this time fits with what the Labor Department has been proposing; but you must have had some experience in the past, Mr. Robie. I would also like Mr. Packer to comment.

We do have a jobs program; we do have a tax credit program; all aimed at trying to encourage the private sector to hire the disadvantaged.

Speaking in terms of your own experience, why didn't this work? I don't quite see why a large company would not be able to do this—it might not need to take advantage of these programs—but still when there are subsidies available it would seem this might help unemployment.

Mr. ROBIE. We have a fair amount of experience if you go back 10 or 15 years. One problem is designing criteria by which to judge your success.

Some people within our company have considered a number of our programs not to be successful because a percentage of people did not stay with us and got jobs with someone else. In a job qualification sense, that should be counted as a success. But you have the administrative problem of just keeping track of these youngsters.

We tried at one time to mount a fairly sophisticated research evaluation effort, involving the group that was in the program matched by a control group outside of the program and to follow both groups of these youngsters. It went beyond our resources to do it.

So there is a question of what is successful.

Second, we did run into problems of what you would call redtape with some of the Government support programs, the problem of proving that you meet certain criteria, the way you got reimbursed

and a whole series of bureaucratic details. At one point we said, let's do it without Government money because it is more trouble than it is worth.

We have continued in a small way to participate in these programs. The most recent experience is on a consortium basis with a number of employers in the city who have banded together under the aegis of the Chamber of Commerce to recruit and train clerical help and then feed them into the private sector system. It is this program which I now understand is about to be administered under the new CETA effort.

Another point is that as a practical matter it is difficult when there are plenty of qualified people around to persuade department heads and supervisors to take obviously less qualified youngsters and give them the time and the attention that is necessary to making them succeed. That is a very difficult thing to do. The personnel department has the unenviable task of trying to get a commitment. Even if you get the president's commitment, you have the problem of reluctant department heads raising the question of why should we give preferential treatment to these people when only one-half or even fewer of them succeed.

The final point is that a job is not all these people need. Most of the youngsters have need for additional help. They need not only a job, but a sensitive and sympathetic supervisor, and I mean sympathetic in the real sense of the word, not just feeling bad about their situation. They need training, special kinds of training. They need continuous counseling. You need three elements, a job—a carefully chosen job. You need special kinds of training—well-targeted training. And you need continuous support on a counseling basis to make these programs work.

Well, that is not easy to do in a private organization. And I have the feeling that in some smaller companies you can do that more effectively, a little less formally.

Mr. KASSALOW. I would be interested in Mr. Packer's comment because the Labor Department came in strongly with this program in the new manpower proposals.

Mr. PACKER. Let me just say that in the original program, the incentives were typically structured so that while the executives in the corporations saw the incentives, the line supervisors, as Mr. Robie suggested, only saw that you got somebody to work for you who might be less productive than somebody else and in some cases who was more trouble than having nobody at all. So the incentives apply to one part of the corporation and, as those of us who work for large corporations know, it is very difficult to operate with that separation.

The other problem is, as Mr. Robie suggested, that it is hard to encourage people to hire the less advantaged when you have plenty of qualified employees around. Right after the jobs program started, labor markets got soft and a few years later they got even softer during the recession, which meant there were plenty of people to be hired. In fact, some of the same people the company had fired were hired. This is a second problem.

The third is the redtape which we are trying to solve. It was always the direct dealing of companies with the Government with-

out an H. & R. Block of the employment system. We are trying to solve that.

The CED document recognized this, and it is a model for our title 7 which establishes a business run intermediary to move between the Government and the employer and to be sympathetic to the employer's concerns over redtape. In some cases, small business says it is redtape. They don't even look to see if there is any form whatsoever. We hope the intermediary will get around that kind of a problem.

The other major change is the old programs were targeted only on big companies. It was jobs. It was a group of people you could bring into the White House. It was the Fortune 500's and it did not get at the small businesses.

So we have a couple of things that may be new things for the system. One is a stronger labor market because the economy is better. Second is the intermediary. Third is the emphasis on the small employer and running through the decentralized CETA system which makes it a community based system.

We found previously that the president of a decentralized corporation would insist that the company cooperate. But out in the communities in the local plants managers did not adhere to the president's call for responsiveness. By basing this thing on the community, we think we can overcome that. We hope that the \$1½ billion we expect to spend on the employment tax credit will test, in a sense, whether the minimum wage is a big problem or not since it will effectively reduce wages for those who hire youngsters from low-income families. There will be no attempt or no way to see if there is any training in that situation. It will be an employment tax credit and some would rather not call it a subsidy, but in economic terms it looks very much like a subsidy.

With the other problems in title 7, there is a hope that there will be training provided for the money. What we will be able to test is if it makes a difference in providing the training as opposed to the subsidy, who will take it and what the results will be.

Mr. ROBE. It occurs to me to add just one more word. We have a program in our company for recognizing outstanding employees. In the past couple of months we have had in that program a couple of employees whose employment began 3, 4, 5 years ago and who came out of these special training programs. The caliber of their performance is absolutely extraordinary.

These are people whose performance is measured against several thousand other employees. So while I have mentioned the difficulties of evaluating success, when you see a couple like that coming out of a program which was recruiting people who were considered unemployable, you feel pretty good that there is, in fact, something constructive happening. There must be more "unemployable" people with this potential.

One other example I would like to mention is the unusual experience that control data has had with at least one and perhaps more of their new plants. They have deliberately located a plant in central Minneapolis where they recruited people right off the street without worrying much about qualification requirements. They applied all the management skills they could summon, including training and counseling, and made the standards fairly

tough to stay in the plant. As I understand, after 3 years that plant is operating profitably with a labor force that was almost entirely drawn right off the street. And it is a plant that produces fairly sophisticated computer equipment. That is just one example of our ability to apply management skills in ways that we never thought possible.

Mr. KASSALOW. I have one more question for Mr. Packer. You sketched a heavy reliance on structural programs in the 1980's, if the goal of 4 percent or the 4-percent unemployment rate or something near it was to be met. Would this imply that the current level of outlays on manpower programs, including job creation programs, would pretty much be sustained and perhaps even grow right into the 1980's, say, up to the target date of 1983 or 1984?

Mr. PACKER. Yes, if you include the welfare reform numbers and take a look at the last budget computation, you see a growing expenditure for training activities. I think one of the major changes in our judgment in Government policy is a commitment to a hard and sustained employment and training effort which was over 12 billion for 1979 compared to 4 billion in 1974.

Mr. KASSALOW. How large a job creation element would there be in the 1980's?

Mr. PACKER. The welfare reform proposal issued by the President had 1.4 million jobs for that alone. On top of that will be hundreds of thousands of jobs in the youth job training slots proposed by welfare reform, so that you are getting close to 2 million slots of some sort, including training, and work experience.

Mr. WALLACE. I have a couple of questions for Secretary Packer. In trying to get at the problem of stagflation, we would want to cut unemployment without causing inflationary pressures on the economy. In so doing, it has struck me that we ought to know as much as possible about the nature of unemployment, to know as much as possible about what it is we are attacking.

We have spent a great deal of time discussing the structural problems such as CETA. But what do we really know about the unemployed part of the labor force—how much is frictional, how much is structural, how much is cyclical? Are there ways of measuring that? Can you measure, say, frictional unemployment by stating that those people who have been unemployed less than a certain period of time, fall into that category?

Could you comment?

Mr. PACKER. There have been studies. I think BLS made some reports within the last year that indicate something on the order of 3-plus percent frictional and another 1 percent structural. But it is not an easy task.

We took a look at the unemployment rate for prime aged males and found that when that rate fell below  $2\frac{3}{4}$  percent, inflation tends to accelerate and when it was above  $2\frac{3}{4}$  percent, inflation does not tend to accelerate. We used techniques by Professor Walker and generated what the unemployment rates would be for the other groups and that is the technique we used to come to the 4.8 percent unemployment rate possible in 1983 without creating inflation.

So anything above that presumably would be cyclical unemployment. But it is not a precise science as we look month to month at

the data to see if we can go beyond the cyclical question or not. I do not believe so, but clearly the evidence is such that one has to be very careful that we are not within the one-half percent or so of the end of cyclical at the moment.

Mr. WALLACE. We expect our Special Study on Economic Change to get into this particular question. Any help that the Department of Labor could give us on it would be appreciated.

I have one other question, but I am afraid it may be unsophisticated. I say that because when I raise it people ignore it.

The big problem which confronts us and much of the discussion has been, over teenage unemployment. We have had programs in the past, the old National Youth Administration and the Civilian Conservation Corps. Were these programs so terrible that they cannot even be considered? Or is there some reason that I should not even be raising the question? Have you thought about these approaches?

Mr. PACKER. I don't think it is unsophisticated. Yes, we have thought about it and lots of programs, we have now resemble very closely those sorts of programs, all those programs that begin with the initials "Y" and are difficult to pronounce and so forth. Some are city oriented, some conservation oriented, and some are outside. This tends to provide work.

The other hypothesis that Professor Anderson referred to is that it is not work, but work with a high degree of training and counseling that is necessary. We are making a serious effort to see if we can distinguish between the series of hypotheses. The main problem with teenagers is their age and they get over that. The evidence such as that indicated by Professor Anderson indicates that they do not get over it very well.

The other fact is that they need a job. Give them work when they are young and as the years pass by they will get over it. The other fact is they need service. I myself have found no evidence convincingly separating which one of those hypotheses is true. We hope the effort that we are spending \$2 billion a year on now will give us those answers.

Mr. DERNBURG. In view of the late hour, I will exercise the option of keeping my big mouth shut.

Mr. SHELDON. Do any of the panelists have any questions or comments?

Mr. KASSALOW. Could I just ask one final question?

Mr. Taeuber, you suggested to us that projections can really be very important—because one way or another people who work on labor force projections do use these projections enormously. The BLS projections may be criticized, but you also suggested a less reliance on any single projection.

Do you have any other recommendations in terms of specific changes that may be made? You are familiar with the Department of Labor's projections and how well they have done or how poorly they have done.

Mr. TAEUBER. My examination of them suggests that the effort is not sufficiently well staffed and sufficiently continuous. Every few years there is an effort to bring together people to update the projections and get out a new set. The techniques that are used are fairly sophisticated, enough to get results, but they do not derive

from the kinds of examinations of the evidence, looking at the trends in the most up-to-date, scholarly way in reviewing the literature so as to illuminate the alternatives being chosen. For instance, a few years ago the Census Bureau did an migration projection. They said in 50 years we will get rid of all the differentials among States. This is a nice way to extend current trends and water them down so you do not have any particular trend running on forever. This approach moves one step beyond simple extrapolation, but it does not look into the total set of regional distributions and exchange models to discern what might happen.

The same thing is true with the female labor force. The kind of chart I presented was not used in the latest round of Bureau of Labor Statistics projections. The numbers were more or less chosen out of a hat. It is a fair selection but it was not a hat I would choose to wear. It is a matter of research and analytic capability of those agencies, and it is a lack of time and resources.

Mr. SHELDON. Professor Taeuber, Secretary Packer, Professor Anderson, Mr. Robie, on behalf of the committee, thank you for coming. We appreciate your taking the time.

The committee will stand in recess until tomorrow, Wednesday, June 7, at 10 a.m. The meeting place is in the Capitol Building, room S-207.

[Whereupon, at 12:15 p.m., the committee recessed, to reconvene at 10 a.m., Wednesday, June 7, 1978.]

# SPECIAL STUDY ON ECONOMIC CHANGE

WEDNESDAY, JUNE 7, 1978

## SPECIAL GROUPS IN THE LABOR FORCE

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, pursuant to recess, at 10 a.m., in room S-207, the Capitol, Hon. Richard Bolling (chairman of the committee) presiding.

Present: Representative Bolling and Senator Hatch.

Committee staff present: Louis C. Krauthoff II, assistant director; Mark Borchelt, administrative assistant; and M. Catherine Miller, minority professional staff member.

Special Study on Economic Change staff present: Charles S. Sheldon II, research director; Robert Ash Wallace, research director; Richard D. Bartel, staff economist; Paula J. Dobriansky, research assistant, and A. A. "Chip" Sayers, research assistant.

Also present: Everett M. Kassalow, Congressional Research Service, Library of Congress.

Representative BOLLING. The committee will be in order.

This set of hearings is running on one opening statement. I made a very long opening statement on the first day of the hearings and in it I laid down what I hoped would be the ground rules.

We are trying not to do anything remarkably new but we are trying to avoid the standard pattern of hearings. We are trying to have a discussion, not only among people sitting here with those there but among those who are before us as witnesses.

We are very grateful to you for being here. I understand that some of you may have made changes in previous plans to make it possible to be here and we appreciate it very much.

Now, having said that, I ask the impossible: In order that we can get to a discussion, I would hope that you would try to summarize your statements.

Of course, the full statement and most other things that you might want in the record will be put in the record, but we are anxious to get to a kind of roundtable discussion.

The members of the full committee staff will participate, the staff of the SSEC will participate and we usually get at least one other Member to show up who is in the right form contrast, he is a relatively conservative Republican and he is a good friend of mine and we make a fairly good mix.



Having said that, I will introduce our first witness. Ms. Alice Yohalem, who has been a research associate on the staff of the Conservation of Human Resources, Columbia University since 1963. She has a B.A. from the University of Wisconsin and an M.A. in economics from Columbia University.

While she has participated in many studies dealing with a variety of labor market concerns, her principal research interest has been the role of women in the American economy, and she has been the author, coauthor or editor of several books that deal with aspects of this subject.

Among these publications are: "Life Styles of Educated Women;" "Educated American Women: Self-Portraits;" "Manpower Strategy for the Metropolis;" and "Corporate Lib: Women's Challenge to Management." Due to be published shortly is "The Careers of Professional Women: Commitment and Conflict."

Currently, Ms. Yohalem is serving as the American collaborator on a multinational study of the reentry of mature women to the labor force, sponsored by the German Marshall Fund of the United States, and she has just returned from a Paris meeting with the other participants who represent France, West Germany, Great Britain, and Sweden.

That must have been a fascinating experience.

Ms. YOHALEM. It was, indeed.

Representative BOLLING. Please proceed.

**STATEMENT OF ALICE M. YOHALEM, RESEARCH ASSOCIATE,  
CONSERVATION OF HUMAN RESOURCES, COLUMBIA UNIVERSITY**

Ms. YOHALEM. Thank you, Mr. Chairman.

My statement is in itself a summary so I would ask that you grant me leave to read it with some interpolations.

I appreciate the opportunity to discuss some issues related to the future implications of changes in the female labor force. As an introduction to my remarks, I feel constrained to comment upon the organization of today's hearing.

Although I recognize the difficulties attendant upon the design of a framework for so comprehensive a series of hearings, it is surely deceptive to categorize women workers as "Special Groups in the Labor Force," in juxtaposition with older workers and illegal workers. Women currently comprise over 40 percent of the civilian work force; they have a labor force participation rate of almost 50 percent overall, and a rate of more than 60 percent in some age groups. Moreover, trends in female employment indicate a steady increase in the proportion of women with a continuing attachment to work. In addition, women's worklife expectancy has lengthened significantly, while that of men has been contracting.

Hence, rather than comprising a special group within the working population, women have become, and will remain, an intrinsic component of this population, albeit one which has special problems.

Forecasts suggest that the number of working women will continue to grow substantially; current estimates predict an increase of about one-third by 1990. Since official projections of the growth of the female labor force have tended to fall short of actual growth,

this may well be an underestimate. For example, in 1973 the BLS projected a female participation rate in 1980 that was exceeded in 1974.

What are the implications of the continued expansion of the female labor force for the economy and for the workers themselves? No problem will be more pressing than that of how to create sufficient employment for all job seekers of both sexes. Underlying consideration of this problem must be an understanding that women are in the labor force to stay; that the change in women's relation to work is irreversible. There is no policy that is likely to keep them down on the farm after they have seen the workplace.

During the 1974-75 recession, for instance, their participation rate was higher than expected on the basis of past experience during downturns which is one reason why the unemployment rate itself didn't drop as quickly as anticipated when things got better.

While women, like men, work primarily for economic reasons, also like men, they do not work for bread alone. I do not believe, therefore, that the absence of financial need will stimulate women to return to hearth and home. For example, one survey which asked a sample of working women if they would continue to work even if they had no financial need found almost 60 percent saying yes, they would continue. The profound social changes that have been underway in recent years have not provoked much response in terms of social policies but they have had a crucial impact upon women's work aspirations and behavior.

During the next decade, increasing numbers of women entrants and reentrants to the labor market in combination with other job aspirants should seriously impede attempts to achieve a full employment economy in the absence, particularly, of any macroeconomic stimuli. Competition for jobs will be intense, and the three major groups of competitors will consist of young white males, young black males, and women of all working ages, for it is not only young women who will be seeking employment, but those who will resume work or make a delayed entry to work after an extended period of homemaking, whose numbers have risen dramatically in the last several years and many of whom require special help in making the transition from home to the labor force.

While it is possible that declining fertility rates will have the eventual effect of widening job opportunities for women insofar as adult females may be sought as substitutes for unavailable young male workers, it is doubtful that this situation would occur within the decade of the eighties. Therefore, in the near future, we cannot count upon a welcome employment environment for all women or all men, for that matter, who may need or wish to work. Unemployment affects women to a far greater degree than men because they predominate among the last hired and because they tend to be second-choice employees. Also, many are middle aged and face a combination of age and sex discrimination. Therefore, they are not only competing with men, but they are competing with younger women when they try to enter employment. Their inability to obtain jobs is especially serious in view of the growing number of families with female heads—14 percent in 1977—and the increase in the employment of wives, which implies the need for a second

earner—49 percent in 1978. The conventional view of the American family as headed by a male who is the sole wage earner is simply not supported by the facts. Yet, I believe it is the image that continues to motivate policies in many spheres.

One solution to the problem of increasing the number of job opportunities that has found favor in some quarters is a restructuring of employment to permit more part time and shared jobs. Part-time employment has customarily been more characteristic of women than of men—more than one-third of females but only 13 percent of males worked part time in 1976—but not all part-time work is a matter of preference. It provides less job security and usually does not include the public and private fringe benefits applicable to full-time work. If these problems were mitigated, however, part-time jobs for both sexes could be an important means of spreading work when the total number of jobs is inadequate.

Also, there are variations in people's preference for work time and I think this would answer some of these differences. Furthermore, in terms of broad social policy, job sharing and other part-time arrangements may be one method of handling the maldistribution of income that will result as more and more husbands and wives at high occupational levels pursue dual careers.

President Carter has given his support to efforts to develop permanent part-time employment in the Federal Government and such action can serve as a model for policies designed to provide similar opportunities on a wider basis.

That there are costs that employers would have to bear in providing alternative work schedules there is little doubt. But it is questionable whether they would have to be as high as some maintain. For example, losses in productivity related to hours worked may well be offset by increased efficiency during a shorter work day or work week. In any event, despite the fact that a loose labor market does not encourage employers to innovate, studies of the benefits and costs of different work time options should be attempted to determine whether national policies to stimulate job restructuring are warranted.

There seems to be a widespread belief that the solutions to the problems of women workers lie in negotiations within the labor market itself, rather than in the public arena. However, women workers represent the weakest segment of the working population. The majority of them are in jobs of low skill, low pay, and low security. Relatively few women are union members; although, if legislation strengthening trade union organizing efforts is passed, the position of many working women should be improved in coming years.

But that will still leave large numbers of women at the bottom of the job ladder, more and more of whom will want to retain and will have to retain a continuous attachment to work. The conventional rationale of employment discontinuity to explain the gap between the earnings and job status of males and females will have no applicability to them and we shall be forced to recognize that relatively little progress has been made in achieving equal employment opportunities for women, except for those who have been in the most favorable positions to take advantage of new options.

Government can ill afford to be complacent about continuing sex inequality in the labor market. Too many working women are and will be heads of households, or wives whose earnings are necessary, and their lack of adequate compensation will be a burden upon their families and upon the larger society.

Although there has been considerable pressure for women to make nontraditional occupational choices, it is unlikely that the next decade will see much occupational desegregation. Women are entering male dominated fields in larger numbers than in the past, but that change has not resulted in a slowdown in their entry into female fields because of an enlarged female work pool, and because the sectors of the economy that are expanding, service and white collar, are those that traditionally seek women workers. Hence, a concentration upon upgrading female occupations would appear to hold more promise of improvement in women's work status in the years ahead than exhortations to seek alternative choices.

I favor nontraditional career choices for women, but, since certain "female" jobs have a place in our economy and are socially desirable, such as social work, library work, nursing and so forth, concentration upon recruiting men and dissuading women serves no social or altruistic purposes.

I think that the younger generation will change. In the future we shall see more occupational integration of the sexes, but the immediate issue is to change conditions within the predominantly female fields.

Stepped up enforcement of existing legislation and executive orders will be necessary to insure that women in all types of occupations are given the opportunity to proceed at the same pace as men. And in those fields, such as law and medicine, where women are making considerable inroads, care must be taken to see that the two-tier system customary in other occupations with substantial numbers of women is not allowed to develop.

Considering the serious difficulties that have been encountered in enforcing antidiscrimination laws and regulations, it may be worth considering whether discrimination on the basis of gender should be handled separately from discrimination on other bases. Enforcement on so broad a range may be one reason why so little progress has been made with respect to both minorities and women. Although both groups share many similar economic disabilities, they also have distinctive characteristics and each may have suffered from inadequate attention because of multiple responsibilities of enforcement agencies.

This may seem unrealistic in light of attempts to coordinate these activities but I think it is something worth considering. It has its counterpart in the Equal Opportunities Commission in Great Britain which has the sole responsibility for dealing with sex discrimination.

Some persons view a restructuring of the workweek as the answer to the problem of the lack of a unified child care system. Although it is probable that increased access to good part-time jobs would indeed serve to solve the child care problems of some numbers of families, it is unlikely to be a total solution to the problem since most jobs will continue to be full-time and part-time employ-

ment does not necessarily coincide with school hours nor does it always serve the needs of mothers of preschool children.

The labor force participation rates of mothers of children of preschool and school age have been steadily increasing, almost half of all children under the age of 18 years had mothers in the labor force in 1976 as did 37 percent of preschool age children. Yet, the United States stands virtually alone among industrialized nations in denying governmental responsibility for a system of child care. Such assistance has been deemed acceptable only as an incentive to permit mothers to work who otherwise would be forced to rely on public assistance, and provisions for this group are inadequate at best.

There is a certain irony in the whole concept of the WIN program because women who tend to have made the smallest investment in human capital are being forced to enter the labor force. Hence, there is an inverse relationship between the size of the investment in female capital and demands for women's labor force participation.

Most working mothers have had to reply upon a hodgepodge of informal arrangements more often than not of low quality and often of high cost. The fact that part of a family's child care expenditures is deductible from the income tax does not come close to addressing the problem of the lack of availability of inexpensive quality care. It makes little sense for government to act to widen women's job opportunities when their ability to take advantage of new options is restricted by the absence of adequate child care facilities.

A child care system has implications beyond enabling mothers to work. These include possible savings realized from the prevention of social pathologies among youth, as well as improvement of the physical and mental well-being of children. Also relevant is the use of public expenditures on a child care system as an instrument for job creation on many occupational levels, for both women and men, including individuals on the welfare rolls and unemployed school personnel.

Whether the provision of child care facilities would induce more women to enter the labor force is moot. France, for example, has an extremely comprehensive child care system open to all mothers regardless of income or work status. Yet her female labor force participation rate is far lower than ours. Just as I question whether women can be kept out of the labor force if they have a mind to work, so do I also question whether the availability of child care services alone would encourage work on the part of many mothers who prefer to remain at home and are able to do so.

Closely allied to the child care problem is that of the protection of working women during pregnancy and shortly after childbirth, another area where the United States falls woefully behind other countries. Although some scattered progress has been made in this area, there is no single national policy that compels employers to protect the job rights of women who must leave work for these reasons. The lack of statutory provisions in this regard not only jeopardizes the health of pregnant workers, but places an added financial burden upon mothers as they are forced to undertake a

renewed job search and upon their former employers who must hire and train replacements.

I have touched upon but a very few of the problems relating to women workers that I believe will confront this Nation and its lawmakers in the decade of the eighties. I think that it is not beyond the realm of possibility that women's labor force participation will some day in the not too distant future overtake that of men. I trust that long before then it will become universally recognized that women are no longer a labor reserve but a permanent constituent of the work force and that Government policies should treat them accordingly.

Representative BOLLING. Thank you very much.

Next we have Mr. Harold L. Sheppard, currently director of the Center on Work and Aging of the American Institutes for Research.

Prior to joining the American Institutes for Research in March 1973, he served for 12 years as staff social scientist for the W. E. Upjohn Institute for Employment Research.

From 1961 to 1963, he was Assistant Administrator for Operations of the Department of Commerce's Area Redevelopment Administration, now the Economic Development Administration, after functioning as research director and staff director of the Senate Special Committee on Aging, 1959-61.

Among his books, reports and activities relating to the topic of this hearing are "Too Old To Work—Too Young To Retire," for the Senate Special Committee on Unemployment; "Industrial Gerontology"; "The Job Hunt"; "Research and Development Strategy on Employment-Related Problems of Older Workers"; and "The Graying of Working America: The Coming Crisis of Retirement-Age Policy."

Mr. Sheppard received his Ph. D in sociology and labor economics from the University of Wisconsin. He has taught at Wayne State University, the University of Michigan, and UCLA.

He is a member of the Industrial Relations Research Association, the Gerontological Society, the American Sociological Association, and the National Economists Club.

He has been kind enough to present me a copy of "The Graying of Working America" and I will ask him to autograph it for me.

Will you please proceed?

**STATEMENT OF HAROLD L. SHEPPARD, DIRECTOR, CENTER ON WORK AND AGING, AMERICAN INSTITUTES FOR RESEARCH, WASHINGTON, D.C.**

Mr. SHEPPARD. Thank you, Mr. Chairman.

I, too, would like to thank the committee and the chairman for this invitation to appear today at this type of informal panel discussion, but also because I think this is the first time the Joint Economic Committee has had a hearing in which the older worker topic has been a major focus.

I have a prepared statement which I hope will be included in the record.

Representative BOLLING. It will be included in the record at the end of your remarks.

Mr. SHEPPARD. The statement concentrates essentially on three main topics or issues regarding the status of older workers and some discussion about the future.

First, problems of joblessness, specially length of joblessness; second, issues regarding labor force participation rates, and finally the emerging issue centering on retirement age policy.

I would also like to mention something along the lines of the previous speaker's remarks that in dealing with the topic of work and aging one frequently hears, especially more recently in the debate over the change in compulsory retirement age from 65 to 70, that this will hurt the chances, for example, of women and minority groups.

Such statements are confusing to me because I didn't know that women and minority people don't become old. If you look at some of the data you might find the greatest victims of age discrimination are older black females.

I am very upset, not just being facetious, when I hear these kinds of supercilious, sophist arguments by some otherwise responsible public leaders.

I also have an appendix to my prepared statement that I would like to request the inclusion of in the record.

Representative BOLLING. It will be included with your prepared statement.

Mr. SHEPPARD. It is the summary of a report recently prepared for the Department of Labor entitled "Research and Development Strategy on Employment-Related Problems of Older Workers."

Representative BOLLING. It will be included, of course.

Mr. SHEPPARD. I think we are all familiar with the general knowledge that the older the worker the lower the unemployment rate.

This frequently leads to the conclusion that there isn't any problem, but when you concentrate on the problem of duration of unemployment you get a different picture.

Here the problems of older workers show up. The older the unemployed worker, the longer he or she remains unemployed, and that is critical.

As of April of this year, the figures on numbers unemployed in this age group—45 and older—apply to more than 1 million unemployed men and women.

And of that 1 million or so, more than 400,000 were long-term unemployed, 15 weeks or more.

Despite general overall improvement in duration of employment figures since the peak of the recession in 1975, we shouldn't overlook the inconvenient fact that for the unemployed 45 to 64 age group the proportion with long-term unemployment actually increased during that so-called recovery period.

Now, this phenomenon is a perfect example of what is meant by structural unemployment.

It should serve as a reminder to Congress and the administration that there should be no relaxation of special target group programs and policies in the midst of current moves to ease up on anti-unemployment measures because of certain legitimate fears of inflation.

I have always been struck in this connection by a sort of a catch-22 pattern.

It seems that each time that certain types of structurally unemployed or underemployed categories of the population are about to grab onto the first rung of the ladder of economic opportunity, partly as a result of some monetary and fiscal and counter-cyclical measures, the job picture in general improves and we say that we don't need any more programs, and the ladder is jerked away from them.

I don't want to fall into the trap of repeating the old, even if correct, labor economic clichés regarding the explanation for this structural problem of these types of workers, including older workers.

One of these arguments is that the problem stems from competitive skill disadvantages of older workers in the open labor market.

But, I am not sure how many of us are aware that even middle-aged and older professionals, scientists and technicians have their problems much of which are a product of age discrimination.

Let me just give one example.

An analysis has been made of length of unemployment by age and education, and there was no question that the lower the level of schooling the longer the duration of joblessness but this was true only of the younger men—this was a study based only on men—the men 25 to 34.

But consider the older group in this study, the group 55 to 64. Their duration of joblessness was positively correlated to schooling.

The higher their education the greater the duration of unemployment. Such a finding suggests that more education by itself can no longer be viewed as a protection against being long-term unemployed if the worker is roughly 55 or older.

This further suggests a program of improved implementation of the Age Discrimination and Employment Act and an effective program of midcareer development opportunities aimed at keeping middle-aged professionals and others up to date with changing technology and with changing skills, and also a program aimed at providing opportunities for midcareer change.

After all, given the fact that 70 is now the upper age for allowable mandatory retirement, a 50-year-old professional still has ostensibly 20 more years in which he or she might pursue a new career or remain in the old one, given the proper refresher course.

There is a great deal of research on changing labor force participation rates of older workers but it essentially concentrates on the role of retirement income incentives in the decrease in labor force participation.

On the other hand, I think that inadequate attention has been paid to the role of the employment environment itself as a factor in the declining labor force participation rate of so-called older workers.

I have made a comparison between the experience in the prosperity period of 1964 to 1968 with the experience in what I call the recession period from 1973 to 1977.

What do we find when we examine relative changes in participation for each of these two periods among older workers within sex and race groups of the population?



Table 1, in my prepared statement, includes figures that have to do with rates of change in participation rates taking one participation rate in, say, 1964, comparing it with 1968 and seeing what the rate of change is.

That table shows that during the prosperity period of 1964 to 1968 the participation rate of white males, for example, 45 to 54 years of age, declined at only a rate of 0.7 but during the recession period the rate of decline had doubled to 1.4 and, as you go up the age scale, the comparisons are much more dramatic.

The same comparison I made in the case of nonwhite males suggests a similar impact of the general economic environment.

Remember, I am talking what happens to participation rates in a prosperity period versus a recession period.

As is generally recognized—this was pointed out by the previous speaker—the trends in labor force participation among women do not parallel those of men.

That is another way of saying also that you can't talk about the older worker.

In general, women's rates of participation have been increasing. If we assume that participation—a rising participation—is a positive sign of social progress, I don't know what the women are complaining about.

I said only if you assume that, now. [Laughter.]

I don't want this discussion to be too dull. [Laughter.]

Representative BOLLING. Neither do we.

Mr. SHEPPARD. This has been true, again, generally speaking, even during the recent recession period and the figures in table 1 show that.

But this cannot be said—this is what I want to build up to—when we focus on the older women, especially those 55 and older.

Another important dimension, too frequently neglected, is that at any one time the level of unemployment in areas, the area unemployment, also can play a role in the retirement behavior of workers, or put the other way, labor force participation rates.

My own analysis of the data from the Department of Labor's national longitudinal survey reveals that in 1973, before the recession, the higher the unemployment rate in an area, the higher the proportion of men 60 to 64 no longer in the labor force.

Clearly, to me, this shows the impact of the economic or unemployment environment in the local area.

This is a form of involuntary retirement in my opinion that too frequently escapes notice in official Government and academic research reports.

Furthermore, the dropping out of the labor force as a result of this adverse employment environment means that dropouts are no longer counted as unemployed and they don't exist as far as counts of the long-term unemployed are concerned.

I won't take time to discuss the discouraged worker phenomenon, except to say it is essentially an older worker phenomenon and I have a research project going on now which I hope gets to that in greater detail.

Now, we can, of course, Mr. Chairman, as you know, through a statistical sleight-of-hand—I think you are an adviser to the National Commission on Employment Statistics—

Representative BOLLING. That is right.

Mr. SHEPPARD. We can, through statistical sleight-of-hand, semantically solve or reduce the unemployment rate or the figures on length of unemployment by excluding from the population defined as the labor force those upper age groups that experience special obstacles in the employment sphere.

What a paradox I think that would be, given the fact that Congress has just recently raised the allowable age for compulsory retirement in the private sector and eliminated it altogether in Federal civil service, Federal agencies.

I assume that the National Commission on Employment Statistics recognizes the incongruity of any proposal to eliminate older age groups from the definition of the labor force in the face of this new legislation.

In another section of my prepared statement I have presented what I term a longitudinal approach to changes in labor force participation.

By that, I mean I have taken data from the Department of Labor, say, for an age group 25 to 29, and what their unemployment or their participation rates are, and then going 5 years later in the table and looking at the age group 5 years older and getting a longitudinal picture that you don't have to get by spending several millions of dollars interviewing people every year.

The data here show that the older the male cohort the greater the rate of decline for every age group. That is in table 2. Paradoxically, for some people, teenagers as they move into being 20 to 24—not the precise 5-year next category, as explained in the footnote—the participation rate over the next 5 years went up the most, but as you go up the age scale, it gets worse if you consider participation as a positive thing.

You cannot make the same kinds of statements that clearly in the case of females—but starting after about the age of 50 to 54 and over a 5-year period, the participation rates of women begin to decline sharply.

Much of this decline is due to premature, involuntary retirement brought about by the labor market experience of these men who were older in 1973 and got older—even older—through the ensuing 5 years.

Little research has been explicitly designed to measure—I think I have said this already—the role of adverse employment experiences in the so-called “retirement decision” among older workers.

This 5-year period covered a time when many industries reduced their employment or failed to expand and, when many companies simply went out of business.

We shouldn't let ourselves be misled regarding any notions about the extent to which seniority truly protects the older worker.

In connection with what Ms. Yohalem said, perhaps if there were more protection indirectly as a result of new labor legislation, there might be more workers protected by seniority, although I am just speculating here.

The type of comparative analysis that I have done in this section of the paper suggests that while many older workers do adapt to adverse labor market experiences simply by leaving the labor force and are no longer counted among the unemployment, many others

will not, or cannot, leave the world of work and thus remain unemployed, still seeking work.

I didn't get into the question of involuntary part-time employment which I think is another dimension of this problem. I also have shown in my prepared statement that during the recent recovery period the rates of recovery have been less for the older groups using unemployment rates.

I also would like to call special attention to the changes, to some matters having to do with minority group workers, especially black workers, because this recovery rate analysis did show that for certain older age groups of blacks, their unemployment rate actually went up during "the recovery".

Speaking of the future, I want to say this. If you look at the Census Bureau projections from 1975 to the year 2000, and at the figures presented for the black age group of 40 to 69, the group protected by the new legislation, the size of that population is expected to rise by 70 percent.

By comparison, the white group is going to go up by only 37 percent.

There is obviously much to be done now and in the immediate future long before the year 2000 to assure that this most rapidly expanding population of the older worker age group has a more equitable access to economic and employment opportunities than has so far characterized the pattern for the recent and current cohorts, the black older worker Americans.

I think these are important because I don't think we can exclude the role of lower skill levels of each age group of nonwhites in relationship to some of the other statistics I present, as some classes of jobs and industries disappear or decline for whatever reason.

I don't think we can exclude the undeniable role, either, of differential health status on the participation capacity of nonwhites versus whites.

Also, health status itself can be adversely affected both by the unemployment experience, and I think this committee has been given an excellent report by Mr. Harvey Brenner of Johns Hopkins showing the social costs of unemployment, including the health cost. Health status itself can be adversely affected by the nature of the work environment itself, all of which highlight the importance both of upgrading the occupational levels of nonwhites as they move into adult ages and also of an effective implementation of occupational health and safety laws and regulations.

So far, I have talked about development of the recent past with respect to such things as duration of unemployment, labor force participation rates and recovery rates.

There are two other major topics I would like to discuss. One has to do with the change in mandatory retirement age. I say in my statement that the immediate impact may not be as great as some people may have feared or hoped, and Congress has required that the Secretary of Labor provide a study, a report, dealing with that question by no later than January 1, 1982. But to me, however, the most important thing is that Congress has formalized a process involving what I call a sociocultural redefinition of what is meant by "old", of when a person may be classified as old.

Now, we might not be able to change our images of what is meant by this word "old". We will not eliminate it from our vocabulary. It typically connotes the onset of behavioral and mental decrements to such a point that the individual no longer is able to or required to continue in socially and economically productive roles, but when is old is another matter.

I think the new legislation is moving in a direction to deal with this area more realistically.

Representative BOLLING. Could you just highlight the other points for us?

Mr. SHEPPARD. Yes. There are other points I would just mention. Demographic, biomedical, and other economic factors will force us before the turn of the century to address all these factors.

This is the thrust of the book "The Graying of Working America." There will be pressure to reconsider our current retirement age policy and here I don't mean the upper age but I mean the early age retirement phenomenon.

I don't think the private and public sectors can afford the support burden and I think we might be beginning to see some signs of—we may have seen some of them yesterday in California—if not a taxpayers' revolt, some kind of rumble when it comes to that reduced working age population having to support a growing non-working older population, which, incidentally, will be augmented because of the new improvements in mortality rates.

They will be living longer than anybody expected, thus creating new problems for the economy, I will finish there and can elaborate later.

Representative BOLLING. Thank you very much, Mr. Sheppard.

As I stated before your presentation, your full prepared statement and the appendix will be entered into the record at this point.

[The prepared statement of Mr. Sheppard, together with the appendix referred to, follows:]

PREPARED STATEMENT OF HAROLD L. SHEPPARD

*The Older Worker: Problems and Prospects*

Mr. Chairman and members of this committee; I am Harold L. Sheppard, Director of the Center on Work and Aging, of the Washington Office of the American Institutes for Research (AIR), a non-profit social science research organization. The views expressed in my statement and testimony are my own, and not necessarily those of AIR.

I want to thank the Committee for this invitation to be part of the panel meetings regarding its special study of economic change with a special emphasis on the issues that should be given special attention over the near- and long-term future.

This is the first time, I believe, that my own topic has received formal attention by the Joint Economic Committee, an institution for which I have always had a high respect.

My full statement, which I hope may be included in the full report on these hearings, concentrates essentially on three main topics or issues, regarding the status of older workers: first, problems of joblessness, especially length of unemployment; second, issues regarding labor force participation rates; and finally, the emerging issue centering on the future of retirement age policy.

As an appendix to my complete testimony, Mr. Chairman, I would also like to request the inclusion of the summary from a report recently completed for the Department of Labor, entitled "A Research and Development Strategy on Employment-Related Problems of Older Workers."

*Duration of unemployment*

Unemployment rate figures may tend to show a more advantageous position of older workers, i.e., the older the worker, the lower the unemployment rate. But concentration only on unemployment rates obscures the problem of duration of unemployment. And here the problems of older workers show up: The older the unemployed worker, the longer he or she remains unemployed.

As of April of this year, the figures on numbers unemployed apply to more than 1 million unemployed men and women 45 and older. More than 400,000 of these men and women, in that month, were without jobs for at least 15 weeks—the so-called long-term unemployed. Regardless of the issue regarding relative employment problems of older vs. younger workers, this figure by itself should be grounds for greater policy attention. There is nothing new on the horizon, as far as the future is concerned, suggesting any clearly identifiable programs or conditions that might mitigate the jobseeking problems of older unemployed workers in the next several years.

In April 1973, before the recent recession began, there were still slightly less than 900,000 unemployed men and women 45 and older. Thirty-six percent were long-term unemployed. Today—at least in April of 1978—despite the general decline in unemployment since 1975—the long-term unemployed proportion is greater than in 1973: 41 percent.

Despite the general, overall improvement in duration of unemployment since 1975, we should not overlook the inconvenient fact that for the unemployed 45–64 age group, the proportion with long-term unemployment actually increased during that same three-year period of so-called “recovery.” In other words, among the younger unemployed, the proportion with long-term joblessness declined from 1975 to 1978 (April), but for the 45–64 year-old unemployed workers, the proportion with long-term joblessness increased.

This phenomenon is a perfect example of what is meant by structural unemployment, and it should serve as a reminder to Congress and the Administration that there should be no relaxation of special, target-group programs and policies in the midst of current moves to ease up on anti-unemployment measures because of certain legitimate fears of inflation.

As a social scientist of, and a former administrator in an agency dealing with, the structural unemployment problem, I have always been struck by a Catch-22 pattern. Obviously, counter-cyclical, monetary, and fiscal policies are a fundamental springboard for improving the employment chances of the structurally unemployed, whether we are talking about young jobseekers, disadvantaged minority groups, older workers, or any workers in chronically high-unemployment labor market areas.

But it seems that each time these types of structurally unemployed or underemployed categories are about to grab onto a rung in the ladder leading upward toward economic security—as a result of a combined program involving both structural and counter-cyclical measures—there comes a point when we jerk the ladder away, that is, when general employment conditions seem to be improving, a series of decisions is made that are counter-productive as far as solving problems of structural joblessness are concerned.

I don't want to fall into the trap of repeating old, even if correct, labor economics clichés regarding the structural nature of the problems of older workers—one of which is that those problems stem from the competitive skill disadvantage of older workers in the open labor market. This is correct in many respects, and it typically connotes a disadvantage stemming from a lower educational level and/or actually lower-level skills per se.

But I'm not sure how many of us are aware that even middle-aged and older professionals, scientists, and technicians have their problems, much of which are a product of age discrimination per se. I can provide detailed examples, if necessary, to support this statement which, I believe, is not one of the conventional clichés and time-worn generalizations in the field of labor economics.

As one example, let me cite an analysis of length of unemployment by age and education.<sup>1</sup> There was no question that the lower the level of schooling, the longer the duration of joblessness. But this was true only of the younger men, for example, 25–34. But consider the older group, 55–64: their duration of joblessness was directly correlated to their schooling. The higher their education, the greater the duration.

Such a finding suggests that more education by itself can no longer be viewed as a protection against being long-term unemployed if the worker is roughly 55 or older. This further suggests a program of improved implementation of the Age Discrimina-

<sup>1</sup> Arnold Katz, “Schooling and Employment,” *Industrial and Labor Relations Review*, July 1974.

tion in Employment Act, and an effective program of mid-career development opportunities aimed at keeping middle-aged professionals and others up-to-date with a changing technology and changing skills, and a program aimed at providing opportunities for mid-career change. After all, given the fact that 70 is now the upper age limit for allowable mandatory retirement, a 50 year-old professional still has ostensibly 20 more years in which he or she might pursue a new career, or remain in the old one, given the proper refresher courses.

### Labor force participation

While most of the research on changing labor force participation rates of older workers has concentrated on the role of retirement income incentives, insufficient attention, in my opinion, has been paid to the role of the employment environment itself. One admittedly limited approach to the impact of levels of unemployment on labor force participation rates consists of a comparison of rates of change in labor force participation during a period of declining or steady unemployment rates with change rates in participation during a period characterized by what we have witnessed since 1973 through 1977. From 1964 to 1968, national unemployment declined from 5.2 to 3.6 percent. From 1973 to 1977, the rate went from 4.9 up to 8.5 in 1975, and still was high—at 7 percent—in 1977.

What do we find when we examine the relative changes in labor force participation rates for each of these two periods among older workers within sex and race groups of the population?

Table 1 shows that during the "prosperity" period of 1964-68, the participation rate of white males 45-54 years old declined at a rate of only 0.7 percent, but during the "recession" period of 1973-77, their rate of decline had doubled, to 1.4 percent. The comparisons are much more dramatic among those 55 and older. For 55+ white males during the prosperity period, the decline rate was only 1.6 percent, but during the recent recession period, it had more than tripled, from a mere 1.6 percent to 5.4 percent. For the 65+ group, it was only 2.2 percent during the prosperity period, compared to a much greater rate of decline of 11.4 percent during the recent recession period, 1973-77.

The same kind of comparison in the case of nonwhite males suggests a similar impact of the general economic environment, especially for the 45-64 age groups (45-54; and 55-64), as shown in table 1.

TABLE 1.—CHANGES IN PARTICIPATION RATES, 1964-68 AND 1973-77, BY AGE, RACE, AND SEX

	1964-68	1973-77
White males, 16 plus.....	-0.9	-1.3
45 to 54.....	-0.7	-1.4
55 to 64.....	-1.6	-5.4
65 and over.....	-2.2	-11.4
White females, 16 plus.....	+8.5	+9.1
45 to 54.....	+2.6	+3.7
55 to 64.....	+6.6	(1)
65 and over.....	-5.1	-8.0
Black and other males, 16 plus.....	-3.0	-3.8
45 to 54.....	-1.6	-6.0
55 to 64.....	-1.2	-5.2
65 and over.....	-10.1	-14.6
Black and other females, 16 plus.....	+1.6	+3.7
45 to 54.....	-4.0	+4.1
55 to 64.....	-2.9	-4.5
65 and over.....	-6.3	-10.8

1 No change.

Note.—Based on data from: "Employment and Training Report of the President, 1978"—table A-4.

As is generally recognized, the trends in labor force participation among women do not parallel those of men. In general, their rates of participation have been increasing. This has been true—again, generally speaking—even during the recent recession period, as the figures for both white and nonwhite females indicate in table 1.

But this cannot be said when we focus on the older women, especially those 55 and older. For example, among white females 55-64, their participation during the prosperity period rose at a rate of 6.6 percent, but in the recent recession period, it remained static, at 40.8 percent. For nonwhite females 55-64, the rate of change during the recession period registered a decline of 4.5 percent, compared with only 2.9 percent during the prosperity period.

Equally, if not more important, area unemployment levels at any one time apparently play a role in the retirement behavior of workers. For example, my own analysis of the data from the Department of Labor's National Longitudinal Survey reveals that in 1973—before the recession—the higher the area unemployment rate, the greater the proportion of men 60–64 years old no longer in the labor force. This is a form of involuntary retirement that too frequently escapes notice in official government and academic research reports.

Furthermore, the dropping out of the labor force, as a result of the unemployment environment, means that drop-outs are no longer counted as unemployed; and they don't exist as far as counts of the long-term unemployed are concerned.

Of course, as we all know, we can—through a statistical sleight-of-hand—semantically “solve” or reduce the unemployment or length-of-joblessness problem by excluding from the population defined as the “labor force” those upper age groups that experience special obstacles in the employment sphere, for example, those 60 or 65 and older. What a paradox that would be, given the fact that Congress has just raised the allowable age for compulsory retirement in the private sector, and eliminated it altogether in federal agencies. I assume that the National Commission on Employment Statistics recognizes the incongruity of any proposals to eliminate older age groups from the definition of the labor force in the face of this new legislation.

#### *A longitudinal approach to changes in labor force participation*

I have made a special attempt to trace, in a modified longitudinal method, what happens over a given five-year period, to specific cohorts of workers with respect to their labor force participation rates. The period I discuss here encompasses the April 1973 to April 1978 period which includes the serious 1975 recession period. While we may be in a recovery period, we have not, of course, returned to the 4.8 level of unemployment that characterized 1973.

What I have done is to take, for example, the participation rate of men 25–29 years old in April 1973, and check that rate for men five years older in April of 1978, i.e., for men 30–34 years old in 1978; and similarly, for each five-year age grouping through those 60–64 as of 1973 who became 65–69 as of 1978.

This has also been applied to women's participation rates, as shown in Table 2.

Over the five-year period from April 1973 to April 1978, labor force participation rates for the 1973 cohort of men 25–64 years old declined. More important, the older the male cohort, the greater the rate of decline. For men who were 25–29 years old in 1973, the five-year period (which encompassed the serious recession year of 1975) produced for that group, by the time they were five years older (1978), a drop in their participation rate at the rate of less than one-half a percent, but for each older group the decline rate accelerates. For men 45–49 in 1973 their level of participation declined over the next five years at the rate of 4.9 percent; for those 50–54 in 1973, the decline rate was much higher—9.2 percent.

For men 55–59 in 1973, the next five years witnessed a rate of decline amounting to more than 28 percent by the time they became 60–64 years old. Much of this decline is due to what, in my opinion, is premature, involuntary retirement brought about by the labor market experiences of these men who were 55–59 in 1973.

TABLE 2.—"LONGITUDINAL" RATES OF CHANGE IN LABOR FORCE PARTICIPATION, APRIL 1973 TO APRIL 1978, BY AGE AND SEX

Age in 1973	Age in 1978	Percent change in participation rate	
		Males	Females
16 to 19.....	20 to 24 <sup>1</sup> .....	+47.8	+51.9
20 to 24.....	25 to 29.....	+11.1	+11.5
25 to 29.....	30 to 34.....	+1.8	+16.0
30 to 34.....	35 to 39.....	-0.4	+26.0
35 to 39.....	40 to 44.....	-1.9	+20.3
40 to 44.....	45 to 49.....	-3.4	+8.8
45 to 49.....	50 to 54.....	-4.9	-2.2
50 to 54.....	55 to 59.....	-9.2	-8.6
55 to 59.....	60 to 64.....	-28.2	-27.6
60 to 64.....	65 to 69.....	-58.6	-55.9

<sup>1</sup> Because of nature of data source, precise 21 to 25 year-old rates are not available, and 20 to 24 is therefore the age grouping used here to estimate change rate over the 5 year period.

Note.—Based on data from: "Employment and Earnings," May 1973 and May 1978, tables on participation rates by age and sex.

Little research has been explicitly designed to measure the role of adverse employment experiences in the so-called "retirement decision" among older workers, as I have already indicated.

This five-year period covered a time when many industries reduced their employment or failed to expand; and when many companies simply went out of business. We should not let ourselves be misled regarding any notions about the extent to which seniority truly protects the older worker.

Furthermore, the fact that the labor force participation rate over the 1973-78 period for men 55-59 years old dropped at a rate of more than 28 percent (from 85.6 to 61.5) might also lead us to expect that the unemployment rate for this same age cohort would have been affected by the drop in the participation rate to such an extent that no adverse change in level of unemployment occurred.

But this is not the case. Instead, by the time the 55-59 year-old men became five years older in 1978, their unemployment rate had increased by 60 percent.

Table 2 shows a clear-cut pattern of mounting rates of decline in participation among men as they become older, starting after age 30. For women, the generally observed rate of increase in participation applies only to those younger than 40 over a following five-year period. Clearly, they begin to experience a longitudinal decline after they reach the age of 45, according to that table.

What I have not done in time for this testimony, of course, is to compare this pattern that has emerged during the 1973-78 period (with its generally sharpened increase in the jobless rate) with an earlier period characterized by an improving employment trend, but I venture to guess that the rates of decline in participation for the older male and female groups, on a longitudinal basis, were not as great as they had been during the 1973-78 period.

This type of comparative analysis nevertheless suggests that while many older workers do "adapt" to adverse labor market experiences simply by leaving the labor force and are no longer counted among the unemployed, many others will not or cannot leave the world of work and remain unemployed, still seeking work.

#### Recovery rates

To be sure, we are no longer in the high unemployment situation that prevailed in 1975, when general unemployment was at the rate of 8.5. We all hope we will continue to be in a positive recovery period. Nevertheless, we cannot escape the inconvenient fact that from 1975 to 1977, the rate of recovery differed from one age group to another; and that the older the labor force participant, the lower the rate of decline in the unemployment rate. Indeed, for certain age groups of nonwhites, there has actually been an increase in unemployment rates. (See Table 3). The only exception to this generalization applies to certain segments of the teen-age population.



TABLE 3.—1957-77 RECOVERY RATES (RATE OF CHANGE IN PERCENT UNEMPLOYED), BY AGE, RACE, AND SEX

	Males		Females	
	Whites	Nonwhites	Whites	Nonwhites
All ages, 16 plus.....	-23.6	-9.5	-15.1	(1)
45 to 54.....	-31.8	-42.2	-13.7	-16.4
55 to 64.....	-19.5	+4.9	-13.7	-8.2
65 and over.....	-2.0	-12.6	-7.5	+16.2

<sup>1</sup> No change.

Source: "Employment and Training Report of the President, 1978," table A-20.

### Older minority group workers

I would also like to call special attention to the changes in the projected population figures for American blacks between 1975 and the year 2000, especially the age group 40-69 which is now the protected group under the 1978 amendments to the Age Discrimination in Employment Act. In 1975, there were about 5,950,000 blacks in this age group. The most recent (1977) Census Bureau projections for the year 2000 indicate that for that future year, the number of blacks in the same age group—40-69—might be 70 percent greater than the 1975 figure—10.1 million. For whites, by comparison, the corresponding figures were 56.1 million in 1975 and 76.8 million for the year 2000, an increase of only 37 percent.

There is obviously much to be done now and in the immediate future, long before the year 2000, to assure that this most rapidly expanding population of the older worker age group has a more equitable access to economic and employment opportunities than has so far characterized the pattern for the recent and current cohorts of black older working age Americans.

TABLE 4.—"LONGITUDINAL" RATES OF CHANGE IN LABOR FORCE PARTICIPATION, 1967-77, AMONG MALES, BY RACE

Age in 1967	Age in 1977	Percent change in participation rate	
		Whites	Nonwhites
25 to 34.....	35 to 44.....	-1.3	-4.3
35 to 44.....	45 to 54.....	-5.6	-11.6
45 to 54.....	55-64.....	-21.9	-26.6

Source: Based on data from "Employment and Training Report of the President, 1978," table A-4.

In Table 4, I have attempted to show that for both white and nonwhite males, as they became older over the ten-year period starting in 1967, their rates of decline in labor force participation went up, and that the rates are greater, the older the age group traced over that recent decade. But more to the point, for each age group, the decline rate for nonwhite males is far greater than for their white age peers, at least for those moving from 25-34, and from 35-44 over a ten-year period.

These comparative findings suggest to me, at least, that among the conditions and factors explaining this greater decline for nonwhites than whites as they grow older we cannot exclude the influence of the differential unemployment experiences for whites and nonwhites, for example, on the job-seeking discouragement phenomenon. Nor can we exclude the role of the lower skill levels of each age group of nonwhites as some classes of jobs and industries disappear or decline—for whatever reason. Nor can we exclude the undeniable role of differential health status on the participation capacity of nonwhites vs. whites.

I hasten to add, in this context, however, that health status itself can be adversely affected both by the unemployment experience—as Dr. Harvey Brenner has already demonstrated to this Committee nearly two years ago in his report on the social costs of national economic policy—and affected also by the nature of the work environment itself, all of which highlights the importance both of upgrading the occupational levels of nonwhites as they move into adult ages, and of an effective implementation of occupational safety and health laws and regulations.

### *Compulsory retirement age and future retirement age policy*

So far I have talked about developments of the recent past, with respect to the conditions of older workers in the American economy and society, specifically, duration of unemployment, and labor force participation, and recovery rates. There are two other major topics I would like to mention.

The first has to do with the change recently enacted by Congress that raises the age at which employers can legitimately require workers to retire, from 65 to 70 (with some exceptions that I won't go into), and the elimination of any upper age for Civil Service employees. The immediate implications of this amendment to the Age Discrimination in Employment Act may not be of any great magnitude. As you know, Congress requires the Secretary of Labor to provide a report on at least the short-run impact of the new change, by no later than January 1982.

The immediate impact may not be great as far as numbers are concerned, but my interpretation of the upper-age revision by Congress is that it has formalized, in my opinion, a process over the past several years involving a socio-cultural redefinition of what is meant by "old," of when a person may be classified as "old." We may not be able to change our image of what is meant by this word ("old"), which typically connotes the onset of behavioral and mental decrements to such a point that the individual is viewed as no longer being able to, or required to, continue in socially and economically productive roles.

But when is "old" is another matter. The new legislation is a formal recognition of the point stressed by gerontologists over recent decades, namely, that increasingly, the 65 year-olds of a given generation are generally in much better physical and mental shape than the 65 year-olds of a previous generation, especially when it comes to work performance, and that future generations of 65 year-olds will be in even better condition.

The other major topic I want to call to your attention has to do with the future of retirement age policy. As important as the issue of the upper age limit for mandatory retirement is, we may be moving into a period in which the more critical issues will stem from problems created by a rapid growth in the numbers of workers retiring long before any given compulsory age. These trends, accentuated by an unexpected increase in average age of death, which might continue to rise, mean a continued reduction of the importance of earnings from paid employment when it comes to the economic support of older Americans.

Will private and public pension systems be capable of providing that support? The costs to the working population and to the general economy of supporting a growing population of nonworking older Americans with truly adequate retirement incomes can be expected to mount, given our current retirement age policies.

Will the younger working population continue to provide that support, especially if it means sharply greater costs to that working population? Will state and local government pension plans be capable of meeting the growing costs of supporting retired employees?

At the risk of oversimplifying, let me tick off a number of factors, trends, and developments that I believe will be pressing us, earlier than other experts may tend to indicate, toward an admittedly controversial re-appraisal of our current policies and practices regarding actual age at retirement, not the legal maximum age at which workers might have the right to continue working before their employers can require them to retire. Here is the list:

1. The trend toward more and more persons retiring at early ages.
2. An increased population of retired persons, and the apparent increase in the number of years they live in retirement—i.e., an increase over current years lived in retirement.
3. The current downward trend toward perhaps a stabilization of, fertility rates, producing a zero or near-zero population growth, but especially resulting in a smaller number of persons eventually moving into the workforce that supports the increasing nonworking older population.
4. Trends in biomedical research that explicitly or indirectly increases the average age of death within a cultural values context that propels science toward reducing and curing diseases; improving health status, etc., regardless of the age of any individual.
5. A disproportionate growth in the number of the very old—say, those 80 and older—a population segment that clearly requires—given our current values—a level and quality of care that is much more costly than supporting the "young old," say, those 60-69.
6. Rising expectations and demands for a better retirement income on the part of each newly retiring cohort.

7. Changes in the energy and resource base that might negatively affect the productivity levels required to support a growing nonworking population.

8. A continuation of inflation rates above those of past decades—an inflation rate that might function as a disincentive to withdraw fully from the paid labor force.

9. A rising proportion of Americans in their 60's with even older parents still alive, and partially dependent on their "old" children.<sup>2</sup>

If we were to put all of these so-called separate items into a computer, with the proper computer program, I believe the outcome would point to cost burdens on the working population greater than have been so far projected, a burden of such a level that new policy adaptations will inevitably be forced upon us.

To be sure, there are some other possible factors and trends that may function as positive offsets to much of what that computerized approach might indicate. Again, without elaboration, what are some of those possible offsets?

1. The impact of a rising labor force participation rate of women to such an extent that they will increasingly become part of the productive working population that works partly to support the increasing older nonworking population.

2. A reversal of the downward trend in fertility rates, in time to augment the otherwise decreasing number of young persons entering the labor force.<sup>3</sup>

3. A lowering of average school-leaving age to increase the "labor supply" of younger persons, for the same purpose.

4. A radically reduced fertility rate sufficient to produce a cost-reduction in the support burden associated with the nonworking child population.

5. A new and rapidly increasing fast-growth economy, and with an unprecedented spurt of productivity increases sufficient to provide the economy with the capacity to pay for the increasing population of nonworking older Americans.

6. The degree to which, quantitatively and qualitatively, immigration—legal and illegal—can be of such a nature as to offset the declining participation of older Americans in the productive labor force.

As you can see, any discussion of the problems of aging, or of employment and aging and of retirement age policy, must be based on some sort of synergistic framework, involving a number of types of variables that simultaneously interact with each other. A mix of disciplines and of bodies of information is called for. In my own work, I have tried to reckon with the joint effect of four major variables, which must be considered together, namely, (1) demographic, (2) economic, (3) the biomedical sphere, and (4) value systems.

The failure to take this joint effect, or synergistic, approach can mislead policy makers, and major institutions in our society which have an impact on policy-making. It is not enough, for example, to use only the conventional demographic approach which typically will take what it is labelled as the "working age" population in relation to the "nonworking age" population, to arrive at what we are all familiar with, the "dependency ratio." Theoretically, it is possible to conclude that the ratio of the "working age" population to the "nonworking age" population will not change at all, over the next ten, twenty, thirty or fifty years, and that therefore there should be no concern about the support burden.

But such an approach leaves out a number of other considerations, all of which comes down to the costs involved. The conventional method of calculating the dependency ratio might reveal no change at all in that ratio, but such a method does not tell us whether the costs of supporting the nonworking population will stay the same, increase, or decrease.

That conventional approach, furthermore, assumes that all of the so-called working age population does not include non-workers, which, of course it does. In 1976, for example, only 71 percent of the so-called working age-population in the United States was in the labor force, i.e., 29 percent should be considered as part of the nonworking population, but it isn't, in the conventional demographic approach.

Similarly, with the so-called "nonworking age" population, those under 20, and those 65 and older. Many of the individuals in these two age groups are in the labor force, but are defined as part of the dependent population. In 1976, about nine million 16-19 year-olds, and about 2.0 million persons 65 and older, were in the labor force.

A more accurate dependency ratio measure, furthermore, would have to reckon with the level of work experience, and not simply labor force participation—in other

<sup>2</sup>See H. L. Sheppard and S. E. Rix, "The Graying of Working America: The Coming Crisis of Retirement-Age Policy" (New York: Free Press-Macmillan, 1977), for a detailed discussion of the possible implications of these and other trends.

<sup>3</sup>For example, in 1977, there were 17 million 16-19 year olds, potential or actual new members of the labor force. If current, below-replacement fertility rates continue, the 1995 figure would be only 12.4 million. Even if it climbs back to replacement-rate levels, the figure would be 13.3 million—still below the 17 million as of 1977.

words, to what extent the individuals work year-round, on a full-time basis. What we really need, in this connection, is a measure of the year-round, full-time equivalence, but that is not readily available.

We do now know that in 1967, when we first had data on the work experience of the 16-plus population, instead of the 14-plus population, nearly 40 percent of the population 16 and older worked on a year-round, full-time basis, but by 1976—the most recent year for which such information is available—the proportion working year-round, full-time, was only 32 percent. Part of that sharp decline is, of course, due to the recession that characterized the year 1976, but the main point I'm trying to make is that the conventional demographic approach is insufficient, as necessary as that approach is. It is necessary but not sufficient. Economic factors must also be included.

But even the most precise measure of year-round, full-time equivalence leaves out of the picture the issue of the productivity of that work force. And it is the productivity base of an economy that provides the foundation for supporting nonworkers. Theoretically, it is possible to have a sharply reduced year-round, full-time equivalent compensated by a high level of productivity capable of supporting the nonworking population.

The Joint Economic Committee has been studying this problem of productivity over the past several years, and I know that it is concerned about the sluggish performance record of our economy's productivity. At the very best, it seems that our rate of productivity increase, if any, has been declining.

We still do not have a firm grip on the economic and manpower implications of the changing energy-resource factor in this country and elsewhere. That factor, too, impacts on our productive capacity, on the costs of producing a given unit of goods or services.

As I see it, therefore, the new and emerging issue is more likely to center on the costs to the total economy, and to specific retirement income systems—not to mention to retired individuals themselves—of early retirement with adequate income during the retirement years for the growing population whose life expectancy is continuing to rise. The emerging issue will concentrate on what the alternative solutions to those mounting costs might be.

I hope that Congress, through this Committee and others, begins now to explore what those alternatives might be, instead of waiting until a critical mass of factors and trends forces the country, to rush somewhat thoughtlessly and painfully, into the least desirable and most costly policies regarding work and retirement.

## APPENDIX<sup>1</sup>

### SUMMARY

This study is a detailed discussion of the employment-related problems of older workers, based on an extensive research and policy literature search, for the purpose of arriving at a strategy for research and demonstration projects to be sponsored by the Department of Labor.

The Introduction deals with some guiding principles that should govern such a strategy, including the concept of worklife stages; the importance of specifying from whose perspective a phenomenon is experienced or deemed as a problem; the need to distinguish current from future problems or possibilities; the changing heterogeneity of what is called the "older" population (in terms of sub-age groups, race, and sex); and the limitations of cross-sectional, as opposed to longitudinal, research on work and aging.

Another critical principle involves the necessary distinction between preventive measures, on the one hand, and remedial, rehabilitative or curative measures, on the other hand, in the formulation of policies and programs regarding the employment-related problems of older workers. "Employment-related" problems and "job-related" problems are used interchangeably in this report.

A number of critical policy issues are presented in Chapter I. One of these issues pertains to the question as to whether it is in the economic interest of this or any other country to include a larger or a smaller proportion of its population in the workforce. Within the context of the topic of this report, the issue frequently is expressed in terms of who shall obtain and keep job opportunities, the young or the old? But, must age be used, to begin with, in answering the basic question in times of job scarcity? What is the net cost or benefit of increasing the non-use of older persons in the economy? There are conflicting views on the employment effects of labor force withdrawal of older workers.

<sup>1</sup> From final report, "Research and Development Strategy on Employment-Related Problems of Older Workers," by Harold L. Sheppard, American Institutes for Research.

Furthermore, the policy issue centering around the notion of removing older workers from the economy to make room for the young may also be a reflection of cultural norms regarding the status of different age groups and their "entitlements."

Chapter II concentrates on a number of older worker problems, including the impact of unemployment on such phenomena as premature retirement, illness (including mental health), and death; exhaustion of unemployment insurance benefits, duration of joblessness, rates of recovery in post-recession periods and poverty risk. This same chapter takes up the topic of level of schooling as a factor in "structural" unemployment, and suggests that traditional explanation of the employment problems of older workers in terms of their low education may need re-examination when applied to older workers of today. For example, increasingly, the educational status of older persons relative to younger ones is narrowing, and a recent study found that for men 55-64, duration of joblessness was higher for those with above-average education, in contrast to the relationship between low schooling and high duration among men only 25-34.

Discrimination is also a critical problem for older workers, when studied objectively and subjectively (in terms of the individual's perceptions). The differential treatment of older workers (even when skill is held constant) is especially clear from studies of jobseeking experiences of unemployed workers.

Chapter III concentrates on the factors and problems associated with retirement. Industry, occupation, health status, economic conditions, and retirement incentives (such as level of expected private and public pension) all play a role in the "retirement decision."

Among the issues involved are those of mandatory retirement which is currently the subject of legislative controversy. Should there be any age at which the worker must retire? Should the existing age (65, as cited in the Age Discrimination in Employment Act) be raised? The topic also raises the question of unambiguous definitions of voluntary vs. involuntary retirement. What might be the impact of removing or raising mandatory retirement age provisions? How does mandatory retirement affect inter-firm mobility? Would its removal affect rates of early retirement?

What are the benefits and costs of early retirement for the individual, the organization, and the economy? These are possibly separate impacts, and raise the need to consider from whose perspective is a given policy a "problem." From an economic standpoint, individuals retiring under Social Security before the age of 65 have lower benefits, and are less likely to have supplemental private pension incomes than those retiring later, a finding which confounds the widespread finding by economists that financial incentives are among the most important determinants of early retirement. The same Social Security data indicate that pre-65 retirees are characterized by greater illnesses, and less steady pre-retirement employment experience.

This chapter, along with other sections of the report, also deals with the issue of the degree to which the lowering of retirement age shifts the cost of unemployment (when such lowering is advocated as a means of solving unemployment) onto the older population and also onto the remaining, younger working population. From a public policy point of view, may there not be a limit to which the economy can go in a continuation of the early retirement trend? This may be one of the overriding policy issues governing the Department's research decisions.

Chapter IV concentrates on the literature concerning health, safety, and aging in the workplace, and as influences in the employment experiences of older workers. While health is typically treated as a variable independent of the individual's job role and experience, it should also be viewed as a status affected by job role and experiences, as a crucial employment-related problem of middle-aged and older workers. The health status of such persons (as suggested by the National Longitudinal Survey) is apparently related to type of industry, for example. And even if without any health limitations in 1966—when the survey began—middle-aged and older workers experienced increases in health problems over the ensuing five years, depending on their occupations.

The relationship between health and age in the workplace is not always clear-cut. The fact, for example, that older workers have the lowest rate of back injuries on the job may reflect the possibility that they also are generally found in less dangerous jobs, compared to younger workers. Many of the findings in this field point to the possibility of job transfers after a certain age, in selected high-risk work environments.

Government research on age and work performance (discussed in Chapter V) has not been of a sustained or systematic nature. In general, what research there is (by

government and non-government sources) reveals no consistent pattern of superior productivity in any age group. Variations in job performance measurements within age groups are frequently greater than variations between age groups, thus suggesting that something other than mere chronological age is at play. Much of the empirical research on the topic points to the greater value of retaining, as opposed to hiring, older workers; and also to the importance of selection, when hiring, on the basis of job-relevant criteria, rather than on the basis of age alone.

Part-time work, and new types of arrangements for work-time distribution, are the subject of Chapter VI. The emphasis is on voluntary part-time employment as a potential source of assistance to older workers, although the chapter presents data on part-time work because of economic reasons, among different age groups in the target population. Despite the potentials, the rate of increase in voluntary part-time employment for older workers is much lower than that for younger ones. Research is needed in determining the "market" for such employment—by industry, and by type of older worker.

Work-sharing and tapered retirement, are viewed as variants of the part-time employment phenomenon. The chapter also deals with such alternative work patterns as job enrichment, job redesign, and other "quality of work" dimensions, insofar as they impinge on employment-related experiences of older workers. The nature of work, and level of job satisfaction, are both among the factors involved in early retirement and in retirement attitudes.

Chapters VII, VIII, and IX focus on the older working woman, older minority workers, and older workers in rural areas, respectively. Each of these have their own special problems, as well as those experienced by older workers in general. Chances of adequate retirement income are lower for both older women and older blacks, for example. Older women may have special problems associated with later entry into the labor force (or later re-entry). In times of unemployment, they may "opt" for early retirement more than men, and thus run the risk of severely reduced Social Security benefits. At the same time, according to some research studies, older women workers are more reluctant to accept the employer's retirement age than men, partly because retirement for them typically means a return to less satisfying housekeeping roles. The rising labor force participation among middle-aged women—especially married ones—is a new phenomenon the implications of which have only recently begun to be explored.

The rate of labor force drop-outs among older blacks is higher than for whites, and for those who are employed, they have a greater level of involuntary part-time employment. Since the decline from the peak unemployment rate in 1975, the labor force participation rate among blacks 55-64 (especially males) actually went down, contrary to the opposite pattern for whites of the same age. The same contrast occurred with respect to "post-recession" unemployment rates. These declines in job opportunities should be weighted further in light of the fact that older minority groups tend to have more dependents than their white age-peers.

Given the reported sharp improvement in the occupational gains of young black adults in recent years, it should be important to monitor, over time, the degree to which such gains are sustained, and built upon, as they move into middle-age. Equally important is the health status of those now middle-aged and older, as a function of occupational experience.

Older workers in rural areas may need special consideration in current and future public service employment programs, given the limited opportunities for private sector employment in many of those areas.

One broad area of study, the scope of Chapter X, concerns employer practices, internal labor market experiences, mid-career change, and the role of intermediary organizations in meeting the employment needs of selected groups of older workers. Not only hiring patterns, but also promotion and training opportunities, along with older-worker retention, need greater attention. Much of this has to do with the issue of "obsolescence" and those management practices that make for or against the etiology of that problem.

Of growing interest in some corporate circles is the challenge of organizational adaptation to an older work force, especially those adaptations that resort to measures other than early retirement as a means of "solving" the alleged problems associated with such a work force. This includes attention to the needs of workers with a need for mid-career change, which may be on the increase.

The country is witnessing a burgeoning of nonprofit private organizations functioning as intermediaries between the older jobseeker and potential employers. Research, along with demonstration projects, on this type of organization deserves greater attention.

Training and education are dealt with in Chapter XI, and the major foci are the need to improve the skills and general educational qualifications of selected groups of older workers, and equally important, the need to improve the training methods used to impart new skills, in keeping with any special learning patterns characteristic of such workers. At the same time, the narrowing of the gap in educational achievement between older and younger persons should be appreciated, since it is generally recognized that the better the educational background, the lower the risks of obsolescence. Mid-career development, or retraining, should be supported as a preventive to human capital deterioration, instead of merely waiting until middle-aged and older workers become unemployed, or retired prematurely. This same chapter summarizes significant findings from the NLS project regarding the outcomes of "investment in training" during middle-age.

Current government programs affecting older workers is the subject of chapter XII. While the Community Service Employment Program (title IX of the Older Americans Act) may be the most visible of such programs, the numbers of older workers in CETA titles I, II, and VI, are much greater. Nevertheless, the proportion of older workers in title I programs is quite low, and the numbers in titles II and VI are low. Is the low representation in title I programs a reflection of national policy? Does the existence of a special and separate program for older persons (title IX) function to decrease the chances for greater participation in the other programs, especially title I?

Specific observations and questions pertaining to all the programs are included in the chapter, e.g., the fact that requests from local organizations to hire older workers typically exceed the total number of slots allocated. In rural areas, title IX programs are frequently the largest employer. These same programs are viewed as restrictive, in that they provide for only part-time employment, while many of the participants want or need full-time employment.

The Age Discrimination in Employment Act (ADEA) is the subject of chapter XIII. The increasing number of complaints filed under this Act may reflect a growing awareness of its provisions, as well as the impact of the 1973-76 recession during which employers may have tried to reduce payroll costs by discharging or prematurely retiring higher-paid, long-service employees. But these points require empirical verification. The increase may also be due to increased ADEA staff activity. While ADEA annual reports indicate the major industrial groups involved in violations, there is a need to know if those industries are over-represented, or merely reflect their share of overall employment structure. The inclusion of state and local governments in the Act as of 1974 should provide new patterns for analysis, especially since this "industry," too, is undergoing fiscal strains.

Impending changes in the upper age covered by the Act may raise a new range of research and policy issues worthy of attention, e.g., impact on labor force participation, and on internal company practices. Raising the age (and for some employees, eliminating it altogether) also may result in greater utilization of work assessment measures, and of functional criteria, on the part of employers—all of which warrants research attention.

Foreign programs and policies, as a source for new programs in this country, are reviewed in chapter XIV. They include the concept of tapered retirement without income loss; incentives for retirement deferral; a more active, positive approach to training for older adult workers; the use of adjustment committees in enterprises in the process of reducing the work force; more appropriate personnel planning with respect to the "aging" of a firm's work force; early training and retraining to prevent future problems; union policies regarding early retirement; and subsidies to employers for hiring older workers.

The final chapter consists of (a) specific priorities for research projects, such as: (1) factors associated with continued employment vs. early withdrawal from the labor force, of older black workers compared with whites; (2) jobseeking behavior and the discouragement process among middle-aged and older minority group workers; (3) research on the role of the retirement test in the retirement decision, and level of work experience; (4) the relative impact on labor force experience of younger workers of different participation rates of workers eligible for retirement; (5) average age of retirement among companies with and without mandatory retirement age; (6) comparisons of retirement age policy as an issue in the United States and other countries; (7) studies in discrimination; (8) voluntary part-time employment.

Projects recommended for (b) experimental and demonstration purposes include or are related to: (1) indepth, multi-pronged prevention projects; (2) voluntary part-time employment; (3) tapered retirement; (4) upgrading of skills to improve employment chances of middle-aged and older minority group workers; (5) developing older skilled workers as trainers of young unemployed and underemployed; (6) mid-career

change; (7) programs among private sector employers to prevent offset of employee obsolescence; (8) public service employment.

Representative BOLLING. Next, Mr. David S. North. He was Assistant Secretary of Labor during the period when Mr. Wirtz was the Secretary.

He is now director of the Center for Labor and Migration Studies of the New TransCentury Foundation.

Mr. North has done extensive contract research for a number of Government agencies about the interaction between the Nation's manpower and immigration policies, including the U.S. Department of Labor, the Immigration and Naturalization Service, and the U.S. Commission on Civil Rights.

He has done extensive empirical research on illegal aliens, his topic for today. He has an M.A. from the University of New Zealand and a B.A. from Princeton.

We are glad to have you here, sir.

**STATEMENT OF DAVID S. NORTH, DIRECTOR, CENTER FOR LABOR AND MIGRATION STUDIES, NEW TRANSCENTURY FOUNDATION, WASHINGTON, D.C.**

Mr. NORTH. Thank you, Mr. Chairman.

Let me make one small correction in what you said. I was Assistant to the Secretary of Labor and some of you know that is an important distinction. [Laughter.]

Representative BOLLING. I misspoke. I know that distinction, of course, because I was once upon a time an assistant to a chief of staff in a theater and not an assistant chief of staff. [Laughter.]

Mr. NORTH. Thank you, Mr. Chairman.

I would like to say something about the three groups that we are talking about today, which I must admit I had not thought about as an entity before I got the invitation, which I also received, while I was in Paris for the German Marshall Fund.

Representative BOLLING. Well, you were all overseas.

Mr. NORTH. Yes, I would like to suggest that there are a couple of things these three labor forces have in common, each is disadvantaged vis-a-vis the peers, the women against men, older workers against the prime age workers, illegal workers against legal workers.

Second, and this has been touched on before, at a time of continuing levels of unemployment and loose labor force, two of the populations we are talking about, the women and illegal workers, appear to be growing in size both absolutely and relatively. Congress, meanwhile, and the courts as well, from time to time, by their actions on mandatory retirements, appear to be encouraging the growth of the size of the older worker population as well.

Let me talk a little about numbers. While I do not want to get involved in a lengthy discussion of the number of illegal aliens in the work force, which tends to be the current version of the middle-ages controversy about the number of angels that can dance on the head of a pin, it is fair to say that there are several million of them; that the stock of illegal workers in the Nation is probably rising, and that the presence of all of them—whatever attractions they may have—are by definition extraneous and by law they are extraneous.



As we look at the size of the total U.S. work force it is perfectly clear that the easiest way to expand that labor force quickly is to let in adult workers from other nations.

If, on the other hand, we wish to slow the expansion of the labor force—our labor force has been steadily expanding since World War II while the labor force in Western Europe has not—we could, if we felt so inclined, decrease the number of entries of alien workers as a major part of this task.

Some of these adjustments, that is, the arrival of legal alien workers, could be made by changing the immigration laws. Some of those, vigorous or less vigorous enforcement of the current law, the extent to which we try to control our borders and our ports of entry.

As to the size of the stock of undocumented workers, which is the Carter administration's contribution to the vocabulary on this issue, let me call to the committee's attention the estimate made by the Social Security Administration, an agency which has no ax to grind in this area.

The Social Security Administration, through a complex files-matching estimation technique which I will not attempt to describe to you—but which I am impressed by—calculates that there are about 3.9 million illegal aliens in the Nation as of April 1973. Those persons were between the ages of 18 and 44. I would suspect that the vast majority of those persons were working. I also suspect that it is a good estimate.

I have a copy of that document which I will leave with the committee.

Representative BOLLING. Without objection, that will be made a part of our record.

Mr. NORTH. Thank you.

[The document referred to follows:]

COUNTING THE UNCOUNTABLE ILLEGALS: SOME INITIAL STATISTICAL SPECULATIONS  
EMPLOYING CAPTURE-RECAPTURE TECHNIQUES

(By Clarise Lancaster, Office of the Assistant Secretary for Planning and Evaluation, Department of Health, Education, and Welfare, and Frederick J. Scheuren, Social Security Administration)

This paper provides some initial statistical speculations on the number of illegal aliens residing in the United States. Our results come from the 1973 CPS-IRS-SSA Exact match Study [1] which has been conducted jointly by the Census Bureau and the Social Security Administration, assisted by the Internal Revenue Service. Direct estimates are presented only for the age group 18 to 44 years old as of April 1973; however, there is some discussion of ways, using other sources, that one can extend these figures to all age groups and project them forward in time.

Organizationally, the paper is divided into five sections. Section 1 provides a brief introduction to what is known about the nature and magnitude of the illegal alien population. The approach we will take in obtaining estimates for 1973 is described in section 2. Some limitations on the data being used are set forth in section 3. Section 4 discusses the results of the exploratory analyses we have carried out so far. A few conclusions and possible implications for future study are given in section 5.

## 1. INTRODUCTION

Most of what we know about illegal aliens comes from data on apprehensions (800,000 in 1975) which suggest that Mexico is a major source of such individuals.<sup>1</sup> United States and Mexican authorities, however, have, on numerous occasions, cited the unreliability of the apprehension information as indicative of the nature of the total illegal alien population in the U.S. In particular, it is misleading to characterize the illegal alien population in the United States as predominantly male and Mexican based on these apprehension statistics: first, because we are dealing with those who are, in fact, caught, and there is no reason to believe that they are representative of those who are not caught; and, secondly, because Mexican illegal immigration may be substantially different from that of other source countries, mainly Jamaica, the Dominican Republic, Haiti, Korea, the Philippines, Thailand, and China. It is suspected that both Mexicans and males are over-represented in apprehension data.

Not only is the composition of the illegal alien population unclear from official statistics, but the total number of illegals who are not apprehended is, of course, unknown and is a source of considerable speculation. To see how widely divergent some of the guesses are, it might be worth quoting from a recent article by Hobart Rowen [4] in the Washington Post—

"There are four million illegal aliens in the United States.

"There are eight million illegal aliens in the United States.

"There are twelve million illegal aliens in the United States.

"These are the estimates of [government] officials trying to evolve a policy to deal with illegal immigration. You can pick any one of them, or insert your own number and you will be—they confess—as accurate as they are. 'The truth is [an official says] that no one knows how many "illegals" are in the country.'"

As will be seen later in this paper, our own preliminary investigations suggest that it is the smallest of these figures which is more nearly correct.

## 2. METHODOLOGY

2.1. *General.*—The approach we will use to estimate the number of illegal aliens makes use of two sources of information:

1. a sample of the total resident civilian noninstitutional population, including illegal aliens (who were not, however, identifiable as such); and

2. an independent estimate or "count" of the number of persons in the resident civilian noninstitutional population, excluding illegal aliens.

From the sample data, the Capture-Recapture procedure is used to estimate the total resident civilian noninstitutional population including illegal aliens. The independent population total, excluding illegal aliens, is then subtracted from this sample estimate to derive counts for "illegals."

The sample we are using to make estimates is the Census Bureau's March 1973 Current Population Survey (CPS). The capture-recapture technique can be applied to this sample because it has been matched to Internal Revenue Service (IRS) individual income tax records, and Social Security Administration (SSA) earnings and benefit data.

The independent population estimates on which we rely also come from the Census Bureau. They were obtained by adjusting the 1970 Census count for underenumeration and carrying forward the population totals taking account of subsequent aging of the population, births, deaths, and net legal migration [5, 6]. Also excluded from the population estimates were members of the Armed Forces in April 1973 and persons living in institutions [7].

2.2. *Capture-Recapture techniques.*—In order to explain how we employed the capture-recapture technique, let us examine table 1, which illustrates our approach for the total 18 to 44 year age group. Two observations should be made initially:

1. All the individual cell estimates, except for the lower right-hand corner total, were taken from a random half-sample selected from the 1973 CPS-IRS-SSA Exact Match Study. These were the data with which we started our exploratory analyses.<sup>2</sup>

<sup>1</sup>The authors have relied primarily on [2] and [3] for the brief overview of the illegal alien immigration situation in this section.

<sup>2</sup>The estimates were obtained by using twice the "Final" administratively weighted [7] sample figures from rotation panels entering the survey in March for the first, third, sixth or eighth time.

2. The right-hand corner entry (shown in parenthesis) was obtained by subtracting the remaining cells from the April 1, 1973 Census Bureau estimate (73,893,000) for the total civilian noninstitutional population 18 to 44 (which excludes illegal aliens).

Now, the capture-recapture [8], or multiple systems [9], estimation procedure that we used, essentially resolved itself into treating the cell entry in the parenthesis as missing and estimating it from the remainder of the table. Once this was done, the difference between the new entry for the "missing" cell and the original (parenthesized) entry provided our count of "illegals."<sup>3</sup>

To compute the capture-recapture estimate for the missing cell, we employed expression (6.4-15) from [8], that is:

$$m_{222} = \frac{m_{111} m_{221} m_{122} m_{212}}{m_{121} m_{211} m_{112}}$$

where the cell counts or entries  $\{m_{ijk}\}$  are defined by letting  $i = 1$  or  $2$ , depending on whether there is a yes or no, respectively, on the IRS dimension (i.e., whether a person was in a unit with a taxfiler, "yes", or not, "no");  $j = 1$  or  $2$ , depending on whether there is a yes or no on the SSA-covered employment dimension; and, finally,  $k = 1$  or  $2$ , depending on whether there is a yes or no on the SSA beneficiary dimension.

The above formula for the missing entry  $m_{222}$  cannot be interpreted without making a number of (strong) assumptions. Two might be mentioned here:

1. To explain all the interrelationships which exist between the three "captures" (administrative systems), it is enough to look at just the pairwise associations between them. (More technically, the assumption is being made that there is no second-order interaction.)

2. The very same set of "capture" probabilities applies to each individual in the population. Such an assumption would only be tenable if the group we are dealing with were divided into very homogeneous subgroups—something we will discuss in section 4.

2.3. *Definition of classifiers.*—Some definitions are needed of exactly what we mean by the classifiers in table 1. These are provided in the following paragraphs:

1. *SSA beneficiaries.*—To be considered an SSA beneficiary, a person had to be receiving benefits in December 1972 (i.e., be in Current Pay Status for that month).

2. *SSA covered employment.*—To be considered as a covered worker, an individual had to have had taxable SSA wages or self-employment reported for calendar year 1972.

3. *Federal income taxfiler.*—To be considered a taxfiler, an individual had to have filed a tax return for 1972 on which he was designated as the primary taxpayer.<sup>4</sup>

4. *STATS unit.*—This is a nuclear family concept used at social security to designate individuals in CPS households who would generally be considered interdependent under social insurance programs [10]. The designation, STATS units, stands for "Simulated Tax and Transfer System" units. These units can consist of a single adult 22 years or older, an adult with children under 14, and married couples with or without children. Young adults (14 to 21 years old), depending on their living arrangements, are treated as separate units or as part of a unit containing their parent(s).

<sup>3</sup>In the more general settings later in section 4, the "count of illegals" is obtained by calculating the difference between the model estimated total population derived from the sample (which includes "illegals") and the Census supplied population (where "illegals" are excluded). It might be mentioned also that just because we sometimes calculate our estimates from the "missing" cell does not imply that this is where all the illegals will be found. Quite the contrary. If none of the "illegals" were ever "captured" by the administrative systems, then our procedure simply would not work.

<sup>4</sup>For nonjoint returns, there was considered to be only one taxpayer; for joint returns filed by married couples, there were two. In such cases, the husband was designated as the primary taxpayer.

TABLE 1.—U.S. CIVILIAN NONINSTITUTIONAL POPULATION 18 TO 44 YEARS OLD AS ESTIMATED FROM THE 1973 CENSUS-SOCIAL SECURITY EXACT MATCH STUDY AND CENSUS BUREAU SOURCES

[In thousands]

In STATS units with persons in SSA covered employment	Total	In STATS units with persons filing Federal income tax returns	
		Yes	No
Overall total .....	76,893	67,289	9,604
IN STATS UNITS WITH SSA BENEFICIARIES			
Yes .....	1,321	1,142	179
No .....	509	79	430
NOT IN STATS UNITS WITH SSA BENEFICIARIES			
Yes .....	68,412	63,447	4,965
No .....	6,651	2,621	(4,030)

Note: For definitions of terms used, see section 2.3.

In table 1 above and in the tables used in our subsequent analyses, we do not classify an individual by whether or not he or she was "captured" by one of the administrative systems, but, rather, by whether or not anyone in his or her STATS unit had been so captured. Two (natural) questions arise in this connection: "Why didn't we classify individuals by their own characteristics?" and "How sensitive would our results be if we had done so?"

We didn't classify people just on the basis of their own characteristics for two reasons. First, the STATS unit, by construction, is conceptually more attractive as a classifier of an individual's relationship with regard to the beneficiary and tax systems. Second, by using the STATS unit as a classifier, we expected to increase the overlap among all three systems, which, in turn, would reduce the probability of having zero cells and, perhaps, make more tenable our assumption of no second-order interaction.

When this paper was delivered in Chicago, we had not yet obtained an answer to the question of how sensitive our results would be if we did the analysis on a person, rather than a STATS unit basis. The work we have done since then, suggests that the results would be very sensitive indeed. The person-based estimates do not actually contradict the STATS unit ones, however. What seems to be happening is that the sampling error of the estimate of the missing cell has increased enormously, principally because much more of the sample was not "captured" by any system.

### 3. DATA LIMITATIONS

The assumptions which the method requires necessarily impose limitations on our estimates. In addition to these, however, there is also a second set of limitations which arises from the nature of the data on which we are using the method.

1. *Survey and matching problems.*—The starting point of the administrative record matches was the CPS and not the systems themselves. Problems of non-matches, mismatches, coverage, and noninterview nonresponse must necessarily be considered. (See [11], for example.) It is enough to say here that we believe that these data problems definitely raise interpretive issues, even though major efforts were made to adjust or "correct" for any impacts they might have had [7].

2. *Administrative data problems.*—The nature of the administrative systems we are using is such that illegal aliens might be less well-represented than their (other) socio-economic characteristics (income level, age, race, sex, etc.) might otherwise suggest. We do not know how serious this is, but it is a problem which we believe would (in the absence of other problems) lead to an underestimation of the total illegal population.

3. *Independent population totals.*—The Census Bureau population estimates needed for deriving "illegals" are themselves subject to error. Evidence from [12], for example, suggests that there may be a serious understatement in the allowance made for outmigration. For the 18 to 34 year olds this is likely to be the only important error. For the remainder of the 18 to 44 year age group, that is, persons 35 to 44, the undercount totals (Siegel's Preferred Series D) for 1970 are based on a combination of demographic techniques [5, p. 6] and not, principally, on vital records, as is true of the younger ages (suggesting that there might be proportionately more error in the older age group).

## 4. EXPLORATORY ANALYSIS

When this paper was given at the meetings, we were still in the exploratory analysis phase of our research on illegals. In order to be able (at a later date) to do at least some confirmatory analysis, we restricted our attention to half the sample cases in the 1973 Exact Match Study.

4.1. *Initial results.*—To make more tenable the assumption that the capture probabilities were equal for every individual, we subdivided the age group 18 to 44 into four race-sex subgroups: white males, white females, males of other races, and females of other races. This also has the advantage, as Chandra Sekar and Deming have suggested [13], of tending to lower the overall variance.

Table 1 was repeated for each subgroup separately. (See Appendix table A.) The combined tabulation, consisting of 32 cells (four of which were to be treated as missing), was then subjected to "standard" log linear contingency table fitting procedures.<sup>5</sup> Our goal was, of course, the usual one: eliminating those parameters which the analysis showed were unnecessary. In other words, to create a model with fewer parameters which fits well enough to withstand statistical inspection while, at the same time, is sufficiently parsimonious to yield "sturdy" estimates.

Many models were considered before we settled on one to illustrate our results. The model chosen was fit by iterative proportional scaling to the following five sets of marginal totals:

1. Sex,
2. Race and taxfiler status,
3. Taxfiler status and covered worker status,
4. Taxfiler status and beneficiary status, and
5. Covered worker status and beneficiary status.

Once we had obtained our fitted model, we then used the estimates it provided in each of the four race-sex subtables to obtain new entries for the "missing" cells. From the "before" and "after" totals for each race-sex group we then constructed table 2.

4.2. *Further results.*—We brought a computer terminal with us to the meetings and invited anyone interested in the results in table 2 to try his own hand at still other models. Our basic data set had literally hundreds of dimensions we had not yet looked at. Two we thought most promising were age and income; and we had come prepared to fit models involving these variables if anyone suggested them. As luck would have it, the interactive APL computer service we use was down most of the day of the meeting, and no one was able to take us up on our offer. Matters did not rest at this point, however.

A number of discussions have been held, since the paper was delivered, with various individuals interested in and knowledgeable about illegal alien immigration. From these conversations, we concluded three things. First, we had to provide at least one model which split up the rather broad age group 18 to 44. Second, we had to adjust our initial estimates for the rather serious understatement (over 500,000) in the outmigration estimates used to obtain population totals that excluded illegal aliens. Third, since our initial and improved results had a certain amount of plausibility, they were likely to be believed and used. Therefore, as "responsible" researchers, we had to provide at least some rough idea about the magnitude of the uncertainty surrounding our figures.

In accord with these excellent suggestions, we returned to our exploratory work with the same half sample that was used to obtain table 2. This time we added age as a dimension (18 to 34 and 35 to 44) and looked at models for the 6-way table involving sex, race, age, and the three administrative systems. The model we finally settled on was obtained by fitting the following marginal totals:

1. Sex,
2. Race and taxfiler status,
3. Age and taxfiler status,
4. Taxfiler status and covered employment status,
5. Taxfiler status and beneficiary status, and
6. Covered employment status and beneficiary status.

To test this model, we fit it on the second half of our sample. While the fit (as expected) was not nearly as good on the second half, it still could be accepted at the  $\alpha = .05$  level of significance.

Our next step was to combine the two half samples and refit the model on all the data. The estimates obtained in this way are shown in table 3, columns (3) and (4).

<sup>5</sup>Actually, standard log linear procedures require simple random sampling. The CPS sample design and estimation procedures were such that we had to modify the ordinary minimum discrimination information (maximum likelihood  $X^2$ ) test statistic by dividing by the product of the base weight for the half sample (3,200) times a preliminary estimate of the design effect (taken to be quite large, about 3).

The final step we took was to revise the population estimates not including illegals (columns (1) and (2) of table 3) to account for the understatement of outmigration. The Warren-Peck paper [12], set B estimates, were our basic source. These were aged to 1973, the effect of additional outmigrant underestimation between 1970 and 1973 was imputed, and a rough adjustment was made to take account of changes in the foreign student population not originally reflected in [12].<sup>6</sup> The result of these steps is shown below.

## UNDERSTATEMENT OF OUTMIGRANTS

[In thousands]

Age group	Total	Male	Female
Total.....	568	244	324
18 to 34 years .....	440	180	260
35 to 44 years .....	128	64	64

Since virtually all of the outmigrants involved were believed to be white, we made the entire adjustment in that racial group.

4.3. *Crude measures of uncertainty.*—It is a formidable, perhaps impossible, task to do a “good” job of assigning measures of uncertainty to the entries for “illegals” in table 3. We have to obtain the approximate sampling errors of the estimates, quantify the impact of the nonsampling errors, and assess the robustness of the figures to possible failures in the assumptions underlying our application of the capture-recapture method.

Time considerations precluded our making more than a crude attempt to quantify the uncertainty surrounding the estimates in table 3. Perhaps we should not even have tried, since subjective judgments play such an important role in our assessments and, undoubtedly, other researchers may reach quite different conclusions.

The actual steps we went through to provide rough measures of uncertainty were as follows:

1. We first obtained the absolute value of the difference between the fitted model estimates for “illegals” from the first and second halves of the sample. These were—

## ABSOLUTE DIFFERENCES

[In thousands]

Race and age	Males	Females
Whites:		
18 to 34 years .....	167	266
35 to 44 years .....	66	116
Other races:		
18 to 34 years .....	117	194
35 to 44 years .....	13	42

2. If we had not used the first half sample to do exploratory analysis, the absolute values of the differences between the two halves, divided by two, would provide approximations to the standard error of the estimate of “illegals” calculated from the whole sample. At this point, however, all that can be said is that the differences divided by two provide a rough lower bound estimate of the sampling error. Nonsampling (variance) errors also have to be considered. All in all, it was our judgment to simply “smooth” the unadjusted figures from step 1. They could be used (squared) to represent the total sampling and nonsampling variance component of the mean square of the estimates in table 3.

3. To smooth the figures from step 1 (and, thus, reduce the variance of the variance estimate) we fit them to an independence model under the assumption that age, race, and sex each act on the standard error but that there is no interaction. The new table of values obtained was—

<sup>6</sup>The updating and adjustments were prepared with the help of Robert Warren.

## SMOOTHED ABSOLUTE DIFFERENCES

[In thousands]

Race and age	Male	Female
Whites:		
18 to 34 years .....	172	294
35 to 44 years .....	55	93
Other Races:		
18 to 34 years .....	103	175
35 to 44 years .....	33	56

4. The nonsampling errors, to the extent that they have a direction, will probably lead to our underestimating the number of illegals. We, of course, have no real idea of the magnitude of this bias but, at least, some account should be taken of it. For women, we arbitrarily chose to set it equal to half the "standard errors" in step 2; for men, to one and a half times the "standard errors."

5. Now, treating our model estimates as being approximately normally distributed, we can combine all of the above steps to construct (quite) subjective confidence interval statements. These are provided in table 4.

## 5. SOME CONCLUSIONS AND IMPLICATIONS

According to the overall model shown in table 3, there were some 3.9 million resident "illegals" 18 to 44 years of age in April 1973. Rough, subjective, 68 percent confidence bounds on this estimate (from table 4) suggest that the actual value could be anything from 2.9 million to 5.7 million. Generally speaking, such widely (wildly?) varying speculations would cause most people to make no further demands on the present results. We certainly would not wish to do so were it not for the fact that the questions of most interest are—

*"How many illegals were there, altogether, in 1973?"*

*"How much has the total increased since 1973?"*

We cannot offer any statistical speculations of our own on these questions, but it might be worth mentioning how others have answered them. First, David North, in [14], cites various studies which . . . "suggest that the 18-44 age range would cover most, but not all, of the illegal aliens; a 10 percent upward adjustment would appear appropriate. . . ." On the second question, we turn to some conclusions of Alex Kornis [15], who has examined the relationship between the BLS establishment and CPS employment series for nonagricultural wage and salary jobs. He notes that while there may have been a sharp rise in illegal alien employment during the business expansion of 1964-1969, there appears to be no sustained increase since then.

With these two outside sources in mind, we feel reasonably comfortable in restating the assertions about the number of "illegals" that Rowen quoted:

"There are probably *not* twelve million illegal aliens in the United States.

"There are probably *not* eight million illegal aliens in the United States.

"There *may*, however, be four million illegal aliens in the United States."

## AN AFTERWORD

We debated whether or not to submit this paper to the Proceedings. The subject is, after all, important and controversial; hence, it deserves a careful, studied treatment. Unfortunately, time and resource constraints intervened. Our results, therefore, are quite preliminary and could be misleading if taken too seriously.

Ultimately, what persuaded us to give the paper and, then, have it published was an expectation that other statisticians interested in "illegals" would learn about the 1973 Exact Match Study data base and use it in their own research. The public-use files from the study are now available and may provide the means to do the complete, thorough job that the subject deserves. We would be more than happy to assist in any such effort.

## ACKNOWLEDGEMENTS AND FOOTNOTES.

The authors would like to thank several individuals for sharing their expertise on illegal aliens: David North, Alex Kornis, Muffie Houstoun, and especially Robert Warren. We also benefitted from discussions with Jeff Passel and Jacob Siegel at the Census Bureau after the paper was delivered at the Chicago meetings. Editorial and other assistance was provided by Ben Bridges, H. Lock Oh, Linda DelBene and, especially, Wendy Alvey. The typing was done by Joan Reynolds and Helen Kearney.

We would also like to take this opportunity to mention two points about the title of our paper. First, "Counting the Uncountables" is apparently an irresistible

phrase. The Illegal Alien Study Design report [2], for example, uses the expression, something we were not aware of when we chose it ourselves. The Design report also suggests that the well-known "Capture-Recapture" technique be employed to estimate the number of illegal aliens. In doing so, the authors of that report add a graceful apology, with which we concur, for the necessity of using such (customary) terminology with respect to this population.

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TABLE 2.—INITIAL EXPLORATORY MODEL ESTIMATES FOR APRIL 1973, OF TOTAL U.S. CIVILIAN NONINSTITUTIONAL POPULATION 18 TO 44 YEARS OLD BY RACE AND SEX

[Numbers in thousands]

Race and Sex	Total population excluding illegal aliens <sup>1</sup>		Total population including illegal aliens		Difference (illegals)	
	Number	Percent	Number	Percent	Number	Percent
Total .....	76,893	100.0	79,951	100.0	3,058	100.0
Male .....	37,490	48.8	39,705	49.7	2,215	72.4
Female .....	39,403	51.2	40,246	50.3	843	27.6
White, total .....	66,673	86.7	68,603	85.8	1,930	68.1
Male .....	32,689	42.5	34,069	42.6	1,370	45.1
Female .....	33,984	44.2	35,534	43.2	550	18.0
Other races, total .....	10,220	13.3	11,348	14.2	1,128	36.9
Male .....	4,801	6.2	5,635	7.1	834	27.3
Female .....	5,419	7.1	5,712	7.1	293	9.6

<sup>1</sup> Population totals not adjusted for understatement of 1960-70 outmigration (12).

TABLE 3.—OVERALL REVISED MODEL ESTIMATES FOR APRIL 1973 OF TOTAL U.S. CIVILIAN NONINSTITUTIONAL POPULATION 18 TO 44 YEARS OLD BY RACE AND SEX

Age, race and Sex	Total population excluding illegal aliens <sup>1</sup>		Total population including illegal aliens		Difference (illegals)	
	Number	Percent	Number	Percent	Number	Percent
Overall total .....	76,325	100.0	80,210	100.0	3,885	100.0
18 TO 34 YEARS OF AGE						
Total .....	53,401	70.0	56,583	70.5	3,182	81.9
Male .....	25,973	34.0	27,974	34.9	2,001	51.5
Female .....	27,428	35.9	28,609	35.7	1,181	30.4
White, total .....	46,198	60.5	48,379	60.3	2,181	56.1
Male .....	22,613	29.6	23,918	29.8	1,305	33.6
Female .....	23,585	30.9	24,461	30.5	876	22.5
Other races, total .....	7,203	9.4	8,204	10.2	1,001	25.8
Male .....	3,360	4.4	4,056	5.1	696	17.9
Female .....	3,843	5.0	4,148	5.2	305	7.9
35 TO 44 YEARS OF AGE						
Total .....	22,924	30.0	23,627	29.5	703	18.1
Male .....	11,273	14.8	11,681	14.6	408	10.5
Female .....	11,651	15.3	11,946	14.9	295	7.6
White, total .....	19,910	26.1	20,304	25.3	394	10.1
Male .....	9,834	12.9	10,038	12.5	204	5.3
Female .....	10,076	13.2	10,266	12.8	190	4.9
Other races, total .....	3,014	3.9	3,323	4.1	309	8.0
Male .....	1,439	1.9	1,643	2.0	204	5.3
Female .....	1,575	2.1	1,680	2.1	105	2.7

<sup>1</sup> Adjusted for outmigration as explained in the text.

TABLE 4.—SUBJECTIVE 68 PERCENT CONFIDENCE INTERVALS FOR THE OVERALL MODEL ESTIMATE OF THE NUMBER OF ILLEGAL ALIENS 18 TO 44 YEARS OF AGE IN APRIL 1973 BY AGE, RACE AND SEX

[In thousands]

Race and sex	18 to 44 years of age			18 to 34 years of age			35 to 44 years of age		
	Model estimate	Approximate bounds		Model estimate	Approximate bounds		Model estimate	Approximate bounds	
		Lower	Upper		Lower	Upper		Lower	Upper
Total.....	3,885	2,904	5,722	3,182	2,438	4,574	703	466	1,148
Male.....	2,409	2,046	3,318	2,001	1,726	2,689	408	320	629
Female.....	1,476	858	2,404	1,181	712	1,885	295	146	519
White, total.....	2,575	1,961	3,724	2,181	1,715	3,052	394	246	672
Male.....	1,509	1,282	2,077	1,305	1,133	1,735	204	149	342
Female.....	1,066	679	1,647	876	582	1,317	190	97	330
Other races, total.....	1,310	943	1,998	1,001	723	1,522	309	220	476
Male.....	900	764	1,241	696	593	954	204	171	287
Female.....	410	179	757	305	130	568	105	49	189

Note: The upper and lower bounds shown above were set so that, given the assumed nature of the uncertainty in our estimates, the confidence coefficient for any individual model estimate would be at least 68 percent. To calculate the lower bound for any individual age-race-sex estimate, we subtracted one "standard error" from the estimate where the "standard error" of the estimate was assumed known and taken to be the appropriate (smoothed) value shown in the text. To calculate the lower bounds for age, race, or sex subtotals, we added together the lower bounds of the individual entries. This, of course, results in the lower bounds for totals and subtotals being more extreme than a strict one standard error normal confidence interval might require. The method does, however, have the advantage of producing a single set of numbers for the lower bound which is internally consistent. To calculate the upper bound, we began by adding the assumed biases to the estimates and then proceeded as with the lower bound except that the "standard errors" were added and not subtracted.

APPENDIX TABLE A.—U.S. CIVILIAN NONINSTITUTIONAL POPULATION 18 TO 44 YEARS OF AGE AS ESTIMATED FROM THE 1973 CENSUS-SOCIAL SECURITY EXACT MATCH STUDY AND CENSUS BUREAU SOURCES

[In thousands]

Item	Total persons 18 to 44 years old	Persons 18 to 34 years old						Persons 35 to 44 years old					
		Total	White		Other races		Total	White		Other races			
			Male	Female	Male	Female		Male	Female	Male	Female		
<b>PART I—OVERALL SAMPLE ESTIMATES</b>													
Total.....	76,893	53,840	22,792	23,844	3,361	3,843	23,053	9,897	10,140	1,440	1,576		
In units with persons in SSA-covered employment:													
In units with persons filing tax returns:													
In units with SSA beneficiaries .....	1,123	765	322	333	52	57	357	96	184	22	55		
Not in units with SSA beneficiaries .....	63,560	44,688	19,915	19,737	2,562	2,473	18,873	8,458	8,409	998	1,008		
Not in units with persons filing tax returns:													
In units with SSA beneficiaries .....	168	113	34	40	18	21	55	14	36	0	6		
Not in units with SSA beneficiaries .....	4,532	3,418	1,004	1,374	448	593	1,114	271	452	158	233		
Not in units with persons in SSA-covered employment:													
In units with persons filing tax returns:													
In units with SSA beneficiaries .....	75	44	14	26	1	3	31	6	16	0	8		
Not in units with SSA beneficiaries .....	2,733	1,743	708	787	118	131	990	438	428	63	61		
Not in units with persons filing tax returns:													
In units with SSA beneficiaries .....	443	247	91	101	11	44	196	63	82	24	26		
Not in units with SSA beneficiaries .....	4,259	2,822	705	1,447	150	521	1,437	552	533	174	178		
<b>PART II—FIRST HALF SAMPLE ESTIMATES</b>													
Total.....	76,893	53,840	22,792	23,844	3,361	3,843	23,053	9,897	10,140	1,440	1,576		

In units with persons in SSA-covered employment:											
In units with persons filing tax returns:											
In units with SSA beneficiaries .....	1,142	794	350	361	31	52	347	85	187	29	46
Not in units with SSA beneficiaries .....	63,447	44,717	20,012	19,631	2,611	2,463	18,730	8,429	8,376	928	996
Not in units with persons filing tax returns:											
In units with SSA beneficiaries .....	179	114	33	33	21	27	65	21	41	0	4
Not in units with SSA beneficiaries .....	4,965	3,719	1,116	1,508	502	594	1,246	318	495	209	227
Not in units with persons in SSA-covered employment:											
In units with persons filing tax returns:											
In units with SSA beneficiaries .....	79	44	20	19	3	3	35	8	14	0	13
Not in units with SSA beneficiaries .....	2,621	1,635	691	734	91	118	986	442	440	42	62
Not in units with persons filing tax returns:											
In units with SSA beneficiaries .....	430	215	69	90	14	43	214	77	80	36	22
Not in units with SSA beneficiaries .....	4,031	2,601	501	1,469	88	543	1,430	520	508	196	205
<b>PART III—SECOND HALF SAMPLE ESTIMATES</b>											
Total .....	76,893	53,840	22,792	23,844	3,361	3,843	23,053	9,897	10,140	1,440	1,576
In units with persons in SSA-covered employment:											
In units with persons filing tax returns:											
In units with SSA beneficiaries .....	1,103	737	294	305	74	63	367	106	180	16	65
Not in units with SSA beneficiaries .....	63,674	44,658	19,818	19,844	2,513	2,484	19,016	8,486	8,442	1,068	1,020
Not in units with persons filing tax returns:											
In units with SSA beneficiaries .....	158	112	34	48	15	14	45	7	31	0	8
Not in units with SSA beneficiaries .....	4,098	3,117	893	1,239	393	592	981	225	409	108	238
Not in units with persons in SSA-covered employment:											
In units with persons filing tax returns:											
In units with SSA beneficiaries .....	72	44	8	33	0	3	28	5	19	0	4
Not in units with SSA beneficiaries .....	2,845	1,850	724	839	144	143	995	435	416	84	60
Not in units with persons filing tax returns:											
In units with SSA beneficiaries .....	455	278	113	112	8	45	177	40	85	13	31
Not in units with SSA beneficiaries .....	4,488	3,044	908	1,424	213	499	1,444	584	558	151	151

Note: Total lines for each part are Census-supplied estimates for the U.S. civilian noninstitutional population on Apr. 1, 1973. (They have not been adjusted for understatement in number of outmigrants.) The estimates shown as the last line in each part are obtained as a residual by subtracting from the total line all the other lines which have been estimated from the Exact Match Study.

Mr. NORTH. My sense is that the number of illegal aliens entering the Nation, that is, the flow, has probably increased in recent years and as a result the stock of illegal aliens probably has increased as well. We have inadequate data on both points, but we do have a rough indicator, which is the increase in apprehensions of illegal aliens by the Immigration Service.

The Immigration Service counts apprehensions, not people. An apprehension is an act, but those apprehensions have increased sharply in recent years going from 65,000 in fiscal 1973 to more than 1 million in the comparable period ending June 30, 1977.

There has been no comparable increase in INS staff and other INS resources. They have rented, the last time I looked, two helicopters; they have some more sensors in place than they did in 1973, but these are very minimal additional resources. So, I suspect that the rising number of apprehensions relates to rising traffic as opposed to rising effectiveness or rising resources. I think it is only logical to say that probably there has been an increase in the flow of illegals.

Let me break in here to note that it would be very helpful if the Immigration Service were to work out some continuing estimation techniques regarding illegal alien flows and stocks, and it would be helpful if someone could find the \$50,000 or so needed to fund and update the Social Security Administration's, by now, 5-year-old estimate of the illegal alien population.

There has not been the executive will to get that done. Let's look at the illegal alien population through the admittedly smoked glass of inadequate data. Much of what I am saying was based on a study that a colleague, Marion Houstoun, now with the Congressional Budget Office, and I did through the Department of Labor 2 years ago.

In the North-Houstoun study, we talked to 793 apprehended illegal aliens who were very open, perfectly willing to talk, and typically, they are carrying their employment stubs with them. They were very open and frank with us until we started asking them how many people from their village were also here in this country; then they clammed up. But in terms of their involvement in the labor force, they were very open.

Who are they? They are no longer, as they apparently once were, confined to the U.S. Southwest. They are no longer primarily in agriculture, though many continue to work on farms and ranches and they are no longer an overwhelmingly male population as they once were.

While INS continues its oft-repeated harvest of Mexican males at the border, retrospective interviews of those apprehended as well as examinations of other flows of illegal aliens—such as those denied admission at the ports of entry—indicates that this is a more heterogenous population than once supposed, perhaps 35 to 40 percent are from nations other than Mexico, and primarily the Caribbean rim, and a far larger percentage than the 5, 6, 7 percent apprehended by INS are women. It is a much more coed population than INS statistics would suggest.

Part of that is because of the chivalry factor. INS falls all over itself to avoid apprehending women. They generally do not have

detention facilities for women and therefore they don't apprehend them.

Representative BOLLING. Is that chivalry?

Mr. SHEPPARD. Is that equality?

Mr. NORTH. They certainly don't arrest them. It is a law enforcement term, chivalry.

Representative BOLLING. Really?

Mr. NORTH. Yes.

Representative BOLLING. I am sorry to interrupt. That is too much for me.

Mr. NORTH. No, it is true.

I did some work once about nontraditional training programs for female convicts and I found that there are very few women in penitentiaries and a smaller percentage of women in jails than women arrested. It is a chivalry factor that keeps them out of those places. Besides, they are less violent which is another question. Let me get back to the illegals and what they do in the United States.

Illegal workers cluster in those jobs which pay low wages, in which governmental or union labor market controls are ineffective, and in which knowledge of English is not important. Thus, they work in the services trades, they work in many light industries, and they do farmwork.

There has been much debate on this point. General Chapman spoke of good-paying jobs being taken away by these illegals while others reply that they are hard-working people who accept jobs that Americans will not take.

A third and somewhat more complex view, which I subscribe to, is that there probably is 1-to-1 displacement of U.S. residents by illegals but their more significant impact is to loosen an already loose labor market which in turn depresses or conserves wages and working conditions in the places where they cluster.

There is the concern that America's most powerless workers, blacks, Puerto Ricans, teenagers, the aging, the handicapped, and women, have been bearing the brunt of the costs of the illegals, which is clearly helpful to other elements of society—agribusiness in the countryside and the users of services in our big cities, just to take two.

Let me add another observation also buttressed by my trip to Europe. Obviously, the private sector in the United States profits from the use of alien workers. In Europe, there is extensive utilization of migrant labor, most of it illegal, to do the dirty work, but it is done for public as well as private employers, sweeping the streets, collecting the garbage, running subway trains.

Those jobs are often done by migrants in Europe, but that kind of activity doesn't happen here because it is only private employers who use illegal aliens.

Before turning to what we can and should do about this phenomenon, which has significant international overtones, environmental overtones, demographic as well as economic aspects, I would like to stress the noneconomic attraction of illegal aliens. They are hard-working, pleasant, attractive, docile, uncomplaining workers. They are very nice people to have around.

I am suggesting that there is many an otherwise law-abiding employer who pays the minimum wage and most of the people we

interviewed were paid the minimum wage, and pays social security taxes who finds the illegals a preferred work force because of their powerlessness, a word which then Senator Mondale used in his hearings a few years ago on the migrant farmworkers.

What should be done about the presence of illegals in the United States? I am thinking in the labor market context. The first thing that needs to be done is already underway, that is, to devote some top-level attention to the subject. This hearing is an evidence of this. The Carter administration's proposal of last August is evidence of this. As to substance of what needs to be done, I would make five recommendations.

First, I agree with a major element of the administration's proposal that there be amnesty for senior illegals, the ones that have been here the longest. By "amnesty" I mean retrospective conversion of an illegal immigrant to a legal one.

This is at once humane, probably politically necessary, and would lead to legal status for those who are most accustomed to life in the United States. I think we can learn something from the Europeans about such an amnesty. It should be broadly publicized in many languages, particularly over the foreign language radio system since we are not dealing with a work force that reads very much. The provisions should be as simple as possible and those seeking amnesty should be able to do so with no risk of deportation.

The Dutch worked out this system. If you thought you were eligible, you came forward and applied. If you were eligible, they gave you your papers; if you weren't eligible, they tore up your papers and sent you on your way.

The British didn't and some people who came forward found themselves deported, which annoyed the immigrant-serving agencies which then told the immigrants to pay no attention to the government on this issue. I think we can learn something from the Europeans on this.

Second, I think we should make a serious effort to control our own borders, which the White House supports partially. They are interested in giving more resources to the most glamorous of the migration control agencies, the border patrol. They are the tall Anglos with the flat hats in uniforms and have guns. But, there are three other migration controlling agencies which are not paid much attention to, if at all, by the White House.

These are the people who issue the nonimmigrant visas, the young diplomatic officers who go through that function—kind of unwillingly, being on their way to more significant things in their lives—then there are the immigration inspectors who ask you some questions as you come into the States typically at airports and land ports of entry, and finally there are the INS investigators who enforce immigration law in the interior of the country.

I would like to point out to you, as you probably don't know, that the Government is more concerned about policing these few buildings within a half mile of where we are sitting than it is in enforcing immigration law away from the border.

Now, the Government has made that determination by the staffing pattern. The Capitol Police Force, last time I looked, had 1,140 authorized positions, the INS investigative staff which does a sub-

stantial amount of adjudicative activity as well as all the inland enforcement of the immigration laws, had only 800 authorized positions.

Third, I would like to suggest that we make a serious effort to eliminate exploitive practices in the labor market by passing an employer sanctions bill, as the House has done several times, and as the White House has recommended.

It would be useful to introduce more stringent enforcement to the minimum wage law and make it illegal to hire an illegal worker by—the current term—employer sanctions.

The Europeans have been doing that and we can learn something from them and it is a predictable lesson, having a law on the books doesn't do much good unless you enforce it.

There have been differing levels of vigor in the European scene on that issue.

My fourth suggestion is a negative one which is that we do not need to revive the Bracero program. We have a temporary worker program, the jargon is H-2, part of the Immigration Act, which can be used in cases of genuine labor shortages and there is no need to loosen or replace that program.

Employers who genuinely want to hire workers to serve meals or harvest the crops can, in most cases, secure the workers they need if they will—in the grand tradition of the free market—compete for those workers.

Typically, many employers would prefer to get them on a platter, an alien work force that is guaranteed to them. Now, newspapers, United States Steel, radio stations, they don't have guaranteed work forces, but some agricultural people think they should have a guaranteed work force.

Finally, I would suggest the development of a tough-minded national posture on this issue vis-a-vis the nations which send us the illegal immigrants.

We should simultaneously help them expand the labor-intensive economic development programs, while telling them that we have served as their pressure valve for long enough; we should let Mexico and other nations around the Caribbean rim know that we can no longer be regarded as a repository for their excess populations and their excess labor forces.

We should place as the first item on our agenda with Mexico our concerns about that Nation's rate of population growth; we should vigorously press for a better distribution of income, which I am told is much more likely to lead to lower birth rates than simply increases in the GNP per se.

The State Department does not take kindly to these suggestions. They want to get along with the current government of Mexico; they do not want to try to change that government. Those who resist the notion of putting pressure on the Mexican Government—by tightening the sieve which is our southern border—argue that such pressure might lead to a revolution. I doubt that. No one wants another Mexican revolution, but one can make an excellent argument for some Mexican reform. The last one didn't do anyone any good, but one can make an excellent argument for some Mexican reform.



I appreciate the fact that the committee has taken its time to focus on this issue and I am grateful for the invitation to be here. [The prepared statement of Mr. North follows:]

PREPARED STATEMENT OF DAVID S. NORTH

The three "special groups in the labor force" which we are discussing today, older workers, women workers, and illegal alien or undocumented ones, have some things in common.

First, in each case the group is disadvantaged in the labor market vis-a-vis the group's peers, i.e., women against men, older workers vs. prime-age workers, illegal vs. legal ones.

Secondly, at a time of continuing substantial levels of unemployment, two of the three populations, women workers and illegal ones, appear to be growing in size, both absolutely and relatively; Congress, meanwhile, by its action regarding the mandatory retirement age, appears to be encouraging the growth of the size of the older worker population as well.

Let me elaborate on the second point, as it relates to my sphere of interest, the impact of illegal aliens on the U.S. labor market. While I do not want to get involved in a lengthy discussion of the numbers of illegal aliens in the work force, it is fair to say that there are several million of them, that the stock of illegal workers in the nation is probably rising, and that the presence of all of them (whatever attractions they may possess) is, in the eyes of the law, extraneous.

As we look at the size of the total U.S. work force, it is perfectly clear that the easiest way to expand that labor force quickly is to let in adult workers from other nations; if, on the other hand, we wish to slow the expansion of the labor force, we could, if we felt so inclined, decrease the number of entries of alien workers. Some of these adjustments (that is, of the arrival of legal alien workers) could come through a revision in the immigration law per se, but far more significant changes could result from more vigorous enforcement of the current laws (which would impact on the number of arriving illegal alien workers).

As to the size of the stock of illegal aliens, let me call to the Committee's attention the estimate made by the Social Security Administration, an agency with no ax to grind in this area; SSA, through a complex files-matching estimation technique, calculates that there were about 3.9 million illegal aliens in the nation in 1973 between the ages of 18 and 44; I would suspect that the vast majority of them were working.

My sense is that the number of illegal aliens entering the nation (i.e., the flow) has probably increased in recent years, and, as a result, the stock of illegal aliens has increased as well. We have inadequate data on both points, but we do have a rough indicator for the increase of illegal traffic across the U.S.-Mexico border (which is a major, but not the only, source of illegal immigrants). This indicator is the number of illegal aliens apprehended by the Immigration Service, which rose from 655,965 in fiscal 1973 to more than a million in the comparable twelve months ending June 30, 1977. The INS staff at the border has increased slightly in those years, there are a few more sensors in place than there used to be, and now INS has two helicopters stationed near San Diego, which were not there in 1973; but these additional investments in enforcement can only account for a small portion of the more than 50% increase in apprehensions between 1973 and 1977. I am suggesting that the total flow of would-be illegal entrants from Mexico (and other parts of the world) is increasing, and I think it only logical to conclude that a major (and probably relatively stable) portion of them slip past the authorities and enter U.S. labor markets.

Let me break in here to note that it would be very helpful if the Immigration Service could get its act together and work out some continuing estimation techniques regarding illegal alien flows and stocks; and it would be helpful if someone could find the \$50,000 or so needed to fund an update of the Social Security Administration's by now five-year-old estimate of the illegal alien population.

Let's look at the illegal alien population through the admittedly smoked glass of inadequate data, regarding who they are, what they do in the labor market, and what their impact is. Much of what follows is based on a study Marion Houstoun, now of the Congressional Budget Office, and I did for the U.S. Department of Labor two years ago. In the North-Houstoun Study, we interviewed 793 apprehended illegal aliens, about 50 unapprehended ones, and made extensive use of INS apprehension data.

Who are the illegals? They are no longer, as they apparently once were, confined to the U.S. Southwest; they are no longer primarily in agriculture, though many

continue to work on farms and ranches; and they are no longer an overwhelmingly male population. While INS continues its oft-repeated human harvest of Mexican males at the border, retrospective interviews of those apprehended, as well as examinations of other flows of illegal aliens (such as those denied admission at the ports of entry) indicate that this is a more heterogeneous population than once supposed; perhaps 35% to 40% are from nations other than Mexico, and a far larger percentage than the 8 or 9 percent reflected in apprehension statistics are women. (INS avoids apprehending women whenever it can.)

What do these workers do in the United States? Illegal workers cluster in those jobs which pay low wages, in which governmental or union labor market controls are ineffective, and in which knowledge of English is not important. Thus they work in the service trades, they work in many light industries, and they do farm work. There has been much debate on this point. Former Immigration Commissioner, Leonard Chapman, contended that the illegals are taking "good paying jobs" from American workers; others replied that they are hardworking people who accepted jobs that Americans would not take. A third view, to which I subscribe, is that there probably is some one-to-one displacement of U.S. residents by the illegals, but their more significant impact is to loosen an already loose labor market, which in turn depresses or conserves wages and working conditions in the places where they cluster. There is the concern that America's most powerless workers, Blacks, Puerto Ricans, teenagers, the aging, and the handicapped, have been bearing the brunt of the costs of the illegals, which is clearly helpful to other elements of society (agribusiness in the countryside and the users of services in our big cities).

Let me add one other observation regarding the illegal aliens' impact on the U.S. labor market—an observation which was brought home to me very clearly in Europe. (I have just returned from a mission for the German Marshall Fund regarding what we can learn from Europe on the management of worker migration.) That observation is: Only the private sector profits from the use of alien workers in the States. In Europe there is extensive utilization of migrant labor to do the dirty work for public employers—sweeping the streets, collecting the garbage, running the subway trains—but in this country it is only private employers who profit.

Before turning to what can and should be done about this phenomenon, which has significant international relations, environmental and population aspects, as well as economic ones, I would like to stress the non-economic attraction of illegal aliens to their employers. I have previously described, in economic terms, the role of illegal aliens as desired workers, because they work hard for low wages. In addition, they are docile; they do not talk back; they do not file wage-hour complaints; they do not (usually) join unions; they fear that if they upset their employer, they may not only be fired, but also expelled from the country. What I am suggesting is that there are many an otherwise law-abiding employer who pays at least the minimum wage, and pays Social Security contributions (as did the majority of employers of those we interviewed in the North-Houston Study) who find the illegal immigrants to be very attractive employees because of their powerlessness.

What should be done about the presence of illegal aliens in the U.S.? The first thing that needs to be done is already underway, and that is to devote some top level attention to the subject. The White House has produced a complex package of proposals on the subject, which I will describe if the Committee so desires; while I disagree with some portions of the package, I can only applaud the fact that there is such a package. Meanwhile, this Committee and at least three other Committees of the Congress are holding hearings on this subject, and that is most appropriate.

As to the substance of what is needed, I would make five recommendations: First, amnesty for the more senior illegals, those who have been in the country for several years. This is at once humane, probably politically necessary and would lead to immigrant status for those among the illegal aliens who are most accustomed to life in the United States. The Administration has proposed such a status for illegals here since January 1, 1970. I would move that date forward by two or three years. I worry, however, about the Administration's proposal to create a half-amnesty for those here for a shorter period of time; the suggestion of a "temporary alien status" which allows persons in that category to work, to pay taxes, and to cross borders, but not to bring in their relatives or use tax-supported services is to me the suggestion of the deliberate creation of a lower caste in the labor force, which I think flies in the face of our notions of equity and egalitarianism. I think we can learn from the Europeans that if there is to be amnesty, it should be broadly publicized in many languages, particularly over the foreign language radio, that the provisions should be as simple as possible, and that those seeking amnesty should be able to do so with no risk of deportation—the Dutch worked out their amnesty in

this manner, and it was more successful than the British one, where some unsuccessful applicants for amnesty were deported as a result. I am not suggesting that we stop enforcing the immigration laws, I am simply saying that persons seeking amnesty should be able to do so in a setting where they cannot lose in the process.

Second, I would suggest that we make a serious effort to control our borders (which the White House supports through additional resources for the most glamorous of our migration control agencies, the Border Patrol). I would place equal or greater importance on additional resources for three other, less glamorous migration-management entities which the White House has all but ignored in its recommendations. I would place greater emphasis on the more careful issuance of nonimmigrant visas by the State Department, and give that agency more funds so that a smaller and more carefully selected flow of nonimmigrants arrived in the nation annually. (Those who abuse nonimmigrant visas probably constitute the majority of illegal aliens outside the Southwest.) I would buttress the immigration inspection function at the ports of entry—and think twice before passing that function off to the Treasury, which is under consideration at the moment. Finally, I would augment—not subtract from—the INS investigators now conducting industrial visits in the interior of the nation. Despite the White House interest in protecting the labor market from illegal aliens, the number of INS investigators assigned to this function is scheduled to drop, as INS diverts them to another one of those more glamorous assignments, the apprehension of smugglers. As the Committee probably is not aware, the Government is more concerned about policing these few buildings on Capitol Hill than it is in enforcing the immigration law away from the border. The Capitol police force, the last time I looked, had 1,140 authorized positions; the INS investigative staff, which does a substantial amount of adjudicative work as well as all inland enforcement, had only 900 authorized positions.

Third, I would make a serious effort to eliminate exploitive practices in the labor market by passing an employer sanctions bill, as the House has done several times, and as the White House has recommended. Such a bill would make it illegal for an employer to hire an undocumented worker; this is not now the case. (What we can learn from Europe on this point is predictable—having such a law on the books is only as useful as the level and vigor of enforcement; the French have recently moved from decentralized to centralized enforcement of their employer sanctions law, after finding that local police forces and magistrates have not paid much attention to the subject.) In addition, I would suggest more vigorous enforcement of the minimum wage law.

My fourth suggestion is a negative one. We do not need to revive the Bracero Program. We have a temporary worker program which can be used in the cases of genuine labor shortages; there is no need to loosen that program. Employers who genuinely want to hire workers to serve meals or harvest the crops can, in most cases, secure the workers they need if they will—in the grand tradition of the free market—compete for those workers.

Finally, I would suggest the development of a tough-minded national posture on this issue vis-a-vis the nations which send us the illegal immigrants. We should simultaneously help them expand labor-intensive economic development programs, while telling them that we have served as their pressure valve for long enough; we should let Mexico and other nations around the Caribbean rim know that we can no longer be regarded as a repository for their excess populations and their excess labor forces. We should place as the first item on our agenda with Mexico our concern about that nation's rate of population growth; we should vigorously press for a better distribution of income, which I am told is much more likely to lead to lower birth rates than simply increases in the GNP per se.

The State Department does not take kindly to these suggestions; they want to get along with the current government of Mexico; they do not want to try to change that Government. Those who resist the notion of putting pressure on the Mexican government—by tightening the sieve which is our southern border—argue that such pressure might lead to a revolution. I doubt that. No one wants another Mexican Revolution, but one can make an excellent argument for some Mexican Reform.

I appreciate being given the opportunity by the Joint Committee to discuss one of the elements in the labor force on which the Committee has decided to focus special attention.

**Representative BOLLING.** Thank you very much.

It has been a very interesting morning to me because I think we have succeeded in talking about some things that have not been discussed as much on the Hill, except in a very piecemeal fashion.

I wonder if any of you have any questions of the other witnesses? I had the feeling there was a little disagreement among the witnesses.

Ms. YOHALEM. I have one comment I would like to make apropos the older workers. I believe that the Age Discrimination Act starts at the age of 40 or 45?

Mr. SHEPPARD. 40.

Ms. YOHALEM. Since I have started to do a study of the reentry of mature women to the labor force, a question has arisen about the adult age at which discrimination first occurs. Many women reenter the labor force in their thirties after considerable periods out of the labor force, many of them are forced to do so—the so-called “displaced homemaker” for instance. They may have been out of the work force for as long as 15 years. Even if they are only 35 years old they often suffer from age discrimination. Therefore, I think consideration should be given to lowering the bottom limit of the Age Discrimination Act. Many reentrants below the age of 40 are suffering employment disabilities because of age.

Representative BOLLING. Nothing much was said, or perhaps my mind was wandering if it was, about what should be done about age discrimination.

I think what Congress does with age discrimination problems is similar to the congressional approach to small business problems. It constantly talks about small business as one part of the string of things that comes behind God and motherhood, but we don't seem to do very much about age discrimination. What kinds of things should be done?

Mr. SHEPPARD. Well, as you know, there is a small program of investigation and litigation in the Department of Labor, and if you look at the data there, there is a rising level of complaints filed which suggests that workers are getting more acquainted with the act itself and that the staff, although not really increasing, is becoming more proficient. Their legal staff is getting smarter in terms of how to answer rebuttals and there is a good conciliation service that takes place.

So, I think Congress should be supporting more of an educational campaign in this whole field without jumping immediately into saying, “Let's have 10,000 enforcement officers immediately taking employers into court.”

I also might point out that increasingly over the last 3 or 4 months there must have been at least 10 quasi-national meetings, essentially with employers and their personnel officers and so on, dealing with how do they comply with the new act. Some of them might have to do with how you manipulate the act, but there is greater attention now being paid by the employers' side to how they can comply.

I must say, also, Mr. Chairman, that there is an organizational factor that is about to take effect. As you know, all the discrimination agencies are now going to be placed in EEOC and among people in my club, people concerned with the older worker problem, some of us feel that this means for the next 3 to 5 years when that transfer takes place there will be nothing done because they will be going through an adaptation, even if they take the existing

staff from the Department of Labor and bring them over and put them in place and have them continue working.

I think that that would be a backward step toward this age discrimination factor.

Finally, I happen to be a naive believer, sometimes, in the power of reason and knowledge and facts. I still insist on being a rational man because I don't like the alternative, and by that I mean slowly I do see that as decisionmakers learn more about the research findings concerning the relationship or lack of relationship between age per se and work performance, it does have some impact.

I don't know if I have answered your question.

Representative BOLLING. That is a good answer.

Mr. NORTH. Let me add another approach to something in both of the previous speakers we have been talking about.

Generally, a tightened labor force is the kind that presumably—greater utilization gives a tighter labor market than we do now have.

Typically, women and blacks made tremendous headway during World War II in a tight labor market, but things can be done to tighten the labor market to help all these issues.

Representative BOLLING. In other words, it is a pattern-breaking matter as well?

Mr. NORTH. Yes.

Representative BOLLING. That certainly is what has happened.

I think pattern-breaking in civil rights has done as much good as the law has. I have been involved in that. This has been one of the things that bothers me, the traditional habit of mind that discriminates against women and that is a habit of mind, culturally held by vast numbers of people, because it is the habit of mouth that is the problem, too, because people well disposed catch themselves slipping in language because they are just not used to the language which at one time was almost entirely—which was in effect agreed upon by 90 percent of the people in our particular complicated culture.

Now, I can understand discrimination against women while not approving of it, as well as discrimination against minorities without approving of it, but I have a very hard time with discrimination against older people not because I have now arrived at the stage of being one, but it isn't part of our culture.

Mr. SHEPPARD. Well, there are some conflicting themes in society, historically speaking, and it is now a great controversy among gerontologists in the field. The more recent research suggests that our images of past, for example, about how idyllic it was for the older people, and how respected they were—I am talking about American society, not China or whatever.

Representative BOLLING. I know.

Mr. SHEPPARD. But it ain't necessarily so.

Representative BOLLING. The county poor farm was not a very nice place.

Mr. SHEPPARD. Right, and also a lot of kids or older children didn't have their parents living with them in the multigeneration family.

Representative BOLLING. Is that related to agriculture versus urban?

Mr. SHEPPARD. I am talking about essentially nonurban, yes, agricultural and rural.

It assumes, also, that these people lived to be old, which is another point.

Representative BOLLING. Right.

Mr. SHEPPARD. But we more recently have had an influence of the stereotype that as you get older you get decrepit and that is where the origin of the bias is in the world of work.

Representative BOLLING. How significant, if at all significant, is the question of having pension and retirement systems that don't vest?

It would seem to me that that would have—I have heard the argument that I don't hire so and so because I would then get involved in his retirement program and all that kind of complexity and since that aspect of remuneration has become increasingly important, it might have a negative effect.

Is much material available on that?

Mr. SHEPPARD. First of all, back in 1965, Willard Wirtz, when he was Secretary of Labor, put out the first big report which preceded the act on older worker discrimination.

In a survey they found that that reason was not as frequently mentioned as we would have believed; second, pension experts tell me that it depends on the nature of the pension plan; third, ERISA now has eliminated some of that problem; and fourth, I don't know why we can't have special dispensations for those so-called older workers who otherwise might be called too expensive to hire.

I am not sure—here I am getting out on a limb—whether or not the previous legislation or new legislation of ADEA and some of the court decisions have said that the cost factor involving the hiring of an older worker is not a legal argument for not hiring him.

Mr. KASSALOW. Might not ERISA accentuate the problem by locking people in with vested pensions where formerly they were not so required?

Mr. SHEPPARD. If I have a vested pension, I become more mobile.

If an employer wants me to move from where I am to where he is, I don't lose anything now that I have vested in company A and I can afford to move with his company.

Mr. KASSALOW. To the extent he has to vest a pension for you, then it becomes a fixed cost; whereas, if he could fire you after 3 years or 5 years and not have any obligation—

Mr. SHEPPARD. Well, there are stories to that effect. I don't have any hard facts. It has been written up in the gerontological journals. There are stories of employers who find some way of getting rid of a person before the 10th year comes up.

Mr. KASSALOW. The Wall Street Journal had a series a few years ago on such treatment of middle management.

Mr. SHEPPARD. Yes, and it is very expensive.

Representative BOLLING. Experience is totally unscientific, but in all my time in Congress I have had a very active district office. Over time you get to be the court of last resort.

I have an abnormally high number of older people coming in and attempting to prove that they are discriminated against but not in

a way that makes it possible for me to figure out how to do anything much about it.

They are discriminated against by the Federal Government as much as by private employers.

Mr. SHEPPARD. Theoretically, legally they are subject to being investigated, those public and private employers, and the Department of Labor, on the private sector side and the State and local government side, is supposed to investigate and see if they can conciliate, if it is truly age related.

If the company refuses to conciliate, it would go to court, but that is an example, if I understand your story, Congressman, of how little—and this is typical—how little workers know of what their rights are.

Representative BOLLING. Right. That is something we would inform them of if they came in, but you get back into the other whole area of the question of equal justice. It turns out that justice is equal only if you have the resources to pursue it.

It is no mystery that economic power always is well represented before a court, but the poor surely aren't.

Mr. SHEPPARD. There are only so many lawyers in the Department of Labor working on that.

Representative BOLLING. That is right.

Mr. SHEPPARD. I know of a recent case taken to litigation by the Department of Labor at the top level. I can't remember the figures, but something like 11 Federal lawyers versus 111 corporation lawyers.

Incidentally, the corporation lost. So, Goliath can sometimes be wounded, at least.

Representative BOLLING. I have a friend in Washington who is going to lose a lawsuit simply because while he is well-to-do, he cannot afford to go to the next step.

His competition is something that is very well-to-do, with a staff of lawyers.

Ms. YOHALEM. It occurs to me, however, that if you use the steps that the EEOC is planning to take now as far as employment patterns and practices are concerned rather than look at individual complaints; if you look at a large organization and see how they treat their older employees generally, rather than wait for someone to complain, this may be one way of solving the problem.

Representative BOLLING. I would think it might be. I think it has had some effect in the civil rights area but I don't know where that approach originated but certainly we had not used it often in Federal law until we used it quite deliberately.

Ms. YOHALEM. Affirmative action.

Representative BOLLING. Right. In the civil rights area we used it, but it is very difficult.

Mr. SHELDON. Mr. Chairman, you asked a question a moment ago, what can we do about age discrimination. As I listen to the panelists, I keep thinking about things that are happening in my own microcosm. Perhaps we all do that.

I work over at the Library of Congress in a relatively small office. I receive about 400 job applications a year from people who would like to work in my office.

Many of these are from experienced people and for the last several years I have not been able to hold out any hope to anyone with any seniority for a reason that has nothing to do with a Library rule.

The Library rule is the standard generous one, that there shall be no age discrimination, but I am also faced with another practical rule which we can all understand, that I must not allow grade creep because my appropriation would not cover grade creep.

We have very high quality staff. They get promoted rapidly. The only way to prevent grade creep is to hire at the entrance grade, so I get bright people directly out of college and all these experienced people with wonderful records that I would love to have if I had spaces for them I simply cannot touch.

Now, this is something that goes beyond a matter of statute outlawing age discrimination and I don't have an answer.

Representative BOLLING. Well, there are other examples that I happen to know about where we treat the people that we employ, not so much in the Congress but as in the auxiliary agencies that help us, and CRS is an example.

It is absolutely ridiculous to take the first-class minds that are willing to come and work with us and put them in a hole in the cellar, which is, in effect, what we do with a great many people.

So, some of the problem in Government is just ridiculous.

Ms. YOHALEM. If you prevent firing people because of age, then you wouldn't have that much of a problem in hiring them. In other words, many older people looking for jobs must have had others previously.

Representative BOLLING. That's true. Our particular problem is that people sometimes are motivated to move from where they are to a different area and when we get them, we don't greet them kindly.

I am sure that kind of thing happens that you suggest in the private sector even more.

There was one comment that the discouraged worker might be the equivalent of the older worker. I am sure that's true, but I know some discouraged workers who are very young.

They are my constituents who live in the ghetto.

Mr. SHEPPARD. I was speaking statistically.

Representative BOLLING. I am not clear on the statistics; they would make me nervous because I don't think we have any clear statistics.

For years, I was chairman of the subcommittee; It was the Subcommittee on Statistics, so I have at least a layman's awareness of the statistics.

I don't think we have any real notion of what is going on in the cities and it may be going on in the rural areas, in the country.

But you know, if I remember correctly, the Census indicates that it thinks rural areas lost 5 million people last year, and it is projecting losing a larger number this time in their work in the decennial count.

I think we are losing a lot more people to hopelessness in relatively prosperous cities than we have analyzed. So, I think that is probably an element, too.

Does anyone have any questions?



If you want to get involved, get in.

Mr. WALLACE. I would like to raise some questions with Mr. North.

You may recall a column in the Washington Post several months ago, by a former head of the CIA, who recommended that we provide food stamps to people in Latin American countries. This, he said, would prevent the illegal immigrants from coming here because they would get the food stamps directly without having to migrate to the United States in order to get them.

Representative BOLLING. That wasn't Admiral Turner, was it? [Laughter.]

Mr. WALLACE. No, that was Colby.

Mr. NORTH. It was Colby. I just woke up one morning and read that in the Post and I called him up and went to see him because it struck me as a very interesting idea. It had been condensed from a much larger paper of his, but this was the very best idea of the whole series of ideas.

We chatted about it, and I suspect that that is a kind of economic development activity in the areas which send us illegal immigrants that would tend to keep some people from moving around.

I would suspect that jobs would probably be better than food for that purpose. In many cases we are dealing with people who are motivated by a need for something more than just food.

They are the brighter and the better and more ambitious people in the village. The village has some kind of tradition of sending males up to the United States anyway and I would suspect that that might be helpful, but it is not the only approach toward discouraging illegal immigration.

Mr. WALLACE. We have noted the huge increase in transfer payments, from something like 25 percent of the total Federal budget to over 40 percent.

Would this relate to the increase in the number of illegal immigrants as people who would be coming into this country to take advantage of the welfare payments or food stamps or something of that nature?

Is this a problem or do the illegal immigrants come purely for jobs?

Mr. NORTH. There are two answers to that.

First of all, in terms of a loosening labor market and displacing of some legal U.S. workers, illegals, by their presence, are probably depriving some legal U.S. residents of jobs and they in turn wind up on welfare or collecting food stamps.

But, that is a very hard thing to measure. I am sure some of that goes on.

I would suggest that that is a real problem and one that should be addressed.

Second, there is a question of whether or not illegal immigrants are directly collecting these payments. I think it is fascinating that neither the Immigration Service office nor any of the welfare agencies have even looked at that issue.

In our North-Houstoun study, we interviewed 793 illegal aliens. They were typically the ones picked up by INS. They were males, working age, average was 27 years of age. They had been in the country for a couple of years, less than 4 percent had ever collected

unemployment insurance, about 1 percent had collected food stamps and one-half of 1 percent had collected welfare.

Now, you are looking at the population with these characteristics, male, physically able, often single or separated from the women in their lives.

You would expect them not to be much involved certainly in AFDC, and you would expect them to be much more likely to be working than collecting welfare. That is exactly what we found.

That was not looking at the welfare population, however. We were looking at the apprehended illegal population. I think the welfare agencies should be encouraged to do this.

One study I know about in San Diego County, about 1 percent of the AFDC recipients in San Diego County on a 100-percent sampling technique were found to be illegal aliens.

Now, the San Diego County is a county through which probably more illegal aliens flow than any other county in the United States.

It is directly on the road between Mexico and Los Angeles.

So, 1 percent of the AFDC caseload there is illegal, and that suggests that that is sort of a manageable kind of problem.

I do think that the agencies involved should pay a little more attention to this issue and look at it from the point of view of the population receiving the benefits, not the illegal alien population.

Mr. KASSALOW. Doesn't your own study, Mr. North, show that clearly on balance the illegals are probably net contributors from the fiscal point of view?

Mr. NORTH. Yes, we found that 75 percent of them roughly had employers who were withholding income tax, and had been withholding social security benefits. However, I hasten to say that is a direct effect, and it relates to the kind of people we interviewed. On the other hand, there is a department study not yet published which shows a much higher percentage of welfare beneficiaries among a group of nonapprehended aliens.

People we talked to were making much more in the way of tax contributions than drains. But I am saying that that is not the whole story.

Mr. KASSALOW. But these people would be unlikely ever to collect pensions, most of them.

Mr. NORTH. Yes.

Also, they would not collect social security. They may not be here long enough. They may not know enough to file.

Mr. KASSALOW. Same for unemployment compensation.

Mr. NORTH. Well, they are two different things.

Unemployment insurance probably is not—they are probably not legally entitled to unemployment insurance because they cannot work legally, they are not available for work.

Now, in addition to the fact that you claim that every week or 2 or 3 weeks at a local office, that is a risky thing to do.

If you are an illegal alien and you get to be 62 or 65 and go back to Mexico and you file your paper, that's fine, you are not in trouble, because the Social Security Administration has no interest in whether you have been working legally or illegally. They have an obligation to pay that pension. It is just a totally different context.

I suspect, however, that the illegal aliens are contributing much more to the social security fund than they are taking out.

Representative BOLLING. Tell me, how much study has been given to what may or may not be a real phenomenon—again, when I can relate things to my district—I have a heterogeneous district. After World War II we had a great deal of in-migration from sort of middle to Eastern Europe and other European countries.

There seemed to be a pattern of maybe a relatively middle-aged person, relatively speaking, getting in perfectly legally and then using the leverage you have once you are a citizen of bringing in perhaps a very large family where you are down to cousins.

Now, occasionally this would be economic. I have in mind a man who built up a successful parking lot business. Now he and his family, which is very large, have not one but a great many parking lots and obviously he needed the workers just the way the farmer needed the children in the old days.

That is exactly what he did. Now, how well he paid them or anything else, I don't have any idea, but very far from there, around here, you see situations where domestic servants who may have or who are not citizens but are not illegals who may not have just one job but who have two, and are in the process of moving upward by increasing their skills, will get substantial numbers of their family in there and perhaps let them inherit a domestic job as that person goes on to a semiprofessional or paraprofessional job.

Have there been any studies on the patterns of types of employment in that way?

Mr. NORTH. This week we delivered to the Labor Department a report entitled "Seven Years Later: The Experiences of the 1970 Cohort of Immigrants in the U.S. Labor Market," which deals with the 1970 cohort of legal immigrants, the ones who came in fiscal 1970.

We have interviewed some of them, looked at their social security data, and we have paid attention to their occupational mobility, so there is something like that and we will send that to you.

Just briefly touching on a couple of things that you mentioned, our immigration policy tends to be much more than any other democracy in the world, tends to relate to bringing in relatives as opposed to needed workers, as opposed to just skilled people, as opposed to refugees.

An increasing percentage of people who come to the United States do so simply because they are somebody's relative.

Approximately 67 to 76 percent of the immigrants to the United States, in recent years, were admitted because of a familial relationship to a legal U.S. resident.

You don't necessarily even have to know those relatives. We don't accept cousins, but I have a sister who lives in your State; were she to live in Canada and had I not seen her for 20 years and never met her husband and never met the kids, I could file a piece of paper to admit that woman I know, my sister, that man I have never met, my brother-in-law, and the children I have never met.

That is an extreme of the family reunification element.

Representative BOLLING. I never understood how they got the cousins in but I know they are there.

Mr. NORTH. What you need is an immigration lawyer that will point out to you that you can't get in cousins, but if you can go up the ladder and you can bring in your parents, you should be able to do that; and the parents can bring in brothers and this takes time, you know—

Representative BOLLING. Right, but that is what has been happening.

I don't think they need the lawyer because I think that the first echelon advised itself. I would be very interested in seeing that study, though.

Mr. NORTH. We will see that you get it.

[The following study was subsequently supplied for the record:]

SEVEN YEARS LATER: THE EXPERIENCES OF THE 1970  
COHORT OF IMMIGRANTS IN THE U.S. LABOR MARKET

by

David S. North

This report was prepared for the Employment and Training Administration, U.S. Department of Labor, under research and development contract no. 20-11-74-21. Since contractors conducting research and development projects under government sponsorship are encouraged to express their own judgment freely, this report does not necessarily represent the official opinion or policy of the Department of Labor. The contractor is solely responsible for the contents of this report.

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16. Abstracts This study deals with the experience of legal immigrants in the U.S. labor market. Each year about 400,000 such immigrants enter the U.S., and each year about 222,000 immigrants (net) enter the labor market. The demographic profile of the legal immigrants is close to that of the population at large, and is thus different from that of illegal immigrants (who tend to be young, single males). In the U.S., immigrants earn more money and work fewer hours per week than they did in their homeland, and, in the case of women, quickly earn as much as their peers; the men appeared to be on their way to earnings equity with their peers. There are substantial occupational group movements, many of which initially at least are downwards. The study is based on published and unpublished government statistics and on a survey of the 1970 cohort of immigrants.			
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## EXECUTIVE SUMMARY

Subject: The experiences in the U.S. labor market of legal immigrants; their numbers, motivations, characteristics, and labor market behavior; and U.S. policies towards them.

How Many?: The United States, in recent years, has been admitting close to 400,000 immigrants a year, a number which will increase, at least temporarily, because of past governmental decisions about Indochinese refugees and Western Hemisphere immigration and possible future decisions regarding the status of illegal immigrants. The 400,000 level is higher than the average yearly level of admissions from the mid-twenties to the mid-sixties, but lower than that of the turn of the century. The majority of arriving immigrants become U.S. workers, and account for approximately one-eighth of the annual increase in the U.S. labor force. (The increase caused by illegal immigration would be in addition to this figure.)

Why Do They Come?: In findings parallel to those of a similar survey taken by the Canadian Government of their immigrants, most U.S. immigrant respondents indicated that they came for economic reasons--despite the fact that most immigrants to the U.S. are admitted for familial, not labor market, reasons.

What Are Their Characteristics?: The demographic profile of recent groups of legal immigrants have resembled those of the population at large (save for their foreign birth); the age mix, level of education, and marital status have been close to the national norms. These recent immigrants are thus quite different from earlier groups of immigrants and apparently from the current illegal aliens, who are more likely to be single adults, predominately male, and poorly educated.

What Happens To Legal Immigrants In The Labor Market?: They earn much more money in the U.S. than in their homeland, and they work 10 fewer hours per week. The female immigrants quickly earn more (perhaps by working longer) than their peers in the labor market; and the males were approaching equity with their peers more slowly (with other factors being held constant). There are substantial net occupation group movements, presumably masking even larger gross movements, and much of this is, initially, downward. Clearly, for a variety of reasons, at least some of the human capital borne by the immigrants is lost in the transition.

What Are Our Policies?: Although a preponderance of the arriving immigrants become workers in the U.S., only a small minority of them are screened with labor market considerations in mind. While virtually all other segments of the labor force are protected from discrimination by employers, under most circumstances immigrants are not so protected. Further, immigrants (other than those who are members of large refugee influxes) are not the targets of specialized manpower programs, as are many other segments of the workforce (e.g., veterans, former prisoners, minority youth).

Study Methodology: Data were drawn from the 1970 Census of the foreign born, published Immigration and Naturalization Service (INS) data on recent groups of immigrants, unpublished INS data on a sample of 5,000 of the immigrants admitted in FY 1970, unpublished Social Security Administration data on the earnings of 1,393 1970 immigrants, a survey of 254 1970 immigrants, and secondary sources.

## INTRODUCTION

This report is part of a larger body of work, written over the last nine years for various Government agencies, sometimes with co-authors (notably Marion F. Houstoun) and sometimes without, but all dealing with the impact on U.S. society of immigration. The principal focus has been on the interaction between the immigration process and the U.S. labor market.

There are three types of aliens in the United States: undocumented or illegal ones, who violated U.S. laws regarding the entry and presence of aliens in the nation, either by their undocumented entry or through abuse of the visa which enabled them to legally enter this country; nonimmigrants, who are temporarily admitted for a specific purpose; and immigrants or "permanent resident aliens," who can alone move about the labor markets at will, stay for the balance of their lives, and are eligible for citizenship via the naturalization process. The first group of aliens, now by far the most publicized and researched group of alien workers, was the subject of our study which has become known as the North-Houstoun Report;\* in that document, written for the Labor Department in the Spring of 1976, we concluded that the principal impact of the illegal aliens was on the labor market (and not on the U.S. Treasury) and that the principal nature of the impact was to depress wages and working conditions in places where the illegal aliens concentrated. The second group of workers, the nonimmigrants, which includes such varied elements as sugar cane cutters, circus performers, waiters, and British rock stars, is the subject of a report for the Labor Department which is now being completed.

The third type of alien workers, the immigrants, are the subject of this report, which is a followup to a study written five years ago for the Labor Department, Immigrants and the American Labor Market. In that study, William G. Weissert and I examined the characteristics and labor market behavior of the 1970 cohort of immigrants, using as our prime data source the visa application forms filed in 1969 and 1970, and the alien address cards filed in 1972, by a sample of 5,000 working age members of that year's group of arriving immigrants. We concluded in that report that there was a substantially higher labor force participation rate for immigrants than was previously realized, and that there was, not unexpectedly, a substantial

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\*David S. North and Marion F. Houstoun, The Characteristics and Role of Illegal Aliens in the U.S. Labor Market: An Exploratory Study (Washington, D.C.: U.S. Department of Labor, March 1976).

amount of movement across occupational group lines in the first two years of exposure to the U.S. labor market.

This report also deals with the 1970 cohort of immigrants, as a proxy for the immigrants of the last decade, and uses Social Security earnings data as well as 254 retrospective longitudinal interviews of the members of the earlier sample of 5,000 working age immigrants; it seeks to describe what happened in the labor market to that cohort of immigrants.

The manpower policy implications of all three elements in the alien work force, immigrants, nonimmigrants, and illegals, are covered in another work, in press as this is written, "Manpower Policy and Immigration Policy in the United States: An Analysis of a Nonrelationship," which was prepared for the National Commission for Manpower Policy. In that report, Allen LeBel and I indicated that immigration policy is made with little recognition of its manpower implications, and that when such considerations are taken into account, the results are not always those desired by the lawmakers. For example, in 1952 the Congress gave first priority, within the existing quota limits, for highly skilled workers, allocating up to 50% of the visas to these workers and their families; in many years only a tiny fraction of the visas available to such workers were utilized in this way.

In addition, we have prepared a series of specialized reports on various aspects of immigration to the United States. The first of these was on green-card commuters, The Border Crossers: People Who Live in Mexico and Work in the United States, in which we described the labor-market impact of the legal movement of a largely unskilled work force across the California, Arizona, New Mexico, and Texas borders. This was produced in 1970 for the Department of Labor. The next publication, also for the Labor Department, entitled Alien Workers: A Study of the Labor Certification Program, was written in 1971. It examined the workings of the one part of the immigrant-screening process which deals with manpower considerations; it concluded that the certification program was of minimal utility, as it screened only a small fraction of those permanent resident aliens who enter the U.S. labor market annually.

The Law Enforcement Assistance Administration (LEAA) then funded three reports, written with Ms. Houstoun, which outlined various techniques for estimating the population, flows, and characteristics of illegal aliens in the United States.\* One of these estimating techniques was used in "Fraudulent Entrants: A

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\*The products of this work were, Illegal Alien Study Design, 3 vols, Vol I, Final Report, Vol II, Bibliography, Vol. III, Research Design, May 1975.

Study of Malafide Applicants for Admission at Selected Ports of Entry on the Southwest Border and at Selected Airports," which was written for the Immigration and Naturalization Service (INS);\* using a random sample method and a careful inspection of applicants for admission, with the usual time pressures removed, the eight INS inspectors assigned to this experiment found a substantially higher percentage of malafide applicants for admission than are normally identified, suggesting that on approximately 500,000 occasions a year such aliens fraudulently pass through the ports of entry undetected.

Work on the present report was done over a period of years in several institutional frameworks; the contract for the work was with Linton & Company, a Washington consulting firm; the interviews were conducted by TransCentury Corporation; the report was written while the author was with the Center for Labor and Migration Studies of the New TransCentury Foundation.

I would like to note here my gratitude to the Department of Labor, and specifically to Dr. Howard Rosen, Director of the Office of Research and Development, and our monitor, Ms. Ellen Sehgal, for their continuing support and remarkable patience on a long, drawn-out, complicated project; I would like to record, simultaneously, my gratitude to numerous individuals within INS who were extremely helpful, and my dismay with our inability to secure a random sample of the 1970 cohort of immigrants, a subject which is dealt with more extensively in Appendix A.

I would like to acknowledge my appreciation to a number of people at the Social Security Administration, specifically to Mr. John Carroll, Assistant Commissioner, who approved our request for a data exchange, and to Mr. Joseph Salis, who supplied us with detailed longitudinal earnings data on a subsample of the original 5,000 immigrants and answered our many questions concerning those data.

There are no qualifications to my thanks to my former co-author, Ms. Houstoun, who was extremely helpful in connection with this report; and to my colleagues at TransCentury, Warren Wiggins, President, B.J. Warren, Vice President and Survey Manager, and Debby Hopkins, who conducted the immigrant interviews with skill. I also wish to thank Lili Wilson-Hishmeh, Robin Wagner, Charles Mann, and the late John Dellaplaine for their major contributions. I remain, however, solely responsible for the approach to the data, the conclusions drawn therefrom, and any and all errors which may have occurred.

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\*That document was not published by INS, but an INS-produced condensation of it was made available.

## DEFINITIONS

Since much of the data on this subject are drawn from agencies which do not use the same concepts, the Census Bureau and the Immigration and Naturalization Service, we have established the following definitions for use in this report:

Foreign Born: This (Census) term encompasses all residents of the U.S. born abroad to non-U.S. citizen parents; it thus includes naturalized citizens and the three classes of aliens (permanent resident aliens, nonimmigrants, and illegal aliens) which are defined below. It excludes citizens born abroad to one or two citizen parents, persons who become citizens by derivation; this small but interesting class is excluded from this report as well.

Immigrants: Two classes of persons are covered by this term, permanent resident aliens (those foreign born admitted to the U.S. on a permanent basis) and naturalized citizens (former permanent resident aliens who secure citizenship through the naturalization process).

Permanent Resident Aliens: Legal immigrants who have not become naturalized citizens; on the U.S.-Mexico border these persons are sometimes called "green carders" because of the formerly green (now blue) form I-151 which they carry as identification.

Nonimmigrants: Persons admitted temporarily to the United States to perform a specific function (such as tourist, student, or diplomat); nonimmigrants may, under some circumstances, adjust their status to that of permanent resident alien; nonimmigrants, unless they adjust their status or enlist in the armed forces, are not eligible to become U.S. citizens.

Illegal Aliens: Persons who either entered without inspection (thus EWIs) or those who subsequently abused the documents which permitted their entrance, by staying too long, or violating the terms of those documents, generally by accepting unauthorized employment (thus visa abusers).

Cohort: A group of persons; here used to identify groups of immigrants admitted in a given fiscal year; the principal subject of this report is the cohort of immigrants admitted as permanent resident aliens in fiscal year 1970 (which ran from July 1, 1969 through June 30, 1970). At this writing, some members of this cohort are still permanent resident aliens, some have become citizens, some have left the nation, and a few have died.



Labor Certification Beneficiary: An individual alien, found by the Department of Labor to be a needed worker whose wages and working conditions will not depress U.S. standards; such a determination by the Department can lead to permanent resident alien status for the worker and his or her dependents, if they meet the other criteria of the immigration system.

Sample: In this report, 5,000 working age, FY 1970 immigrants aged 18-59 in 1970, whose matched visa applications and alien address cards were studied in Immigrants and the American Labor Market.

Subsample: Here, 1,393 individuals for whom social security numbers were known, and who, in turn, were known to the Social Security Administration, drawn from the sample of 5,000 working age immigrants.

Study Group: (also respondents) 254 members of the sample of 5,000 who were interviewed about their labor market experiences after responding favorably to a letter from the Immigration and Naturalization Service requesting their cooperation.

## CHAPTER ONE

## BACKGROUND: U.S. IMMIGRATION AND IMMIGRATION POLICY

Before we can usefully examine the labor market experiences of the 1970 cohort of immigrants, it is necessary to outline the background for those experiences, which we do in the first three chapters of the report.

Chapter One deals with the nation's immigration policies and the principal results of those policies (i.e., immigrants). The three sections of this chapter cover, in turn, the changes over time in the manner in which would-be immigrants have been selected and the post-admission controls over their labor market activities; the flows of immigrants, which have averaged about 400,000 a year recently, a number which will, however, temporarily increase in the immediate future; and the stock of the foreign born, the cumulative result of past immigration. This chapter, then, provides a legal and demographic backdrop for the labor market adventures of the 1970 cohort.

Chapter Two outlines the personal characteristics of the recent cohorts of immigrants, including that of 1970. It is useful to know something of the age, sex, and national origin of recent immigrants, as well as their destinations within the nation, for such characteristics are important factors in determining labor market behavior.

Chapter Three reviews the available data, largely from the Census, of the labor market roles and characteristics of those foreign-born persons who were already in the U.S. labor market when the cohort of 1970 arrived.

With this legal, demographic, and historical background in place, the fourth and fifth chapters deal with the 1970 cohort of immigrants, *per se*, while the final chapter draws some policy implications from the data presented. Whenever appropriate, comparisons are made among data available on the 1970 cohort of immigrants and other groups of immigrants to the U.S., the legal ones of the past and the illegal ones of today; comparisons are also made to the population or the labor force generally.

#### I. United States Immigration Policy and Procedures

Although the nuances of U.S. immigration policy have been adjusted frequently throughout the nation's history, one can identify five distinct phases of immigration policy; the fiscal year 1970 cohort of immigrants arrived in the second full year of the fifth phase, that of familial screening.

The first phase of our immigration policy dealt with the involuntary migration of slaves; while the slave trade was nominally illegal after 1808, it persisted until the Emancipation Proclamation. Overlapping that phase was the period of no numerical limits-no screening, the time of the open door, which ended with the passage of the first law regulating free migration, the Immigration Act of 1875. For the next half century, with immigration sometimes reaching annual totals of one million and more, the nation was in the qualitative screening-no numerical limits phase. During this period, everyone who wanted to come to the United States could do so, except members of certain classes found undesirable by the Congress, such as Chinese, anarchists, prostitutes, and the handicapped.

The fourth phase of our immigration policy, that of ethnic screening, was operative from 1921 through June 30, 1968, when the most recent major revision of our immigration policy, the Immigration and Nationality Amendments of 1965, went into full effect. During this period, both an overall quota on Eastern Hemisphere immigration and separate country-of-origin quotas were established, which made it relatively easy for would-be immigrants from Western or Northern Europe to enter the nation, difficult for Southern Europeans to do so, and just about impossible for Asians.

The openly ethnocentric, country-of-origin system for screening would-be immigrants was attacked, with varying degrees of vigor, by Presidents Truman, Eisenhower, Kennedy, and Johnson, and finally, in 1965, with the nation in a mood for reform, Congress passed the Amendments of 1965, which eliminated the country-of-origin system (after a three-year transition period) and replaced it with the immigrant-screening system which (with some minor modifications) is in place today.

The post-1965 immigration policy of the nation rests on three principals, to each of which there are exceptions:

1. The nation can absorb only a finite number of immigrants (presumably a smaller number than want to immigrate) and thus there are numerical limitations on most would-be immigrants.  
Exception: this does not apply to immediate relatives of U.S. citizens.
2. An alien's ability to secure an immigrant visa does not relate to his race, color, creed, or country of origin.  
Exception: the 20,000 ceilings for individual nations, and the much smaller ceilings established for European possessions (such as some islands in the Caribbean and Hong Kong) have tended to limit

immigration, respectively, from Italy, the Philippines, some Caribbean islands, and Hong Kong, as well as from Mexico (since the passage of the 1976 Amendments).

3. The Congress has decided, with great precision, the classes of family members, needed workers, and refugees, which may be admitted under the law.  
Exception: The Executive, from time to time, using an emergency provision in the law, causes the admission of numbers of refugees, most recently the Indochinese; these admissions, which lead to immigrant status for the refugees at a future date, are called "paroles," one of the several unfortunate terms (like "qualitative screening") used in this field.

The 1965 Amendments set hemispheric quotas on numerically limited immigration (i.e., on all admissions except those of spouses, children, and parents of U.S. citizens, and several smaller classes, such as former overseas employees of the United States); the ceiling for the Eastern Hemisphere is 170,000, and that from the Western Hemisphere is 120,000. Until the 1965 Amendments, there had been no numerical limitations on New World immigrants.

Within the 170,000 ceiling for the Eastern Hemisphere, the Congress also created a series of seven preference and one nonpreference categories (a system which was extended to the Western Hemisphere with the 1976 Amendments). The seventh preference was assigned to refugees, the third and the sixth to needed workers and the other preferences to relatives of either citizens or permanent resident aliens.\* And, as we will show subsequently, the vast majority of immigrants are admitted not because this society has decided that it needs their skills, or because the nation feels an obligation to be helpful (as in the case of the refugees), but because they are related to someone, usually someone foreign-born, who is legally present in this country. Hence the term, familial screening for this phase of immigration policy.

How did the members of the 1970 cohort of immigrants secure their admission to this nation? The vast majority were admitted because someone in the United States requested it, usually a relative and sometimes an employer. A handful of immigrants were able to enter without direct U.S. ties; these included some of the most skilled of the professionals and the refugees.\*\*

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\*For a year-by-year accounting of the numbers of immigrants admitted in each of the preference categories, see Appendix B.

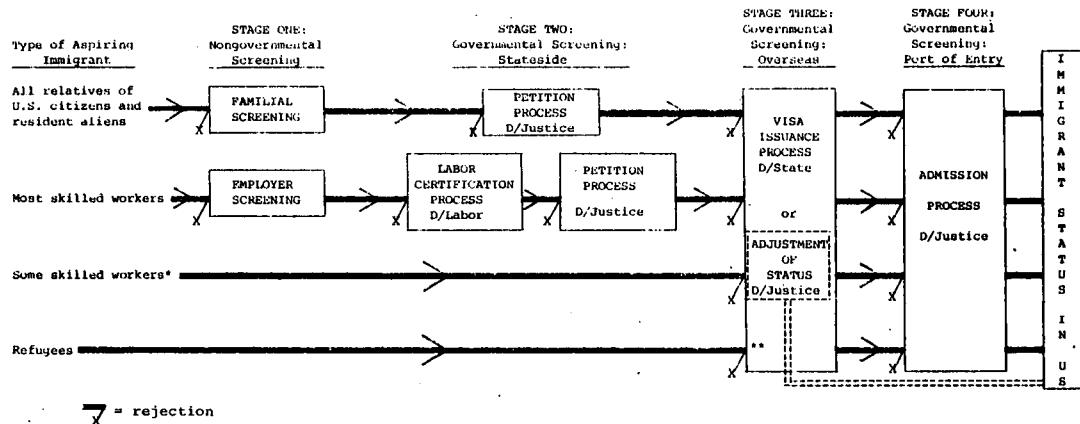
\*\*The year was not one in which many refugees were admitted; further, because of an anomaly in our approach to the INS record-keeping system, only a few refugees showed up in our sample of 5,000 members of the 1970 cohort, and they were not examined in this study as a separate category.

The procedures which were followed by and on behalf of the 1970 cohort included the following (which are also illustrated in Figure 1):

- labor certification: immigrants whose application for immigrant status is based on a claim that the nation needs their skills are screened by the U.S. Department of Labor; those whose skills are regarded as in demand, and who are destined for jobs (or professions) in which their presence would not depress wages and working conditions, become labor certification beneficiaries. In 1970, for example, physicians could secure a labor certification with relative ease, a craftsman only after a more complex screening process, and a farmworker or factory hand would, under virtually all circumstances, be denied a certification.
- petition: employers with a labor certification in hand for a needed worker, or relatives (who wanted to immigrate one of the several designated classes of relatives) filed petitions with INS, asking that the alien be admitted.
- immigrant visa: all would-be immigrants from the Western Hemisphere, and all would-be immigrants from the Eastern Hemisphere, who were at the time in that hemisphere sought immigrant visas from the consular officials of the Department of State. If the official found that the applicant had a valid, INS-approved petition (or in some cases an equivalent document), and a valid application for a visa, and was otherwise eligible for immigrant status, the official either issued an immigrant visa or put the alien on an immigrant visa waiting list (if the category the alien fell into was oversubscribed). This is the only point in the process in which there is a substantial interview of the would-be immigrant, and it is also the point at which the previously mentioned numerical controls (hemispheric and country-of-origin ceilings, and preference allocations) are enforced.
- adjustment of status: at the time the 1970 cohort of immigrants were filing their papers, it was possible for some of them from the Eastern Hemisphere to adjust their status from that of non-immigrant (such as tourist or student) to immigrant while they were in the United States. In this case, the would-be immigrants reported to an INS office for the same process they would have undergone had they been applying to a consular office for an immigrant visa.
- admission: assuming that the would-be immigrant had all of his papers in order, including the all-important immigrant visa, he would then arrive at a port of entry (either along the land borders or, more likely, at one of the international airports) for physical admission to the U.S. If admitted (and only a tiny fraction are denied entry), the immigrant is then given his permanent resident alien identification (the green card or form I-151).

FIGURE 1

The Screening Process for Immigrants to the United States



**Note:** This exhibit shows the screening process experienced by the major classes of arriving immigrants (but not all classes); those included are relatives inside and outside the numerical limits, labor certification beneficiaries, and seventh preference refugees.

\*Nonpreference, Schedule A labor certification beneficiaries can apply for certification and immigrant visas from the consular officers; nonpreference investors and other nonpreference immigrants exempt from labor certification requirements are treated in a similar manner.

\*\*Seventh preference refugees apply for conditional entry to INS officers overseas, rather than going through the visa issuance process.

**Source:** Taken from David S. North and Allen Jabel, Manpower Policy and Immigration Policy in the U.S.: An Analysis of a Nonrelationship, (Washington, D.C.: National Commission for Manpower Policy, forthcoming), exhibit III.

- registration: during each subsequent January (until such time as the immigrant secures citizenship) the alien is obliged to file an alien address card (I-53) with his name, address, alien number, Social Security number, occupation, and employer. While filing this document is not part of the screening procedure, it is a potentially useful source of data on immigrants after their admission to the nation.

Permanent resident alien status, which the cohort of 1970 achieved following successful completion of the procedures just described, does not guarantee full and free access to the nation's labor markets. In fact, immigrants have to cope with three sets of constraints as they seek equal treatment in the labor market; we are primarily concerned here with the third of these factors, legal barriers to full access to the labor market, but the other two (covered in more detail later in the report) should be at least mentioned.

The first set of constraints are those which the immigrant brings with him. He is, by definition, in an alien environment, where the customs, practices, and in many cases, the language are new to him. Often the immigrant's status as a newcomer slows his progress in the labor market. (On the other hand, immigrants tend to be self-selected, ambitious persons.)

The second set of constraints are laid on by employers who, perhaps motivated by xenophobia, may be reluctant to hire the new arrival, or to make full use of his training and experience. (Other employers, however, react differently, and seek out aliens either as landsmen, and thus familiar, or as eager and perhaps exploitable workers.)

The third set of constraints are those which are imbedded in federal and state law, which under many circumstances can limit a permanent resident alien's search for appropriate employment. Unfortunately, the cheerful American myth that resident aliens can do everything a citizen can, except vote and be elected to public office, is simply not true.

The Supreme Court, in a series of recent opinions (described more thoroughly in David Carliner's very useful The Rights of Aliens\*) in effect voted twice to restrict the rights of permanent resident aliens in the labor market, and voted once to expand those rights.

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\*David Carliner, The Rights of Aliens: The Basic ACLU Guide to an Alien's Rights (New York: Avon Books, 1977).

On the issue of a long-standing Federal Government practice, essentially barring resident aliens from most Federal jobs, the Court ruled that such a decision, while constitutional, could not be made, as it had been, by the U.S. Civil Service Commission; it had to be made by the Congress or the President.\* Subsequently, President Ford reaffirmed the previous Civil Service Commission position on the subject.

As far as private employment is concerned, the Court ruled in the Farah case\*\* that it was lawful for an employer to discriminate against permanent resident aliens in favor of citizens. The Equal Employment Opportunity Commission, however, has interpreted that decision to mean that such discrimination is acceptable only when it is not a proxy for nation-of-origin discrimination; in the Farah case, all the workers involved, both the citizens and the aliens, were of Mexican heritage.

But what is acceptable for private employers and for the U.S. Government is not acceptable for states and for local government; in the Sugarman v. Dougall case,\*\*\* the Court ruled that the State of New York could not discriminate against permanent resident aliens in favor of citizens.

There is another body of law and regulation, at the state level, which persists as a barrier to appropriate employment for some permanent resident aliens, even though the Supreme Court has ruled against it. These are the stipulations, in many states' professional licensing regulations, which make it mandatory for a physician, or a mortician, a barber or a beautician to be a citizen before the individual can practice the trade or profession. Carliner contends that, although such stipulations would not hold up on court review, this is not generally known, and many aliens are prevented thereby from following the trade or profession for which they have been trained.

Immigrants not only receive relatively little protection against discrimination in the labor market, they are also unlikely to receive manpower training services, unless they arrived with one of the large groups of refugees for whom the government has provided extensive services, such as the Cubans and the Indochinese. Immigrants are not barred from manpower training and vocational education programs; that is not the point we are making. What we are arguing is that there are relatively few programs which are designed with their special needs in mind. (Since the Labor Department's reporting system for its local grantees is not structured to capture data on alien clients (or foreign born ones), there are, unfortunately, no statistics on the subject.)

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\*Hampton v. Mow Sun Wong, 426 U.S. 88 (1976).

\*\*Espinoza v. Farah Manufacturing Co., 414 U.S. 86 (1973).

\*\*\*Sugarman v. Dougall, 413 U.S. 634 (1973).



These, then, are the immigration policies which facilitated the admission of the 1970 cohort of immigrants, some of the procedures that they completed in the immigration process, and some of the constraints they faced as they entered the labor market.

## II. The Flows of Immigrants

The 1970 cohort of immigrants consisted of 373,326 individuals. The total for the year was fairly typical for a cohort of immigrants arriving under the provisions of the 1965 Amendments; during the eight years of full effectiveness of the Amendments for which we have data (July 1, 1968 through June 30, 1976), the cohorts gross mean was 383,350, and there was little variation from the mean year after year.\*

It should be stressed that this is a gross measure of legal immigration; it is not a measure of the net arrivals of additional people in the United States. This is the case, because several movements of people across our borders are not covered by this measure; the most significant of these is the movement of illegal aliens into the nation. Since the number of apprehensions of illegal aliens has, in recent years, been running at more than twice the level of legal immigration, it is likely that this is a substantial movement. Two other, legal movements of persons are not included in the 373,326 figure noted above; these are the departures of U.S. citizens, which was estimated at 56,043 in 1970 by Finifter,\*\* and the departures of permanent resident aliens, which Warren has estimated at an annual average of 110,000 during the 1960s.\*\*\*

The arrival of about 400,000 legal immigrants annually in recent years indicates, as Figure 2 illustrates, that immigrants are coming to the country in larger numbers in the last eight years than they have since the 1920s. However, at the turn of the century, when we were a much less populous nation, we were admitting considerably larger numbers of immigrants in both absolute and relative terms.

The gross numbers of arriving immigrants is certain to increase in the years following 1976, without any further change in the immigration law. This is the case because of two decisions, one judicial and the other administrative, each of which will increase the number of immigrants by approximately 150,000. A Federal District Court judge has ruled that the Government acted improperly in issuing numerically controlled immigrant visas to Cuban refugees (who should have been granted visas outside the numerical ceilings); this practice adversely affected other Western Hemisphere immigrants who were told to wait in line until

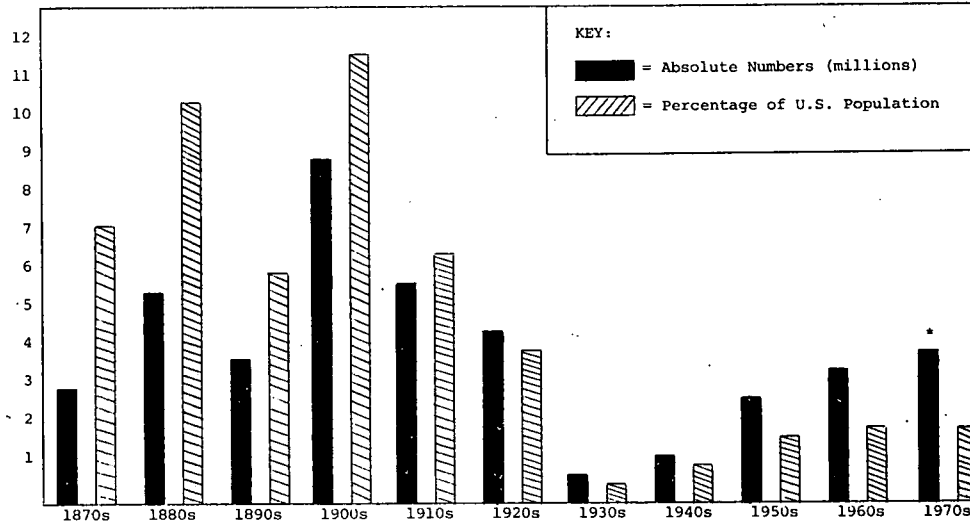
\*Immigration and Naturalization Service, Annual Report: Immigration and Naturalization Service, 1976, Table 1.

\*\*Ada Finifter, "Emigration from the United States, An Exploratory Analysis," paper presented at the Conference on Public Support for the Political System at the University of Wisconsin-Madison, August 13-17, 1973.

\*\*\*Robert Warren, "Recent Immigration and Current Data Collection," Monthly Labor Review, October 1977.

FIGURE 2

Immigration to the United States in Absolute Numbers, by Decade, and as Percent of U.S. Population at the Beginning of the Decade, 1870-1970



\*This projection of 3.9 million is based on the assumption that immigration will continue at about the same rate for the last half of the decade as it did in the first half, 1971-1975, which was 1,936,000.

Source: Immigration figures from INS Annual Report, 1975, Table 1; percentages computed from population figures derived from The World Almanac & Book of Facts, 1977.

visa numbers became available. The judge ordered the Government to issue immigrant visas to those who had previously been told to wait.\*

The administrative decision, really a series of them, permitted the admission of Indochinese refugees following the end of the Vietnamese War; these admissions, which are outside the previously described numerical limits, will not be recorded in the formal statistics of INS until the refugees convert their status to that of immigrants, a process which will start two years after their arrival in this country.

Legal immigration will also increase, perhaps substantially, if the Administration's proposal to grant amnesty, or permanent resident alien status, to the more established of the illegal aliens is incorporated into the law; it is regarded as unlikely that these amnesty admissions would be made within the framework of the current numerical limits.

### III. The Stock of the Foreign Born

While the numbers of arriving immigrants in the last decade (1968-1977) has been larger than in the previous four decades, and while in recent years the numbers of arriving illegal aliens has apparently been increasing as well, the size of the foreign born population has been decreasing relatively since 1910, and absolutely as well since 1930, as shown below:

<u>Census</u>	<u>Number of Foreign Born</u>	<u>Percent of Total**</u>
1910	13,516,000	14.6%
1920	13,921,000	13.2
1930	14,204,000	11.6
1940	11,595,000	8.8
1950	10,347,000	6.9
1960	9,738,000	5.4
1970	9,619,000	4.7

\*See Silva v. Levi, U.S.D.C., N.D. Ill., No. 76 C 4268, and for a commentary, see Maurice A. Roberts, ed. Interpreter Releases, Vol. 54, No. 14, April 12, 1977 (New York: American Council for Nationalities Service)

\*\*Data for 1920-1970 from U.S. Bureau of the Census, Statistical Abstract of the United States, 1976, Table 40; data for 1910 from U.S. Bureau of the Census, Historical Statistics of the U.S., series A29-42 and A105-118.

The reason for this anomaly relates partly to the advanced age, in recent decades, and the consequent high death rates of the large numbers of immigrants who arrived at the turn of the century, partly to some emigration of immigrants (a portion of whom retire to their homelands), and partly because of the timing of the measures described above.\* The post-1965 Amendments increase in legal immigration made only a minimal impact on the 1970 census, as the Amendments had been in full effect for only 21 months when the 1970 enumeration was taken (on April 1, 1970); further, most of the increase in illegal immigration apparently has taken place since the census was conducted.

It will be interesting to see whether or not the 50-year trend, of a steadily decreasing foreign-born stock, will continue when the results of the 1980 census are tabulated; I suspect that the trend will be reversed.

To summarize this chapter, we find that the nation's immigration policies are primarily based on non-labor market considerations and, as a result, only a minority of immigrants are screened with labor market factors in mind; these are the potential labor certification beneficiaries. Most immigrants are admitted because they are a relative of a U.S. resident.

Annual admissions of immigrants have been running just below the 400,000 level in recent years, a higher rate than in the previous four decades, but considerably lower, both absolutely and proportionally, than the rate of immigrant acceptance at the turn of the century. The 400,000 figure, however, is likely to be increased, at least temporarily, in the next few years because of refugee admissions and (if enacted) amnesty for some portion of the illegal alien population.

The increases in levels of legal immigration made possible by the 1965 Amendments have not yet reversed the long-term declining trend of the foreign born population, as reflected in the decennial censuses.

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\*Underenumeration, particularly of the illegal immigrants, would be another factor.

## CHAPTER TWO

## BACKGROUND: THE CHARACTERISTICS OF IMMIGRANTS

An individual worker's experiences in the labor market are influenced by a wide variety of factors, some internal to the worker, many external; some of the most important individual factors (such as ambition and one's ability to adjust in the working environment) cannot be measured directly with any degree of success; but there are other factors known to influence labor market behavior on which data are available for arriving immigrants. Preparatory to examining the labor market experiences of the cohort of 1970, it is useful to draw a profile of that group of immigrants in terms of seven variables:

- age (upon arrival)
- sex
- marital status (upon arrival)
- nation of birth
- planned destination within the U.S.
- immigration classification, and
- occupation (as stated on the visa application)

In addition, we are interested in the variable of education, although data on this subject are available only for earlier groups of immigrants, through the decennial censuses.

We will examine, for each of the variables noted above (save education), the profile of the 1970 cohort of immigrants and, where pertinent, compare the cohort's characteristics with those of four other populations:

- the resident population of the United States in 1970;
- the foreign-born population, which was comprised principally of earlier groups of immigrants (those who arrived before the 1965 Amendments went into effect);
- other recent cohorts of immigrants (those of fiscal years 1969, and 1971 through 1976); and
- illegal aliens.

While some statistical material is presented within this chapter, most of the detailed data regarding immigrants arriving in the years of interest can be found in Appendix B.

**Age:** The 1970 cohort of immigrants was youthful (median age at arrival, 24.3 years) and as such tended (slightly) to decrease the median age of the U.S. population; the median age of recent immigrant cohorts varied little from the 1970 figure, and stayed consistently under the median for the U.S. population as a whole, which was 28.0 in 1970 and 28.8 in 1975. The arriving 1970 immigrants were, understandably, considerably younger than the stock of the foreign born, whose median age that year was 52.0 years.\*

While a predominance of young adults characterized the earlier cohorts of immigrants and apparently the current group of illegal aliens, the 1970 cohort of immigrants included a substantial number of family members (with children represented more generously than older persons). The tendency of recent immigrant cohorts to approach the U.S. norm, in terms of age distribution, is shown in Table 1; although young adults are more heavily represented in the 1970 cohort than in the resident population, the difference is less dramatic than it was in 1910.

Illegal immigrants of today, like the legal ones of 1910, appear to be concentrated in the young adult years, with approximately 90% of apprehended illegals falling in the 18-44 age range; studies on this subject tend to agree; for example, four recent studies of apprehended illegal aliens from Mexico indicated that the mean ages of the members of the study group were, respectively, 27.5, 27.5, 27.6, and 28.9 years of age.\*\*

**Sex:** Compared to the U.S. resident population in 1970, which consisted of 948 men for every 1,000 women,\*\*\* the immigrant cohort of 1970 had a larger proportion of women; this was a reversal of the situation in earlier years, when predominantly male cohorts of immigrants came to a nation which had a few more

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\*Sources for most statistics used in this chapter can be found in Appendix B; when they are derived from other sources, they will be noted. In this case, it is U.S. Bureau of the Census, Census of Population: 1970, Subject Report PC(2)-1A, National Origin and Language (Washington, D.C.: U.S. Government Printing Office, 1973), Table 10. Footnote references to this publication will hereafter be cited Census, PC(2)-1A.

\*\*These studies were: Immigration and Naturalization Service, Illegal Alien Study, Part 1: Fraudulent Entrants Study, September 1976, p. viii; Julian Samora, Los Mojados: The Wetback Story (Notre Dame: University of Notre Dame Press, 1971), p. 90; North and Houston, Characteristics and Role of Illegal Aliens, p. 69; and Government of Mexico, Resultados de la Encuesta Realizada por la Comision Intersecretarial para el Estudio del Problema de la Emigracion Subrepticia de Trabajadores Mexicanos a E.U.A., 1972.

\*\*\*U.S. Bureau of the Census, Statistical Abstract of the United States, 1975, Table 26.

TABLE 1

## Distribution of Age of Immigrant Cohorts and Total U.S. Population, 1910 and 1970

(as percents)

Age Group	1910		1970	
	Immigrant Cohort	U.S. Population	Immigrant Cohort	U.S. Population
Total: Number	1,041,570	91,972,266	373,326	203,210,000
Percent	100.1	99.9	100.1	100.0
Under 15 years*	11.6	32.1	26.4	28.6
15-44 years*	83.4	48.9	61.1	41.0
45 years and over	5.1	18.9	12.6	30.4

\*The age groups for the 1910 cohort of immigrants varied slightly; they were under 14 and 14-44.

Source: Data for 1910 from U.S. Bureau of the Census, Historical Statistics of the United States, Series A119-134 and C138-142; data for 1970 immigrants from INS Annual Report, 1970, Table 10, and for the 1970 population from Bureau of the Census, 1970 Census of Population, Detailed Characteristics, United States Summary, Table 191.

men than women. (An extreme example of this occurred in 1824, when there were 4,025 male immigrants to 1,000 female ones, at a time when the most recent census (of 1820) reflected a resident population ratio of 1,032 men to every 1,000 women.)\* As recently as 1910, there were more than 2,400 male immigrants arriving for every 1,000 female ones. By the thirties, the majority of immigrants were women, and this pattern has persisted since that time.\*\*

A major reason for the predominance of female immigrants relates to a single clause in the immigration law, which, understandably, permits U.S. citizens who marry aliens to immigrate these alien spouses; in the years of concern, 1969-1976, the mean number of men admitted through this provision was 18,409, while the mean for women was approximately twice as large, 36,371. An examination of Appendix B on this point, however, shows that the predominance of women has been declining in this category; there were almost three times as many women as men in this category in 1969, but by 1976 the ratio was down to about three to two. One could speculate that changing mores now allow U.S. citizen women the freedom that U.S. citizen men have long had, that is, to go abroad and find a suitable spouse and bring that person back to America; one could also speculate that a portion of these marriages involved no foreign travel at all, but were between citizen women and alien males lacking permanent resident status (nonimmigrants and illegals).

This second line of speculation is supported by what little information we have on the male-female mix among illegal aliens; men appear to be in a substantial majority in that population. Certainly, all the survey data on ever-apprehended illegal aliens (those who have been arrested at least once by INS) indicate a high incidence of males. What is not clear are the relative sizes of the two groups of illegal aliens, i.e., the ever-apprehended as opposed to the never-apprehended ones; but it appears likely that the latter group contains a larger percentage of women than the former.

Marital Status: At the turn of the century, when immigrant cohorts were young and predominantly male, immigrants were much more likely to be single than the general population. In 1920, when sound data on the subject for an immigrant cohort became available, this was still the case. The approach to the American norm, which we have reported in terms of immigrant age groupings and sex ratios, can also be seen when the marital status of immigrants and the resident population is compared, as it is in Table 2 for the years 1920 and 1970.

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\*Harry Jones, Migration and Business Cycles (New York: Macmillan, 1926), p. 39.

\*\*For a more extended treatment of this subject, see North and Weissert, Immigrants and the American Labor Market, pp 25-33.



TABLE 2

Distribution of Marital Status of Adult Immigrant Cohorts  
and the General Population,\* 1920 and 1970

(as percents)

<u>Year</u>	<u>Categories</u>	<u>Single</u>	<u>Married</u>	<u>Other**</u>
<u>1920</u>	<u>Males</u> - Immigrants	57.5	40.6	2.0
	- Population	31.8	61.3	6.8
	<u>Females</u> - Immigrants	44.2	46.9	8.8
	Population	24.1	60.4	15.4
<u>1970</u>	<u>Males</u> - Immigrants	29.0	69.3	1.6
	Population	19.1	75.0	5.9
	<u>Females</u> - Immigrants	19.8	74.6	5.4
	Population	13.7	68.5	17.8

\*Over 18 years of age for 1970, over 14 years of age for 1920.

\*\*widowed, separated, divorced.

Source: Adapted from David S. North and William G. Weissert: Immigrants and the American Labor Market (Washington, D.C.: Trans-Century Corporation, 1973), Table XV.

The percentage of married immigrants rose for the cohorts which followed that of 1970, as Appendix B indicates. In 1970 69.3% of the immigrant males 18 and older were married; by 1976 the percentage had increased to 73.5%. Among the female immigrants, the percentage increased slightly from 74.6% in 1970 to 76.4% in 1976. The immigrant cohorts since 1973 have shown higher incidences of marriage than the adult population as a whole, a reversal of the turn of the century situation; this is largely because of a sharply lower incidence of separation and divorce among the immigrants than among the balance of the population.

One of the reasons for the trend for more married immigrants may well be built into the immigration law itself; being married to a U.S. citizen or a permanent resident alien is one of the characteristics for which one is rewarded with an immigrant's visa under the current law (just as being Irish or Swedish was rewarded under the prior country-of-origin law). Table 3 indicates that while the number of marriages in the U.S. has been quite steady in recent years, at a little above the 2,100,000 level, the number of marriages-which-create-immigrants has increased sharply, up more than 50% between 1969 and 1976, the last year for which complete data are available. (Such marriages are not counted as such, of course; we combined data on visas issued to spouses of permanent resident aliens and admissions data on U.S. citizens' spouses to arrive at the estimates used in Table 3.)

Fertility is a related variable which affects family size and hence, income, the labor force participation rate of females, the earnings rate of employed females, and the second generation effects of immigration. Data on fertility are unavailable for immigrant cohorts but available from the Census on the foreign born.

The fertility of foreign born females 25-44 is 2.14 children ever born per female versus 2.57 for native U.S. females. It is similarly lower for the 45-64 age group. Fertility varies with nationality for 25-44 year old females, ranging from 1.80 for Japan to 3.44 for Mexicans. The latter is in excess of the 2.75 rate for native persons of Spanish language.

Fertility rates for all foreign born women 35-44 are lowest (2.21) for the 1960-64 immigrants, and are 2.26 for the 1965-70 wave, having declined significantly from those waves prior to 1960. For Mexican women 35-44, the rate is 4.0 both for the 65-70 and the 60-64 waves. These are very high rates and account for an important part of the high poverty rates of Mexican immigrants.\*

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\*Census, PC(2)-1A, Tables 2, 3, and 17.

TABLE 3

Incidence of Immigrant-Creating Marriages as Compared to all U.S. Marriages, 1969-76

	1969	1970	1971	1972	1973	1974	1975	1976
(A) Admissions of Spouses of U.S. Citizens	39,273	51,895	54,300	58,297	67,288	67,563	55,620	60,090
(B) Visas Issued to Spouses of Permanent Resident Aliens	<u>9,656</u>	<u>10,562</u>	<u>12,057</u>	<u>12,772</u>	<u>13,472</u>	<u>14,773</u>	<u>14,419</u>	<u>14,574</u>
Total of Above	48,929	62,457	66,357	71,069	80,760	82,336	70,039	74,664
Percentage Change, 1969-1976								<u>+52.6</u>
(C) Total U.S. Marriages (000s)	2,145	2,159	2,190	2,282	2,284	2,230	2,126	2,133
Percentage Change 1969-1976								<u>-0.6</u>

Source: Line (A) is from INS Annual Reports, Table 4; line (B) is from Report of the Visa Office, Table II; and line (C) is from Statistical Abstract of the U.S., 1976, Table 68 for 1969-75, and for 1976 from the National Center for Health Statistics (by phone).

Note: Data on U.S. marriages are for calendar years, while data on immigrants are for fiscal years.

Predictably, when illegal aliens are compared to either legal immigrants, or to the U.S. population as a whole, they show a much lower incidence of marriages; for example, 54.8% of the 25-34 year olds in the North-Houston study group (90% of whom were male) said that they were married, while 80.3% of the comparably aged male group in the resident population are married.\*

**Nation of Birth:** Table 4 indicates that there has been a substantial change in the source of U.S. immigrants over the past eighty years, with the flows from Europe falling sharply, and those from Asia and the Americas increasing correspondingly. The number arriving from Northern and Western Europe, for example, in 1970 was less than one tenth what it had been in 1890. Other patterns of note are the substantial decreases in immigration from Canada, which have been more than compensated for by substantial increases from Mexico and from the balance of the Western Hemisphere. Immigration from Africa and from Oceania has increased over the years, but remains a minor factor.

Table 4 shows the changing regions of origin of U.S. immigrants over a period of 80 years, in which there were numerous (and substantial) changes in immigration laws, as well as wars, revolutions and depressions; the more immediate trends in the source of immigrants in the eight years under scrutiny here (and during a period when the immigration law remained virtually unchanged) is shown in Appendix B.

During these eight years the longterm trends noted above continued; immigration from Europe, which comprised about a third of all immigration in 1969, fell to about a fifth by 1976. Canadian immigration, down to about 18,000 in 1969, fell to below 8,000 in 1976. Immigration from Mexico rose from 1969 to 1974, when it reached a peak of 71,586 and then slipped off slightly, while immigration from the balance of the Western Hemisphere increased from about 90,000 in 1969 to about 100,000 in 1976. The most dramatic single change related to Asia; the number of immigrants from that continent almost doubled in the eight year span, going from a little more than 75,000 in 1969 to a little less than 150,000 in 1976. The labor market implications of these region of origin shifts will be examined subsequently.

**State of Destination:** The 1970 cohort of immigrants, like those before and after them, clustered geographically within the United States; 78.9% of the members of this cohort reported that they were going to settle in 10 states of the nation, which was home, according to the 1970 Census, to only 49.9% of the nation's population. The states on the cohort's list were, in descending order, New York, California, New Jersey, Illinois, Texas, Massachusetts, Florida, Michigan, Pennsylvania, and

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\*North and Houston, Characteristics and Role of Illegal Aliens, pp. 76-77.

TABLE 4

Region of Birth of Selected Cohorts of Immigrants, 1890-1975  
(as absolute numbers and percent of column total)

<u>Region of Origin</u>	<u>QUALITATIVE SCREENING</u>		<u>ETHNIC SCREENING</u>			<u>FAMILIAL SCREENING</u>	
	<u>1890</u>	<u>1910</u>	<u>1930</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1975</u>
Northern & Western Europe	286,124 (62.8%)	202,198 (19.4%)	97,118 (40.2%)	163,707 (65.7%)	84,552 (31.9%)	34,387 (9.2%)	22,058 (5.7%)
Southern & Eastern Europe	159,556 (35.0%)	724,093 (69.5%)	50,320 (20.8%)	35,408 (14.2%)	55,118 (20.8%)	81,652 (21.9%)	51,938 (13.4%)
Asia	4,448 (1.0%)	23,533 (2.3%)	4,535 (1.9%)	4,508 (1.8%)	23,864 (9.0%)	94,883 (25.4%)	132,469 (34.3%)
Africa	112 *	1,072 (0.1%)	572 (0.2%)	849 (0.3%)	2,526 (1.0%)	8,115 (2.2%)	6,729 (1.7%)
Oceania**	1,167 (0.3%)	1,097 (0.1%)	1,051 (0.4%)	517 (0.2%)	1,179 (0.4%)	3,198 (0.9%)	3,347 (0.9%)
Mexico	not recorded	18,691 (1.8%)	12,703 (5.3%)	6,744 (2.7%)	32,684 (12.3%)	44,469 (11.9%)	62,205 (16.1%)
Canada	183 *	56,555 (5.4%)	65,254 (27.0%)	21,885 (8.8%)	30,990 (11.7%)	13,804 (3.7%)	7,308 (1.9%)
Other Western Hemisphere	3,650 (0.8%)	14,288 (1.4%)	10,147 (4.2%)	15,562 (6.2%)	34,449 (13.0%)	92,814 (24.9%)	100,139 (25.9%)
Other Countries	62 *	43 *	0	7 *	36 *	4 *	1 *
<b>TOTAL</b>	<b>455,302</b> (99.9%)	<b>1,041,570</b> (100.0%)	<b>241,700</b> (100.0%)	<b>249,187</b> (99.9%)	<b>265,398</b> (100.1%)	<b>373,326</b> (100.1%)	<b>386,194</b> (99.9%)

Source: Taken from David S. North and Allen LeBel, Manpower Policy and Immigration Policy in the U.S.: An Analysis of a Nonrelationship, (Washington, D.C.: National Commission for Manpower Policy, forthcoming), Exhibit VI, which was derived from, for 1890-1950, Historical Statistics of the United States, Series C, 88-114; 1960-1975 data from INS Annual Reports, 1960, 1970, and 1975, Table 14.

\*less than one tenth of one percent.

\*\*Australia, New Zealand, and the Pacific islands.

Hawaii.\* Similarly, the members of the 1970 cohort were more likely to live in major cities than Americans, generally; 37.5% of the cohort elected to live in ten cities, which in 1970 had been the residence of only 9.8% of the nation's population. Thus newly arriving immigrants tend to play a more important role as workers and as consumers in some states than others and in the big cities of the nation, as opposed to suburban and rural areas.

While the clustering of immigrants has decreased a bit over time--the ten most popular states in the 1899-1910 period drew 83.5% of immigrants,\*\* and New York alone had 31.4% of them, compared to the 1970 figures of 78.9% and 26.2%, respectively--the locus has changed considerably. Sunbelt states such as Florida, Texas, and Hawaii have attracted increasing numbers of immigrants; consequently, the flows, in terms of percentages, have slacked off in the northeastern quadrant of the nation.

The 1970 cohort's destinations were fairly close to those of the other recent cohorts, as Appendix B shows; in 1970, New York was still the most favored state for immigrants, but by 1976 that distinction had been won by California.

Less is known about the geographic location of illegal aliens than is known about their demographic characteristics; one can speculate, however, that they probably cluster where recent legal immigrants from the same nations cluster. Given the nearness of the U.S.-Mexican border, on one hand, and the recent trends toward sunbelt settlement by legal immigrants, on the other, one would expect something of a tilt to the South and West, as well as a continuing interest in urban areas in the North and the Middle West.

Classes of Immigrants: The immigration law is a complex instrument, said to be the most complicated piece of American legislation outside the Internal Revenue Code; immigrants are admitted to the nation if (assuming interest on their part and successful completion of the application process) they are defined as admissible under one of the segments of the law. The 1970 INS Annual Report, which presented voluminous data on the cohort of that year, indicated (in Table 4) 26 separate and distinct provisions of the law which had been used that year to facilitate immigrant admissions. Some of these provisions were virtually inactive, thus only two admissions were recorded as those of "foreign government officials adjusted under Section 13 of the Act of September 11, 1957," while more than 100,000

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\*See Appendix B for individual state percentages.

\*\*United States Immigration Commission, Abstracts of the Reports of the Immigration Commission, Statistical Review of Immigration (Washington, D.C., 1911), p. 105.

were admitted as "Natives of the Western Hemisphere, their spouses and children (subject to Western Hemisphere numerical limitations)" a category which has many subcategories (such as labor certification beneficiaries, their relatives, relatives of U.S. citizens, and relatives of permanent resident aliens). For a full listing of all the provisions of the law, and the number of immigrants whose admission was facilitated by those provisions, during the eight recent years of interest, see Appendix B.

Clearly, the various provisions of the law might be a useful variable to study as one analyzes the results of immigration and its impact on the labor market. It was equally evident that simply using the 26 provisions as an analytical framework would not be practical; not only would there be too many cells, but some cells (such as the large one for the Western Hemisphere) contain a variety of important subcells, and others (such as first preference, unmarried sons and daughters of U.S. citizens) might not be significantly different in the labor market from others (such as fourth preference, married sons and daughters of U.S. citizens). Another classification system was needed, and, to make things a little more complex, we devised two of them, each with a different objective, over the years.

The first system, which we call immigration categories, was used in Immigrants and the American Labor Market; seven classes are defined (and a small miscellany of others who did not fit the system were dropped). The seven categories of the 1970 cohort, for which we have extensive earnings data, are:

<u>Immigration Category</u>	<u>Description</u>
EH Workers	Labor certification beneficiaries from the Eastern Hemisphere, in third, sixth and nonpreference.
EH Workers' Relatives	Spouses and children of EH Workers.
EH Relatives	First, second, fourth, and fifth primary preference persons (i.e., the alien with an immigrant relative in the U.S.)
EH Relatives' Relatives	Spouses and children of EH Relatives.
WH Workers	Labor certification beneficiaries from the Western Hemisphere.
WH Relatives	All other Western Hemisphere immigrants admitted under the numerical limits.
U.S. Relatives	Immediate relatives of U.S. citizens (from both hemispheres).

There are two deficiencies in this system, which limit its utility. In the first place, the system was designed to categorize 5,000 immigrants (in the 1970 cohort) for whom we had completed (and utilized) visa applications; we could, and did, make distinctions (say between a primary fifth preference immigrant, the one with the brother in the U.S., and the secondary fifth preference immigrant, the child of the alien with the brother in the U.S.), which are not reflected in the INS statistical system; therefore comparisons must be made overtime through a technique that includes some estimations. The second problem was that, for reasons covered more thoroughly in Appendix A, the data gathering system used in selecting the 5,000 members of the cohort sample, systematically excluded refugees, who would have made a highly logical eighth category. Despite these difficulties, the immigrant category system was built into our analytical framework and was used in connection with the Social Security Administration's 1970-1975 taxable earnings data on the 1970 cohort of immigrants. (See Chapter 4)

An analysis of the changing composition of the cohorts over the years in terms of immigration categories (as shown in Appendix B) indicates that there were decreases in the numbers of workers, particularly those from the Western Hemisphere, a sharp increase in U.S. citizen relatives, a slight decline in the other four relative categories, and an increase in the other category, caused by slightly larger groups of refugee admissions in the later years.

Subsequently, we developed a simpler analytical framework,\* which divided immigrants into two broad categories, those who were admitted to the nation as relatives of U.S. residents, through the process of familial screening, as opposed to those admitted because their presence was judged to meet some public need, i.e., as a result of societal screening. In general terms, familial screening facilitates the admission of relatives of both U.S. citizens and permanent resident aliens, while societal screening facilitates the admission of labor certification beneficiaries (and their families), refugees, and members of several smaller subclasses (such as former employees of U.S. missions overseas). This framework is based on the published statistics of INS (and certain ancillary estimation techniques); the increasing incidence of familial screening, in both percentage and absolute terms, is shown in Appendix B.\*\*

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\*See Appendix A for methodology.

\*\*A rough relationship can be established between the two classification schemes outlined above; familial screening covers the categories EH Relatives, EH Relatives' Relatives, U.S. Relatives, and virtually all of WH Relatives (save for a few labor certification beneficiaries dependents who are in this category); societal screening covers both EH and WH Workers, and EH Workers' Relatives.



One of the principal reasons why immigrants admitted through the societal screening process declined in the period studied, from more than 37% to less than 26%, is because of the operations of the labor certification program. With spreading unemployment, it became more difficult for would-be employers to convince the Labor Department that resident workers were not able and available for work, a necessary pre-condition for the issuance of a labor certification for the employment of an alien. Given the U.S. immigration system, this did not mean that we secured fewer immigrants; it just meant that we welcomed different ones, typically family members not subject to the labor certification process. The decline in utilization of labor certifications, from 59,597 in 1969 to 25,474 in 1976, is spelled out in Appendix B. (The labor market implications of this downward trend will be discussed subsequently.)

**Stated Occupation:** When potential immigrants file their visa applications, they complete this sentence, "My present calling or occupation is: \_\_\_\_\_." Upon admission to the United States, data on the visa applications are collected and published by the Immigration and Naturalization Service. Since the applicant, by definition, is seeking a good from the U.S. Government, there may be some tendency to misstate one's occupation in order to secure the visa. For example, a short-order cook who has secured a labor certification as a domestic servant might be tempted to note that calling, not her current job, on the form. Despite these problems, however, it is a source of occupational data on each year's arriving immigrants.\*

When the 1970 cohort completed their forms, almost half of them reported that they were either professionals, or craftworkers and foremen, with the percentages being 29.4% and 17.4%, respectively. There were also large numbers of operatives, 11.7% and sales and clerical workers, 10.5%. The balance, of 31.0%, were scattered through six other categories. (As we will note subsequently, this distribution for the 1970 cohort changed with the passage of time.)

In comparison with U.S. employed persons in 1970, the workers in the immigrant cohort had more than twice as many professionals (29.4% vs. 14.2%) and less than half as many white collar workers (14.2% vs. 34.1%). The immigrants also reported larger percentages of craftworkers, laborers, farmers and farmworkers, and particularly, domestic servants, than the population

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\*See statement of Roy S. Bryce-LaPorte, Research Sociologist, Smithsonian Institution in Hearings Before the Subcommittee on Inter-American Affairs of the Committee on Foreign Affairs: United States Caribbean Policy, Part I, September 19 and 21, 1973, (Washington, D.C.: U.S. House of Representatives), p. 75.

as a whole, but fewer operatives and non-household service workers. The comparison with the foreign born population (as reported in the 1970 Census) was similar; in fact, the occupation group profile of the foreign born was much more like that of the resident population than it was of the new immigrants.

When comparisons are made with earlier cohorts of immigrants, it is clear that the occupational composition of the current generation of immigrants is drastically different than that at the turn of the century, when only a handful of immigrants were in the skilled trades and in the professions. For example, in 1910, 1.2% of the immigrants were professional and technical workers, while 37.0% were farm laborers, and 27.7% were non-farm laborers.\* Similarly, the skill levels of the legal immigrants of today are remarkably different from those of the illegal immigrants of today, a group whose home-country occupation profile closely resembles that of earlier waves of legal immigrants.\*\*

While the differences between the occupation groups reported by the population as a whole and those reported by the 1970 cohort are more pronounced than intercohort differences, the latter are substantial enough to warrant comment. The percentage of reported professionals increased from the 1970 level in the years that followed, reaching a high of 31.9% in 1972, before declining to below the 1970 level in 1976. A similar pattern was followed in the nonfarm laborer category.

In the cohorts that followed 1970, there were larger percentages of managers, nonhousehold service workers, and operatives, and declines among the household workers, craftworkers and farmers, while farmworkers, sales and clerical workers held steady. The decline among the household servants probably reflected the Labor Department's increasing reluctance to issue labor certification for such jobs.

The percentages noted above are of those immigrants with stated occupations; the percentage of immigrants with stated occupations, however, has been declining in recent years, from 42.1% of all immigrants in 1970 to 38.8% in 1976.

Years of Education: Unfortunately data are not available on the years of education completed for the 1970 cohort or any other cohort of arriving immigrants; what are available, however, are census data which provides us with information on the extent of education reported by the foreign born (most of

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\*Census, Historical Statistics of the United States, Series C-120-137.

\*\*North and Houstoun, Characteristics and Role of Illegal Aliens, pp. 105-112.

whom were presumably immigrants), by the native born of foreign or mixed parentage (i.e., the second generation), and by native born of native parentage. These data, while useful, reflect the educational attainments of a previous generation of immigrants. Data presented on the 25-44 year olds among the foreign born, for example, relate to persons who arrived in the U.S. between the years 1924 and 1969; data on older persons reflect an even longer sweep into the past.

Examining the data on 25-44 year old males, one finds that for the three classes (foreign born, native born of foreign or mixed parentage, and native born of native parentage), they had a median years of schooling in the range of 12.2 to 12.6.\* Years of school for females generally were reported as a few months lower, on average, and older persons in all three groups reported less education than those 25-44.

These averages, however, hide a striking difference between the foreign born and the natives, the bimodal, age-specific educational distribution curve of immigrants; there is a far higher concentration of foreign born with extremely low levels of education than natives (29% with 8 grades or less completed vs. 12% for natives, in the 25-44 age group), while there is also a higher concentration of foreign born than native born with 4 or more years of college (24% vs. 18%) for 25-44 year old males.

Among the foreign born, further, there are remarkable differences in educational attainments, by country of origin, with those from Japan reporting 16 years or more, from China and "all other," (15), Austria (14), Sweden, Netherlands, France and Lithuania (13), and with most other enumerated nations falling in the 12 years or more class, which is this nation's norm.\*\* Standing out at the very bottom of the list, however, are those born in Mexico, who reported a median educational level of six years. Non-Mexican Western Hemisphere immigrants (Cuba, Other Caribbean, Other Central and South America, and Canada) were all placed in the same 12-13 range with the U.S. averages.

The available data on educational levels of illegals are largely confined to a survey of apprehended Mexican nationals, but the findings tend to be consistent. The 1972 study by the Mexican Government found that 23% of the respondents had not been to school at all, and only 23% had finished as many as six years of school (the cutoff point for Mexican grammar schools); Samora's

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\*Census, PC(2)-1A, Tables 4 and 5.

\*\*Ibid., Table 12.

survey, taken earlier, reported that 28% of the respondents had no contact with any school, and that more than 90% had completed six or fewer grades; the mean level of education for the North-Houston Mexican respondents was 4.9 years, as compared to 8.7 years for those from elsewhere in the Western Hemisphere, and 11.9 years for those from the Eastern Hemisphere.\*

**Conclusions:** When examined along the variables of age, sex, and marital status, the 1970 cohort of immigrants (and all post-1965 Amendments cohorts) appear to resemble the population of the United States generally; they differ from both the immigrants of early in this century, and from the apprehended illegal aliens of today, two groups which have a substantial resemblance to each other, in that those groups appear to be dominated by young male adults, who reported a sharply lower incidence of marriage than did their peers in this country. We suspect that, given the high incidence of professionals among the 1970 cohort of immigrants, the educational level of these immigrants (like those enumerated by the 1970 census) will be more like those of the U.S. population generally, than those of the illegal immigrants of today, or the legal ones of the early decades of this century.

It is possible to make firmer judgments, than those noted above, and more of them about the extent to which the 1970 cohort reflects the characteristics of all post-1965 Amendments cohorts of immigrants. The mean age of the 1970 cohort was almost precisely that of the other seven cohorts; the 1970 cohort had a few more males in it than the other recent cohorts, and slightly fewer marriages than the cohorts which followed. The cohort of 1970 clustered in selected states and major cities, as the other cohorts did, but with less concentration in the sunbelt states than the cohorts which followed.

On the other hand, the 1970 cohort of immigrants had a substantially larger percentage of labor certification beneficiaries (14.9% compared to 6.4% in 1976) than more recent cohorts; and compared to the most recent ones, the 1970 cohort had considerably fewer Asians and considerably more immigrants from Canada and from Europe. The occupation group profile of the 1970 cohort was roughly comparable to the profile for other recent cohorts.

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\*Mexican Government, Resultados de la Encuesta; Samora, Los Mojados; and North and Houston, Characteristics and Role of Illegal Aliens, p. 75.

The 1970 cohort of immigrants is a useful group to study, not because their characteristics will be mirrored year-after-year in the future, but because they represent one of several groups of immigrants whose admissions were governed by the explicit provisions of the 1965 Amendments. A major portion of the immigrants admitted during most of the previous half century were filtered through the country-of-origin selection process; the characteristics of immigrants admitted in the next few years will be heavily affected by decisions made in the past about refugees, and those made in the future about illegal aliens. The 1970 cohort, in a sense, was one that we welcomed during a transitional period--after we had shaken off the ethnocentric policies of the past and before we faced up to the questions raised by the illegal aliens of the present and the future.

The 1970 cohort, to oversimplify, was youthful, there were a few more women than men, and close to three quarters of those over 18 were married. Setting aside a small band of Canadian immigrants, roughly a third were from Europe, a third from Asia and Africa, and another third from other parts of the Americas. They clustered geographically in the U.S., more than three quarters going to ten states, and more than a third to ten specific cities (not SMSAs). The majority were admitted as relatives of U.S. residents, the minority as needed workers (and their relatives), and a few as refugees. On their arrival, they reported an occupation group profile quite different than that of the resident population, with disproportionate numbers of professionals, at one end of the spectrum, and household and farmworkers at the other. Given the large number with professional backgrounds, it is likely that the median years of education for this group, as with other recent immigrants, was roughly equivalent to that of the U.S. population generally.

## CHAPTER THREE:

BACKGROUND: THE LABOR MARKET EXPERIENCE  
OF PRE-1970 IMMIGRANTS

The 1970 cohort of immigrants arrived in the United States as the Census Bureau was collecting data on, among other things, the labor market experiences of previous groups of immigrants (and a few other foreign born as well). Subsequently, the Census Bureau published data on the following variables:\*

- Employment Status, as of the enumeration (April 1, 1970), i.e., participation or non-participation in the civilian labor force.
- Employment or Unemployment, for those within the civilian labor force on that date;
- Occupation Group (twelve groups) on that date, for those who were employed;
- Class of Worker (private wage and salary, government, self-employed, and unpaid family workers) for those employed; and
- Income in 1969 for families and unrelated individuals.

This chapter will summarize these data and examine census and INS data regarding the extent to which the growth of the labor force can be attributed to immigration.

Three observations should be kept in mind as these data are described. First, like all Census data, this is a cross-sectional profile of the population of interest at a specific point in time; as suggested earlier, most of the foreign born persons enumerated in that Census (perhaps 94-95% of them) had been admitted to the U.S. before the 1965 Amendments went into full effect.

Second, the median age of the foreign born population enumerated by the Census was considerably older than that of both the total U.S. population at the time of the enumeration and that of the arriving cohort of immigrants, 52.0 years, as compared to 28.1 years and 24.3 years, respectively; some of the foreign born workers had been in the U.S. labor market for more than half a century at the time. Given this remarkable difference in age structure, it is important to utilize age-specific data whenever possible.

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\*Census, PC(2)-1A.

The third consideration is the general difficulty that the Census has in counting low income persons, which is usually discussed in terms of an undercount of (particularly young male) blacks and Hispanics; the Census Bureau, for perhaps similar reasons of incomplete communication with their target population, apparently has similar problems with the enumeration of the foreign born, particularly of those born in Mexico. A comparison made elsewhere,\* between data gathered through the annual registration of aliens and Census data, showed that some 4,247,000 aliens filed alien address cards (Form I-53) with the Immigration Service in January, 1970, while the Census, a few months later, enumerated only 3,542,000 non-naturalized foreign born persons; the two series are not perfectly compatible, but it is interesting that the Census found only 83% as many aliens as INS did. The discrepancy between the numbers of Mexico-born aliens was even more pronounced, with INS reporting a quarter of a million more of them than the Census, 734,000 compared to 483,000; in percentage terms, that is an enumeration of 66%. Given the low labor force participation rates of Mexico-born women, the higher unemployment rates and low incomes of Mexican immigrants of both sexes, compared to other immigrants, the underenumeration of these aliens undoubtedly creates a rosier picture of the experiences of all immigrants in the labor market than is justified.

Nonetheless, the more than 500-page Census publication, National Origin and Language (PC(2)-1A), contains a wealth of information on the enumerated foreign born worker; the cross tabulations dealing directly with labor market variables are shown in Table 5.

The age groupings used in that publication are: 16-24, 25-44, 45-64, 65-74, and 75 plus. The years of migration are five year intervals from 1965-1969 back to 1945-1949, then 1934-44, 1925-34, and before 1925. There are 22 selected Standard Metropolitan Statistical Areas, and the four census regions, Northeast, South, North Central, and West.

The list of 25 nations used by the Census in 1970 can best be described as quaint. There were separate listings for Denmark, Norway and Sweden, three nations which collectively in 1970 produced less than one half of one percent of the immi-

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\*For a discussion and comparison, see Immigration and Naturalization Service, Illegal Alien Study Design, Vol. I, Final Report, pp. 67-69, which in turn was based on INS Annual Report, 1970, Table 34, and Census, PC(2)-1A, Table 17.

TABLE 5

Labor Market Data Published on the Foreign Born, 1970 Census

<u>LABOR MARKET VARIABLE</u>	CROSS TABULATIONS PUBLISHED				
	Age Grouping	Year of Migration	National Origin	SMSA	U.S. Region
Employment Status (by sex)	by region	by national origin	by age grouping by SMSA by year of migration	by national origin	by age grouping
Unemployment (by sex)	as above	as above	as above	as above	as above
Occupation (by sex)	"	"	"	"	"
Class of Worker (by sex)	"	"	"	"	"
Income (for families and unrelated individuals)	"	"	"	"	"

Source: U.S. Bureau of the Census, Census of Population: 1970, Subject Reports, Final Report PC(2)-1A, National Origin and Language (Washington, D.C.: U.S. Government Printing Office, 1973), Tables 7, 9, 13, 14, 16, and 18.



grant cohort; also for Lithuania, a nation which disappeared 30 years earlier, a fact which is reflected in INS reports, but not those of the Visa Office. On the other hand, there were no separate listings for five of the twelve nations which were the source of more than 10,000 immigrants in 1970: Philippines, the second largest source nation that year, Jamaica, Portugal, Dominican Republic, and India.

Employment Status: The labor force participation rate of the foreign born appears, at first blush (see Table 6) to be less than that of native born Americans, for both males and females, but when age is held constant, the difference all but disappears. The lower rate for foreign born relates primarily to the median age of that population.

The overall foreign born labor force participation rate masks wide variations in the rates among foreign born women, and less drastic ones among men. These rates are shown for the 25-44 year old population for the previously described list of nations in Table 7. The rates among women range from highs of 68.5% for Other West Indies (mostly Jamaica and Dominican Republic), of 59.8% for Cuba, and 54.6% for Other Central and South America, to lows of 33.6% for the small Netherlands cohort and 35.3% for the large Mexican group. The range for males was predictably smaller (97.0%-88.5%), with Japanese males (many of whom were in educational institutions) at the lower end of the scale.

The labor force participation rates appear to vary inversely with levels of fertility; the number of children ever born to women 15 years and over is the measure used by the Census. The fertility rate for Mexican women was 3.4 or about double that of the other three groups (all from the Western Hemisphere), with the highest labor force participation rates. Their fertility rates were between 1.6 and 1.7.

Unemployment: While unemployment rates for many groups in the population are a monthly economic thermometer, only once a decade does the Government publish statistics on the rates experienced by the foreign born. The data for the week studied in 1970 follows:

<u>Unemployment, 1970</u>		
<u>Class of Worker</u>	<u>Male</u>	<u>Female</u>
Foreign Born	3.7	5.4
Native Born of Foreign or Mixed Parentage	3.0	4.2
Native of Native Parentage	4.1	5.2
White	3.8	4.8
Negro	6.4	7.9
Spanish	6.4	8.4

TABLE 6

Labor Force Participation of the U.S. Native and Foreign Stock, by Sex and Age: 1970

(as percents)

<u>Population</u>	<u>M A L E S</u>						<u>F E M A L E S</u>					
	<u>Total</u>	<u>16-24</u>	<u>25-44</u>	<u>45-64</u>	<u>65-74</u>	<u>75+</u>	<u>Total</u>	<u>16-24</u>	<u>25-44</u>	<u>45-64</u>	<u>65-74</u>	<u>75+</u>
Native Born of Native Parentage	77.0	64.1	94.1	86.2	31.2	12.2	42.2	45.7	47.7	47.3	13.8	5.2
Native Born of Foreign or Mixed Parentage	78.8	62.2	95.8	90.1	33.6	13.4	40.0	49.4	45.8	49.1	14.2	4.6
Foreign Born	65.0	64.4	93.2	88.2	32.2	9.7	33.2	48.2	46.1	46.7	11.6	3.0

Source: U.S. Bureau of the Census, 1970 Census of Population, Subject Reports, Final Report PC(2)-1A, National Origin and Language (Washington, D.C.: U.S. Government Printing Office, 1973), Tables 6 and 13.

TABLE 7

Labor Force Participation Rates of the Foreign Born, Aged 25-44, 1970,  
by Sex and Selected Nations of Origin

(ranked by female labor part. rates)

<u>Country of Origin</u>	<u>Labor Force Participation Rates</u>		<u>Number of Persons</u> (000s)	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
<u>ALL COUNTRIES*</u>	93.7	46.1	1,093	1,384
Netherlands	97.0	33.6	16	15
Mexico	94.0	35.3	122	134
Japan	88.5	36.5	13	49
Norway	92.6	37.5	6	7
Italy	95.8	39.7	89	82
Greece	95.3	40.0	34	26
Sweden	89.0	40.5	4	8
Ireland	96.8	41.4	24	36
Canada	94.7	42.3	72	110
Germany	96.1	42.9	78	174
Denmark	94.3	43.5	5	6
France	93.9	45.4	12	26
United Kingdom	96.3	46.0	57	116
Yugoslavia	96.8	48.3	23	20
Lithuania	95.7	48.3	5	5
Austria	92.1	48.5	8	14
U.S.S.R.	91.6	48.8	13	15
Hungary	96.2	48.8	22	15
Czechoslovakia	95.7	48.9	10	13
Poland	95.0	51.1	31	36
China	95.0	51.5	37	37
Other Central & South America	92.0	54.6	75	88
Cuba	95.6	59.8	75	86
Other West Indies	92.2	68.5	41	52
All Others	93.4	49.3	197	187

\*Includes a number of not reported, not shown separately; therefore, sum of the individual countries will not equal total.

Source: U.S. Bureau of the Census, 1970 Census of Population, Subject Reports Final Report PC(2)-1A, National Origin and Language (Washington, D.C.: U.S. Government Printing Office, 1973), Table 13.

In 1970, the foreign born were less likely to be unemployed than the native born of native parents, and considerably less likely to be unemployed than the native born Blacks and Hispanics. In terms of age, the foreign born, like other segments of the labor force, tend to have lower unemployment rates in the middle years of work careers (25-64) than at both ends of the age spectrum.

Immigrants who had arrived most recently (and therefore are less acclimated to the U.S. labor market) and those who have been here the longest (and who are the oldest) had higher unemployment rates than those in the middle of the arrival spectrum, those who came to the U.S. between 1935 and 1965. Given the organization of the data, however, it is impossible to separate the effects of year of arrival from those of age.\* The most recent arrivals reported only a fraction of a percentage point more unemployment than the foreign born, on average; the males in the 1965-1969 arrival group were 4.1% unemployed, compared to the previously cited average of 3.7% for all male foreign born.

The pattern of varying rates by nation of origin, noted above for labor force participation, held true for unemployment rates as well. The highest rates for males were those for the (fairly old) group from Norway (5.8%) and those from Mexico (5.7%), and the lowest for those born in Japan (1.8%). Among the females, the lowest rates were for those from Sweden (2.7%), Denmark (2.9%), and Ireland (3.1%); the highest were those from Italy (7.4%) and from Mexico (9.2%).

Occupation. The last two columns of the table on page 7 of Appendix B, which shows the distributions of the employed foreign born labor force and that of the employed labor force, by occupation group, would suggest that there is very little difference between these groups. The foreign born appear to be somewhat more heavily represented in the professions and among the operatives and service workers, and underrepresented among clerks, transport operatives and farmers. While there are only mild differences between the foreign born and the employed generally, there are sharp differences between both populations and the recent cohorts of arriving immigrants.

The data described above are for the employed of all ages and of both sexes, and, as is often the case, sharper distinctions can be made when a closer analysis is attempted; men and women have very different occupation group distributions, and occupational representation changes to some extent with age (the percentage of managers and professionals, for example is

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\*Such a separation could be accomplished through the use of Census tapes, but they were not utilized in this research.

larger among older groups of workers). Table 8, showing the occupation group distribution in 1970 of 25-44 year old males and females, indicates noticeable differences between the foreign born and the native born of native parentage. There appears to be a bimodal distribution among the foreign born males, with higher percentages of professionals, at one end of the spectrum, and of service and farmworkers, at the other; this is balanced by smaller percentages of other white collar workers and transport equipment operatives. The principal differences among the females are that the foreign born are much more heavily represented among the operatives and considerably less so among clerical workers (where command of English would be particularly important).

Occupation group distribution varies radically by nation of origin; among males, those from China had the highest proportionate representation in the professions, 30.6%, followed closely by All Other (a predominantly Asian group) and the United Kingdom, each with 28.7%. Only 3.5% of those born in Mexico were reported in professional jobs. Among the women, All Other with 23.2% and France, with 22.1% had the largest representation in the professions, with Mexico again low, at 4.0%. Since immigration from Asia and Mexico has been growing in recent years, this suggests a continuation of the bimodal distribution of occupations among immigrants (which, in turn, reflects the previously discussed bimodal distribution of schooling).

Class of Worker: Three-quarters of employed American workers in 1970 were private wage workers, about one-sixth worked for various levels of the government, and most of the balance were self employed. Data for employed persons in the U.S. and the employed foreign born are shown below:

<u>Labor Force</u>	<u>Private Wage and Salary Worker</u>	<u>Government Worker</u>	<u>Self Employed Worker</u>	<u>Unpaid Family Worker</u>
<u>All U.S. Workers</u>				
Male employed	75.5%	14.0%	10.2%	0.2%
Female employed	75.8	19.5	3.7	1.0
<u>Foreign Born Workers</u>				
Male employed	79.9	8.8	11.1	0.2
Female employed	84.4	10.2	4.4	1.0

The foreign born are more likely to be in private wage and salary employment, or self-employment, than the labor force as a whole, and less likely to be employed by the Government.

TABLE 8

Distribution of Occupation of the Foreign and Native Stock, 25-44, by Sex, 1970

(as percents)

OCCUPATIONAL GROUP	M A L E S			F E M A L E S		
	Foreign Born	Native Born of Native Parentage	Difference	Foreign Born	Native Born of Native Parentage	Difference
Professional, Technical & Kindred Workers	23.8	17.2	+6.6	17.2	18.8	-1.6
Managers and Administrators, except Farm	9.0	11.5	-2.5	2.9	3.3	-0.4
Sales Workers	4.4	6.7	-2.3	5.4	5.8	-0.4
Clerical and Kindred Workers	5.9	6.9	-1.0	25.9	34.2	-8.3
Craft and Kindred Workers	22.4	22.8	-0.4	2.3	1.9	+0.4
Operatives, except Transport	14.7	13.6	+1.1	25.5	14.9	+10.6
Transport Equipment Operatives	2.7	6.8	-4.1	0.2	0.7	-0.5
Farmers and Farm Managers	0.4	2.2	-1.8	0.1	0.2	-0.1
Farm Laborers and Farm Foremen	2.2	1.2	+1.0	0.7	0.5	+0.2
Laborers, except Farm	5.2	5.3	-0.1	0.8	1.0	-0.2
Service Workers, except Private Household	9.2	5.8	+3.4	15.8	15.8	-
Private Household Workers	0.1	0	+0.1	3.2	2.9	+0.3
TOTAL	100.0	100.0		100.0	100.0	

Source: U.S. Bureau of the Census, 1970 Census of Population, Subject Reports, Final Report PC(2)-1A, National Origin and Language (Washington, D.C.: U.S. Government Printing Office, 1973), Tables 6 and 13.

The latter is not surprising, given the historical policy of the federal government against the employment of permanent resident aliens, and given the extent of clerical work within the government, a line of work in which immigrants are underrepresented generally.

What is remarkable, however, is not the fact that the foreign born are proportionately under-represented in governmental employment, but that they are as extensively represented as they are. Close to one tenth of the foreign born labor force, a total of some 380,000 persons, worked in 1970 for governments. Of this total, 44.9% were local government employees, 29.9% worked for states, and 25.2% for the Federal Government, a distribution among these three levels of government which approximates the distribution of all government workers.

Being a new arrival, and therefore not yet a citizen, apparently does not bar government employment for many immigrants; of the 1965-69 wave of immigrants, 8.4% of the males reported they were working for a government in 1970.

The Census data for 1970 bears out the image of the Irish as persons with a particular interest in the governmental process; the percentage of the male natives of Ireland employed in government was 15.4%, not only the highest among the nations of origin, but above the national average as well. Among females, those from France and the United Kingdom had the highest incidence of government employment, each with 13.1%.

The incidence of self-employment rises as one looks back over the waves of arriving immigrants, with a 3.1% incidence noted for the most recent group of male arrivals, and, for example, 12.4% for the male immigrants who came between 1945 and 1949; this upward movement is true among females as well. The nations whose immigrants were most likely to become self-employed were USSR (21.3%) and Greece (19.4%) among the males, and Norway (8.6%) and Austria and Sweden (both 7.6%) among the females.

Family Income: One of the traditional indicators of economic success is median family income, even though it masks the number of workers in the family producing that income. When income data on families and unrelated individuals are compared, without regard to age, we see the following:

<u>Class of Worker</u>	<u>1969 Income of Families</u>	<u>1969 Income of Un-related persons</u>
Foreign Born	\$9,026	\$2,357
Native Born of Foreign or Mixed Parentage	11,356	3,064
Native Born of Native Parentage	9,327	2,414
White	9,763	2,507
Negro	6,035	1,932
Spanish	7,248	2,379

Source: Census, PC(2)-1A, Tables 8 and 9.

Incomes of the foreign born appear to be marginally below those of the native born, and considerably below those of the second generation; once the variable of age has been removed, as it has in Table 9, it is clear that in eight of the ten comparisons the foreign born have incomes marginally or substantially higher than the native born of native parentage, with this not being the case only for the unrelated individuals under the age of 45. The relative advantage of foreign born is at the highest among older families.

The bimodal distribution previously noted along the variables of education and occupation group carries over to family earnings; once age is taken into consideration there is only a small difference between the median earnings of the foreign born and those of the native born of native parentage, but the income distribution for the foreign born is clearly more skewed than it is for the natives. Thus for the 25-44 age groups:

1969 Cumulative Percent of Families With Incomes	Head of Family	
	Native of Native Parentage	Foreign Born
less than 1000	2.2	3.3
less than 5000	14.0	16.1
more than 15,000	18.5	21.0
more than 25,000	3.1	4.0

Given this distribution, one would expect that the percentage of immigrant families with incomes falling below the poverty level would be higher than for the native population of native parentage; this is true, but only for families with heads less than 45 years old. Thus:

Age of Head of Family	Percent of Families in Poverty, 1969	
	Native of Native Parentage	Foreign Born
16-24	15.7	18.2
25-44	10.1	10.9
45-64	9.1	6.3
65-74	19.7	11.9
75+	28.5	20.7

As one would expect, the percentage of foreign born families in poverty drops as one moves backward regarding the time of arrival. Of the immigrants arriving in 1965-70, 16.1% were in poverty, those arriving between 1950-54, 8.1%, and those who arrived between the mid-twenties and mid-thirties, only 7.0%.



TABLE 9

Median 1969 Income of Families and Unrelated Individuals of the Foreign and Native Stock,  
by Age Groupings

(in dollars)

<u>Age Group</u>	<u>MEDIAN FAMILY INCOME</u>		<u>MEDIAN INCOME OF UNRELATED INDIVIDUALS</u>	
	<u>Foreign Born</u>	<u>Native Born of Native Parentage</u>	<u>Foreign Born</u>	<u>Native Born of Native Parentage</u>
16-24	6,685	6,669	1,484	1,562
25-44	10,134	10,054	4,789	5,917
45-64	11,493	10,551	4,265	3,866
65-74	6,288	5,092	1,973	1,885
75+	4,332	3,724	1,626	1,614

Source: U.S. Bureau of the Census, 1970 Census of Population, Subject Reports, Final Report PC(2)-1A, National Origin and Language (Washington, D.C.: U.S. Government Printing Office, 1973), Tables 8 and 9.

So far we have been dealing with published Census data. A useful contribution to our knowledge on this subject has been made by Barry Chiswick,\* of the Hoover Institute at Stanford. Drawing on the public use sample and using linear regression analysis, Chiswick found that the white male foreign born earn less than native white male workers with similar characteristics for their first 13 years in the nation; they then reach earnings parity with their peers, and after 20 years they are making 6.4% more than these peers. In Chiswick's work, he controlled for the effects of schooling, labor market experience, marital status, and place of residence.

Chiswick writes that his findings suggest "that immigrants are, on average, more highly motivated or more able than the native born. This implies a selectivity bias in migration to the U.S. in favor of the more able, more highly motivated."

It should be borne in mind that Chiswick's findings relate to a minority of the foreign born in the nation in 1970 (eliminating all women, all non-whites, and younger and older white males), and that the characteristics of immigrant cohorts have changed sharply since the 1965 Amendments went into effect. Does the labor market react similarly to women and to non-whites? Some data on that point are presented subsequently.

Contribution to the Growth of the Labor Force: The native born U.S. labor force, unlike some of the labor forces in Western Europe in recent years, would grow without any contribution from immigration. This is the case because of the excess of births over deaths, because of a rising rate of labor force participation of women, and because of the age composition of the current and recent population of the nation (in other words, because the babies of the baby boom years are now joining the labor force).

Another basic factor is the relatively small proportion of foreign born workers in 1970. The Census reported these labor force totals for that year:

Foreign born:	4,254,000
Native born of foreign or mixed parentage:	11,905,000
Native born of native parentage:	65,760,000

Source: Census, PC(2)-1A, Tables 6 and 7.

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\*Barry R. Chiswick, "The Earnings of Immigrants and Their Children," (mimeo), December, 1976; "The Effect of Americanization on the Earnings of Foreign Born Men," Journal of Political Economy (forthcoming); and "Sons of Immigrants: Are They at an Earnings Disadvantage?" American Economic Review, Papers and Proceedings, February 1977, pp. 376-380 (Errata, AER, September 1977, p. 775).

Given this background, what contribution does immigration make to the growth of the labor force? Two major problems immediately present themselves; the first and more significant is that there is virtually no useful data on the flow or stock of illegal immigrants in the nation, so that one can only hope to deal with one aspect of the international migration of workers, that of legal, permanent immigrants.\*

The second problem is that there is no generally accepted way to measure the contribution of immigrants to the labor force; this is a relatively obscure statistical issue, and no federal commission has been established to struggle with the problem (as it has for unemployment data).

A traditional and not very satisfactory way to measure the immigrant contribution to labor force growth has been to total the number of legal immigrants who indicate that they have an occupation when they complete their visa application and then compare that total to the increase in the civilian labor force. During the first eight years in which the 1965 Amendments controlled immigration (and the period covered by the statistical appendix), there was, on average, a growth of 2,000,000 a year in the labor force, and an average of about 154,000 immigrants with occupations listed on their visa applications; thus only about 7.7% of the addition to the labor force could be attributed to immigration.\*\*

We have worked out a more comprehensive estimation technique which takes into account a variety of other factors, principally the fact that many adult immigrants who report no occupation on their visa application are hard at work a few years later; further, children arriving as immigrants grow up and join the labor force. On the other hand, immigrants, just like other workers, die, retire, or emigrate. Using a technique described elsewhere,\*\* and assuming a steady flow of immigrants at the 400,000 a year level, we estimated that in the period mid-1972 through mid-1985, that the net increase in the labor force attributable to immigration would average about 222,000 a year, thus comprising about 13% of the projected increase in the labor force in that time period.

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\*A third flow of workers, notable more for their characteristics, limited rights, and working conditions than their numbers, temporary non-immigrant workers, is the subject of an ongoing study by the author.

\*\*Immigrant data from INS Annual Reports, 1968-1976, Table 8A; U.S. labor force data for 1968 from Bureau of Labor Statistics, Handbook of Labor Statistics, 1975, Table 1 (noninstitutional population, civilian labor force 16 years of age and over); comparable data for 1976 secured by phone from BLS.

\*\*\*See David S. North and Allen LeBel, Manpower Policy and Immigration Policy in the United States: An Analysis of a Nonrelationship (Washington, D.C.: National Commission for Manpower Policy, forthcoming), Chapter IV and Appendix B.

My late colleague, John Dellaplaine, suggested a third approach which should be mentioned; he pointed out that in 1970 there were 4,685,000 native born children living in families with one or two foreign born parents; these children could be expected to join the labor force at approximately age 20, and that would suggest, on average, that 5% of them would be joining the labor force annually. This would be an additional movement of about 235,000 annually, or about twice the impact measured through the technique described above. We do not favor this estimating technique, because it deals with a population (of native born citizens) which is essentially, as it should be, beyond the control of immigration policy makers. It is useful, however, to remember this secondary impact on the labor force.

In summary, we find that the foreign born workers enumerated by the 1970 Census were much older than native born workers, and that comparisons between these workers and others were more meaningful when the factor of age was held constant. Thus labor force participation rates, which appeared to be lower for the foreign born than the native born when the two groups are viewed generally, are not much different when age is held constant. The foreign born have slightly lower rates of unemployment, on average, than the native born of native parents, but slightly higher than the native born of foreign or mixed parentage. The labor force participation and unemployment data for the foreign born as a whole mask wide variations among different nationality groups.

The occupation group distribution of the foreign born is mildly different from that of the native born of native parentage, in that there is a slightly higher percentage of men in the professions and services and of women in the operative category, among the immigrants. On the other hand, there is a radical difference between the occupation group distribution of the foreign born and that of the recent cohorts of immigrants, described in the previous chapter.

The income of the foreign born is higher than that of the native born of native parentage in most age-specific comparisons; the distribution of income is also more likely to be bimodal than that of native born families.

While there is no uniformly accepted technique to measure the extent to which immigrants contribute to the growth of the labor force, it appears that about one-eighth of that growth, when various factors are taken into consideration, can be attributed to immigrants.

## CHAPTER FOUR

## THE 1970 IMMIGRANTS IN THE LABOR MARKET:

## SOCIAL SECURITY EARNINGS DATA

The data we will present on what happened to the 1970 cohort of immigrants in the U.S. labor market are derived from two quite different sources, and thus will be discussed separately. One collection of data, based on the taxable earnings records of the Social Security Administration, provides extensive longitudinal employment and earnings information on a random subsample of 1,393 working-age immigrants, drawn from the previously mentioned sample of 5,000 members of the 1970 cohort; these data will be presented in this chapter. The other collection of data, while it deals with a wide variety of labor market variables (earnings, occupation, job histories, unemployment, and job changes), is based on interviews with 254 volunteers from the 1970 cohort, a study group which has a higher median income than the Social Security subsample and presumably the cohort as a whole. Data from this source, while useful particularly in comparing the experiences of different segments within the respondent group, must be treated carefully and is presented in the following chapter. The detailed methodologies employed in connection with both data sources are described in Appendix A.

The taxable earnings records of the Social Security Administration present a researcher with both unique opportunities and some limitations. The advantages are:

- Extensive coverage. By law, virtually all work for compensation in this nation is subject to Social Security taxation; the principal exception to that statement, work for the Federal Government, is of little significance in this study, because of the Government's general policy of not employing permanent resident aliens. The law, apparently, is very likely to be obeyed; of the members of the 254-member study group responding to the question, 95.6% said that Social Security taxes were deducted. In our previous survey of apprehended illegal aliens,\* we found that of those responding, 77.3% reported these deductions.
- Sound data. Hard data on groups of workers with known Social Security numbers can be secured, year after year, directly from the computer, without seeking either the cooperation--

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\*North and Houstoun, Characteristics and Role of Illegal Aliens, p. 142.

or testing the memory--of the individual worker or employer. Data can subsequently be cross-tabulated along variables supplied by the researcher.

The limitations are:

- Group data. Because of the Social Security Administration's strong concern with confidentiality, only data on groups of workers (at least five in a cell) are available. In this study, we essentially had a one-time-only access to the data and could ask the system for a single collection of cross tabulations and could not (understandably) have data on individuals to use, for example, in subsequent regression analysis.

- Concepts measured. While Social Security earnings data are most useful, they do not mesh with standard labor market concepts, such as labor force participation, weeks of unemployment, involuntary part-time work, and the like. (On the other hand, a possible problem factor, that the Social Security tax covers only the first \$7,800 of earnings in 1970 (\$14,100 in 1975) did not present any difficulties, because we used median earnings, and the median did not exceed the taxable maximum for any cell of interest in the years studied.)

What the Social Security system does measure is receipt (and the extent thereof) or the non-receipt of earnings taxes in a given year; we use the term "all workers" for those members of the cohort for whom at least some tax payments were made during the year, and "nonworkers" for those for whom no deductions were made in a given year.

Within the worker category, there are several mutually exclusive subcategories, grouped into four elements for this study:

- four-quarter wage and salary workers: These are workers with the strongest ties to the labor market, in that they have (in most cases) reported taxable wages or salaries in each three-month period of the calendar year or (in a few cases) exceeded the taxable maximum early in the year and are assumed to be working throughout the year.
- less than four quarter wage and salary workers: These are workers who had taxable wages or salaries in at least one quarter of the year, but not in all four quarters.
- self-employed workers: These workers were either entirely self-employed, or reported both self-employment and wage and salary taxes.
- agricultural workers: A handful of workers reported agricultural wages, mostly in addition to non-agricultural wages; only one immigrant of the 1,393, in one year, reported only agricultural wages.

We have analyzed the data along eight variables, seven known at the time of visa application; these were sex, region of origin, immigration classification (the provision of the law which enabled their admission), state of intended residence in the U.S., and age, marital status, and occupation, all at the time of application. (Marital status was cross-tabulated with sex.) The eighth variable was occupational group as reported in January, 1972, i.e., after they had been exposed to the U.S. labor market for an average of two years.

The first seven variables were potential predictors of earnings levels and other labor-market behavior available from the primary data source, the visa application (other interesting variables, such as education, wealth, fluency with English, were not).

Table 10 provides a quick summary of some of the characteristics of the subsample, which closely resembles the profile of recent immigrant workers generally; a majority of the subsample are men, a slight majority are from the Eastern Hemisphere, most were married on arrival, and all were between the ages of 18 and 59 in 1970 (age groupings are updated in tables dealing with later years in this chapter). Their occupational concentrations are much like those of cohorts of recent immigrants, shown in Appendix B, and all reported that they were intending to live in the nine states of heavy immigrant concentration, from which the original sample was drawn.

1. Employment Data: What does the Social Security data tell us about the immigrants' employment patterns? Table 11 indicates that the overwhelming majority of the subsample were four quarter workers, that only a small portion were self-employed, and that farmwork was a minimal factor in their lives.

Over time, it shows a substantial net drop in the number of four quarter wage and salary workers, from a peak of 895 in 1971 to 771 in 1975, a year of high unemployment, and net increases among the less than four quarter workers, the self-employed and, particularly, the nonworkers. (The number of less than four quarter workers in calendar 1970 is deceiving, because some members of the cohort did not arrive in the country until June of 1970.)

It is instructive to compare the employment patterns of the immigrant subsample with those of all workers in the years 1970 through 1975, but one should bear in mind that the immigrants fall into a tighter age range (18 to 59 in 1970) than U.S. workers generally. Table 12 indicates that, except in the first year, these immigrants were more likely to be four quarter workers than U.S. workers generally. Although it is not displayed, immigrant workers of both sexes in the subsample were

TABLE 10

Distribution of Immigrants in SSA Subsample,  
by Selected Characteristics  
(as numbers; 1970 distribution)

TOTAL . . . . .	1,393
<u>Sex</u>	
Men . . . . .	749
Women . . . . .	644
<u>Age Groupings</u>	
20-24 . . . . .	314
25-34 . . . . .	588
35-44 . . . . .	305
45-54 . . . . .	158
55-64 . . . . .	28
<u>Marital Status</u>	
Married . . . . .	983
Single . . . . .	347
Other . . . . .	31
Unknown . . . . .	32
<u>Region of Origin</u>	
Canada . . . . .	84
Mexico . . . . .	172
Caribbean . . . . .	203
Central & South America . . . . .	195
Northern & Western Europe . . . . .	93
Southern & Eastern Europe . . . . .	256
Asia . . . . .	323
Africa . . . . .	31
Australia . . . . .	18
Unknown . . . . .	18
<u>1970 Occupation</u>	
Professional, Technical, & Kindred Workers . . . . .	230
Managers, Administrators, and Owners . . . . .	33
Farmers . . . . .	27
Sales Workers . . . . .	14
Craft & Kindred Workers . . . . .	185
Clerical & Kindred Workers . . . . .	78
Operatives . . . . .	93
Laborers, except Farm . . . . .	101
Farm Laborers . . . . .	11
Service Workers, except Private Household . . . . .	63
Private Household Workers . . . . .	38
Students . . . . .	66
Housewives . . . . .	263
Unknown . . . . .	191

Note: The tables dealing with earnings of the subsample, which follow, will not reflect these totals, because a number of elements were eliminated; these include: nonworkers, self-employed individuals, and in some cases, cells were eliminated because they were too small for separate analysis.



TABLE 11

Incidence of Recorded Social Security Taxable Earnings of the SSA Subsample of FY 1970  
Working-Age Immigrants, by Type of Worker, 1970-1975

(as numbers)

YEAR	WORKERS					NONWORKERS	TOTAL SAMPLE
	Four Quarter Wage & Salary	Less Than Four Quarter Wage & Salary	Self. Employed*	Farmworkers*	Total Workers		
1970	671	496	17	1	1,185	208	1,393
1971	895	267	18	1	1,181	212	1,393
1972	891	262	22	6	1,181	212	1,393
1973	874	271	36	0	1,181	212	1,393
1974	866	230	46	3	1,145	248	1,393
1975	771	282	47	0	1,100	293	1,393

\*all or partial.

Source: Computer printout supplied by the Social Security Administration to the Center for Labor and Migration Studies.

TABLE 12

Incidence of Four Quarter Workers Among All Workers Generally, for the SSA Subsample of 1970 Immigrants and All U.S. Workers With Recorded Social Security Taxable Earnings, and U.S. Unemployment Rates, 1970-1975

(as numbers and percents)

Year	IMMIGRANT WORKERS			U.S. WORKERS			U.S. Unemployment Rate
	All Workers	Four Quarter Wage & Salary Workers	Percent	All Workers (000s)	Four Quarter Wage & Salary Workers (000s)	Percent	
1970	1,185	671	56.6	93,090	62,790	67.5	4.9
1971	1,181	895	75.8	93,340	62,540	67.0	5.9
1972	1,181	891	75.4	96,240	64,060	66.6	5.6
1973	1,181	874	74.0	99,940	66,490	66.5	4.9
1974	1,145	866	75.6	101,960	67,850	66.5	5.6
1975	1,100	771	70.1	100,400	66,550	66.3	8.5

Source: Immigrant worker data from computer printout supplied by the Social Security Administration to the Center for Labor & Migration Studies; U.S. worker data from Social Security Administration, Social Security Bulletin, Annual Statistical Supplement, 1975, Tables 39 and 43; U.S. unemployment rate from Bureau of Labor Statistics, Handbook of Labor Statistics, 1975, Table 60 for 1970-1974; rate for 1975 secured by phone from BLS.

more likely to be four quarter workers than their peers among U.S. workers, with the level of difference being slightly more pronounced among males than among females. In 1975, the total number of resident four quarter workers fell by more than a million, but the nationwide decrease was proportionately less drastic than it was among the immigrant subsample.

Returning to the increase in nonworkers among the subsample of immigrants, it should be noted that this increase may (and probably does) reflect three different sets of events: movements out of the labor force, movements from employment to unemployment (over a full year), and movements out of the nation (emigration). (We know that neither deaths nor conversion to beneficiary status were significant factors, a subject covered in Appendix A.)

There was a net movement of 85 individuals into the nonworker category between 1970 and 1975, and we have some data on the characteristics of these additional nonworkers; for example, while 46% of the subsample were females, they constituted 53% of the net increase among the nonworkers. Similarly, it was women who were single in 1970 who made a disproportionate contribution to the net increase among nonworkers; the single (in 1970) women made up 12% of the subsample, but 29% of the additional nonworkers. Presumably, many of these women married and left the labor market for family reasons. Similarly, when movements out of the labor force are examined by sex and age grouping variables, women who were in their early 20s in 1970 made the most disproportionate contribution to the net movement out of the labor force; women in their fifties were also over-represented in this movement, as were men in their forties, a group which may have experienced some emigration.

When we examine the net movement out of the labor force by occupation stated in 1970, we find that those who identified themselves as clericals and as students (two groups including many women) are overrepresented among the additions to the nonworkers, as are craftworkers (who made up 13.3% of the population, but 17.6% of the net additions to nonworkers). Why the craftworkers are leaving the labor force, or perhaps the country, we do not know.

In terms of immigration classification, the picture is clear; those admitted under the Western Hemisphere limitations are disproportionately leaving the labor force, constituting 53% of the additional nonworkers, but only 35% of the subsample; numerically limited Eastern Hemisphere immigrants were less likely to move out of the labor force than average, but the least likely to leave were the immediate relatives of U.S. citizens, who constituted 23% of the subsample, but only 8% of the additional nonworkers. (Labor certification beneficiaries were about as likely to become nonworkers as members of the subsample generally.) Looking more closely at the Western Hemisphere, we

find that the Canadians were more than twice as heavily represented among the additional nonworkers than they were in the subsample; exactly the opposite was true among those born in Mexico. The Canadians may be simply returning to Canada or taking advantage of their relatively high earnings (described subsequently) to finance the withdrawal from the labor market of married women.

Despite the clear evidence that part of the movement out of the labor market is due to family reasons, it is also clear that the movement accelerated in 1974 and particularly in 1975, at a time of extensive unemployment, and involved almost as many men (40) as women (45). We speculate that a major segment of this group of 85, when pressed by the 1974-1975 recession, simply left the country.

2. Earnings Data: We have previously described the published Census data on the earnings of the foreign born, generally, as well as Chiswick's\* findings regarding the earnings of white male immigrants age 25 to 64. These data, dealing with an earlier generation of immigrants, primarily with immigrants admitted under previous legislation, indicate that over time immigrant earnings, all else being equal, reach parity with and then exceed those of native-born peers.

Bearing this in mind, we turn to the SSA earnings data on the 1,393 members of the 1970 cohort to seek answers to the question: how did the subsample's earnings compare to U.S. workers generally?

(a) Earnings of 1970 Immigrant Workers Compared to U.S. Workers: The broad-brush response to the first question for the period studied is that the immigrant women in the subsample (with age groupings held constant) quickly surpassed the earnings of U.S. female workers, while immigrant males (with age groupings held constant) had not yet surpassed the earnings levels of U.S. men by 1975; this is shown in Table 13. (The devastating effect of inflation can be seen in this table by comparing the 1973 and 1975 earnings in constant 1970 dollars, for all four groups of workers; all were earning less in the latter year than in the former, though when unadjusted dollars are used, the U.S. male median earnings, for example, increased from \$9,522 in 1973 to \$11,095 in 1975.)

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\*Chiswick, "Earnings of Immigrants," "Effect of Americanization," and "Sons of Immigrants."

TABLE 13

Weighted Average Median Annual Earnings of U.S. Workers and the SSA Subsample of 1970 Immigrants,  
by Age Range and Sex, 1970-1975  
 (in 1970 dollars)

Year	Age Range	M A L E S			F E M A L E S		
		U.S. Median	Immigrants		U.S. Median	Immigrants	
			Median	% of U.S.		Median	% of U.S.
1970	20-59	\$7,175	\$5,158	71.9	\$3,230	\$2,602	80.6
1971	21-60	7,291	6,333	86.9	3,300	3,654	110.7
1972	22-61	7,916	6,914	87.3	3,440	3,859	112.2
1973	23-62	8,351	7,383	88.4	3,538	4,060	114.7
1974	24-63	8,175	7,461	91.3	3,475	4,126	118.7
1975	25-64	8,033	6,889	85.8	3,533	3,942	111.6

Source: U.S. data adapted from Social Security Bulletin, Annual Statistical Supplement, 1975, Tables 41 and 42; Immigrant data from computer printout supplied by the Social Security Administration; data is for all wage and salary workers in both groups. 1970 dollars were adapted from Handbook of Labor Statistics, Table 122.

Note: Source material data for U.S. workers were arrayed by five year groups, e.g., 20-24, 25-29, etc. In order to make the age range of U.S. workers comparable to that of the immigrants (who became one year older each year), we adjusted the U.S. population at the upper and lower ends of the range. For example, in the case of the 21-60 year olds, we took 4/5s of the 20-24 group, the entire 25-29, 30-34, 35-39...55-59 age group, and 1/2 of the 60-61 group. We then multiplied the number of workers in each group by the median earnings for that age group, totaled the products of these calculations, and divided the total for that age group by the work force in the age range of interest to secure the weighted average median earnings.

An immediate question arises from the data presented in Table 13, and that relates to the occupational distribution of the U.S. workers and of the subsample of immigrant workers: if there is a larger proportion of persons in high income occupational groups among the U.S. workers than among the immigrant workers, or vice versa, what does that do to the comparisons in Table 13?

Given the nature of the data and our access to them, we could not simply factor out this variable (as we factored out the variable of sex), but we did work out a corrective mechanism. This was useful because the occupation group distribution of the immigrants is different from that of all U.S. wage and salary workers (in the age groups under consideration). While the immigrant subsample had a larger representation of professional and technical workers than the U.S. work force, it also had larger representations in such poorly paid occupation groups as operatives for the women and nonfarm labor for the men. On balance, and for this reason, any group of workers with the occupational group mix of the immigrants (all else being equal) could be expected to earn less than a group of workers with the occupational group mix of the U.S. work force. In fact, when this variable is taken into account (for the year 1975) through a technique described elsewhere,\* one would change the immigrant/U.S. earnings percentage from 85.8% for the males (in the bottom line of Table 13) to 90.0%. Similarly, the 111.6% level for the females would advance to 119.4%.

If the female members of the immigrant subsample are earning more than women workers generally, why are the men lagging behind, particularly in view of Chiswick's sample of white male immigrants which reached income parity with their peers after 13 years? There are many possible answers, some of which are presented here; the first being that a linear projection of the earnings of the males

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\*We calculated the weighted average median earnings of the experienced U.S. civilian labor force in 1969, by occupation groups, and then we calculated the hypothetical 1969 weighted average median earnings of the subsample (assuming that the subsample's earnings were equal, occupation group by occupation group, to those of the experienced civilian labor force.) Weighted average median earnings for U.S. male workers were \$7,843, compared to the hypothetical weighted average median for the subsample's males of \$7,476; the U.S. females were at the \$3,825 level, while the immigrant females were at \$3,576. Calculations were based on occupation group distribution and median earnings data in U.S. Bureau of the Census, 1970 Census of Population, Detailed Characteristics, Final Report PC(1)-D1 United States Summary (Washington, D.C.: GPO, 1973), Tables 221 and 227, and on occupation group distribution data provided to the Center for Labor and Migration Studies by the Social Security Administration for those members of the subsample whose 1972 occupation was known and who were reported to be working in 1975.

in the subsample, which was 71.9% of the earnings of U.S. male workers in 1970, to parity 13 years later would suggest that 84% of the U.S. norm in their sixth year would be about what one would expect, and in fact, the males in the subsample were earning slightly more than that in 1975, even without taking into consideration the factor of occupation group distribution. (The relative decline in earnings of all immigrant workers vis-a-vis resident workers between 1974 and 1975 shown in Table 13 may, Chiswick has suggested, relate to the sharp rise in layoffs in 1975; since the 1970 immigrants had less than five years of employer-specific training or seniority, they may have been more vulnerable to job lay-offs than other workers. Letter from Chiswick to the author, May 1, 1978.)

A second possible reason for the apparent slowness of the rate of earnings increases for the males in the subsample relates to their region of origin; Chiswick's population of working-age immigrants had arrived between 1905 and 1969; during this period there was a substantially larger percentage of Eastern Hemisphere immigrants (73.5%) than in the 1970 cohort (59.5% for all immigrants of all ages that year; and 51.7% for those in the subsample.) This is significant, because Western Hemisphere immigrants earn considerably less than those from the Eastern Hemisphere. (Similarly, Chiswick's immigrants were all white; this was not the case with the SSA subsample.)

Thirdly, there is the difference in the age of arrival between Chiswick's study group and ours; his immigrants were a little less than 24 years of age on average upon arrival,\* which means that many of them arrived as children (giving them an opportunity to acquire linguistic and other skills before entering the labor market). Our subsample, on the other hand, were all of working age when they arrived and were close to ten years older than Chiswick's immigrants, on average, on arrival.

This last point--the impact of age-at-arrival on a male immigrants future earnings--is shown for the subsample of immigrants in Table 14. In this table, we display earnings for the immigrant subsample and U.S. workers generally, in 1975, comparing four age groupings for both men and women. These female immigrants, except those over the age of 55, earn about \$800 a year more than female workers generally, no matter what their age. But a different pattern emerges for the males; 25-34 year old members of the subsample earned about \$600 less than their peers, 35-44 year old immigrants made \$1,300 less than their peers, while the earning gaps spread to \$2,500 for those in the next age bracket, and to close to \$3,000 in the 55-64 age bracket. The widening gap strongly suggests that the U.S. labor market rewards males' experience in the U.S. labor market rather than males' work experience per se.

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\*Derived from "Effect of Americanization," Table 1, by subtracting median years since migration from median age.

TABLE 14

Median Annual Earnings and Number of U.S. Workers and the SSA Subsample of 1970 Immigrants,  
by Age Group and Sex, 1975  
(in 1975 dollars)

AGE GROUP	M E D I A N   E A R N I N G S				N U M B E R   O F   W O R K E R S			
	M A L E		F E M A L E		M A L E		F E M A L E	
	U.S.	Immigrant	U.S.	Immigrant	U.S.	Immigrant	U.S.	Immigrant
25-34	\$9,678	\$9,195	\$4,696	\$5,280	14,762,000	251	9,539,000	226
35-44	12,313	10,980	4,700	5,614	10,128,000	201	6,541,000	123
45-54	12,410	9,900	5,260	6,000	9,567,000	109	6,490,000	64
55-64	10,517	7,650	4,986	4,500	7,007,000	44	4,456,000	20
TOTAL	11,338	9,515	4,879	5,445	41,464,000	605	27,026,000	433

Note: Data are for all wage and salary workers. Five year age groups for U.S. workers were combined to make 10 year groupings for comparability to data on immigrants.

Source: U.S. worker data from Social Security Bulletin, Annual Statistical Supplement, 1975, Tables 41 and 42; immigrant worker data from computer printout supplied by the Social Security Administration to the Center for Labor and Migration Studies.



But why do female immigrants appear to earn more than U.S. female workers, with age groupings held constant, when this is not the case with male immigrants vis-a-vis U.S. male workers? The answer may simply lie in more hours worked by the female immigrants compared to U.S. female workers--data on this point cannot be secured through the Social Security taxable earnings records. Another possible answer is that both the occupational distribution of women, as well as often discriminatory pay scales, tend to compress the range of their earnings compared to those of men. It is in this setting, of generally limited economic opportunity, that it may be possible for immigrant females to achieve earnings equity with U.S. female workers more quickly than male immigrants can reach parity with their peers.\*

The relatively compressed range of female earnings can be seen across both lines of age and color; for example, data in Table 14 for U.S. female workers indicate that seniority is less well rewarded for females than for males; the age grouping with the highest earnings for both sexes is that of 45-54, but white males in that age group earn 28.2% more than 25-34 year old males, females in the 45-54 age group earn only 12.0% more than 25-34 year old females. Further, the earnings differences between white males and black males are more pronounced than they are between white females and black females; in May 1977, for example, BLS reported that average weekly earnings of white full-time male workers were \$217, compared with \$171 for their black counterparts, a difference of 29%, while the difference between white females' weekly earnings (\$157) and that of their black counterparts (\$147) was only 7 percent.\*\*

(b) Earnings of 1970 Immigrant Workers Compared to Illegal Aliens: The Social Security data also supply some clues concerning the relative earnings of groups of recent legal and illegal alien workers. As predictable, when the annual median 1975 earnings of the immigrant subsample are compared with the estimated annual median 1975 earnings of the North/Houston sample of 777 apprehended illegal alien workers,\*\*\* the former group of aliens did better in the U.S. labor market than did the latter. As Table 15 shows, the illegal alien workers earned less than immigrants, regardless of their region of origin. These are the roughest of comparisons, but

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\*For another view of the gap between male and female earnings, see Jacob Mincer and Soloman Polachek, "Family Investments in Human Capital: Earnings of Women" Journal of Political Economy, 82: 2, Part II, March/April 1974. The writers argue that the lower hourly earnings of women can be explained, to a major extent (particularly for married women), by the smaller number of years worked in the past, by the discontinuity of this work experience in many cases, and by smaller investments in on-the-job training in the years that they worked.

\*\*U.S. Department of Labor press release 77-955, Wednesday, Nov. 2, 1977, "Trends in Weekly and Hourly Earnings for Major Labor Force Groups."

\*\*\*North & Houston, Characteristics and Role of Illegal Aliens. The sample for this study, while nationwide in scope, could not by definition be a random sample, as can no sample of illegal aliens until more is known about this population.

TABLE 15

Estimated Annual Median Earnings of the SSA Subsample of 1970 Immigrants and a Sample  
of Apprehended Illegal Aliens, by Region of Origin, 1975

(in 1975 dollars)

<u>Region of Origin</u>	<u>ALL WAGE &amp; SALARY IMMIGRANT WORKERS</u>		<u>APPREHENDED ILLEGAL ALIEN WORKERS</u>		<u>Illegal Alien Earnings as % of Immigrant Earnings</u>
	<u>Median</u>	<u>No. in Sample</u>	<u>Median</u>	<u>No. in Sample</u>	
Mexico	\$6,263	125	\$5,188	476	82.8%
Non-Mexican Western Hemisphere	7,684	367	5,919	231	77.0
Eastern Hemisphere	8,158	534	7,246	70	88.8

Source: Data on estimated annual earnings of illegals are derived from weekly earnings data prepared for The Characteristics and Role of Illegal Aliens in the U.S. Labor Market: An Exploratory Study; data for immigrants by region of origin were derived from computer printouts supplied by the Social Security Administration to the Center for Labor & Migration Studies.

there are balancing sets of factors which suggest that it is appropriate to review this information. The factors which would tend to overstate the difference between illegal and legal immigrant earnings are the younger average age of the illegals (by about 10 years) and their shorter stay in the nation (about 2.5 compared to 5 years); these factors would suggest that the group of illegals would be paid less than the legal immigrants, regardless of formal status. On the other hand, operating to understate the difference in wages (by inflating the illegals' earnings data) are the considerations of the sexual mix of the two work forces, the surveyed illegals were roughly 90% male, while roughly 40% of the legal immigrant subsample were females; further, the illegals annual earnings estimates are made by multiplying their weekly earnings in the spring of 1975 by 50, which would tend to overstate these earnings (but there is no clearly preferable alternative estimation technique).

It is interesting to note, however, that despite the differences between the annual earnings of immigrant and illegal alien workers, both groups exhibit the same subgroup differences. That is, Mexican nationals in the SSA subsample and in the sample of apprehended illegal aliens earned the least in 1975, while those from the Eastern Hemisphere earned the most. Nevertheless, those substantial intragroup differences appear to be diminished by legalization: while the Mexican and non-Mexican Western Hemisphere illegals earned, respectively, only 71.6% and 81.7% of Eastern Hemisphere illegals, the Mexican and non-Mexican Western Hemisphere immigrants earned 76.8% and 94.2% of the earnings of Eastern Hemisphere immigrants. Thus, on the basis of these data, lack of legal status in the U.S. appears to not only decrease the earnings of alien workers, it also appears to increase the earnings gap among these regional subgroups of foreign nationals.

(c) Earnings of the 1970 Immigrant Subsample. What were the earnings of the various segments of the immigrants' subsample? The measure adopted was that of the median taxable earnings level for the segment studied (such as immigrants from Canada in the region of origins table); to eliminate the inflation factor, the data are presented in 1970 dollars when data for several years are utilized.

As Table 16 indicates, there were differences in variations of median earnings between levels of the variables considered; the standard deviations presented in that table indicate, for example, that the difference between median earnings of male immigrants and female immigrants was greater than the differences between 10-year age groupings of the same subsample. In these terms, the three variables with the greatest variation between levels are sex and occupation in 1970, as one would expect, and interestingly, immigration classification. Region of origin, marital status of women, and state of destination occupy a middle role in the table, with age groupings and marital status of men at the bottom of the list. Descriptions

TABLE 16

Variation Between Levels of 1975 Median Earnings of the SSA Subsample  
of 1970 Immigrants for the Eight Studied Variables

<u>Variable</u>	<u>Standard Deviation from the Mean of the Group Medians</u>
Sex	\$1,489
Occupation in 1970	1,394
Immigration Classification	1,334
Region of Origin	851
Marital Status of Women	786
State of Destination	760
Age (by ten-year groupings)	467*
Marital Status of Men	222

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\*Standard deviation is 370 when the least well-paid and the smallest subset, those between age 50 and 59 in 1970, are deleted from the calculations.

Note: Data are for all wage and salary workers in the sample with social security taxable earnings in 1975.

Source: Derived from computer printouts supplied by the Social Security Administration to the Center for Labor and Migration Studies.

of the findings for each of these variables, and for occupation in 1972, follow in the order noted above.

(i) Sex. The median earnings of female immigrants is considerably less than that of male immigrants, as Table 17 indicates. Although the females' earnings increased at a slightly higher rate, in terms of percentages, than that of males, between 1970 and 1975, by the latter year the dollar difference between earnings levels had increased to almost \$3,000 a year.

(ii) Occupation in 1970. Immigrants who identified themselves as managers, proprietors and owners (MPOs) on their visa applications received the highest median earnings, as Table 18 indicates, and were followed, in order, in both 1970 and 1975, by professionals, craftworkers, and clericals; those who labeled themselves either housewives or household servants (the only two all-female groups) were at the bottom of the earnings scale in both years. While we know from other sources that there is individual upward mobility, in terms of earnings, and while there is clearly an increase in earnings over time for all occupational groups, group occupational backgrounds continue to differentially affect the earnings. Though it is not particularly helpful to point out that immigrants with varying occupational backgrounds have varying earning levels, it is interesting to note that these group differences persist over time. (It should also be noted that Table 18 records the earnings of those who recorded a particular occupation in 1970; subsequent occupational changes made by members of the subsamples are not reflected in these tabulations, e.g., an immigrant who recorded "lawyer" on his visa application, but worked in 1970 and 1971 as a clerk, and since 1972 as a manager, is grouped with other professionals in the Table 18 data.)

While occupational group differences in earnings persisted over time, and the absolute dollar differences between earning levels increased between 1970 and 1975, it is also true that the largest percentage increases in median earnings were recorded for the four groups at the bottom of the 1970 earnings scale, for laborers, sales workers, household service workers, and housewives.

(iii) Immigration Classification. The immigrants with the highest earnings in the 1970 subsample were those labor certification beneficiaries from the Eastern Hemisphere, identified in Table 19 as Eastern Hemisphere workers. Those with the second highest earnings were their counterparts from the Western Hemisphere. (For a full description of these classifications, see page 22.) Understandably, the various relative classes, none of which had been screened for their labor-market utility, reported lower earnings, with the group which has the highest priority in U.S. immigration law, the immediate relatives of U.S. citizens, being near the bottom of the earnings levels.

TABLE 17

Median Earnings of the SSA Subsample of 1970 Immigrants,  
1970 & 1975, by Sex  
(in 1970 dollars)

<u>Sex</u>	<u>M E D I A N   E A R N I N G S</u>			<u>1975 as % of 1970</u>
	<u>1970</u>		<u>1975</u>	
Males	(631) \$5,173		(578) \$6,870	132.8
Females	(453) 2,631		(412) 3,892	147.9
Total	(1084) 4,118		(990) 5,571	135.3
Standard Deviation	1,271		1,489	

Note: Number of members of subgrouping are noted in parentheses.

Source: computer printout supplied by the Social Security Administration to the Center for Labor & Migration Studies. 1970 dollars were adapted from Handbook of Labor Statistics, 1975, Table 122.

TABLE 18

Median Earnings of the SSA Subsample of 1970 Immigrants, 1970 & 1975,  
by Their 1970 Occupational Group  
(in 1970 dollars)

1970 Occupational Group	MEDIAN EARNINGS		1975 as % of 1970
	1 9 7 0	1 9 7 5	
Professional, Technical & Kindred	(196) \$5,871	(191) \$8,230	140.1
Managers, Proprietors & Owners	(30) 6,600	(27) 8,905	134.9
Sales Workers	(12) 3,600	(10) 5,864	162.9
Clerical and Kindred Workers	(70) 4,846	(60) 6,255	129.1
Craft and Kindred Workers	(170) 4,975	(148) 6,783	136.3
Operatives	(84) 4,091	(81) 4,735	115.7
Laborers, except Farm	(84) 4,371	(78) 5,430	124.2
Farmers and Farm Managers	(20) 4,800	(23) 5,575	116.1
Farm Laborers and Foremen	(9) 2,700	(10) 5,430	201.1
Service Workers, exc. Private Household	(55) 4,050	(51) 4,851	119.8
Household Service Workers	(28) 2,700	(28) 4,127	152.9
Students	(58) 3,075	(47) 4,398	143.0
Housewives	(168) 2,014	(154) 3,258	161.8
Unknown	(151) 4,250	(130) 6,950	163.5
<b>TOTAL</b>	<b>(1,135) 4,082</b>	<b>(1,038) 5,594</b>	<b>137.0</b>
Standard Deviation	\$1,141	\$1,394	

Note: Number of members of subgrouping are noted in parentheses.

Students, housewives, and those with unknown occupations were excluded from the standard deviation calculations.

Source: Computer printout supplied by the Social Security Administration to the Center for Labor & Migration Studies. 1970 dollars were adapted from Handbook of Labor Statistics, 1975, Table 122.

TABLE 19

Median Earnings of the SSA Subsample of 1970 Immigrants,  
1970 & 1975, by Immigration Classification  
 (in 1970 dollars)

<u>Immigration Classification</u>	<u>M E D I A N   E A R N I N G S</u>				1975 as % of 1970
	<u>1970</u>		<u>1975</u>		
Eastern Hemisphere Workers	(154) \$6,420		(143) \$8,623		134.3
Eastern Hemisphere Workers' Relatives	(84) 3,400		(74) 5,647		166.1
Eastern Hemisphere Relatives	(159) 4,071		(137) 5,075		124.7
Eastern Hemisphere Relatives' Relatives	(87) 3,563		(83) 4,597		129.0
Western Hemisphere Workers	(210) 4,410		(192) 6,386		144.8
Western Hemisphere Relatives	(208) 3,167		(181) 4,643		146.6
Immediate Relative of Citizen	(215) 3,616		(212) 4,851		134.2
Unknown*	(18) 5,000		(16) 5,864		117.3
<b>TOTAL</b>	<b>(1,135) 4,082</b>		<b>(1,038) 5,594</b>		<b>137.0</b>
Standard Deviation		\$1,026		\$1,334	

\*excluded from standard deviation calculation

Note: Number of members of subgrouping are noted in parentheses.

Source: computer printout supplied by the Social Security Administration to the Center for Labor & Migration Studies. 1970 dollars were adapted from Handbook of Labor Statistics, 1975, Table 122.



(iv) Region of Origin. It is interesting that the 1970 and 1975 variance across immigration classifications are higher than along the lines of region of origin--the variable upon which for many years the nation's immigration policy was centered (during the years of the country-of-origin quota system).

Table 20 shows that immigrants from Canada and Northern and Western Europe had the highest median earnings in 1970; by 1975, the Canadians had dropped back with the Northern and Western Europeans recording the highest medians, followed by the Asians. The most dramatic increase in earnings levels, more than 158%, was recorded for the immigrants from the Caribbean, a group which included a number of Cubans.

Not shown are the cross-tabulations by region of origin and by sex; in most of the six years covered by this study, Canadian men had the highest earnings, and Mexican men, the lowest. Among the women, Canadian and Northern European women ranked at the top during most of the years, but were displaced by the Caribbean women in 1975. Mexican women were consistently at the bottom of the ladder.

(v) Marital Status of Women. As one would expect, married women reported lower earnings than single women in the subsample of immigrants; in 1975, the married women had median earnings of \$4,996, compared to \$7,167 for single women. Single men, on the other hand, who presumably had financial obligations roughly comparable to those of single women, had median earnings of \$9,081 that year. The sample had too few divorced, separated or widowed persons (at the time of filing of the visa application) for analysis as three categories, or for analysis as a single "other marital status" category; this was the case for both men and women.

(vi) State of Destination. Immigrants who indicated that they planned to settle in Michigan and Pennsylvania secured the highest median earnings in 1970 (see Table 21), while those who recorded a preference for California and Texas had the lowest median earnings. (The latter groups included large numbers of immigrants from Mexico.)

By 1975, the pattern had changed substantially, with New Jersey and Michigan showing the highest medians, and Pennsylvania, the lowest. During those years, the income for immigrants who said they were destined for California increased, in constant dollars, by almost 50%, while it fell in Pennsylvania, presumably another indication of the sunbelt-snowbelt trends in the American economy. The lower standard deviation (\$760) in 1975 compared to that in 1970 (\$1,083) suggests that the relative importance of the state of destination, in terms of its association with earnings levels, declined over time.

TABLE 20

Median Earnings of the SSA Subsample of 1970 Immigrants, 1970 & 1975,  
by Region of Origin  
 (in 1970 dollars)

<u>Region of Origin</u>	<u>M E D I A N   E A R N I N G S</u>			<u>1975 as % of 1970</u>
	<u>1970</u>	<u>1975</u>		
Canada	(62) \$6,360	(51) \$5,756		90.5
Mexico	(124) 3,375	(125) 4,534		134.3
Caribbean	(183) 3,793	(156) 6,027		158.9
Central & South America	(172) 3,733	(160) 5,050		135.3
Northern & Western Europe	(77) 5,150	(66) 6,950		135.0
Southern & Eastern Europe	(215) 4,038	(185) 5,403		133.8
Asia	(248) 4,341	(250) 6,130		141.2
Africa	(26) 5,400	(21) 5,539		102.6
Australia	(14) 3,600	(12) 3,910		108.6
Unknown	(14) 5,000	(12) 5,213		104.3
<b>TOTAL</b>	<b>(1,135) 4,082</b>	<b>(1,038) 5,594</b>		<b>137.0</b>
Standard Deviation	\$945	\$851		

Note: Number of members of subgrouping are noted in parentheses.

Source: computer printout supplied by the Social Security Administration to the Center for Labor and Migration Studies. 1970 dollars were adapted from Handbook of Labor Statistics, 1975, Table 122.

TABLE 21

Median Earnings of the SSA Subsample of 1970 Immigrants, 1970 & 1975,  
by State of Destination  
 (in 1970 dollars)

<u>State of Destination</u>	<u>M E D I A N   E A R N I N G S</u>		<u>1975 as % of 1970</u>
	<u>1970</u>	<u>1975</u>	
New Jersey	(119) \$4,864	(110) \$6,733	138.4
Michigan	(34) 5,700	(36) 6,516	114.3
Illinois	(81) 4,740	(84) 5,864	123.7
Massachusetts	(68) 4,125	(57) 5,691	138.0
New York	(409) 3,972	(337) 5,665	142.6
California	(255) 3,688	(237) 5,458	148.0
Texas	(63) 3,500	(68) 4,778	136.5
Florida	(56) 3,800	(57) 4,724	124.3
Pennsylvania	(38) 5,200	(42) 4,344	83.5
<b>TOTAL</b>	<b>(1,123) 4,111</b>	<b>(1,028) 5,607</b>	<b>136.4</b>
Standard Deviation	\$1,083	\$760	

Note: Number of members of subgrouping are noted in parentheses.

Source: computer printout supplied by the Social Security Administration to the Center for Labor & Migration Studies. 1970 dollars were adapted from Handbook of Labor Statistics, 1975, Table 122.

(vii) Age Groupings and Marital Status of Men.

As we stated earlier, the age groupings of immigrant men do not have the same relationship to median earnings levels as for U.S. men, with Table 14 indicating that U.S. men experience their highest earnings in the 45-54 age group (as do both immigrant and resident women), while male members of the immigrant subsample showed the highest earnings in the 34-44 age group.

Married men in the subsample, as expected, earned more than the single men, by margins of 10 to 12%.

(viii) The Workings of the System. If one assumes that earnings equates to, or at least relates to, productivity,\* and if one examines the subsets of the immigrant subsample with the highest and the lowest earnings, and then examines the trends in immigrant admission statistics (in Appendix B), one notices a curious phenomenon. The intricate, and not particularly deliberate, operations of the immigration system appear, on at least three counts, to be producing larger groups of the less productive immigrants, and smaller groups of the more productive immigrants.

Men earn more than women; Canadians, more than Mexicans; and labor certification beneficiaries, more than other immigrants (primarily relatives). Yet the system, in the period 1970 through 1976, enabled the entrance of progressively larger groups of those with lower median earnings. In 1970, the ratio of male to female admissions was .901; in 1976, it was .865. (For those in the working ages, 20 to 60, the ratios were even lower, .877 in 1970 and .837 in 1976.)

Between 1970 and 1976, annual immigration from Canada fell from 13,804 to 7,638, while immigration from Mexico rose from 44,469 to 57,863.

The admissions of labor certification beneficiaries fell from 55,452 in 1970 to 25,474 in 1976, with a comparable increase (in numbers) of admissions of those with family preferences.

We are not suggesting that there is a grand design to bring about a less productive (or at least less well paid) mix of immigrants, but this appears to be what is happening, nevertheless.

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\*Clearly, discrimination plays a role in the compensation of many workers as well.

(ix) Post-admission Changes in Occupations.

Data were collected on the occupational groups of the immigrant subsample in January 1972, when they filed their alien address cards; at that time, they had been exposed to the U.S. labor market for an average of two years, and in a majority of cases, they had changed their occupational grouping (or had moved out of the housewife or student category into the labor force.)\* When median earnings are arrayed along the lines of their 1972 occupational distribution, as shown in Table 22, the variations in earnings, as one might expect, are larger than when the 1970 occupational lines are used. The greater variations in group earnings between Tables 18 and 22 can be measured in two ways: by the larger standard deviations recorded on the second table, and by the greater range (with professionals recording the largest earnings and housewives, the smallest, in both 1970 and 1975).

Percentage income increases between 1970 and 1975 were, as has been noted along other variables, the greatest for those at the bottom of the economic ladder; the relatively small groups of persons who, in 1972, classified themselves as household service workers, farm laborers, students and housewives all enjoyed well-above average increases in income in the 1970-1975 period.

That women earn less than men in our sample has been mentioned earlier; Table 23 indicates that when 1972 occupational group data are cross-tabulated with sex, women earn less than men in every occupational group (with the exception of the handful of 1972 students), and that in many cases they earn less than half as much as male immigrants in the same occupational group.

Finally, median earnings data may be used on another aspect of the immigrants' adjustment to the U.S. labor market--occupational stability; we examined those immigrants who in 1972 reported the same occupational group as in 1970 (stayers), and those who departed from their 1970 stated occupation (leavers). A third group may, in fact, be considered--those who moved into a new occupational group in 1972 (arrivers).

Generally, stayers fared better than leavers. The stayers, in 1975, had median earnings of more than a thousand dollars higher than those who changed occupational groups (\$8,482 vs. \$7,478 in 1975 dollars).

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\*It would have been desirable to have occupational group data for each of the years, 1970 through 1975, as well as the median earnings data, but such a mesh could not be secured because of difficulties within the INS system.

TABLE 22

Median Earnings of the SSA Subsample of 1970 Immigrants,  
1970 & 1975, by Their 1972 Occupational Group  
(in 1970 dollars)

1972 Occupational Group*	MEDIAN EARNINGS		1975 as % of 1970
	1 9 7 0	1 9 7 5	
Professional, Technical & Kindred Managers, Proprietors & Owners	(192) \$6,927	(186) \$8,978	129.6
Sales Workers	(28) 5,000	(18) 8,254	165.1
Clerical and Kindred Workers	(19) 4,700	(19) 5,973	127.1
Craft and Kindred Workers	(132) 4,440	(114) 5,958	134.2
Operatives	(133) 5,250	(120) 7,037	134.0
Laborers, except Farm	(199) 3,579	(172) 4,308	120.4
Farm Laborers and Foremen	(102) 4,275	(94) 5,430	127.0
Service Workers, except Private	(6) 1,200	(9) 6,299	524.9
Household Service Workers	(142) 3,327	(132) 5,337	160.4
	(8) 1,600	(9) 3,667	229.2
Students	(23) 1,860	(21) 4,453	239.4
Housewives	(63) 1,367	(67) 2,534	185.4
Unknown	(84) 3,000	(72) 4,561	152.0
<b>TOTAL</b>	(1,131) 4,095	(1,033) 5,605	136.9
Standard Deviation	\$1,616	\$1,550	

\*Farmers and Farm Managers were omitted from this list, as there were no reported occupations in that group in 1972.

Note: Number of members of subgrouping are noted in parentheses.

Source: computer printout supplied by the Social Security Administration to the Center for Labor and Migration Studies. 1970 dollars were adapted from Handbook of Labor Statistics, 1975, Table 122.

TABLE 23

Median Earnings of the SSA Subsample of 1970 Immigrants, by Their  
1972 Occupational Group and Sex, 1975  
(in 1975 dollars)

<u>1972 Occupational Group*</u>	<u>1975 MEDIAN EARNINGS</u>			
	<u>M A L E S</u>		<u>F E M A L E S</u>	
Professional, Technical & Kindred Managers, Proprietors & Owners	(119)	\$13,878	(67)	\$10,071
Sales Workers	(13)	13,842	(5)	3,900
Clerical & Kindred Workers	(12)	11,400	(7)	5,100
Craft & Kindred Workers	(40)	10,600	(74)	7,425
Operatives	(114)	10,080	(6)	5,700
Laborers, except Farm	(90)	9,075	(82)	4,200
Farm Laborers and Foremen	(83)	7,710	(11)	5,100
Service Workers, except Priv. Household	(9)	8,700	(0)	0
Household Service Workers	(74)	8,700	(58)	5,400
Students	(0)	0	(9)	10,500
Housewives	(35)	7,500	(67)	3,500
Unknown	(0)	0	(37)	5,025
<b>TOTAL</b>	<b>(601)</b>	<b>9,456</b>	<b>(432)</b>	<b>5,430</b>
Standard Deviation		\$2,104		\$1,810

Note: Number of members of subgrouping are noted in parentheses.

\*Farmers and Farm Managers were omitted from this list, as there were no reported occupations in that group in 1972.

Source: Computer printout supplied by the Social Security Administration to the Center for Labor & Migration Studies.

Table 24 shows in more detail the variances in earnings for stayers, leavers, and arrivers. For the first five occupational groups listed on the table, the labor market provided higher earnings for those who stayed in their field than for those who left their field or those who were new entrants. Persons who identified themselves as, for example, lawyers at admission, who went into other non-professional careers, would be among those who left the professional category; new arrivals in that category would include (among others) those who called themselves students in 1970, but had obtained professional jobs in 1972.

While it was economically rewarding to stay in the first five occupational categories noted on Table 24, it was profitable, apparently, to move out of the next five categories listed. The persons who stopped being housewives (a major group) or students, or who moved out of the clerical, operative, and other service occupations had higher earnings than those who stayed in those categories. The earning levels of the arrivals into these occupational groups were mixed.

Data on the last three categories are inconclusive; no members of the sample stayed in farm work, though some moved into it, and some out of it; so no stayer-leaver comparisons can be made. Similarly, the data on household workers are not particularly instructive; while many more women left those jobs than entered them, the earnings of the stayers and the leavers were equal, with the newcomers earning less money than either of the other two segments.

The highlights of this chapter, which dealt with the work experience and Social Security taxable earnings of a subsample of 1,393 members of the 1970 cohort of immigrants, were as follows:

- There was a 7% shrinkage in the work force (not explained by deaths, disabilities or retirements) which we speculate was caused by family-oriented withdrawals from the work force by young women, and by at least some emigration.
- The women in the subsample, by 1971, were earning more than their U.S. peers; the men in the subsample were moving toward earnings parity with their U.S. peers by 1975, but had not reached it.
- Although the comparisons are only approximate, the legal immigrants in 1975 were earning more than a sample of apprehended illegal ones; in both groups, Eastern Hemisphere workers earned more than those from the balance of the Western Hemisphere and who in turn earned more than those from Mexico.
- In terms of internal comparisons within the subsample, earnings were strongly influenced by sex, by presence or absence of previous professional/managerial experience, and by immigration classification (i.e., labor certification beneficiaries were better paid than other immigrants).



TABLE 24

1975 Median Earnings of the SSA Subsample of 1970 Immigrants, by Those Who Changed  
and Those Who Did Not Change Occupational Group Between 1970 and 1972  
(in 1975 dollars)

<u>Occupational Group</u>	<u>Stayers</u> <sup>1</sup>		<u>Leavers</u> <sup>2</sup>		<u>Arrivers</u> <sup>3</sup>	
Professional, Technical, Kindred Managers, Proprietors, Owners	(125)	\$12,780	(66)	\$8,600	(61)	\$11,350
Sales Workers	(5)	14,100	(22)	10,200	(13)	8,700
Craft and Kindred Workers	(4)	8,400	(6)	7,200	(15)	7,050
Nonfarm Laborers	(67)	11,100	(81)	8,950	(53)	8,700
	(21)	7,650	(57)	7,350	(73)	7,470
Clerical and Kindred Workers	(34)	8,400	(26)	9,000	(80)	8,200
Operatives	(36)	6,000	(45)	6,700	(136)	5,925
Other Service Workers	(26)	5,850	(25)	7,500	(106)	7,900
Students	(13)	5,700	(34)	6,300	(5)	8,100
Housewives	(43)	3,675	(111)	5,008	(25)	2,850
Farmers and Farm Managers	(0)	0	(23)	7,700	(0)	0
Household Service Workers	(5)	5,700	(23)	5,700	(4)	4,200
Farm Laborers and Foremen	(0)	0	(10)	7,500	(9)	8,700
Unknown	(14)	3,600	(116)	9,733	(58)	6,300
<b>TOTAL</b>	<b>(393)</b>	<b>8,482</b>	<b>(645)</b>	<b>7,478</b>	<b>(638)</b>	<b>7,478</b>

<sup>1</sup>Those in occupation in both 1970 and 1972

<sup>2</sup>Those who were in occupation in 1970 but not in 1972.

<sup>3</sup>Those who were in occupation in 1972 but not in 1970.

Note: Number of members of subgrouping are noted in parentheses.

Source: Computer printout supplied by the Social Security Administration to the Center for Labor & Migration Studies.

- Classes of immigrants with higher earnings records (such as males, labor certification beneficiaries and Canadians) are arriving in ever-decreasing numbers as the immigration system (presumably non-deliberately) progressively admits larger percentages of aliens with lower earnings potentials.

## CHAPTER FIVE

## THE 1970 IMMIGRANTS IN THE LABOR MARKET:

## STUDY GROUP DATA

This chapter is divided into three sections; the first describes the characteristics of the respondents as a whole (the 254 working age, FY 1970 immigrants who agreed to be interviewed); the second outlines differences within the study group, such as the responses and experiences of men and women and of those with and without relatives in this country at the time of their arrival; the third examines in some detail the occupational progression of the 209 members of the study group for whom we have information on two or more jobs.

Throughout the analysis, we will present 1976 earnings data on various subsets of the study group, 222 of whom reported wage and salary or self-employed earnings that year. Thus we find, for example, that the mean earnings of the male respondents was \$15,809 in that year, and \$8,456 for the female respondents. Similarly, members of the survey group who reported that they knew relatives in this country before their arrival had mean earnings of \$12,256, while those without such ties had earnings of \$14,268. (These earnings are expressed in 1976 dollars.)

I. The Study Group as a Whole

The 254 respondents had a number of characteristics in common because all were drawn from the previously mentioned sample of 5,000 immigrants admitted to the United States between July 1, 1969 and June 30, 1970; all were between the ages of 18 and 59 upon admission; all had indicated on their visa applications that they were planning to live in the nine states of high immigrant concentration (listed on page A-1); all were alive and within the United States during October and November 1977, when they were interviewed (and thus could supply neither emigration nor mortality data); and all had told INS, in writing, that they were willing to be interviewed.

It should be stressed that the study group, deliberately, covered all immigrants as defined above; we did not define out of the universe married women, as the valuable Canadian longitudinal study did,\* nor did we exclude nonwhites and women, as Chiswick did, nor did we exclude nonworkers, another possibility. This is not to suggest, on the other hand, that ours is a random sample, a point we have made elsewhere in this report; it is useful, however, to review the characteristics of the entire study group before discussing the more significant findings about differing labor market behavior of segments of the study group.

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\*Department of Manpower and Immigration, Three Years in Canada (Ottawa: Information Canada, 1974).

Personal Characteristics

The study group included 148 males (142 with 1976 earnings) and 106 females (80 with such earnings); thus the percentage of females in this work force of 222 was 36%, which is close to the percentage in the total foreign born labor force, as reported in the 1970 census, which was 38%.\*

The median age of the group at the time of the interview was 37; the group consisted predominantly of persons in their prime working years:

<u>Age Group</u>	<u>Number</u>	<u>Percentage</u>
25-34	87	34
35-44	94	37
45-54	50	20
55 plus	22	9
TOTAL	253	100%

Two twenty-five year olds and two sixty-seven year olds marked the ends of the age spectrum. The age of one immigrant is not known.

The respondents had been citizens of nations in the following regions:

<u>Region of Citizenship</u>	<u>Number</u>	<u>Percentage</u>
Eastern Hemisphere	110	43
Canada	34	13
Mexico	29	11
Other Western Hemisphere	75	30
Unknown	6	2
TOTAL	254	99

Thus Canadians and Northern and Western Europeans were over-represented in the study group when it is compared to the 1970 cohort. Interestingly, an examination of the nation of birth of the respondents, at the time of migration, indicates 25 Canadians, not the 34 above, showing that at least nine of the respondents had stayed in Canada long enough to become Canadian citizens before migrating, again, to the U.S.

Most of the respondents were married, with the incidence of both marriage and divorce increasing since arrival:

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\*Census, PC(2)-1A, Table 18.

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	<u>MARITAL STATUS</u> <u>ON ARRIVAL</u>		<u>MARITAL STATUS</u> <u>AT INTERVIEW</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
married	165	65	202	80
single, never married	77	30	26	10
divorced	4	2	15	6
widowed	4	2	6	2
separated	4	2	5	2
TOTAL	254	101%	254	100%

Three quarters of the spouses of the respondents were foreign born.

The respondents were primarily members of small households. There were, at the time of the interview, a mean of 3.8 members of the respondents' households, including 1.5 children. (This was not a measure of children-ever-born, but of children under the age of 18 living in the household at the time of the interview.) A substantial minority of the respondents continued to support persons (presumably family members) in their nations of origin in 1977, close to eight years after migration; 12.7% of the respondents said that they supported one such person, and 18.3% said that they supported two or more. (The illegal alien respondents in the North-Houston study, who had been in the nation for about a third as long as the immigrant respondents had a much higher incidence of such support, more than three-quarters of them reporting those payments.\*)

The respondents' exposure to schooling was predictable; the median was 12 years (as is the median for the foreign born and the U.S. population generally), and a substantial number of them, 85, or 25%, reported 16 or more years of education, as opposed to only 10% who reported six years or less. The 85 included 55 with one or more overseas degrees, a dozen with U.S. degrees (only), and a particularly cosmopolitan group of 18 with at least one overseas degree and at least one U.S. degree. We suspect, based on the higher percentage of the study group who identified themselves as professionals in their last overseas job (compared to comparable data on the 1970 cohort as a whole) that the study group had more years of schooling than the cohort as a whole.

The study group (we suspect disproportionately vs. the cohort because of the higher incidence of professionals before migration) brought with it substantial knowledge of the English language; 29% were native English speakers, 40% said that they had learned (or started to learn) the language in their home country (almost inevitably in the school system), and only 32% said that they had not studied English (or in English) in their

\*North and Houston, Characteristics and Role of Illegal Aliens, p. 78.

home country. By the time of the interview, all but about one sixth of the respondents were speaking English adequately or better (according to the admittedly subjective ears of our interviewers):

Interviewer Rating of Respondents' Ability With English	Number	Percentage
Native English Speaker	74	29
Perfect	42	17
Very Good	61	24
Adequate	33	13
Poor	26	10
Very Poor, None	18	7
TOTAL	254	100

For analytic purposes, we have characterized members of the last three classes, 30% of the study group, as having non-fluent English, and the balance as having fluent English.

#### The Migration

The respondents were asked to characterize their motivation for coming to the United States, in reply to a limited-choice question which the Canadian study had used earlier. The responses of the two study groups were as follows:

<u>Motivation for Migration</u>	U.S. <u>Immigrants</u>	Canadian <u>Immigrants*</u>
to improve economic position	56%	54%
to be near relatives or friends	27	10
desire for adventure and travel	11	18
political situation in former country	7	8
other	0	10
	101%	100%

These results are particularly interesting for two reasons:

- when motivation for immigration is explored, economic, not family considerations are paramount despite the fact that, in the U.S., most immigrants' admissions are facilitated by family ties; and;

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\*Manpower & Immigration, Three Years in Canada, p. 127. We handled our coding slightly differently than the Canadians, forcing answers into the first four categories noted above. Nearly 10% of the U.S. responses grouped here under the economic heading related to a specific U.S. job opportunity, in some cases a job transfer to this country; in that specific case, the Canadian study labeled the response "other."

- U.S. and Canadian results are similar.

It should be borne in mind when examining these responses that close to two-thirds of the 1970 cohort of U.S. immigrants were admitted because petitions were filed for them by their U.S. relatives; a somewhat smaller percentage of the Canadians were admitted as relatives, hence, presumably the lower incidence of the relative motivation in the Canadian survey. The Canadian report contained the following comment on its findings:

"In general, relatives or friends in Canada had less influence on the decision to emigrate than might have been expected, but had greater significance, naturally, among nominated immigrants than independent immigrants. Family ties were given as the reason by only 16 per cent of all nominated immigrants, a classification which was established specifically to broaden the range of relatives that Canadians and landed immigrants could help bring to Canada. Despite the fact that 55 per cent of immigrants received advance information about conditions in Canada from relatives or friends, less than 10 percent came to be near them. There was, moreover, no evidence of a strong desire to join relatives on the part of immigrants from countries where a modified form of the "extended" family system still exists. Persons from Greece, Portugal, Hong Kong, Taiwan, and India, for example, were actually more likely to give economic considerations than family ties as their reasons for emigrating."\*

Among the U.S. immigrant respondents, 59% told us that they knew relatives in this country prior to immigration, a percentage which is more than twice as large as those who said that they wanted to be near those relatives. For analytic purposes, we have divided the study group into those who said they knew relatives in this country, hereafter "relatives," and the smaller group who did not know relatives, hereafter "non-relatives."

A number of the respondents were not making their first international move when they arrived in the U.S. as immigrants; some had previously lived and worked in a third nation (i.e., other than the U.S. and the country of birth); and almost half had at least visited the U.S., if not worked here, prior to securing their immigrant visa. Fifty-six of the respondents had worked in a third nation, 14 in Canada, 8 in the United Kingdom, and the rest scattered around the globe; two respondents had worked in two nations other than the U.S. and their country of origin.

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\*Ibid., pp. 125-26.

A much larger group of respondents, 118 (47%) had been in the United States prior to securing their immigrant visa; most of this group had been here for a year or less, but 46 (18%) of the study group had been in the nation for periods ranging from a year to, in one case, ten years. Most of these prior visitors said that they were tourists during these visits to the U.S.

Interestingly, about ten percent of the respondents who had been in the nation before securing their immigrant visa had been here illegally; we did not ask this question directly, but did inquire at one point in the survey instrument about their visa status at the time, and at another point we asked them if they had worked in the U.S. before their arrival as immigrants. Eleven of the respondents said that they had worked before securing immigrant status with either tourist visas or no visa at all. The ten percent figure is undoubtedly a minimal one; some of the respondents must have fudged their answers to these questions or simply forgot these details.\*

#### Labor Market Experiences

In the Country of Origin. Most of the respondents, who had a median age of about 29 on their arrival in the country, were experienced workers when they were admitted to the U.S. Of the 254, 217 told us that they had worked for one or more months in their homeland, with a median work experience of eight to nine years; in response to other questions, 218 identified their industry of employment in the old country, and 221 specified their occupation in the homeland; in addition, an overlapping group of 32 indicated some period of self-employment before emigration. Thus on the order of 88% of the study group had participated in the labor force prior to coming to the U.S., a rate almost as high as that which they experienced in the U.S. This was somewhat surprising, as our previous work with visa application and alien address data had given us the impression that a substantial number of the women among the arriving immigrants had not worked in the homeland, and had only entered the labor force after their arrival in the States.\*\*

U.S. Labor Force Participation. Securing labor force participation data retrospectively is difficult, because the respondent must be asked an essentially two-part question: were you

\*The use of the formal immigration process to legalize the presence of former illegal immigrants is described in more detail in Alejandro Portes, "Return of the Wetback," Society, April/May 1974.

\*\*David S. North, Immigrants and the American Labor Market, Manpower Research Monograph No. 31 (Manpower Administration, 1974) pp. 33-34. (This monograph was based on the North and Weissert report of the same title cited earlier in this report.)



employed on date X, and if not employed were you or were you not looking for work? It is easier to recall the answer to the job part of the question than the seeking employment-or not seeking portion.

Nevertheless, the data in hand suggest that most of the respondents were in the labor force most of the time, except for 19 individuals who answered all U.S. labor market questions negatively. On this point, we asked the respondents how many years they had worked in the U.S., with these results:

<u>Years Worked in the U.S.</u>	<u>Number</u>	<u>Percentage</u>
seven or more years	174	69%
five or six years	31	12
three or four years	15	6
less than three years	15	6
nonworkers	19	7
TOTAL	254	100%

The respondents had been admitted to the country between 7.25 and 8.25 years before the interviews took place.

Obtaining the First Job. One measure of an immigrant's adaptation to the labor market is the length of time it takes to secure the first job, a measure pointed out to us by the Canadian study; the immigrants to Canada, whose arrival (in time) overlapped that of our respondents (1969 through 1971) secured their first job quickly, with 58% of the males and 55% of the females doing so within two weeks of arrival, and about 75% of both groups doing so within four weeks.\*

The U.S. immigrant respondents were not quite as fast on their feet; only 42% had found jobs within two weeks; within four weeks, 62% of the study group had secured jobs. A substantial portion of the respondents, some 26% of them, presumably including many who had been in the nation before receiving their immigrant visa, knew their first employer before arriving as immigrants; interestingly, a larger percentage had a job lined up, 34% before their arrival, than said that they knew their employer before arrival. One assumes that some of these sight-unseen placements must have been made by relatives of the intending immigrants.

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\*Three Years in Canada, pp. 32-33.

A comparison of the 34% with lined-up jobs and 62% securing jobs in the first four weeks suggests that many respondents arrived without pre-arranged work and then hustled into the labor market to secure work immediately after arrival.

Employment History: In the course of the interviews, we asked the respondents about their last job overseas before receiving their immigrant visa, their first job in the U.S. after obtaining that visa, the job they held in January 1972, the job held in January 1975, and the current (or most recent) job at the time of the fall 1977 interview.

In each instance, we asked about occupation and industry, number of days worked per week, hours per day, and weekly earnings. The data which follow are for the respondents as a group, and all changes described are net changes; thus if in the last job overseas 37 of the respondents worked as clerks, and in the first job in the U.S. 40 were similarly employed, it could mean that the 37 former clerks remained in the activity and were joined by three others who had worked in different occupation groups previously; it is more likely, however, that the net increase of three clerks indicated, to use some imagined numbers, that 20 clerks remained clerks when they came to the U.S., that 17 former clerks found other jobs, and that 20 respondents who had not been clerks previously moved into the field. Thus there would be a net gain of three, but this small net change would mask a great deal of occupation group movement--a subject to which we will return.

Industry: Table 25 suggests that there was not a great deal of net movement among industry groups resulting from the respondents' immigration. Between the last overseas job and the first U.S. job there was an increase in manufacturing employment, and a drop in services employment. Generally, the patterns set in the first U.S. job held, and the industrial distribution changed little over time, though the small groups of immigrants in agriculture and private household were reduced still further over the years.

Occupation: While there was relatively little net industry group movement, there was considerably more net movement among occupation groups, both between the last overseas job and the first U.S. job, and, in some instances, over time within the U.S. labor market. Table 26 shows a sharp drop in professional and technical employment following migration, and an even sharper drop, proportionally, for those who had been managers, proprietors, and owners overseas. Together, these two occupation groups accounted for about 47% of the respondents (with stated occupations) when they were overseas, but only 28% of them in their first U.S. job, clearly a drastic shift down the occupational ladder for many individuals.

TABLE 25

Distribution of Industry of Immigrant Respondents, Overseas and in U.S.,  
and of U.S. Workers Generally, 1975  
 (as percent of group responding)

<u>INDUSTRY</u>	<u>LAST JOB OVERSEAS</u>	<u>FIRST U.S. JOB</u>	<u>U.S. JOB IN JANUARY 1972</u>	<u>U.S. JOB IN JANUARY 1975</u>	<u>CURRENT OR MOST RECENT U.S. JOB</u>	<u>U.S. WORKERS 1975</u>
Agriculture, Forestry & Fisheries	3.7%	2.6%	2.6%	1.9%	1.4%	4.1%
Mining	0.9	0.4	0	0.5	0.5	0.8
Contract Construction	3.7	3.0	2.1	5.2	4.1	5.9
Manufacturing	24.8	30.2	32.8	30.5	31.7	22.7
Transportation & Communication	8.7	4.7	3.7	5.2	6.0	6.6
Trade: Wholesale and Retail	11.5	14.7	12.7	10.5	11.0	20.6
Finance, Insurance & Real Estate	6.0	6.9	8.5	10.0	8.7	5.5
Services, except Private Household	37.6	34.1	36.5	34.8	35.3	26.4
Household Services	2.3	3.4	1.1	1.0	0.9	1.6
Public Administration	0.5	0	0	0	0	5.6
Miscellaneous	0.5	0	0	0.5	0.5	0
<b>TOTAL</b>	<b>100.2</b>	<b>100.0</b>	<b>100.0</b>	<b>100.1</b>	<b>100.1</b>	<b>99.8</b>
<b>No. of Respondents</b>	<b>218</b>	<b>232</b>	<b>189</b>	<b>210</b>	<b>218</b>	<b>84,783,000</b>

Source: Immigrant data from TransCentury 1977 Immigrant Survey; data on U.S. workers from Statistical Abstract of the U.S., 1976, Table 591.

TABLE 26

Distribution of Occupation of Immigrant Respondents, Overseas and in U.S., and of U.S. Employed Persons, 1976  
(as percent of group responding)

<u>OCCUPATIONAL GROUP</u>	<u>LAST JOB OVERSEAS</u>	<u>FIRST U.S. JOB</u>	<u>U.S. JOB IN JANUARY 1972</u>	<u>U.S. JOB IN JANUARY 1975</u>	<u>CURRENT OR MOST RECENT U.S. JOB</u>	<u>U.S. EMPLOYED PERSONS 1976</u>
Professional, Technical & Kindred Workers	35.3	23.6	25.1	27.4	26.8	15.2
Managers, Proprietors & Owners	11.3	3.9	5.2	10.4	11.8	10.6
Sales Workers	5.0	3.0	4.7	2.8	2.7	6.3
Clerical & Kindred Workers	17.2	17.2	17.8	16.5	14.1	17.8
Craft & Kindred Workers	13.1	14.2	12.0	12.8	12.7	12.9
Operatives, except Transport	4.1	14.2	15.7	12.3	12.7	11.5
Transport Equipment Operatives	1.4	1.3	2.1	1.9	2.3	3.7
Laborers, except Farm	2.7	5.2	3.1	2.4	3.6	4.9
Farm Occupations*	2.3	2.1	2.1	1.4	0.9	3.2
Service Workers, except Private Household	5.4	12.0	11.0	11.3	11.4	12.4
Private Household Workers	2.3	3.4	1.0	0.9	0.9	1.3
<b>TOTAL</b>	<b>100.1</b>	<b>100.1</b>	<b>99.8</b>	<b>100.1</b>	<b>99.9</b>	<b>99.8</b>
Number of Respondents	221	233	191	212	220	87,485,000

\*Includes farmer, farm manager; farm labor, supervisor (the respondents were farm laborers)

Source: Immigrant data from TransCentury 1977 Immigrant Survey; data on U.S. employed persons from Employment & Training Report of the President, 1977, Table A-33

To compensate for these migration-caused changes, there were drastic net increases among operatives and other service workers, with some lesser upward movements in other groups.

With the passage of time, some interesting trends are visible, again on a net basis. There was some post-arrival increase in the number of professional jobs, a sharp increase, to above average U.S. levels, among the managers, proprietors and owners, while the household servants and farmworkers drifted into other lines of work. The number of respondents in occupations noted in the middle of the chart--sales, clerical work and crafts--remained fairly steady over the years.

Looking at the data another way, one can compare the percentage of respondents reporting white collar jobs for each time unit; the figure fell from 68.8% in the last overseas job to 47.7% in the first U.S. job, and then rose slowly to 55.4% for the current or most recent job, a figure above that of the U.S. work force generally (50.1%).

Thus the overall picture which emerges is of considerable net occupational group movement, with much of the initial movement downwards, followed by some degree of recovery over time; the differing patterns among the subsets of the respondents and the specific adjustments made by individual respondents will be discussed in subsequent sections of this chapter.

Hours and Days Worked-Earnings: Table 27 indicates that while most of the respondents had worked 8-hour days in their overseas jobs, as well as in the U.S., the five-day week was a brand-new, and presumably welcome, feature of their lives. The sharp drop in days worked brought about a comparable drop in hours worked per week; respondents who had been accustomed to 50-hour work weeks reported 41-42 hour work weeks in their U.S. jobs, on average.

Hours of work data for the study group cannot be compared with rigor to those of other elements in the U.S. labor force, but it is interesting that the respondents appear to be working about six hours a week longer than U.S. production and nonsupervisory workers generally (who logged 35.9 hours a week on average in 1975) and only a couple of hours less a week than the illegal aliens in the North-Houstoun study.\*

There were few part-time workers among the respondents; for example, in their most recent job, only a dozen of the 221 supplying data on hours of work indicated that they were working six hours or less per day; and eight of those were working six hours a day.

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\*North and Houstoun, Characteristics and Role of Illegal Aliens, pp. 124-127.

TABLE 27

Mean Hours and Days Worked and Median Earnings Reported by Immigrant Respondents, Overseas and in U.S.

	LAST JOB OVERSEAS	FIRST U.S. JOB	U.S. JOB IN JANUARY 1972	U.S. JOB IN JANUARY 1975	CURRENT OR MOST RECENT U.S. JOB
Mean Hours Worked Per Day	8.29	8.26	8.10	8.30	8.26
Mean Days Worked Per Week	6.07	5.03	5.16	5.08	5.08
Mean Hours Worked Per Week	50.32	41.54	41.79	42.19	41.96
Median Weekly Income (Unadjusted dollars)	\$44.67	\$107.71	\$151.93	\$177.95	\$237.85
Median Weekly Income (1970 Dollars)	\$44.67*	\$107.71	\$141.14	\$128.48	\$152.46

Source: TransCentury 1977 Immigrant Survey; 1970 dollars adapted from Bureau of Labor Statistics, Handbook of Labor Statistics, 1975, Table 122.

\*In most instances, the respondents supplied this information in U.S. dollars. In about 10% of the cases, the reply was expressed in the currency of the homeland; in these instances, we converted the results to dollars using the rate of exchange prevailing at the time.

Perhaps the most stunning difference between working overseas and working in the United States is the financial rewards for work. Not only did the work week drop by a day, and the hours worked a week by about 10, between the last foreign job and the first U.S. one, but the wages increased by 140%. On the other hand, this is a gross wage comparison, and the differing costs of living in the old country and the new one are not included in these calculations; further, while the one-time migration-caused leap in gross earnings was followed by further increases, between the first job and the January 1972 job, inflation seriously impacted the post-1972 earnings pattern of the study group.

As suggested earlier, the respondents appear to be better paid than the Social Security subsample described earlier; using constant 1975 dollars, we can compare the subsample's 1975 earnings with the study group's 1976 earnings, which are markedly larger:

	<u>Median 1975 Earnings of SSA Subsample</u>	<u>Median 1976 Earn- ings of Study Group (in 1975 dollars)</u>
Males	\$9,515	\$14,359
Females	4,879	7,650

Training: A large majority of the respondents have received formal training in the United States, and an even larger majority have secured formal education or training in the U.S. or overseas to prepare for their careers. Regarding training in the United States, 65% (or 165) of the respondents said that they had taken courses of instruction. Of these individuals, 114 had taken vocational training, 69 had been instructed in English, and 64 had studied other subjects; many had engaged in more than one of these categories of education.

When the broader question was raised about career training either in the U.S. or overseas, 80% of the respondents indicated that they had such training, with 51% of those with training being trained in the professions, 17% in crafts, 12% in clerical work, with the balance scattered. Since those with at least some training for the professions numbered 104, and since those working as professionals numbered only 78 in the home country, and no more than 59 at any time in the U.S., this indicated, in this field at least, either a substantial underutilization of training, a substantial amount of uncompleted training, or both.

Many of the respondents were aware of this; when asked "did you ever work in this occupation (for which training was secured) in the U.S.?" 36% indicated that they had not done so. Not all

who did not use their training were unhappy about it, having apparently found other acceptable work, for when we asked "Are you doing the type of work you had hoped to do in the U.S.?" only 28% responded negatively.

Unemployment: In order to obtain unemployment data, the respondents were asked, for each year of interest, the number of weeks in which they were out of work and seeking work. Table 28 shows the total weeks of unemployment reported, the number of respondents unemployed for ten weeks or more, and respondent and overall U.S. unemployment rates. The picture which emerges appears to be that in the first year the respondents suffered higher unemployment rates than the U.S. population generally, but quickly recovered, and their incidence of unemployment fell in the next four years as they learned their way around the labor market, only to rise again (but not to national levels) as they encountered the recession starting in 1975.

Other Labor Market Data: The respondents, by the fall of 1977, found jobs for themselves largely outside the ethnic work places where persons of similar nationality work together, often speaking their native language. A restaurant manned by a totally Chinese staff, or an agricultural setting in which all the workers are natives of Mexico are examples of these ethnic work places, which often offer less attractive wages and working conditions than more integrated places of employment.

We asked two questions to secure data on this subject; first, we asked "in your current place of employment, about how many other people of your own nationality work there?" Only 11% said that most of the people, more than half of the people, or half of them were of similar nationality--these we regard as ethnic work places; an additional 6% responded less than half; 35% replied "very few," and 45% said there were no other nationals employed, with the balance being five persons who worked alone.

Similarly, in response to a question on whether English was spoken at the place of employment, we secured these responses:

	<u>Number</u>	<u>Percentage</u>
Always	127	54%
Most of the time	48	20
Half and half	34	14
Occasionally	17	7
Never	9	4
TOTAL	235	100%

There appears to be a relatively small incidence of self-employment among the respondents; while 32 of them had been self-employed overseas at some time in their lives, only 22 of them had been self-employed, at any time, in the U.S., a dozen



TABLE 28

Weeks of Unemployment, Incidence of Long-Term Unemployment, and Unemployment Rates for Immigrant Respondents, and for the U.S., 1970-1977

<u>Year</u>	<u>Person Weeks of Unemployment Reported by Respondents</u>	<u>Number of Respondents Unemployed for 10 or more weeks</u>	<u>Respondents' Unemployment Rates</u>	<u>U.S. Unemployment Rate</u>
1970	967	20	8.0	4.9
1971	520	16	4.3	5.9
1972	361	10	2.9	5.6
1973	264	9	2.2	4.9
1974	275	7	2.2	5.6
1975	520	18	4.3	8.5
1976	510	20	4.2	7.7
1977	352	8	3.5	7.0

Source: Immigrant data from TransCentury 1977 Immigrant Survey; U.S. data from Handbook of Labor Statistics, 1975, Table 60 for the years 1970-1974; data for 1975-1977 secured by phone from BLS.

Note: Total weeks of unemployment for 1970 and 1977 have been adjusted upwards by 33% to compensate for the extent of arrivals after the beginning of calendar 1970 and for the reduced exposure in 1977, caused by the timing of the interviews, around October 1 of that year. Respondents' rates for each year are presumably somewhat understated, as they are calculated on the assumption of a 235-member labor force among the respondents, which is slightly generous; that estimate was obtained by subtracting the persistent non-workers (19) from the study group of 254.

of these for three years or less, and 10 for four years or more. Six respondents were both self-employed and employers of others, at the time of the interview, with 19 employees among them. In response to another question, 16 respondents said that they received some self-employment income in 1976, which would be roughly equal to the incidence of self-employed workers in the U.S. generally.

As for union membership, 31% of the respondents said that they were, or had been, union members.

#### The Respondents' Reactions to Life in the U.S.

We asked a number of questions to gauge the study group's feelings about their U.S. experiences; knowing that there would be a human tendency to tell the interviewer what the respondent thought the interviewer wanted to hear, the questions were asked in several ways, some directly, some indirectly.

In three of the direct questions, we asked the respondents to use a five-part scale to compare their current job, their current housing conditions, and their general quality of life to the best experiences they had in these areas before arriving in the U.S. The scale is shown in Table 29.

Clearly, most of the respondents felt that things were much better or better in the U.S., and only a small minority used the worse or much worse replies; one would expect that the respondents (who had, by definition, not voted with their feet by leaving the U.S.) would be positive about their experience here. What is more interesting is their differing levels of enthusiasm about various aspects of American life.

In order to measure that variable, we scaled the percentage of "much better" responses as two, the "betters" as one, the "about the same" as zero, the "worses" as minus one, and the "much worses" as minus two, and from this and the replies in Table 29 we constructed a contentment index. The respondents, in short, are happier about their work, where the index is 93, than they are about quality of life in general, with an index of 77; housing, with an index of 60, is the least attractive in the eyes of the study group.\*

The indirect measures of respondents' contentment included questions about U.S. citizenship and the extent to which the respondents had encouraged others to come to this country. A respondent who opts to become a citizen and one who helps a lands-

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\*Most of the respondents, 58%, in the great American tradition, live in a mortgaged house, 26% in apartments, 9% in rented houses, 3% in owned-outright houses, 2% in employer-provided housing, and the balance in other arrangements.

TABLE 29

Respondents' Judgments of Differences Between Life in Old Country and U.S.  
(as percents of group responding)

<u>EXPERIENCE IN U.S. IS:</u>	<u>Comparison of Best Overseas Job to Current U.S. Job</u>	<u>Comparison of Quality of Life in U.S. to that Overseas</u>	<u>Comparison of Housing Conditions to That Experienced Overseas</u>
Much Better	34%	23%	24%
Better	35	43	36
About the Same	23	24	28
Worse	6	8	9
Much Worse	<u>2</u>	<u>2</u>	<u>3</u>
TOTAL	100%	100%	100%
No. of Respondents	213	244	254
Contentment Index	92	77	69

Source: TransCentury 1977 Immigrant Survey

Note: See text for contentment index methodology.

man to come to this country is stating, in obvious terms, relative satisfaction with this nation.

Although all of the respondents had been eligible for citizenship for years, only 46% of them had sought naturalization; this is a lengthy process, and an underfunded one, so it is no surprise that half of the 46% were still waiting for their citizenship when we interviewed them.

We asked three questions about their relations with others regarding migration to the U.S.; we asked, "did you encourage others to migrate?" Did you file papers for them (i.e., petitions with INS)?" And, finally, "did you give or lend them money?" As one might expect, the incidence of positive responses was higher for the first question, 32% than for the second, 19%, or the third, 15%.

#### 1976 Income

We secured 1976 income data on 195 of the respondents, but decided to exclude from our calculations those of a male, Canadian-born M.D., whose \$250,000 income would skew the financial data for the sub-groups of which he was a member. The mean income for the remaining 194 was \$13,442. (That statistic would be increased by more than \$1,000 had the Canadian M.D.'s income remained in the calculations.)

As Table 30 indicates, the most common form of income, by far, was wages and salaries, with 184 respondents reporting such income, showing a mean of \$12,868. Next most common was interest and dividends, with 56 respondents reporting a mean of \$744.

Examined another way--from the point of view of the income sources of the group of 194--return for labor (wages and salaries and self-employment income) amounted to 95.8% of their income; return for savings (interest, dividends, rental income, and capital gains) came to 2.2%; and income transfer programs (unemployment insurance, social security, supplemental security income (SSI),\* and other welfare) came to only 1.3% of the group's income. The remaining 0.7% were in miscellaneous categories.

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\*A recent General Accounting Office report, dealing with a very different sample of arriving immigrants than ours (those members of the FY 1973, 1974, and 1975 cohorts who were more than 65 years of age upon arrival), estimated that 34.3% of the latter group were receiving SSI payments by December 31, 1976. See, Report to the Congress, Number of Newly Arrived Aliens Who Receive Supplemental Security Income Needs to be Reduced, February 22, 1978.

TABLE 30

Summary of Immigrant Respondents' 1976 Income

<u>Type of Income</u>	<u>Incidence</u>	<u>Mean</u>	<u>Standard Deviation</u>
Gross Wages and Salaries	183	\$12,868	\$8,897
Interest or Dividend Income	56	744	2,467
Unemployment Insurance	15	1,926	1,562
Self Employed Business Income	11	13,029	17,141
Rental Income	10	1,567	1,066
Social Security or Railroad Retirement	1	600	-
Welfare Payments	1	2,200	-
Supplemental Security Income	1	2,112	-
Capital Gains	1	700	-
Other Income	8	2,230	1,444
Total Income in 1976	194	13,442	9,704

Source: TransCentury 1977 Immigrant Survey.

These data on income should be differentiated from the previously mentioned 1976 earnings data, which will be used extensively in the balance of this chapter. The 1976 earnings data are drawn from answers to two closely related questions, to which overlapping subsets of the respondents replied. When the immigrants supplied us with gross wage and salary data for 1976 (as shown in Table 30) we used it for 1976 earnings; in 28 instances in which those data were not supplied, we had answers to the question, "what is your current or most recent weekly earnings?" Those data, extrapolated to an annual rate, were used as proxies for 1976 earnings. In this way, we were able to secure recent earnings data on a broader group of respondents than we could secure from the replies to either of the two questions alone.

## II. Subsets Within the Study Group

In this section, we examine the differing characteristics of segments of the study group, as well as mean 1976 earnings levels along the lines of the personal, migration, and labor market variables previously described. Cross tabulations of the question responses were run with each of five different characteristics with the levels noted below:

<u>Characteristics</u>	<u>Levels</u>	<u>Respondents</u>	
		<u>Number</u>	<u>Percent</u>
<u>Sex</u>	Male	148	58.3
	Female	106	41.7
<u>Region of Origin</u> (Nationality)	Eastern Hemisphere	110	44.4
	Canada	34	13.7
	Mexico	29	11.7
	Other Western Hemisphere	75	30.2
<u>Relative Status</u>	Relative	149	59.1
	Non-Relative	103	40.9
<u>Skill with English</u>	Fluent	177	69.7
	Non-Fluent	77	30.3
<u>Years of Education</u>	12 years or less	128	51.2
	13 years or more	122	48.8

(Note that these observations cannot be interpreted either independently or as cause and effect. A more detailed analysis of the data, including attention to interactions, could provide additional insights. For example, a characteristic attributed to the non-fluent might be better attributed to service workers, both of which groups are heavily Mexican.) Note further, missing observations cause some of the totals above to vary slightly from the total of 254.

Personal Characteristics

The personal characteristics we examined included sex, age, several family characteristics, several educational variables, and fluency in English. In terms of age, respondents in the 35-44 age range earned more money than older ones and considerably more than younger ones:

<u>Age Group</u>	<u>Respondents</u>		<u>Mean 1976 Earnings</u>	<u>Standard Deviation</u>
	<u>Number</u>	<u>Percent</u>		
25-34	75	34	\$11,936	\$7,154
35-44	89	38	14,358	10,181
45-67	<u>63</u>	<u>28</u>	13,018	10,697
Group Total	222	100	13,160	9,446

We note the relative youth of the Mexican respondents; almost half of them were under 35. Similarly, women were slightly younger than men in the sample, with the median age being 38, as opposed to 40:

The earnings of the Mexico-born subset of respondents was remarkably lower than those of the other respondents, \$7,468, compared to \$10,741 for the other Western Hemisphere respondents, \$16,074 for those from the Eastern Hemisphere, and \$17,600 for the Canadians.

In terms of marital status and number of children, respondents from Mexico had a higher incidence of marriage and more children than the other respondents; similarly, non-fluent respondents and those with 12 years of education or less were more likely to be married, and more likely to have large families. Predictably, the largest families were the ones with the smallest earnings:

<u>Number of Children</u>	<u>Number</u>	<u>Percent</u>	<u>Mean 1976 Earnings</u>	<u>Standard Deviation</u>
none	73	33	\$12,252	\$8,924
1-3	131	59	13,939	9,996
4 or more	<u>18</u>	<u>8</u>	11,166	6,797
Group Total	222	100	13,160	9,446

Similarly, the minority of immigrants who continue to support relatives overseas earn about \$1,000 less a year than those who make no such payments; males, those from Mexico (and to a lesser extent other Western Hemisphere immigrants), and those nonfluent in English were more likely to support people in their homelands than other respondents.

The male respondents had more years of schooling than the females, with 56% of the former, compared to 40% of the latter, reporting 13 or more years. Canadians had the most education, with 67% in the 13-plus class, and Mexican respondents the least, with 62% of them reporting 0-8 years. Non-relatives were only slightly better educated than relatives.

The relationship between years of education and 1976 earnings was clear and direct:

<u>Years of Education</u>	<u>Number</u>	<u>Percent</u>	<u>1976 Mean Earnings</u>	<u>Standard Deviation</u>
0-8	44	20	\$ 8,525	\$5,721
9-12	60	27	11,454	9,453
13-16	67	31	14,566	10,218
17-25	48	22	17,585	9,131
Group Total	219	100%	13,162	9,502

In response to the question about occupational training, more than 80% of the respondents said that they had received some such training, and about half of them said that they had received training in one of the professions. The incidence of males and females among those receiving professional training was about equal (at just over 50%), but the Eastern Hemisphere respondents (69%) and those from Canada (50%) reported higher incidences than others. Nonrelatives (56%) were more likely to be so trained than relatives (47%).

The receipt of occupational training was apparently rewarded in the market place, as these 1976 earnings data indicate:

<u>Respondent Subgroup</u>	<u>Number of Respondents</u>	<u>1976 Mean Earnings</u>	<u>Standard Deviation</u>
Total with Occupational Training	180	\$14,222	\$9,887
Those with Professional Training	95	16,667	10,969
Those with Manager/Proprietor Training	8	17,512	9,647
Total with Earnings	222	13,160	9,446



The crosstabulations on English fluency produced some puzzling results; we had expected that there would be a strong positive relationship between years of education and ability with the language, and a strong negative one between knowing relatives in this country and speaking English well; these relationships turned out to be only marginal; those speaking English fluently, for example, had only half a year's more education (13 years versus 12.5 years) than those who did not speak fluently. Our expectations regarding labor market reaction to fluency turned out to be accurate; the fluent respondents earned a mean of \$14,503 in 1976; the non-fluent ones, only \$9,159. We compared linguistic background on another basis, finding that those whose native language was English earned \$15,419, compared to those who studied English in their homeland, \$13,286, and those who did not study it there, \$10,974.

### The Migration

Sharply different levels of 1976 earnings appear when the study group is divided along the lines of their motivation for coming to the U.S. The percentage of the responses and the mean earnings of those offering the responses follow:

<u>Motive</u>	<u>Number</u>	<u>Percent</u>	<u>1976 Mean Earnings</u>	<u>Standard Deviation</u>
to improve economic position	128	58	\$14,616	\$10,818
to be near relatives or friends	50	23	9,499	6,905
desire for adventure or travel	26	12	14,007	7,011
political situation in homeland	17	8	11,730	5,810
TOTAL-----	221	101%	13,164	9,468

Women were more likely to cite familial or desire-for-adventure motivations than men, while men were more likely than women to cite economic or political considerations. By regions of origin, the Mexico-born respondents were most likely to cite familial reasons, those from elsewhere in the Western Hemisphere to cite economic reasons, while one-third of the Canadians told us (within the economic motivation response) that they had been transferred to jobs in the U.S. The better educated respondents were twice as likely as the less well educated to cite either adventure or political motivations for their migration decision.

Perhaps the most interesting cross tabulation was for those who said that they had known relatives in this country; 52% said that their motivation for coming to the country was to improve their economic status, another 10% cited political or adventure reasons, leaving only 39% of this group who stated that their motivation for migration was to be near friends and relatives.

As we indicated earlier, many of our respondents had previous migration experiences before coming to the United States as resident aliens. Generally, those with such experiences earned more money in the U.S. in 1976 than those without such exposure. The three questions we asked dealt with work in a third nation before coming to the U.S., time spent in the U.S. prior to receiving an immigrant visa, and time spent working in the U.S. prior to arrival as an immigrant.

Those who had worked in a third country earned more in 1976 than those who had not: \$16,790 compared to \$12,139. More than three times as many men as women had this experience (31% vs. 9%), and Canadians and migrants from the Eastern Hemisphere were more likely than respondents from elsewhere to have worked in a third nation. Similarly, such overseas work was experienced more often by the more educated, by those more fluent in English, and by the nonrelatives than by others.

Being in the U.S. prior to receiving an immigrant visa carried with it good omens for future earnings, by a margin of \$14,578 to \$11,976; Canadians and Mexicans were more likely to report such visits than others, but the other comparisons were not meaningful.

Actually working in the U.S. produced something of a mixed bag of earnings levels with those who did not work here prior to securing immigrant status earning \$14,887, those who worked for less than a year making \$15,731 in 1976, and those who had worked here for more than a year, interestingly, receiving \$13,286.

#### Labor Market Experiences

In the Country of Origin: Most of the respondents had worked in the country of origin, and this was apparently marginally beneficial in terms of 1976 earnings; those with such experience had mean earnings of \$13,863 or about \$1,000 a year above the mean earnings of the study group as a whole. There were no significant patterns among the subgroups on this variable.

Obtaining the First U.S. Job: Apparently the qualities which help one line up a job quickly in the U.S. are the same ones which assure higher earnings years later. Thus the minority of migrants who had a job lined up prior to admission (a group in which Canadians and males were disproportionately represented) earned more

in 1976, \$16,307, than those who did not have such contacts at the time of admission; they earned \$11,607. Another test was how many weeks passed between admission and starting the first job; men, Canadians, and those fluent with the language moved the most rapidly, with 37% of the men securing a job within a week of admission and 22% of the women securing their initial job within a week.

**Occupational Movement:** While we had occupation group data for five points in time, making a number of comparisons possible, we found the most useful to be the comparison between the last job in the old country and the job held by the respondent at the time of the interview. By the fall of 1977, the respondents had close to eight years to adjust to the U.S. labor market, and presumably most of those who were destined to recover from downward occupational adjustment had done so by that time.

The data, which recorded net movements, indicate that occupational group adjustments, particularly those out of white collar work, were not distributed evenly among the subsets within the study group; women and those nonfluent in English were more likely to experience such changes than men or those fluent in English, as Table 31 shows.

Thus while 34% of the men and 37% of the women reported that their last job in the old country was professional or technical, some 30% of the men, but only 20% of the women reported holding such a job at the time of the interview. (These percentages are of those who were working at the time, and thus withdrawal from the labor market was not a factor.) In addition, the percentage of women with clerical jobs dropped from 31% to 23%, while that of men remained approximately the same, 8%. While there was some movement out of professional work for those fluent in English--a drop from 43% to 36%--there was a much sharper drop for those not fluent in English; 18% of the latter group said that they had held professional jobs in the old country, but only 2% had such jobs at the time of the interview. The heavy concentrations of the non-fluent in manual labor, which was expected, is also shown in Table 31.

Perhaps the most interesting tabulation regarding occupational group movement related to years of education; it indicates that while 11% of those with 12 years of education or less had professional positions in the old country, only 3% of them had such positions in this country at the time of the interview. The percentages for those in the professions with 13 or more years of education also dropped, from 61% to 48%. Thus many of those leaving professional positions had experienced no more than a high school education; one presumes that their movement into non-professional activities was an appropriate adjustment to the realities of the U.S. labor market, and that there is no clear indication that their skills were underutilized. It is the other group, the respondents with 13 years or more of education, who are a more appropriate target for our concern.

TABLE 31

Net Occupational Group Movement of Respondents Between Last Job in Old Country (1969) and Job at Time of Interview (1977),  
by Sex, Fluency in English, and Years of Education

(as percent of group responding)

OCCUPATIONAL GROUP	S E X				FLUENCY IN ENGLISH				YEARS OF EDUCATION			
	MALE		FEMALE		FLUENT		NON-FLUENT		12 YEARS OR LESS		13 YEARS OR MORE	
	1969	1977	1969	1977	1969	1977	1969	1977	1969	1977	1969	1977
	Job	Job	Job	Job	Job	Job	Job	Job	Job	Job	Job	Job
Professional, Technical & Kindred Workers	34%	30%	37%	20%	43%	36%	18%	2%	11%	3%	61%	48%
Managers, Proprietors, & Owners	15	14	5	8	14	15	6	3	12	11	10	13
Sales Workers	4	2	6		6	4	2	0	5	2	5	4
Clerical & Kindred Workers	8	9	31	23	16	14	20	15	21	13	14	15
Craft & Kindred Workers	21	17	1	5	8	8	24	25	20	20	6	6
Operatives, Except Transport	4	12	3	14	3	7	8	20	6	22	1	5
Transport Equipment Operatives	1	3	1	1	1	2	2	3	3	3	0	2
Laborers, Except Farm	3	5	2	1	2	3	5	5	5	6	0	2
Farm Occupations*	4	1	0	1	1	1	5	2	5	2	0	0
Service Workers, except Private Household	4	6	8	21	5	9	8	17	8	17	3	6
Private Household Workers	0	0	6	3	1	1	5	0	5	2	0	0
TOTAL	98%	99%	100%	101%	100%	100%	103%	100%	101%	101%	100%	101%
NUMBER OF RESPONDENTS	134	140	87	80	155	160	66	60	111	101	106	115

\*Includes farmers and farm managers, and farm laborers and supervisors.

Source: TransCentury 1977 Immigrant Survey.

Regarding hours and days of work, men tended to work both more hours in the day and more days a week than women, both in their homeland and in their current U.S. job. The group reporting the longest work week in the old country were the respondents from Mexico; a majority reported working more than five days a week, and more than eight hours a day in their homeland. Immigration changed that, for only 17% of these respondents reported working more than eight hours a day in their current job, a slightly smaller percentage than the study group as a whole.

Longer hours relates directly to higher wages; those who work seven hours a day or less received \$11,853, on average, in 1976; those with eight hour days, \$13,110; and those with more than eight hours a day, \$15,534.

Training in the U.S. also correlated with higher incomes; those with such training earned about \$3,000 a year more than those without it. It was also true, however, that education begets education; thus those with 13 or more years of education were almost twice as likely to report such U.S. training as those with less education (84% compared to 48%).

The ethnic work places mentioned earlier were much more likely to be experienced by Mexican than non-Mexican respondents; 52% of the former were in such places of employment, compared to the total study group's percentage of 11%. Further, and understandably, those nonfluent in English were much more likely (27%) to be employed in such places than those fluent in the language (5%).

The distribution of unemployment among the subsets was relatively equitable, with men and women and those with more and those with less education, reporting approximately the same incidence of it. This relatively equitable distribution of unemployment is contrary to the general U.S. experience, in which some groups, such as Blacks, and particularly center-city Black teenagers, experience much more unemployment than other workers; in this study, however, there were no teenagers, and Blacks were not identified for separate analysis. Canadians and those fluent in English were somewhat less likely to be unemployed than others, however.

#### Reactions to Life in the U.S.

Table 32 displays the varying reactions of subsets of the study group to the previously described set of three questions regarding the degree of contentment with the U.S.; the table also shows, for the same subsets, the percentage of those who have sought to become citizens, as well as the adjusted (1969 dollars) increase in wages between the last job in the old country and the job at the time of the interview.

Men, generally, were more contented than women, were slightly more likely to seek citizenship--and reported a somewhat higher increase in earnings than women. Canadians had the lowest contentment scores, almost miniscule increases in real income, and were unlikely to apply for citizenship; Mexicans, on the other hand, although also unlikely to seek naturalization, reported

TABLE 32

Distribution of Contentment Indices,\* the Difference Between Overseas (1969) Wages and 1977 U.S. Wages  
(adjusted to 1969 dollars), and the Percentage of Respondents Seeking U.S.  
Citizenship, by Selected Characteristics

<u>Respondent Characteristics</u>	<u>Job Contentment Index</u>	<u>Quality of Life Index</u>	<u>Housing Contentment Index</u>	<u>Adjusted 1977 Wages as % of Overseas Wages**</u>	<u>Percent of Respondents Seeking Citizenship</u> (as percents)
Male	95	88	75	316.0	48
Female	73	66	64	292.6	43
Eastern Hemisphere	106	87	86	404.4	59
Canada	71	35	39	106.8	24
Mexico	99	113	84	479.2	14
Other Western Hemisphere	78	74	52	294.3	47
Relative	89	82	66	313.8	43
Non-Relative	100	76	78	337.4	52
Fluent	93	74	68	261.8	51
Non-Fluent	88	90	77	400.4	35
12 or Less Years of Education	99	81	70	303.6	39
13 or More Years of Education	86	74	72	243.7	53
ENTIRE STUDY GROUP	92	77	69	322.1	46

\*See page 89 for contentment index methodology. (The potential range of the indices is from +200 to -200.)

\*\*Respondents median weekly wages were used in these calculations.

Source: TransCentury 1977 Immigrant Survey; the 1969 dollar adjustment rate was computed from Handbook of Labor Statistics, 1975, Table 122, with updated 1977 rate supplied by BLS.

substantial increases in real income, and had the highest contentment indices.

Since those fluent in English and those with more education were more likely to seek citizenship than their opposite numbers, it should be no surprise that those who did so would have a higher income than those who did not, by a margin of about \$2,000 a year.

#### Regression Analysis of 1976 Earnings

We performed a series of step-wise linear regression analyses modeling the 1976 earnings of the respondents, using the following variables at the indicated levels (by means of dummy variables). The variables selected were chosen because they were regarded as potential predictors of income, and because they are available from (or potentially available from) visa applications.

<u>Variables</u>	<u>Levels</u>
<u>Sex</u>	Male Female
<u>Region of Origin</u>	Eastern Hemisphere Canada Other Western Hemisphere Mexico
<u>Years of Education</u>	13 years or more 12 years or less
<u>English Fluency</u>	Fluent Non-fluent
<u>Age Groupings</u> (at last birthday)	45 and over 35-44 25-34
<u>Relative Status</u>	Non-relative Relative
<u>Occupation Group</u>	Professional and Technical Manager, Proprietor, Owner Sales Worker Clerical & Kindred Worker Craft & Kindred Worker Operative, except Transport Transport Operative Non-farm Laborer Service Worker, except Household Private Household Worker Farm Laborer and Supervisor

In each instance, the base levels (against which the earnings of other segments of the study group were compared) were the last level listed above. We ran four regressions for the first six variables alone; for those six plus occupation group in country of origin; for those six plus occupational group in country of origin and in the most recent U.S. job; and finally for the first six and for occupation group in the most recent job.

The most powerful predictor among the variables was Sex (being male was worth between \$5,000 and \$6,500 in each of the various regressions.)

The model which was best in the sense that it balanced simplicity and explanatory power contained only four independent variables and yielded the following estimates of variable level values versus their base levels:

<u>Variable</u>	<u>Estimated Value</u>	<u>Standard Error</u>
Male	\$6,394	\$1,061
13 or more years of education	3,080	1,081
Eastern Hemisphere	4,797	1,136
Canada	4,815	1,672

(The printout for this model and for the summary tables are shown in Appendix B.)

In other words, with all other variables held constant, it is estimated that men earned \$6394 more than women; those with 13 or more years of education earned \$3,080 more than those with 12 years or less; and immigrants from the Eastern Hemisphere and Canada earned about \$4,800 more than those from Mexico. All of these coefficients were found to be different from zero at the .05 level of significance. Note, however, that examination of the summary table indicates that these four variables together explain only 27% of the variation in 1976 income. The only occupational group variable with appreciable significance in any of the models was the indicator for being a Manager, Proprietor or Owner in the most recent U.S. job; that was estimated to be worth \$7,853 more than being a farmworker, again all other variables being held constant. (In this instance, the standard error of the estimator was \$.3,743.)

Note that although non-relative status and particularly fluency in English were shown to be positively related to earnings in the univariate analysis earlier in this Chapter, they did not enter the step-wise regression until steps five and six, respectively, and even then their F values were not statistically significant. This is clearly due to the relationships between these two variables and the variables of education and of region of origin (i.e., once the four stronger variables, those used in the best model, were taken into consideration, the supplemental value of non-relative status and fluency were marginal).



A review of the regression analysis as a whole leads one to conclude that there may be other variables which are powerful predictors of earnings but which were not available in this model. This could, of course, include variables considered by the survey instrument and not included in the regression, but it seems more likely that they would be factors which were not measured (and which may not be measurable) such as aggression, diligence, intelligence, social skills, range of contacts, skin color, and physical appearance.

### III. Individual Occupational Progressions

The Literature. A number of writers on immigration matters have expressed concern about the underutilization of the experience, skills, and training of immigrants to the U.S.; this concern can stem from two orientations, a sense that the nation is not making appropriate use of the human capital available to it and a sense that individual aliens are experiencing discrimination in the market place. As Parlin points out, immigrants are members of a "hidden minority" who may lawfully be discriminated against by private employers, while similar discrimination against members of the "popular minorities" (Blacks and Chicanos) is contrary to law.\*

Among those dealing with the subject is Chiswick, who suggested the following hypotheses guiding occupational progression:

- "1. Immigrants experience a decline in occupational status when their last job in the country of origin is compared with their first job in the U.S.
- "2. The occupational status of immigrants increases after their first job in the U.S.
- "3. The U-shaped pattern of occupational change is weaker for immigrants from countries similar to the U.S. (e.g., Canada, Britain) than it is for immigrants from countries that differ more in language, occupational requirements, and labor market structure (e.g., non-English speaking countries).
- "4. The U-shaped pattern of occupational change is stronger for immigrants who are primarily refugees (e.g., Cubans) than for immigrants who are primarily economic migrants (e.g., other non-English speaking countries)."

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\*Bradley W. Parlin, Immigrant Professionals in the United States: Discrimination in the Scientific Labor Market (New York: Praeger, 1976), p. 58).

\*\*Barry R. Chiswick, "The Occupational Mobility of Immigrants to the United States: A Preliminary Longitudinal Analysis," paper presented at the Industrial Relations Research Association Winter Meeting, December 1977, New York City, pp. 3-4.

His findings from census data include the following:

"Thus, the high rate of occupational change among immigrants in the U.S. less than 5 years is disproportionately downward mobility. That is, compared to their occupation in the country of origin, their early occupation in the U.S. is of a lower status. Immigrants from Cuba and Mexico experienced greater occupational change and greater downward mobility than immigrants from other countries....

"Among immigrants who arrived in the U.S. between 1950 and 1964, 22 percent were in a different major occupational category in 1970 than in 1965. Compared to more recent immigrants, the occupational mobility was more likely to be upward, with the net upward mobility greater for those in the U.S. 6 to 10 years than for those here 10 to 20 years."\*

In our previous discussions of net occupational group movement of the respondents, we have shown employment patterns which support his first two hypotheses (see pp. 81-83 of this report), as well as less frequent incidence of the U-shaped patterns for those who are fluent in English (page 98), which would tend to support the third hypothesis. We did not obtain data on political refugees per se.\*\*

Other writers have focused on different aspects of post-arrival occupational adjustments; the Canadian study, which did not deal with pre-migration occupational distributions, showed an increase in the managerial, professional, and technical category from 30% of their study group after one year in the country to 44% after three years (our data showed a roughly comparable trend, from 20% in that category in the first job to 38% five years later).\*\*\* Focusing on the last job in the homeland-first

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\*Ibid., p. 10.

\*\*It should be borne in mind, however, that our data were not confined, as were Chiswick's, to white males; and that he described a four-category grouping of occupations, as opposed to our 11-unit grouping; further, his condensed categories masked occupational group movements which we would regard as upward, such as from household servant to operative and from farm laborer to operative (since these groups were placed in the same category). On this point, Chiswick, on May 1, 1978 wrote to the author "Chiswick's U-shaped pattern for occupational change involves two stages: a decline in occupational status when the comparison is between "last" occupation in country of origin and "first" occupation in the U.S. and a rise in occupational status when the comparison is between "first" occupation and "current" occupation in the U.S. There is no implication as to whether the "last" occupation is at a higher or lower status than the "current" occupation. North's concave pattern is far more stringent. It implies "last" and "current" occupation are at the same occupational level." But despite these methodological differences, which make the statistics non-comparable, the general thrust of his hypotheses is supported by our data.

\*\*\*Manpower and Immigration, Three Years in Canada, p. 38.

job in the U.S. comparison, Portes\* found for a group of Cuban exiles arriving in Florida in the winter of 1973-74, that only 31% of his sample maintained their occupational level (using a definition different from either Chiswick's or ours) while 60% reported a decline (apparently leaving 9% who increased their status); Parlin\*\* documents a case study (written from within the personnel department of one of America's industrial giants), showing how immigrant graduates of major U.S. universities are systematically discriminated against in the hiring process. While Parlin's study group was considerably different from ours, his inside-the-system description of anti-immigrant discrimination deals with an important and troublesome subject more effectively than we can.

The Individual Progressions: In order to analyze the occupational group changes of the respondents, we first had to identify those on whom we had data on two or more jobs as well as 1976 earnings information; these data were available on 209 respondents. Secondly, it was necessary to make some judgments as to what constituted upward, downward, and level occupational group movements, a movement being a single transition from one job to the next. Our essentially subjective decisions are displayed in Table 33, which covers movements among 11 occupational groups. (The twelfth group normally found in such an array, farmers and farm managers, was eliminated because none of our 209 respondents so identified themselves in any of the jobs described.) Regarding the movements, we decided, for example, that a transfer from the Professional, Technical, Kindred group to any other occupational group, save that of Managers, Proprietors, and Owners, was a downward movement, the latter being a level one. On the other hand, any movement out of household or farm work was a sign of upward mobility, unless the movement was the level one between these two, bottom-of-the-labor-market categories. Some movements, such as between Crafts and Sales, fit into no readily discernible pattern, and were simply labeled "other;" fortunately, there were not many of them.

The next task was to identify the paths which the immigrants followed between the last job in the old country and their job at the time of the 1977 interview; a path is a series of movements from job to job, usually four in number, each of which is characterized in Table 33. The six paths of interest are shown in Table 34.

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\*Alejandro Portes, et. al., "The New Wave: A Statistical Profile of Recent Cuban Exiles to the U.S.," Cuban Studies, 7:1, January 1977, pp. 1-32.

\*\*Parlin, Immigrant Professionals.

TABLE 33

Characterization of Occupational Group Movements\* Experienced  
by Respondents

FROM \ TO	1 PROFESSIONAL, TECHNICAL, KINDRED	2 MANAGERS, PROPRIETORS, OWNERS	3 SALES WORKERS	4 CLERICAL WORKERS	5 CRAFT WORKERS	6 OPERATIVES, EXCEPT TRANSPORT	7 TRANSPORT OPERATIVES	8 NONFARM LABORERS	9 FARM LABORERS & FOREMEN	10 SERVICE WORKERS EXCEPT PRIVATE HOUSEHOLD	11 PRIVATE HOUSEHOLD WORKERS
1. PROFESSIONAL, TECHNICAL, KINDRED	0	1	2	2	2	2	2	2	2	2	2
2. MANAGERS, PROPRIETORS, OWNERS	1	0	2	2	2	2	2	2	2	2	2
3. SALES WORKERS	4	4	0	2	6	2	2	2	2	2	2
4. CLERICAL WORKERS	4	4	4	0	4	6	6	2	2	2	2
5. CRAFT WORKERS	4	4	6	2	0	2	2	2	2	2	2
6. OPERATIVES, EXCEPT TRANSPORT	4	4	4	6	4	0	1	2	2	2	2
7. TRANSPORT OPERATIVES	4	4	4	6	4	1	0	2	2	2	2
8. NONFARM LABORERS	4	4	4	4	4	4	4	0	2	6	2
9. FARM LABORERS & FOREMEN	4	4	4	4	4	4	4	4	0	4	1
10. SERVICE WORKERS EXCEPT PRIVATE HOUSEHOLD	4	4	4	4	4	4	4	6	2	0	2
11. PRIVATE HOUSEHOLD WORKERS	4	4	4	4	4	4	4	4	1	4	0

\*A movement is a transition from one job to another; they are: 0=no change; 1=level; 2=down; 4=up; and 6=other

TABLE 34

Occupational Progression Paths From Last Job in Home Country to Current or Most Recent U.S. Job Experienced by Respondents

PATH	JOB 1	JOB 2	JOB 3	JOB 4	JOB 5	Respondents		Mean 1976 Earnings
						Number	Percent	
CONSTANT						62	29.7	\$17,723
DECLINE						50	23.9	10,113
INCLINE						36	17.2	11,593
CONCAVE						24	11.5	13,215
MIXED						12	5.7	8,890
NEW ENTRANTS						25	12.0	13,542
TOTAL						209	100.0%	\$13,322

Source: TransCentury 1977 Immigrant Survey.

The most common of the paths, which we call Constant, is that of occupational group stability, a series of job transitions which are labeled either "0" (no change) or "1" (level); next comes Decline, a series of job transitions which is summarized by a downward movement between the last job in the old country (job 1) and the most recent job in this country (job 5). The third most common pattern is the exact opposite of Decline, Incline, in which the job at the time of the interview is in a higher occupational group than the last job in the old country. Interestingly, only 11% of the respondents had the Concave pattern, which has some of the qualities of Chiswick's U-shaped pattern (see footnote on page 105); perhaps with the passage of time, more of these patterns will occur in this group of immigrants, but they can be recruited only from the Decline and Mixed paths. The remaining two paths shown are Mixed, in which the job transition between job 1 and job 5 is that of the previously described "other" movement (i.e., of an indeterminate nature) and New Entries, that is the path followed by those who had no stated occupation in the old country.\*

Characteristics of Those on the Six Paths: The characteristics of those following the various paths varied in predictable directions, as Table 35 shows. The Constant path, which was the most rewarding financially,\*\* accounted for disproportionately large numbers of Eastern Hemisphere immigrants, males and non-relatives. The Concave path, while producing a \$4,500 a year lower mean earnings figure than that for the Constants, also attracted high proportions of Eastern Hemisphere immigrants and males.

The Decline path, which produced the lowest earnings of the major patterns (excluding the small number of the Mixed path), included disproportionately large groups of women and Western Hemisphere immigrants and accounted for large proportions of the Operatives and the Clerical and Service workers. A closer examination of these fifty immigrants, whose occupational group movements suggest either underutilization of skills and/or discrimination, will be presented shortly.

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\*Two other paths were possible, one of which is Convex, in which, for example, the immigrant reports his last old country job was that of farmworker, his first or subsequent job in this country as a craftsman, but his last job that of a farmworker again; the interview instruments suggested that two individuals probably fell into this category, but for the sake of simplicity, they were merged into the Mixed category. The other possibility, Return, a path of rises and falls, in which, for example, a craftsman in the old country moves down to operative in his first U.S. job, to professional, and back to the original level, craftsman, in his last job, simply did not occur.

\*\*Respondents on the Constant path can be compared to those members of the SSA subsample who reported the same occupation in 1970 and 1972; the latter group, the "stayers" had higher incomes than other members of the subsample.

TABLE 35

Distribution of Selected Respondent Subgroups by the Six Occupational Paths Experienced  
(as numbers and percents)

RESPONDENT SUBGROUPS	CONSTANT		CONCAVE		INCLINE		DECLINE		MIXED		NEW ENTRANTS		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Eastern Hemisphere	35	56	11	46	14	38	14	28	0	-	8	32	82	39
Canada	9	15	4	17	4	11	3	6	3	25	4	16	27	13
Mexico	1	2	2	8	9	25	5	10	2	17	4	16	23	11
Other Western Hemisphere	16	26	7	29	8	22	24	48	7	59	9	36	71	34
Unknown	1	2	0	-	1	3	4	8	0	-	0	-	6	3
Male	44	71	17	71	22	62	30	59	8	67	13	52	134	64
Female	18	29	7	29	14	38	20	40	4	33	12	48	75	36
Relative	29	47	15	63	20	56	31	62	9	75	16	64	120	57
Non-Relative	33	53	9	38	16	44	19	38	3	25	8	32	88	42
Unknown	0	-	0	-	0	-	0	-	0	-	1	4	1	1
<u>Occupation Group-Current or Most Recent Job</u>														
Professional, Technical, Kindred Managers, Proprietors, Owners	33	53	10	42	5	14	0	-	0	-	8	32	56	27
Sales Workers	6	10	6	25	8	22	0	-	0	-	1	4	21	10
Craft & Kindred Workers	1	2	0	-	1	3	4	8	0	-	2	8	8	4
Clerical & Kindred Workers	9	15	5	21	7	19	4	8	0	-	2	8	27	13
Operatives, Except Transport	7	11	2	8	4	11	10	20	4	33	2	8	29	14
Transport Operatives	0	-	0	-	9	25	12	24	4	33	2	8	27	13
Nonfarm Laborers	2	3	0	-	0	-	2	4	1	8	0	-	5	3
Farm Laborers	0	-	0	-	0	-	5	10	2	17	1	4	8	4
Service Workers, exc. Household	1	2	0	-	0	-	0	-	0	-	0	-	1	1
Household Service Workers	2	3	0	-	2	6	12	24	1	8	7	28	24	11
Not in Labor Force*	0	-	0	-	0	-	1	2	0	-	0	-	1	1
Unknown	1	2	1	4	0	-	0	-	0	-	0	-	2	1
<b>TOTAL</b>	<b>62</b>	<b>100%</b>	<b>24</b>	<b>100%</b>	<b>36</b>	<b>100%</b>	<b>50</b>	<b>100%</b>	<b>12</b>	<b>100%</b>	<b>25</b>	<b>100%</b>	<b>209</b>	<b>100%</b>

\*In two instances, respondents for whom paths had been identified were no longer in the labor market at the time of the interview; the paths to which they were assigned were those they followed up to their withdrawal from the labor market.

Source: TransCentury 1977 Immigrant Survey.

The Incline path attracted a disproportionate number of Mexican immigrants. The New Entries in the labor market included a disproportionate number of women and professionals; their earnings in 1976 were second only to those on the Constant path.

Bearing in mind the higher-than-average incomes among the respondents, as compared to the Social Security earnings subsample, one is struck by the fact that there were more respondents on the Decline path (50) than on the Incline path (36); if in a volunteer study group (which, by definition, includes no immigrants who became discouraged and left the country) with above average earnings, those on the Decline path outnumber those on the Incline path, must not there be a higher, perhaps substantially higher, incidence of downward occupational mobility in the balance of the cohort?

The Respondents on the Decline Path: Table 36 consists of a series of one-line vignettes of the fifty respondents, who in their 1977 job were working in a lower occupational group than their last job prior to immigration. It is among these 50 individuals who have made a downward occupational adjustment, if not necessarily a financial one, that we can expect to find both the victims of discrimination and instances of underutilized experience.\*

Of the 50 on this path, 20 had held Professional positions prior to arriving in the U.S., a dozen had been Owners, Proprietors, or Managers, ten had been Craftsmen, and the remaining eight had been Sales and Clerical workers and Transportation Operatives. Only 10 were from developed nations (four of whom were from Communist nations), while 40 were from the Third World. Ethnically (making assumptions on the basis of nation of birth), it appears that 11 of the group are black, nine are Asians, 20 are Hispanics, and 10 are other white persons. White immigrants who were native speakers of English were particularly rare; there were evidentially only three of them, along with seven (presumably black) native English speakers from former British colonies in the Caribbean. Since the incidence of Hispanics, Blacks, and Asians among those on the Decline path is 80% (compared to approximately 64% of the 1970 cohort of immigrants as a whole) one can suspect that discrimination in the labor market may well be one of the causes for the downward mobility shown here.

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\*We are here concerned with the underutilization of previous labor market experience; we have previously discussed a related but separate issue, the underutilization of work-oriented training. While we could not secure from our respondents firm data on the extent of their training (i.e., some of them may not have completed it), the extent of underutilization of experience appears to be less widespread than the underutilization of training.



TABLE 36

Labor Market Vignettes of 50 Immigrant Respondents Who Experienced Declines in Occupational Group Status, by Last Job in Old Country (circa 1969), Current or Most Recent U.S. Job (1977), Sex, Nation of Birth, Region of Origin, and 1976 Earnings

LAST JOB OLD COUNTRY	CURRENT OR MOST RECENT U.S. JOB	SEX	NATION OF BIRTH	REGION OF ORIGIN*	1976 EARNINGS
<u>Professional &amp; Technical</u>					
Accountant.	Statistical Clerk	F	Honduras**	Can	\$ 8,750
Accountant	Truck Driver	M	Argentina	WH	19,000
Accountant	Sewer/Stitcher	F	Equador	WH	12,500
Accountant	Buyer's Assistant	F	Uruguay	WH	5,750
Chemical Engineer	Janitor	M	Philippines	EH	9,700
Electrical Engineer	Janitor	M	Mongolia**	WH	12,300
Pharmacist	Retail Sales Clerk	F	Germany	EH	5,000
Registered Nurse	Health Aide	F	El Salvador	WH	7,250
Clergyman	Bottling/Canning Oper.	M	Costa Rica	WH	12,864
Business/Commerce Teacher	Teacher Aide	M	Haiti	WH	7,900
Adult Ed. Teacher	Machine Operative	F	Mexico	Mex	5,000
Elementary Teacher	Hairdresser	F	Equador	WH	8,100
Elementary Teacher	Bookkeeper	F	Haiti	WH	6,500
Elementary Teacher	Nursing Aide	F	Philippines	EH	2,950
Secondary School Teacher	Inspector	F	Philippines	EH	13,600
Secondary School Teacher	Gardener	M	Philippines	EH	12,500
Secondary School Teacher	Billing Clerk	F	Philippines	EH	8,450
Tutor	Library Assistant	M	Poland	EH	8,173
Publicity Writer	Blue Collar Supervisor	F	India	EH	6,500
Trade Teacher	Misc. Mechanic	M	Uruguay	WH	13,450
Mean Earnings-----					9,309
<u>Managers, Proprietors, &amp; Owners</u>					
Store Owner	Bartender	M	Lebanon	EH	3,750
Store Owner	Metal Plater	M	Jamaica	WH	8,200
Store Owner	Sewer/Stitcher	F	Italy	EH	12,400
Store Owner	Nursing Aide/Orderly	F	Jamaica	WH	9,500
Store Owner	Mechanic/Repairer	M	Dominican Rep	WH	2,188
Store Owner	Health Aide	F	Jamaica	WH	6,500
Store Owner	Insurance Underwriter	M	Jamaica	WH	25,000
Store Owner	Carpenter's Helper	M	Mexico	Mex	7,000
Airport Manager	Automobile Salesman	M	India	EH	38,000
Purchasing Agent	Retail Sales Clerk	M	Canada	Can	6,738
School Administrator	Statistical Clerk	F	Philippines	EH	11,700
Manager/Administrator	Statistical Clerk	M	U. Kingdom	EH	6,731
Mean Earnings-----					11,476
<u>Sales Workers</u>					
Retail Sales Clerk	Freight Handler	M	Mexico	Mex	13,200
Retail Sales Clerk	Bookkeeper	F	Canada	Can	7,692
Retail Sales Clerk	Assembler	M	Uruguay	WH	7,500
Mean Earnings-----					9,464

TABLE 36 - continued

LAST JOB OLD COUNTRY	CURRENT OR MOST RECENT U.S. JOB	SEX	NATION OF BIRTH	REGION OF ORIGIN	1976 EARNINGS
<u>Clerical &amp; Kindred Workers</u>					
Cashier	Nursing Aide	F	Dominican Rep.	WH	10,000
Secretary	Nursing Aide	F	Trinidad	WH	7,100
Statistical Clerk	Nursing Aide	M	Haiti	WH	9,700
Mean Earnings	-----				8,933
<u>Craft &amp; Kindred Workers</u>					
Baker, Chef	Stock Clerk	M	Guatemala	WH	15,300
Carpenter	Welder, Flame Cutter	M	Mexico	Mex	12,100
Electrician	Machine Operative	M	Peru	WH	12,000
Electrician	Fork Lift Operative	M	Colombia	WH	12,525
Machinist	Lathe & Milling Machine Operative	M	Czech.	EH	26,500
Aircraft Mechanic	Welder, Flame Cutter	M	Colombia	WH	9,700
Railroad Mechanic	Drill-Press Operative	M	Sweden	EH	11,193
Plumber Apprentice	Shipping Clerk	M	Czech.	EH	12,000
Printing Press Operator	Machine Operative	M	Bahamas	WH	7,000
Shoe Repairer	Cook	M	Haiti	WH	7,140
Mean Earnings	-----				12,546
<u>Transport Equipment Operatives</u>					
Taxi Driver/Chauffer	Housekeeper	F	Trinidad	WH	6,700
Truck Driver	Construction Laborer	M	Mexico	Mex	6,500
Mean Earnings	-----				6,600

\*EH (Eastern Hemisphere); Mex (Mexico); Can (Canada); WH (other Western Hemisphere)

\*\*Multiple migrants.

This is not the whole story, however, at least for those in the Professional, Technical category; fully half of those who were forced out of professional ranks had been teachers before they came to this country, a profession which has been hard-hit by the reductions in elementary and secondary school enrollments. Further, of these 10, only three had 16 or more years of education, the norm for teachers in this country. In fact, of the ex-professional group as a whole, six had 12 or fewer years of education, an educational level which would hardly make them eligible for a professional position in the U.S.; eight others had 13 to 15 years of education, making them marginal candidates for such jobs; and six others had 16 years or more. Thus at least some of the downward mobility of these respondents related to the fact that one can acquire professional status in some nations with fewer years of education than would be required in the U.S.

On the other hand, there appear to be, among these vignettes, some examples of underutilized experience; the pharmacist with 17 years of education, working as a sales clerk; the electrical engineer from Mongolia (who is a citizen of Brazil) with his 14 years of formal training would, hopefully, be employed as something other than a janitor; similarly, the 25 years of education claimed by the first accountant on the list might be better utilized than in her current job as a statistical clerk.

Those who moved away from professional work were not only the largest group among the 50, they were also the least well paid (among the major subgroupings); the ex-professionals' mean earnings of \$9,309 ranked behind those of the ex-craftsmen, the ex-managers, proprietors and owners, and even below those reported by the former sales workers.

While the mean earnings of the 50 respondents on the Decline path was lower than that of the 209 respondents as a whole by about \$3,000 a year; five individuals on this path told us of earnings in excess of \$15,000 a year, including the airport manager turned auto salesman, and the accountant turned truck driver.

In summary, one can speculate that some of the downward occupational adjustment of the 50 respondents could be accounted for by understandable reactions to the labor market (higher educational standards required here and diminishing job opportunities for teachers) and that some of these downward movements were caused by discrimination; we cannot determine the relative significance of these two forces. Parlin's case history of anti-immigrant discrimination in instances in which the immigrants had been trained in U.S. educational institutions and had better grades on average than their native-born competitors, speaks more clearly on this issue than our findings do.

Given the fact that occupational groups are broadly defined and that there are many levels of skill (and income) within each of the groups, we decided to examine the specific jobs held by the 62 respondents on the Constant path. Generally, we found much more stability than mobility, and found that much of the mobility was of an apparently lateral nature (e.g., the immigrant who had worked as a physicist in the old country was teaching physics in a U.S. college in his most recent job). We did find, among the 62 individuals, three instances of Decline and three of Incline; the former were of some interest. There was a classic case of an M.D., a woman from the Eastern Hemisphere, who had not been able to secure a U.S. medical license and was working as a respiratory technician (a lower level job than that of physician, but still within the occupational group). Then there were two engineers, one working as a building superintendent and the other as a technician; their specific areas of expertise were useless to them in this country; one had been a nuclear engineer in Russia (and may have encountered security clearance problems with the U.S. nuclear industry), and the other had been working in the Philippines rubber industry. They apparently had not been able to make use of either their specific work experience or their more general training as engineers.

In summary, the study group consisted of 254 voluntary respondents who had higher earnings and were more likely to have homeland experience in the professions than members of the 1970 cohort of immigrants as a group. Although most of them had relatives in this nation prior to their arrival (and presumably most of them secured their immigrant visas through these relatives), the majority of the study group migrated for economic reasons, not in order to be reunited with these relatives.

The respondents had substantial work experience in their homelands; most of them quickly found jobs in the U.S., but many of them experienced initial downward occupation group mobility in the process. The U.S. labor market provided them with higher earnings and shorter hours than they had experienced abroad. The study group expressed more contentment with their jobs in this nation than in their housing and overall quality of life; as a group, they clearly felt that they were better off in the U.S. than they had been overseas.

The study group was divided along a number of variables, and 1976 earnings data were secured for the various subgroups. Those with more education, with more fluency in English, and with overseas professional experience, predictably, earned more than those with less education, less fluency, and without professional experience. Further, those who migrated for economic reasons earned more than those who were motivated by familial reasons.

There was substantial net occupational group movement between the last job in the old country and the first job in this country, much of it downward; women (rather than men) and those with 12 years or less education (as opposed to those with more than 12 years) suffered a disproportionate share of the net movement out of professional work.

Five occupation group movement paths were identified for the 184 respondents who described their jobs in both the homeland and in this country; 62 of them remained in a constant path; 50 experienced declines in job status, and 36, inclines; 24 were on a Concave path of initial downward movement followed by recovery, and 12 others had paths we termed mixed. We found it significant that there were more declines than inclines in this group of volunteer respondents, of above-average income (for members of this cohort) who had been here for seven years. We speculate that the incidence of declining occupation group status must be greater in the balance of the 1970 cohort of immigrants.

## CHAPTER SIX

## SUMMARY AND RECOMMENDATIONS

This chapter consists of a summary of the material presented previously, a discussion of some of the policy implications growing out of the findings, and several specific recommendations on the nation's immigration policies.

The various populations examined in this study, in descending order of size, have been as follows:

- the foreign born enumerated by the 1970 Census;
- the various cohorts of immigrants, particularly those admitted since the 1965 Amendments to the Immigration Act became fully effective;
- the 1970 fiscal year cohort of immigrants, from which our sample, our subsample, and our study group were chosen;
- the 5,000 members of the 1970 cohort in the sample (on which "Immigrants and the American Labor Market" was based);
- the 1,393 members of the subsample of the 1970 cohort, for whom we secured Social Security Administration data, primarily on their taxable earnings; and finally
- the 254 members of the 1970 cohort who were interviewed in our study group (the respondents).

Legal and Demographic Background. Since most respondents in our study group (and a similar Canadian one) indicated that they had migrated for economic reasons, and since most immigrants become workers in the U.S., one might expect that manpower considerations would play a significant role in immigration policy. One might also, particularly in view of the stream of civil rights legislation in the last two decades, expect that the nation would have a policy of non-discrimination against immigrants in the labor market.

Both of these expectations would be mistaken. Not only are most immigrants admitted without reference to their labor market impact, being accepted into the nation for familial rather than societal reasons, but the Supreme Court has ruled that only sub-federal units of government may not discriminate on the basis of alien status, leaving the federal government and the private sector free to do so.

In terms of demographics, the nation, in the last decade, has been admitting permanent resident aliens at the rate of about 400,000 a year, a larger number of admissions than in recent decades, but a figure both proportionally and absolutely lower than at the turn of the century. Despite the recent increases in the numbers of arrivals (which is recorded only on a gross, not net, basis), the number of foreign-born persons and their percentage of the total population, has been shrinking in the last several decennial censuses. (These statements relate to legal immigration; illegal immigration being beyond, at the moment, the ken of the nation's statisticians.)

Post-1965 Immigrants. The characteristics of the immigrants admitted after the passage of the 1965 Amendments to the Immigration and Nationality Act, are quite different from those of the turn of the century immigrants and, similarly, apparently different from those of the current generation of illegal immigrants. In recent years, the cohorts of immigrants have displayed a demographic profile very much like that of the population as a whole; while the 1900 immigrants and the apprehended illegals of today tended to be young males, unaccompanied by women, and with little education, the legal immigrants are about evenly mixed by sex, are about as likely to be married as Americans generally, are just slightly younger than the population as a whole, and are slightly more likely to report their occupations as in the professions than the members of the U.S. labor force.

The 1970 cohort of immigrants is a good example of those immigrants admitted during a now ending transition period, after the nation shook off forty years of ethnocentric, country-of-origin screening policies and before we had to face up to the twin challenges of the refugees we created in Vietnam and the illegal immigrants among us.

Foreign-Born Workers. The 1970 Census provided substantial data on foreign-born Americans (most of whom presumably were immigrants); this is a group of persons of above average age, most of whom came to the nation many years earlier, and under provisions of earlier legislation, thus one must not assume that the profile of the foreign-born which emerged from the 1970 Census will be similar to that emerging from the 1980 and 1990 censuses. The labor force participation rates, unemployment rates of this group, and years of education, when age is held constant, are very much like those of the United States population as a whole. The immigrants, however, were less likely to work in the public sector (except for the Irish) than U.S. workers generally, and a larger proportion of those 25 to 44 years of age report professional and technical jobs than their native-born peers. While 1969 incomes for the foreign born were slightly lower than those of the native born, there were also signs of a bimodal income distribution, with the foreign born reporting higher proportions of low incomes as well as of high ones than the balance of the population.

...

There is no generally accepted method of calculating the net extent to which immigrants contribute to the growth of the labor force, but an estimate of 13% annually appears appropriate. (This does not take into account the contribution from illegal immigration.)

SSA Earnings of the 1970 Subsample. The data on the taxable wages earned by the 1970 subsample of immigrants, supplied by the Social Security Administration, indicated that the immigrants were somewhat more tightly tied to the U.S. labor market than U.S. workers generally, since a larger percentage of the immigrants reported taxable earnings in each of the four quarters of the year than the U.S. average. On the other hand, over time, particularly in 1974 and 1975, there was a growing number of the 1970 immigrants who were reported as having no earnings. We speculate, based on data on various subsets within this group of workers, that many of the younger women have withdrawn from the labor market, presumably to have children, and that some of the men and women have emigrated; deaths and conversion to beneficiary status are minimal factors.

Comparing the earnings of the 1970 cohort to those of U.S. workers generally indicates that soon after arrival the female immigrants earned more than U.S. female workers generally (perhaps because of longer hours of work), but that the men among the immigrants had not yet reached parity with U.S. male workers--although they were on their way. (Another researcher estimates that it takes white male immigrants 13 years to reach parity, and by 1975, the members of our cohort had been here for only five years.)

The income variations within the subsample were predictable; men earned more than women; Eastern Hemisphere and Canadian immigrants more than Mexican ones; those admitted with labor certifications more than those admitted as relatives. Sex, occupation in 1970, and immigration classification were the most powerful predictors of earnings (in the last instance, those with labor certifications earned more than those without); nation of origin and state of intended residence were less significant.

Experiences of the Respondents in the Labor Market. The experience of these 254 immigrants must be examined with the understanding that they had responded, in writing, to an invitation from INS to be included in this survey, that they had higher earnings than the SSA subsample previously described, and were more likely to be professionals than the 1970 cohort as a whole. We also suspect from this, and from the nation-of-origin distribution, that the respondents had more years of schooling and were more likely to speak English well than the cohort generally.

When asked why they came to the U.S., most responded that they did so for economic reasons; even among the subset of respondents who said that they had relatives in the U.S. prior to immigration a majority said that they came to the U.S. for economic, not familial, reasons. Close to 90% of the respondents said that



they had worked prior to their arrival here and most of them quickly secured jobs in this country, and were rewarded (by 1977) by having a level of earnings, in constant 1969 dollars, more than three times the level they experienced in their last job in the home country. Not only was their adjusted income up, but the hours worked per week were down, as most changed from a six-day to a five-day work week. On the other hand, there was appreciable non-utilization of both professional experience and training, as the respondents moved into their first U.S. job. As the seven years in the U.S. labor market passed, there was a net increase in jobs in the professions, but not back to the level reported in the homeland. On average, the group reported their 1976 incomes at the \$13,400 level, with 96% of the reported income being return for labor, with the rest being return for capital, income transfers, and miscellaneous.

When we looked at the varying experiences of the subsets within the study group, many of the findings paralleled those which had already been suggested by the Social Security data; men earned more than women, Eastern Hemisphere immigrants, more than those from Mexico; and those who had been professionals before arrival, more than those who had been in other lines of work. Also predictably those with more than 12 years of education earned more than those with less; those fluent in English earned much more than those who were not fluent; and the non-relatives (as we have defined them), more than relatives.

The economic differentials reported by the sub-groups varied sharply, with Canadians reporting very little real increase in income between 1969 and 1977, while immigrants from Mexico and from elsewhere in the Western Hemisphere told of pronounced increases in real earnings. Immigrants from the latter areas, understandably, scored higher on the contentment indices than those from Canada.

When the occupation group change patterns of the 254 respondents were assigned to several paths, we found that the largest group (62), which was also the best paid group, was on the Constant path; the next largest (50) were those who reported (as we defined it) a Decline in occupation group; next were those (39) on the Incline Path, and there were 26 on the Concave path. Given the volunteer and above-average-income characteristics of the study group, we found it interesting that there were more respondents on the Decline path than on the Incline one, and suggest that this ratio must be even more pronounced in the cohort as a whole. On the other hand, case-by-case examination of those on the Decline path indicated, among the one-time professionals, that many of those on the path had less than a high school education, and that a majority had less than 16 years of schooling.

What does all this suggest? We believe, drawing more from the Social Security, Census, and INS data than from the study group responses, and drawing from our previous work in the field, that three conclusions are indicated:

- Immigrants appear, after time, to compete successfully in the U.S. labor market with the native-born. A clear distinction can be made between the labor market impacts of legal immigrants and illegal ones; the former, presumably at least in part because of their legal status, appear not to depress wages in the manner which illegal ones do.
- In some instances, however, society appears to be losing the benefit of experience and/or training of immigrants, and they, in turn, are losing an opportunity to work at their full potential; this is occurring because of an undetermined mix of discrimination on one hand, and inefficient operations of the labor market, on the other.
- The nation's policies on the admission of immigrants largely operate without reference to the needs of the labor market, and sometimes when those needs are taken into consideration, the results are not those that had been anticipated.

The last point needs amplification. Recently the Congress decided to limit the extent to which labor certifications are issued to foreign medical graduates;\* similarly, in recent years, the Labor Department has been steadily decreasing the number of labor certifications it issues. Neither of these decisions, of course, have any impact on the number of arriving immigrants, since the M.D.s and other would-be labor certification beneficiaries are replaced by relatives who are competing for visas within the hemispheric limits; and these limits are always reached. And since the relatives waiting for these visas are considerably less well-educated on average than the labor certification beneficiaries, particularly the M.D.s (we would speculate that their median years of education would be at about the 10th-grade level), and considerably less well-paid, the decision to deny M.D.s and other skilled persons labor certifications decreases both the median level of education and the median earnings of cohorts of arriving immigrants.\*\*

Given another system, such as Canada's, the denial of certifications for M.D.s would reduce the total number of arriving immigrants and would have no indirect consequences.

Further, whether or not an immigrant visa is issued to a labor certification beneficiary, or to a relative, it should be remembered that securing an immigrant visa from the Government--like securing a permit to operate a television station--gives the recipient a major economic opportunity. In short, an immigrant visa is a Government-created economic good. This perception of the visa, however, is all but unknown. (Clearly, non-economic considerations must be borne in mind in the shaping of immigration policy.)

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\*Health Professions Educational Assistance Act of 1976, Public Law 94-484.

\*\*Any decision to increase immigration from Mexico will, similarly, tend to lower the mean educational level and anticipated earnings of future immigrant cohorts.

These three conclusions lead us directly to three labor market recommendations, and somewhat indirectly (along with some other policy considerations, such as our obligations to our defeated allies overseas, like the Indochinese) to four recommendations about immigration policy more broadly.

#### Labor Market Recommendations

- (1) Corrective legislation should be introduced, passed, and signed into law essentially reversing the Supreme Court decisions condoning discrimination against permanent resident aliens by the Federal Government and by private employers.\*

While there may be some small units within the Federal Government where one can argue that the employment of some aliens might not be appropriate, for national security reasons, and while any government may want to encourage its non-citizen employees to become citizens, the current blanket exclusion of permanent resident aliens from federal employment is not in keeping with either our traditions, or what hopefully will be our efforts to ban discrimination against aliens by private employers.

- (2) All arriving immigrants who plan to work in the U.S. should be offered counseling on the U.S. labor market by counselors working for, or contracted by, the U.S. Employment Service. Perhaps in some areas this work could be performed by immigrant-serving agencies.

In this way, the Government would seek to help immigrants avoid the non-utilization of experience and training which occurred frequently among our respondents, and must occur even more frequently among immigrants generally. Upon arrival at the port of entry, or upon securing adjustment to immigrant status, the immigrant would be encouraged by INS to call the responsible agency. A brochure--hopefully written in several languages--outlining the nature of the services offered by or through the Employment Service would be given the immigrant. In the counseling the immigrant would be told about the employment-related rites of the nation, the various techniques used to secure work, the laws governing the labor market, and the services of the Employment Service. Specific information would be offered on training available and on the various credentialing processes. Such a program might be attempted on a demonstration basis before being instituted on a wider scale.

- (3) In order to fully utilize the human capital brought to this country by immigrants, more extensive efforts should be made to offer bridge-the-gap training not necessarily designed to train the immigrant from scratch in a vocation, but to make the best use of his existing training and experience.

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\*See Hampton v. Mow Sun Wong, 426 U.S. 88 (1976); and Espinoza v. Farah Manufacturing Co. 414 U.S. 86 (1973).

Some efforts along these lines have been made, particularly in the programs dealing with refugees. (There was, for example, a special program created for refugee Cuban MDs, to help train them in English, and assist them through the credentialing process.)

#### Immigration Policy Recommendations

Regarding immigration policy, per se, it is apparent to us that no alterations in the Immigration Law themselves can be as significant as far as the labor market is concerned as the more active enforcement of that law. The additional recommendations which follow closely parallel those made in our report to the National Commission for Manpower Policy.

- (1) We recommend that the Congress give the Executive the discretion each year to set the immigration totals for the coming year, within a (admittedly arbitrary) range of 300,000 to 500,000 a year, with an escape clause for catastrophic refugee situations; although the Executive would announce the target figure early in the year, it would be free to increase it in the course of the year, but not to decrease it, as this would adversely affect persons who made plans on the basis of the earlier announcement.

The annual total would be based on two, totally separate calculations; the first would be the absorptive capacity of the nation, based primarily on the unemployment rate, the lower the rate, the larger the ceiling. The other consideration would be the nation's sense of responsibility for refugees and perhaps other overseas political consideration.

- (2) Within the target figure, proposed above, there would be three preference groups:
  - First: immediate relatives of citizens (now admitted outside the numerical ceilings);
  - Second: needed workers and refugees; and
  - Third: other relatives

All immediate relatives who qualified, as now, would be admitted.

The Executive would determine each year the total admissions limit and what allocations would be made to the second preference workers and refugees (the immigrants selected for societal reasons) and to the third preference. The third preference familial immigrants would include those now in the first, second, and fourth preferences; the fifth preference (which facilitates immigration of siblings of U.S. citizens and their families) would be eliminated.

Dropping the fifth preference would permit the admission of some 40-50,000 societally-screened immigrants annually, without increasing overall immigration. Further increases in societal admissions and thus increases in total admissions could be considered once effective progress is made towards decreasing illegal immigration.

- (3) The labor certification program, operating within the framework described above, would be empowered to adjust the total number of arriving workers up or down, as it does not now. Further, it would be administered in such a way that the numbers of workers admitted qua workers would increase, while the number of family members, admitted as such, would decrease.

The labor certification program would be broadened to include the following elements:

- issuance of visas for would-be immigrants with skills in demand-- that demand calculated more liberally than at present--but there would be no provision for certifications for specific employers who want specific workers; the latter is a made-to-order reward system for illegal immigrants and their employers;
  - a public service apprenticeship program, in which aliens with needed skills accept public service jobs (presumably under rugged conditions, such as the only M.D. in a small desert town or an island in the Chesapeake Bay) in return for a two-year nonimmigrant visa which is converted to an immigrant visa at the end of the tour of duty;
  - a self-employed craftsmen program, to provide highly skilled workers not wanting to work for others (such as violin repairmen, jewelers, and the like);
  - perhaps a limited world-wide skills lottery program, which would offer young persons with a skill and/or an education a chance to come to the U.S., despite the fact that they did not fit into any other categories. Such a program would have to be carefully designed so that it would be useful to this nation internally, attractive externally, trouble-free, and self-supporting; and
  - the revival of the negative certification system, so that all would-be immigrants (save refugees and those in the new first preference) could be barred from entry if they sought to come to areas of the nation or to occupations where they would depress a labor market. (This review would be handled on a class-basis, not on a case-by-case basis.)
- (4) A few years from now our demographic profile will start to look like a fat beet, with relatively few young people and many middle aged and older ones. When that day comes, we may well want to redesign our immigration screening process around the need for young workers to help produce a more balanced work force.

Such a course of action would be inappropriate at the present, given the high rate of teenage unemployment.

A-1.

## APPENDIX A

## METHODOLOGY

The first three sections of this appendix describe the methods used to draw the basic sample of 5,000 members of the Fiscal 1970 cohort of immigrants, to draw the subsample of 1,393 members of that cohort for whom we secured social security earnings data, and to secure the responses from the 254 members of the cohort who made up the study group; the terms sample, subsample, and study group having been defined earlier. The fourth section describes how we calculate the division of recent immigrant cohorts into the two classes, those selected for societal reasons and those selected for familial reasons; how we divided the immigrant cohort among the seven classes of immigrants, Eastern Hemisphere Worker, Eastern Hemisphere Workers' Relative, Eastern Hemisphere Relative, Eastern Hemisphere Relatives' Relative, Western Hemisphere Worker, Western Hemisphere Relative, and U.S. Citizen Relative; and how we estimated the number of arriving immigrants with labor certifications.

The Sample

The sample of 5,000, which supplied the statistical data for Immigrants and the American Labor Market, as well as the base for both the subsample and the study group, were selected from those members of the FY 1970 cohort who filed Alien Address Reports (Form I-53) in January of 1972. All had been admitted to the U.S. as immigrants (or adjusted to that status) between July 1, 1969 and June 30, 1970. All were of working age at the time of entry (i.e., 18-59). All, in January 1972, were living in one of nine states of high immigrant concentration where the sample was drawn: New York, California, New Jersey, Illinois, Texas, Massachusetts, Florida, Michigan, and Pennsylvania. (Of the fiscal 1970 immigrant cohort, slightly over 75% had indicated intentions to live in these states.)

In order to gather the necessary data on these immigrants, the Immigration and Naturalization Service asked its district offices for matched alien address reports and visa applications on an oversample of 7,181 individuals in the cohort. The requests were distributed in proportion to the distribution of the 1970 cohort of immigrants in these states. In all, data were returned on 6,354 members of the cohort. To derive the final sample, the state figures were deflated so that the nine "theoretical quotas" together would include the 5,000 immigrants originally proposed. As is illustrated in Table A-1, the sample used in the statistical analysis closely matches these quotas.

TABLE A-1

Derivation of the Sample of 5,000 Members of the  
FY 1970 Cohort of Immigrants

<u>State</u>	<u>Requested by INS</u>	<u>Received</u>	<u>Theoretical Quota</u>	<u>Final Sample</u>
New York	2,643	2,073	1,716	1,718
California	1,867	1,571	1,300	1,302
New Jersey	596	590	415	415
Illinois	524	527	365	363
Texas	459	469	319	318
Massachusetts	381	349	265	266
Florida	352	358	245	245
Michigan	273	233	190	190
Pennsylvania	266	183	185	182
<b>TOTAL</b>	<b>7,181</b>	<b>6,354</b>	<b>5,000</b>	<b>4,999</b>

A-3

Alien Address cards and visa application forms were, at that time, filed separately in the district offices; this combination of data had not been used previously (or to our knowledge subsequently) as a research tool. Data from the Alien Address Report, from the Immigrant Visa (Form FS-511), the Application for Immigrant Visa (Form FS-510), and the Memorandum of Creation of Record of Lawful Permanent Residence (I-181) were used in the preparation of that earlier report. Since there was a lack of clarity in the instructions, the documents filed by refugees which are comparable to the FS-511, the I-485 and I-485A, were not specified, and as a result, the sample included fewer refugees than would have been expected.

#### The Subsample

In 1976 an exchange of data agreement was made between the Social Security Administration on one hand, and the New TransCentury Foundation's Center for Labor and Migration Studies, on the other; the Center prepared a report on the impact of illegal immigrants on the Social Security system,\* and SSA agreed to provide group data on the 1970 through 1975 taxable earnings of selected members of the 1970 cohort of immigrants.

We then drew a random sub-sample from those immigrants within the basic sample of 5,000 whose Alien Registration Reports carried a legible social security number. There were 1,496 individuals on the list submitted to the Social Security Administration; incomplete data supplied by the researchers eliminated seven of them, and 96 others were eliminated by SSA as "not in file," i.e., incorrect social security numbers, social security numbers for which accounts were out of balance (and therefore not accessible or usable at that time for statistical purposes), or possible read errors (i.e., electronic flaws) in the input or output of the records. This left a population of 1,393. Early in our work with SSA, we asked that a check be run on the entire file of 1,496, as to deaths (nine were noted) and conversion to beneficiary status (two were recorded). It is not known to what extent these 11 individuals were represented within the final universe of 1,393, as opposed to the initial one of 1,496. In any case, the incidence of death and conversion to beneficiary status was minimal.

Subsequently, data on incidence or non-incidence of social security taxable earnings and the amount of those earnings was obtained for the 1,393 members of the subsample; we provided SSA with information (which it would not have otherwise) on the characteristics of the immigrants. SSA provided us with group data for a group of cross-tabulations which we specified; this was a one-instance access to the data, and we did not have an opportunity to manipulate the data further. We would like to stress at this point that we at no time had any access to any SSA information about specific individuals; further, we assume full responsibility for the analysis and interpretation of the data.

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\*"Interactions Between Illegal Alien Respondents and the Social Security Tax Collection System," 1976, prepared for the Office of the Assistant Commissioner, Social Security Administration.



### The Study Group

In the summer of 1974, we asked the Immigration Service to pull from its (then decentralized) alien address report files copies of the 1974 alien address reports for 2,000 specific members of the cohort of 1970; these names had been generated, on a random basis, from within the basic sample of 5,000. (This work and all other work requested of INS was done with the knowledge, consent, and financial support of the U.S. Department of Labor.)

In the fall of 1975, 629 of the requested alien address forms were supplied to the researchers; in some instances, a major fraction of the request was satisfied, thus we received 49 of the 71 names we wanted from the Detroit district office. In other instances, we received no names at all. The resulting subsample was not only less than a third as large as we desired, but distributed in a biased way as well. In some instances the immigrants had left the nation or had died; some had moved to states other than the ones where they had lived previously. Others failed to file the form in 1974, and still others probably filed reports, but the forms themselves could not be located. Clearly another approach was needed.

In the meantime, two events occurred; the Privacy Act was passed, and INS centralized its filing of the alien address reports.

Finding that our previous efforts had failed, we then sought, from the then-leadership of INS, copies of the 1976 Alien Address Reports for 2,000 or so names previously submitted. After strenuous negotiations, and extensive (and expensive) involvement of attorneys on all sides, INS decided, as a matter of policy, not to provide us with the 1976 Alien Address reports; the agency could have handled the Privacy Act differently, but chose not to do so.

The INS counteroffer, which we had no choice but to accept, was to write to the list of members of the cohort of 1970, now shrunk to 1,806, and tell them about the study, and ask them to write back if they were willing to be interviewed. This was done late in 1976, and the letter sent to the immigrants can be seen in Figure A.

Of the 1,806 names provided to INS, it was able to locate usable addresses on 1,012. On April 21, 1977, INS reported to us that they had returns from 623 members of the cohort; 278 consenting, 235 not consenting, and 111 letters returned as undeliverable. (Subsequently, the names and addresses of 23 more consenting immigrants were provided to us, for a total of 301. It was from this universe of 301 persons that the TransCentury Corporation interviewers secured the interviews of 254 individuals.)

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FIGURE A

UNITED STATES DEPARTMENT OF JUSTICE  
IMMIGRATION AND NATURALIZATION SERVICE  
WASHINGTON, D.C. 20536

PLEASE ADDRESS REPLY TO

DOL Survey

AND REFER TO THIS FILE NO.  
CO 105.8-C

February 28, 1977

Dear

Immigrants play an important role in the U.S. work force. Several years ago, the Department of Labor published a report on this subject, based largely on the experience of immigrants who arrived (or adjusted status) between July 1, 1969 and June 30, 1970. That report was based on statistical data from government files and can be secured from Mrs. Ellen Sehgal, Office of Research and Development, U.S. Department of Labor, Room 9028, 601 D Street, N. W., Washington, D. C. 20213.

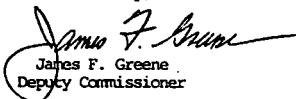
In order to supplement that earlier study, the researchers are now planning to interview a sample of immigrants who arrived in the U.S. at that time. The researchers of the TransCentury Corporation want to ask questions about immigrants' experiences in their jobs, information which will later help other immigrants, and which cannot be secured in any other way.

Your name has been randomly selected for such an interview. All such interviews are voluntary; all information will be reported without reference to any individual; no names will be written down on the questionnaire that the researchers will use and, the person interviewed can refuse to answer any question or end the interview at any time.

The "Privacy Act of 1974" (5 U.S.C. 552a) requires that we obtain your written consent before disclosing your name and address to the researchers. If you would be willing to be interviewed, which would be very helpful, please indicate by checking the first box; if not, check the second box. In either case, please sign your name, date the form, and mail it back to us in the enclosed self-addressed envelope. No postage is needed.

Thank you.

Sincerely,



James F. Greene  
Deputy Commissioner

A 18 855 505

 I consent to the requested interview. I do not consent to the requested interview.\_\_\_\_\_  
(your signature)\_\_\_\_\_  
(date)

Because of the INS decision not to permit us access to up-to-date addresses (of persons whose names we already knew) it was not possible to secure a random sample of the cohort of 1970; as we have indicated in the body of the report, the study group appears to be more affluent than the cohort, generally, and has a disproportionate number of Canadians and Europeans in it, and a disproportionate representation of professional and technical workers.

While we were disappointed with the INS posture on this issue, it did give us a chance to read some of the reactions of immigrants to the Government's requests, including these excerpts:

- "...As you know I live in Philadelphia and I have to open store six days a week. If you going to hold the interview near me, I would. If you are going to hold the interview at Washington, D.C., I can't."
- "(I consent) however, I'm leaving for United Arab Emirates on or about March 15, 1977 for an approximately two-year period...."
- "I am sorry that I myself cannot cooperate in these interviews and research. The reason is my poor English. But my daughter, N.... L...., age 24, of same address would be more than willing and happy to partake in your program. She entered the USA on the same date (Nov. 4, 1969). I hope you will contact her and allow for these little change. It will make me very proud, too."

While several of the respondents thought that they were being asked to travel to an office for the interview, the interview was conducted at the respondent's home or some other place of his choice. The respondents, as is normal in survey research, had the option of not answering specific questions or discontinuing the interview. Their names and other identification were separated from their responses to the questions after the interviews had been validated.

## FAMILIAL-SOCIETAL ESTIMATES

The following is a line-by-line description of the data sources, estimation techniques, and a definition of terms used on page 6, Appendix B, "Classes of Immigrants--by Familial and Societal Screening."

line

1. FAMILIAL SCREENING: includes actual (Eastern Hemisphere [EH]) and partially estimated (Western Hemisphere [WH]) admission figures of immigrants whose immigration equity was based on a relationship to a U.S. citizen or a legal permanent resident alien.
2. U.S. Citizen Relatives: immigrants admitted by virtue of family relationship to a U.S. citizen.
- 3(a) Admitted outside numerical limits of Eastern Hemisphere: these data were derived from INS Annual Report, Table 6A (for the years cited) and include the following columns: parents of U.S. citizens; wives of U.S. citizens; husbands of U.S. citizens; children of U.S. citizens; spouses of U.S. citizens; and children of spouses of U.S. citizens, for the following continents or areas of last permanent residence: Europe, Asia, Africa, and Oceania.
- 3(b) Admitted outside numerical limits of Western Hemisphere: these data were derived from the same columns listed in 3(a), above, but include these continents of last permanent residence: North America and South America.
- 4(a) Admitted within numerical limits of Eastern Hemisphere: these data were derived from Table 4, for 1st, 4th, and 5th preference categories.
- 4(b) Admitted within numerical limits of Western Hemisphere: For estimation purposes, total natives of the Western Hemisphere (from Table 4) was divided into two categories:
- 7(b) Mexican immigrants and non-Mexican immigrants, by subtraction of the Mexican immigrants (from Table 6) from the WH total. A workers-and-their-families estimate ratio (described below under item 9) was applied and the product subtracted from the two WH figures. The remainder was WH aliens admitted as relatives. Unpublished Visa Office estimates indicate that among the non-Mexican WH immigrants admitted as relatives, 20% are USC and 80% are LPR relatives, and that among the Mexican immigrants admitted as relatives, the rates are 40% and 60%, respectively. These rates were applied to the two categories to get the estimated number of USC and LPR relatives admitted within the numerical limits of the Western Hemisphere.

line

5. Legal Permanent Resident Relatives: immigrants admitted by virtue of family relationship to a legal permanent resident alien.
6. Admitted outside numerical limits (both hemispheres): data are from Table 4 for the category, children born abroad to resident aliens or subsequent to issuance of visa.
- 7(a) Admitted within numerical limits of Eastern Hemisphere: includes, from Table 4, immigrants admitted in 2nd preference status.
- 7(b) Admitted within numerical limits of Western Hemisphere: estimation procedure the same as described under 4(b), above.
8. SOCIETAL SCREENING: includes immigrants admitted as needed workers, their dependents (estimated), refugees, and certain other classes of immigrants (described below).
- 9(a) Needed workers and their families admitted from the Eastern Hemisphere: from Table 4, includes 3rd, 6th, and nonpreference immigrants, their spouses and children.
- 9(b) Needed workers and their families admitted from Western Hemisphere: Certified WH worker data were derived from unpublished Visa Office data (for FY 1971-1974) and unpublished INS data (for FY 1975-1976, from computer printout IMSD420). A difference exists between the two data sources, in that the Visa Office formerly recorded issuances of visas in which a labor certification was attached; INS now handles that function and records admissions of immigrants with a labor certification. For the purpose of this Exhibit, it is assumed that a visa issued to a labor beneficiary equals an admission. In order to convert the certified worker admissions data to admissions estimates for those workers and their families, a worker-dependent ratio was secured for WH workers in the 3rd and 6th preference categories from Table 6 data. This showed that for the fiscal years of concern, 92.4 dependents were admitted for every 100 3rd and 6th preference prime beneficiary (worker). The WH worker data were then adjusted accordingly to produce workers-plus-dependents estimates. It is likely that WH labor certification beneficiaries have larger families than those from the EH, and thus the estimate on this line is probably an underestimate.
- 10(a) Refugees from Eastern Hemisphere: figures derived from INS Annual Report, Table 4, classes as follows: 7th preference; Hungarian parolees; and Refugees-escapees.

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line

- 10 (b) Refugees from Western Hemisphere: from Table 4, from Immigrants, Act of November 2, 1966 (Cuban refugees)..
- 11 Other Classes: Includes foreign government officials and the special immigrant classes of ministers of religion, and employees of U.S. government abroad, from Table 4.
- 12 MISCELLANEOUS: includes all other classes of aliens not covered elsewhere in this table, i.e., all remaining alien adjustment and immigration act categories.

The following is a description of the data sources and estimation techniques used on page 5, Appendix B, "Classes of Immigrants--by seven categories." All figures used in the preparation of this Exhibit were taken from INS Annual Report, Table 4, for the years cited, as follows:

Eastern Hemisphere Worker: 3rd and 6th prime beneficiaries, plus nonpreference immigrants minus an estimate of nonpreference relatives (based on the ratio of 3rd and 6th preference secondaries to primes);

Eastern Hemisphere Workers' Relative: 3rd and 6th preference secondaries plus an estimate of nonpreference relatives, as above.

Eastern Hemisphere Relative and Eastern Hemisphere Relatives' Relative: 1st, 2nd, 4th, and 5th preference immigrant admission data did not differentiate between prime and secondary beneficiaries, so the proportion of secondaries to primes visa issuance was worked out from Visa Office statistics (Annual Report of the Visa Office, Table II) and applied to INS admission data to get relatives and relatives' relatives.

Western Hemisphere Workers: labor certification beneficiaries from the Western Hemisphere, as described under 9(b), above.

Western Hemisphere Relatives: Western Hemisphere workers subtracted from natives of the western hemisphere, their spouses and children."

US Citizen Relatives: Immediate relatives, plus spouses of U.S. citizens and their children under "Immigrants Exempt from Numerical Limits."

Other: includes mainly refugees, plus other miscellaneous categories of immigrants listed in line 11, above.

The estimation techniques and data sources for page 7, Appendix B, "Immigrants Arriving with Labor Certifications," follows:

The 1969-1974 data are based on Table II, Annual Reports of the Visa Office (for primary third and sixth preference beneficiaries), plus unpublished statistics from the FS-258 series of the Visa Office (for visas issued to nonpreference and Western Hemisphere immigrants), plus adjustee data from INS Annual Reports, Table 6B (for third and sixth preference beneficiaries), plus an estimate of nonpreference adjustees based on the number of nonpreference adjustees in each year multiplied by the percentage of labor certification beneficiaries among all third and sixth preference immigrants, from INS Annual Report, Table 4. Data on FY 1975-1976 immigrants arriving with labor certifications were derived from INS printout IMSD 420.

STATISTICAL APPENDIX

THE CHARACTERISTICS OF FY 1969-1976 COHORTS OF IMMIGRANTS

FISCAL YEARS	1969	1970	1971	1972	1973	1974	1975	1976	SOURCE/NOTE
TOTAL IMMIGRATION	358,579	373,326	370,478	384,685	400,063	394,861	386,194	398,613	U.S. Department of Justice, Immigration & Naturalization Service, <u>Annual Report: Immigration &amp; Naturalization Service</u> , Table 1
MEDIAN AGE (years)									
<u>Immigrant Median Age</u>									
Both Sexes	24.8	24.3	24.3	24.4	24.0	23.7	24.4	24.9	<u>Ibid.</u> , Table 10A
Males	25.2	25.0	24.8	24.8	24.2	23.8	24.4	24.9	
Females	24.2	23.8	23.9	24.0	23.8	23.7	24.5	24.9	
SEX (males per 1,000 females)									
<u>Males per 1000 Females</u>									<u>Ibid.</u> , Tables 4 and 10
All Immigrants	857	901	872	877	872	877	880	865	1/ Ratio computed by subtracting wives of U.S. citizens from all female immigrants, and husbands of citizens from all male immigrants
Excluding spouses of U.S. Citizens <sup>1/</sup>	945	1,008	964	941	917	925	925	925	

APPENDIX B  
 STATISTICAL APPENDIX  
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STATISTICAL APPENDIX

FISCAL YEARS	1969	1970	1971	1972	1973	1974	1975	1976	SOURCE/NOTE
<b>MARITAL STATUS</b> (as percents)									
<u>Immigrants 18 &amp; Older<sup>1/</sup></u>									<sup>2/</sup> Assuming that a statistically insignificant number of "married and other" would be less than 18 years of age, the 17 and under population was subtracted from the "single" category.  Immigrant data from INS Annual Report, Table 10A; U.S. population data from Statistical Abstract of the U.S., for the years 1970 and 1973-1975, and by phone from the Population Division for 1969, 1971, 1972, and 1976, from Current Population Reports, Series P-20, Nos. 198, 225, 242, and 306.
<u>MALE IMMIGRANTS</u>									
Single	29.6	29.0	27.0	24.4	22.9	23.7	24.4	24.5	
Married	68.7	69.3	71.3	73.9	75.5	74.8	74.0	73.5	
Other	1.7	1.7	1.7	1.7	1.6	1.5	1.6	2.0	
<u>FEMALE IMMIGRANTS</u>									
Single	24.1	20.0	17.8	15.8	14.8	14.7	16.3	16.0	
Married	70.0	74.6	76.6	78.6	79.1	79.5	77.0	76.4	
Other	5.9	5.4	5.6	5.6	6.0	5.8	6.7	7.6	
<u>U.S. POPULATION 18 &amp; OLDER-1 MARRIED</u>									
Male	75.5	75.3	74.1	74.8	74.5	73.7	72.8	72.2	
Female	68.9	68.5	68.1	69.3	68.1	67.6	66.7	66.2	

FISCAL YEARS	1969	1970	1971	1972	1973	1974	1975	1976
<b>REGION OF BIRTH</b> (as numbers and percents)								
<u>TOTAL IMMIGRATION</u>	<u>358,579 99.9</u>	<u>373,326 100.1</u>	<u>370,478 99.9</u>	<u>384,685 100.0</u>	<u>400,063 99.9</u>	<u>394,861 99.9</u>	<u>386,194 99.9</u>	<u>398,613 99.9</u>
<u>Eastern Hemisphere Total<sup>3/</sup></u>	<u>202,225 56.3</u>	<u>222,239 59.6</u>	<u>209,664 56.6</u>	<u>220,951 57.5</u>	<u>226,940 56.7</u>	<u>221,110 56.0</u>	<u>216,542 56.0</u>	<u>233,607 58.5</u>
Northern & Western Europe	34,113 9.5	34,387 9.2	27,023 7.3	25,230 6.6	25,372 6.3	24,257 6.1	22,058 5.7	23,563 5.9
Southern & Eastern Europe	83,915 23.4	81,652 21.9	69,483 18.8	64,763 16.8	67,498 16.9	56,955 14.4	51,938 13.4	48,848 12.2
Asia	75,679 21.1	94,883 25.4	103,461 27.9	121,058 31.5	124,160 31.0	130,662 33.1	132,469 34.3	149,881 37.6
Africa	5,876 1.6	8,115 2.2	6,772 1.8	6,612 1.7	6,655 1.7	6,182 1.6	6,729 1.7	7,723 1.9
Oceania	2,639 0.7	3,198 0.9	2,923 0.8	3,286 0.9	3,255 0.8	3,052 0.8	3,347 0.9	3,591 0.9
<u>Western Hemisphere Total</u>	<u>156,354 43.6</u>	<u>151,087 40.5</u>	<u>160,814 43.3</u>	<u>163,734 42.5</u>	<u>173,123 43.2</u>	<u>173,751 43.9</u>	<u>169,652 43.9</u>	<u>165,006 41.4</u>
Canada	18,582 5.2	13,804 3.7	13,128 3.5	10,776 2.8	8,951 2.2	7,654 1.9	7,308 1.9	7,638 1.9
Mexico	44,623 12.4	44,469 11.9	50,103 13.5	64,040 16.6	70,141 17.5	71,586 18.1	62,205 16.1	57,863 14.5
Caribbean	59,529 16.6	61,498 16.5	68,257 18.4	61,934 16.1	65,383 16.3	63,540 16.1	67,993 17.6	67,393 16.9
Central & South America	33,620 9.4	31,316 8.4	29,326 7.9	26,984 7.0	28,648 7.2	30,971 7.8	32,146 8.3	32,112 8.1

Source: INS Annual Reports, Table 8. <sup>3/</sup> Individual Eastern Hemisphere regions may not add to total, because a negligible number of "unknowns" were included.

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STATISTICAL APPENDIX

FISCAL YEARS	1969	1970	1971	1972	1973	1974	1975	1976	SOURCE/NOTE
IMMIGRANTS' INTENDED RESIDENCE--by the ten most preferred states (as numbers and percents)									
New York	94,403 26.3	97,821 26.2	92,478 25.0	93,833 24.4	93,626 23.4	88,068 22.3	86,492 22.4	85,928 21.6	B-3 4/ A dash denotes that immigration to that state in that year did not rank in the upper ten, and therefore the numbers were not included in this table. 5/ Sum of individual percentages may not add to total due to rounding. Source: INS Annual Report, Table 17.
California	71,183 19.9	74,268 19.9	69,825 18.8	80,121 20.8	85,062 21.3	86,861 22.0	83,184 21.5	88,700 22.3	
Illinois	20,420 5.7	20,910 5.6	23,254 6.3	25,611 6.6	25,489 6.4	24,814 6.3	24,684 6.4	27,497 6.9	
Massachusetts	19,043 5.3	15,212 4.1	15,760 4.3	13,364 3.5	12,484 3.1	12,417 3.1	13,102 3.4	12,493 3.1	
New Jersey	18,935 5.3	23,699 6.3	23,593 6.4	24,011 6.2	25,236 6.3	24,679 6.3	25,980 6.7	24,905 6.2	
Texas	17,739 5.0	18,264 4.9	20,210 5.4	23,624 6.1	26,619 6.7	28,976 7.3	23,972 6.2	23,805 6.0	
Florida	13,783 3.8	13,902 3.7	17,438 4.7	17,027 4.4	22,117 5.5	19,409 4.9	22,921 5.9	25,182 6.3	
Pennsylvania	10,041 2.8	10,584 2.8	10,132 2.7	9,431 2.5	8,886 2.2	8,721 2.2	8,641 2.2	8,792 2.2	
Michigan	9,407 2.6	10,730 2.9	9,274 2.5	9,166 2.4	9,882 2.5	10,072 2.6	8,908 2.3	8,399 2.1	
Connecticut	8,332 2.3	- 4/	-	7,214 1.9	-	-	-	-	
Hawaii	-	9,013 2.4	-	-	-	-	7,012 1.8	7,789 1.9	
Ohio	-	-	8,377 2.3	-	6,993 1.7	-	-	-	
Maryland	-	-	-	-	-	7,359 1.9	-	-	
10 State Total 5/	283,286 79.0	294,403 78.9	290,341 78.4	303,402 81.9	316,394 79.1	311,376 78.9	304,896 78.9	313,490 78.6	
Balance of States	75,293 21.0	78,923 21.1	80,137 21.6	81,283 21.1	83,669 20.9	83,485 21.1	81,298 21.1	85,123 21.4	
Total Immigration	358,579 100.0	373,326 100.0	370,478 100.0	384,685 100.0	400,063 100.0	394,861 100.0	386,194 100.0	398,613 100.0	

STATISTICAL APPENDIX

FISCAL YEARS	1969	1970	1971	1972	1973	1974	1975	1976
CLASSES OF IMMIGRANTS--by admission classes under the immigration laws (in numbers)								
TOTAL IMMIGRATION	358,579	373,326	370,478	384,685	400,063	394,861	386,194	398,613
Immigrants Subject to Numerical Limitations of Eastern Hemisphere	157,306	172,547	158,152	164,849	166,100	159,059	160,460	166,204
Relative Preferences	92,458	92,432	82,191	83,165	92,054	94,915	95,945	102,007
1st Preference-Unmarried Sons and Daughters of U.S. Citizens and Their Children	1,124	1,089	1,111	858	936	932	871	931
2nd Preference-Spouses, Unmarried Sons and Daughters of Resident Aliens, and Their Children	25,719	30,714	33,990	36,484	38,680	41,920	43,077	44,339
4th Preference-Married Sons and Daughters of U.S. Citizens, Their Spouses and Children	9,914	8,350	5,230	3,971	4,060	3,404	3,623	4,077
5th Preference-Brothers and Sisters of U.S. Citizens, Their Spouses and Children	55,701	52,279	41,860	41,852	48,378	46,659	48,374	52,560
Occupational Preferences	31,763	34,016	34,563	33,714	26,767	28,482	29,334	26,361
3rd Preference-Immigrants in Professions	9,677	10,142	9,807	10,385	10,521	7,763	8,353	8,318
6th Preference-Other Workers	9,100	8,786	9,011	7,915	4,549	6,420	6,724	4,792
Their Spouses and Children	12,986	15,088	15,745	15,414	13,697	14,299	14,247	13,251
7th Preference	9,533	9,863	8,361	10,396	9,808	9,076	9,129	11,907
Nonpreference	23,170	36,058	34,896	37,387	37,361	26,475	25,961	25,775
Aliens Adjusted Under Section 244, I&N Act	372	176	131	185	114	104	86	143
Foreign Government Officials Adjusted Under Sec. 13 of the Act of 9/11/57	10	2	10	2	2	7	5	11
Immigrants Subject to Numerical Limitations of Western Hemisphere	133,689	114,736	122,474	118,817	116,803	115,072	121,101	118,569
Natives of the Western Hemisphere, Their Spouses and Children	127,346	102,529	102,938	101,232	96,762	99,800	96,547	91,319
Immigrants, Act of November 2, 1966	6,343	12,207	19,536	17,585	20,041	15,272	24,554	27,250
Immigrants Exempt from Numerical Limitations	67,584	86,043	89,852	101,019	117,152	120,730	104,633	113,840
Immediate Relatives	60,016	79,213	80,845	86,332	100,953	104,344	91,504	102,019
Wives of U.S. Citizens	28,915	36,276	36,960	36,801	40,145	40,274	33,719	37,856
Husbands of U.S. Citizens	10,350	15,619	17,340	21,496	27,123	27,284	21,901	22,234
Children of U.S. Citizens	12,731	18,095	17,970	18,797	22,990	24,758	22,315	23,889
Orphans Adopted Abroad or to be Adopted	2,080	2,409	2,724	3,023	4,015	4,770	5,633	6,552
Other Children	10,651	15,686	15,246	15,774	18,975	19,983	16,682	17,337
Parents of U.S. Citizens	8,012	9,223	8,575	9,238	10,675	12,528	13,569	18,040
Special Immigrants	6,130	6,342	5,831	7,166	7,098	6,964	7,030	5,961
Ministers of Religion, Their Spouses and Children	1,337	1,497	1,417	1,505	1,549	1,416	1,231	1,368
Employees of U.S. Government Abroad, Their Spouses & Children	227	290	252	368	508	1,176	1,622	449
Children Born Abroad to Ros. Aliens or Subsequent to Issuance of Visa	2,935	3,012	2,939	3,566	3,760	3,477	3,636	3,405
Aliens Adjusted Under Section 244, I&N Act	46	23	33	54	27	20	35	106
Aliens Adjusted Under Section 249, I&N Act	1,565	1,520	1,190	1,653	1,254	879	556	633
Immigrants, Act of September 11, 1957	-	-	1	1	4	-	-	10
Hungarian Parolees, Act of July 25, 1958	3	-	-	-	-	-	-	-
Refugee-Escapees, Act of July 14, 1960	985	20	36	4	-	-	-	-
Immigrants, Act of September 26, 1961	17	4	1	2	1	-	-	-
Immigrants, Act of October 24, 1962	93	50	39	26	11	7	1	2
Spouses of U.S. Citizens and Their Children, Act of April 17, 1970	-	9	2,641	6,828	8,276	7,885	5,057	5,014
Other Immigrants Not Subject to Numerical Limitations	340	405	458	678	809	1,030	991	834

Source: INS Annual Reports, Table 4.

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STATISTICAL APPENDIX

FISCAL YEARS	1969	1970	1971	1972	1973	1974	1975	1976	SOURCE/NOTE
CLASSES OF IMMIGRANTS--by seven categories (as numbers and percents)									
Eastern Hemisphere Worker	32,470 9.1%	38,976 10.4%	37,756 10.2%	38,601 10.0%	31,303 7.8%	27,368 6.9%	28,431 7.4%	25,920 6.5%	B-5 S/Sum of individual percentages may not add to total, due to rounding. Source: Admissions data from INS Table 4; methodology used in dividing categories described in Appendix A.
Eastern Hemisphere Workers' Relative	22,463 6.3	31,098 8.3	31,703 8.6	32,500 8.4	32,827 8.2	27,589 7.0	26,864 7.0	26,216 6.6	
Eastern Hemisphere Relative	50,835 14.2	53,853 14.4	52,040 14.0	53,879 14.0	58,695 14.7	62,908 15.9	62,778 16.3	65,884 16.5	
Eastern Hemisphere Relatives' Relative	41,623 11.6	38,579 10.3	30,151 8.1	29,286 7.6	33,359 8.3	32,007 8.1	33,167 8.6	36,123 9.1	
Western Hemisphere Worker	32,079 8.9	23,844 6.4	11,442 3.1	8,874 2.3	4,625 1.2	5,293 1.3	6,523 1.7	4,720 1.2	
Western Hemisphere Relative	95,267 26.6	78,685 21.1	91,496 24.7	92,358 24.0	92,137 23.0	94,507 23.9	90,024 23.3	86,599 21.7	
U.S. Citizen Relative	60,016 16.7	79,222 21.2	83,486 22.5	93,160 24.2	109,229 27.3	112,729 28.5	96,561 25.0	107,033 26.9	
Subtotal Seven Categories <sup>5/</sup>	334,753 93.4	334,257 92.2	338,074 91.2	348,658 90.6	362,175 90.5	362,401 91.8	344,348 89.2	352,495 88.4	
Other	23,826 6.6	29,069 7.8	32,404 8.7	36,027 9.4	37,888 9.4	32,460 8.2	41,846 10.8	46,118 11.6	
TOTAL	358,579 100.0	373,326 100.0	370,478 99.9	384,685 100.0	400,063 99.9	394,861 100.0	386,194 100.0	398,613 100.0	

STATISTICAL APPENDIX

FISCAL YEARS	1969	1970	1971	1972	1973	1974	1975	1976
CLASSES OF IMMIGRANTS--by familial and societal screening (as numbers and percents)								
1. <b>FAMILIAL SCREENING</b>	<u>220,992</u> 61.6	<u>231,355</u> 62.0	<u>249,526</u> 67.4	<u>265,027</u> 68.9	<u>292,902</u> 73.2	<u>300,741</u> 76.2	<u>280,138</u> 72.5	<u>294,718</u> 73.9
2. <b>U.S. Citizen Relatives</b>	<u>143,161</u> 39.9	<u>155,263</u> 41.6	<u>152,851</u> 41.3	<u>163,881</u> 42.6	<u>188,076</u> 47.0	<u>189,758</u> 48.1	<u>173,518</u> 44.9	<u>188,267</u> 47.2
3. Admitted outside numerical limits								
(a) Eastern Hemisphere	40,119	49,060	51,022	55,231	61,461	63,019	56,570	68,553
(b) Western Hemisphere	19,497	30,153	32,464	37,929	47,768	49,710	39,991	38,480
4. Admitted within numerical limits								
(a) Eastern Hemisphere	66,739	61,718	48,201	46,681	53,374	50,995	52,868	57,668
(b) Western Hemisphere	16,408	14,332	21,164	24,040	25,473	26,034	24,089	23,566
5. <b>Legal Permanent Resident Relatives</b>	<u>77,829</u> 21.7	<u>76,092</u> 20.4	<u>96,675</u> 26.1	<u>101,146</u> 26.3	<u>104,826</u> 26.2	<u>110,983</u> 28.1	<u>106,620</u> 27.6	<u>106,467</u> 26.7
6. Admitted outside numerical limits (both hemispheres)	2,935	3,012	2,939	3,566	3,760	3,477	3,636	3,405
7. Admitted within numerical limits								
(a) Eastern Hemisphere	25,719	30,714	33,990	36,484	38,680	43,920	43,077	44,339
(b) Western Hemisphere (est)	49,175	42,366	59,746	61,096	62,386	63,586	59,907	58,713
8. <b>SOCIETAL SCREENING</b>	<u>135,111</u> 37.7	<u>139,828</u> 37.4	<u>118,908</u> 32.1	<u>117,037</u> 30.4	<u>104,936</u> 26.2	<u>92,088</u> 23.3	<u>104,387</u> 27.0	<u>102,202</u> 25.6
9. <b>Needed Workers and Their Families</b>	<u>116,653</u> 32.5	<u>115,948</u> 31.0	<u>91,296</u> 24.6	<u>87,175</u> 22.7	<u>73,028</u> 18.3	<u>65,141</u> 16.5	<u>67,046</u> 17.6	<u>61,217</u> 15.4
(a) Eastern Hemisphere	54,933	70,073	69,282	71,101	64,130	54,957	55,295	52,136
(b) Western Hemisphere	61,720	45,875	22,014	16,074	8,898	10,184	12,551	9,081
10. <b>Refugees</b>	<u>16,364</u> 4.7	<u>22,091</u> 5.9	<u>25,933</u> 7.0	<u>27,987</u> 7.3	<u>29,849</u> 7.5	<u>24,348</u> 6.2	<u>33,683</u> 8.7	<u>39,157</u> 9.8
(a) Eastern Hemisphere	10,521	9,883	6,397	10,402	9,808	9,076	9,129	11,907
(b) Western Hemisphere	6,343	12,208	19,536	17,585	20,041	15,272	24,544	27,250
11. <b>Other Classes</b>	<u>1,594</u> 0.4	<u>1,789</u> 0.5	<u>1,679</u> 0.5	<u>1,875</u> 0.5	<u>2,059</u> 0.5	<u>2,599</u> 0.7	<u>2,858</u> 0.7	<u>1,828</u> 0.5
12. <b>MISCELLANEOUS</b>	<u>2,433</u> 0.7	<u>2,187</u> 0.6	<u>2,030</u> 0.5	<u>2,599</u> 0.7	<u>2,220</u> 0.6	<u>2,036</u> 0.5	<u>1,699</u> 0.4	<u>1,728</u> 0.4
TOTAL ACTUAL IMMIGRATION	354,579	373,326	370,478	384,685	400,063	394,861	386,194	398,613
TOTAL BY ESTIMATED DISTRIBUTION METHOD	356,536 100.0	373,370 100.0	370,464 100.0	384,663 100.0	400,056 100.0	394,865 100.0	386,194 99.9	398,648 99.9

Source: Data derived from INS Annual Reports, Tables 4, 6, and 6A, and from unpublished Department of State and Immigration Service data on labor certification beneficiaries; estimation technique is described in Appendix A. The actual arrival of Vietnamese refugees in 1976 is not reflected in these statistics, because they had not yet secured immigrant status by June 30, 1976. Data for 1976's transitional quarter are not included in these calculations.

STATISTICAL APPENDIX

OCCUPATIONAL GROUP	immigrant cohort							Foreign Born 1970 Census	U.S. Employed Persons, 1970	SOURCE/NOTE	
	1969	1970	1971	1972	1973	1974	1975				1976
OCCUPATION GROUP (as percents of those with reported occupations)											
Professional, Technical & Kindred . . . . .	26.0	29.4	31.9	31.1	26.3	23.5	25.7	26.6	15.5	14.8	Sources: Immigrant data from INS Annual Reports, Table 10h; Foreign born data from U.S. Bureau of the Census, 1970 Census of Population, Subject Reports, National Origin and Language, Table 7; U.S. data from U.S. Bureau of the Census, 1970 Census of Population, Detailed Characteristics, Final Report PC (1)-P-1, United States Summary (1973), Table 222.
Managers & Administrators, exc. farm	3.4	3.7	4.1	4.9	5.9	6.1	6.7	7.5	7.8	8.3	
Sales Workers . . . . .	11.2	10.5	9.6	9.5	10.2	2.0	2.3	2.5	6.6	7.1	
Clerical & Kindred . . . . .	17.1	17.9	14.3	12.0	12.2	8.7	9.5	9.6	14.0	18.0	
Craftsmen & Kindred . . . . .	10.7	11.7	12.3	12.1	13.6	10.2	12.3	13.5	14.0	13.9	
Operatives, exc. Transport . . . . .	10.7	11.7	12.3	12.1	13.6	10.2	12.3	13.5	14.0	13.7	
Transport Equipment Operatives . . . . .	10.7	11.7	12.3	12.1	13.6	10.2	12.3	13.5	14.0	13.7	
Laborers, except farm . . . . .	8.4	9.0	8.6	9.7	11.7	12.1	11.9	7.8	1.9	3.9	
Farmers & Farm Managers . . . . .	2.4	2.4	0.8	0.1	0.1	0.1	0.6	0.9	4.0	4.5	
Farm Laborers & Foremen . . . . .	3.4	2.8	3.6	4.1	4.0	4.6	4.2	4.0	0.6	1.9	
Service Workers, exc. private house.	6.7	5.9	8.0	9.8	10.5	12.0	10.4	9.0	1.7	1.2	
Private Household Workers . . . . .	10.8	6.7	6.9	6.7	5.6	5.8	4.0	4.4	13.7	11.3	
Total Reporting Occupation n=	100.1 55,753	100.0 157,189	100.1 153,122	100.0 157,241	100.1 156,477	100.0 151,268	100.1 149,605	99.9 154,658	100.0 4,039,763	100.1 76,553,599	
Housewives, Children & those with no occupation reported	202,826	216,137	217,356	227,444	243,586	243,593	236,589	243,955	n/a	n/a	
TOTAL IMMIGRATION	358,579	373,326	370,478	384,685	400,063	394,861	386,194	398,613	n/a	n/a	
FISCAL YEARS	1969	1970	1971	1972	1973	1974	1975	1976	SOURCE/NOTE		
IMMIGRANTS ARRIVING WITH LABOR CERTIFICATIONS (as percents)											
Percent Arriving with Labor Certifications	16.6	14.9	13.1	11.7	8.7	7.8	7.7	6.4	See Appendix A for estimation method and data sources.		

S T A T I S T I C A L   A P P E N D I X

THE BEST MODEL

\*\*\*\*\* MULTIPLE REGRESSION \*\*\*\*\*

DEPENDENT VARIABLE.. ANNEARN

VARIABLE LIST 1  
REGRESSION LIST 1

VARIABLE(S) ENTERED ON STEP NUMBER 4.. CANADA

MULTIPLE R	0.52539	ANALYSIS OF VARIANCE	DF	SUM OF SQUARES	MEAN SQUARE	F
R SQUARE	0.27603	REGRESSION	4.	4238834692.61059	1059708673.15265	19.63555
ADJUSTED R SQUARE	0.26197	RESIDUAL	206.	11117591798.85025	53968892.22743	
STANDARD ERROR	7346.35231					

-----VARIABLES IN THE EQUATION-----

VARIABLE*	B	BETA	STD ERROR B	F
MALE	6394.502	0.36084	1061.48748	36.290
EDGR12	3080.063	0.18027	1081.34718	8.113
EH	4797.296	0.27527	1135.88631	17.837
CANADA	4815.829	0.18857	1672.32389	8.293
(CONSTANT)	5129.637			

-----VARIABLES NOT IN THE EQUATION-----

VARIABLE*	BETA IN	PARTIAL	TOLERANCE	F
OTWH	0.05172	0.03933	0.41862	0.318
FLUENT	0.08821	0.09520	0.84321	1.875
NONREL	0.09501	0.11115	0.99085	2.564
AGE3544	0.06896	0.08008	0.97633	1.323
AGE4554	-0.01377	-0.01596	0.97339	0.052

\*The variables abbreviated above are as follows:

- EDGR12 = Education Greater than 12 Years
- EH = Eastern Hemisphere
- OTWH = Other Western Hemisphere (i.e., exclusive of Canada and Mexico)
- NONREL = Nonrelative
- AGE3544= Age group 35-44
- AGE4554= Age group 45-54

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S T A T I S T I C A L   A P P E N D I X

S U M M A R Y   T A B L E

VARIABLE*	MULTIPLE R	R SQUARE	RSQ CHANGE	SIMPLE R	B	BETA
MALE	0.36140	0.13061	0.13061	0.36140	6341.612	0.35786
EDGRI2	0.45395	0.20607	0.07546	0.29223	2573.515	0.15063
EH	0.49688	0.24689	0.04082	0.27357	4380.776	0.25137
CANADA	0.52539	0.27603	0.02914	0.09353	4105.243	0.16075
NONREL	0.53383	0.28497	0.00894	0.11813	1673.458	0.09702
FLUENT	0.54029	0.29191	0.00694	0.20398	1808.929	0.09415
AGE3544	0.54470	0.29669	0.00478	0.11815	1477.197	0.08421
(CONSTANT)					2930.945	0.03085

\*See Statistical Appendix, page 8 for variable definitions.

Representative BOLLING. I wonder if any work has been done with regard to the deliberate or a deliberate effort on the part of a significant number of females to train themselves and attempt to get into the higher positions in corporations and so on.

Ms. YOHALEM. To train themselves?

Representative BOLLING. I mean, it would be a decision that this is what I intend to be, the president of General Motors, and I will get the education that I need to do that.

Is there a substantial amount of that kind of thing going on?

Ms. YOHALEM. All you have to look at is female enrollment in graduate schools of business today—it has risen dramatically. This, of course, is one of the training grounds for executive positions. I don't think it may be a necessary training ground. Plenty of managers have been trained within the firm.

Representative BOLLING. Right.

Ms. YOHALEM. But, because of women's special disadvantages more women than ever before are in businesses and law school—

Representative BOLLING. That is what I am asking. You say dramatic increases have been made. That could be anywhere from 10 to 20, 50, or 100.

Ms. YOHALEM. I understand that one-third or more of the entering students at Columbia Graduate School of Business were women last year. Female registration is rising in many schools; Harvard, Stanford, and Chicago and others are seeing similar increases in the number of women business students.

Now, where these women want to go is one thing. Obviously, there are a number of alternatives when you have gone to business school; accounting is one, since it is a very good field for women, and for men, too. Many women are going into that field. Some may go into a female-related business field like retailing, but many women are planning to go into other types of business firms.

Representative BOLLING. The reason I ask the question is it has always seemed to me that one of the reasons that in a male dominated society it was so difficult to make progress in legislation is that to a very considerable degree women had to depend on men to exercise the power that would get them to the next step.

I am very interested in the fact that they seem to be going to the kinds of schools that would give them an opportunity to share other than as stockholders in the control of the great corporations.

Ms. YOHALEM. I think something must be stressed, however. When I was in Europe recently with a group of people from different countries, an American pointed out that great progress had been made by women in the U.S. labor force; a Swedish economist encountered, said, "Oh, yes, but only at the very top."

Indeed, we have made progress. Women have made progress getting into medical schools, getting into law schools, business schools, and they are being sought for engineering and other male dominated professions. These are women, upper middle class mostly, who are in the most favorable positions to take advantage of such opportunities; they have fathers and friends and fathers' friends, all of whom can help get them employed. They are the cream; only the tip of the iceberg.

Mr. SHEPPARD. But you can't deny that 20 years ago you would not have seen that pattern, so something has changed.

Ms. YOHALEM. Oh, yes, and this happens in every group. Among blacks, for example, "them that has gits"—at the beginning, anyway.

Representative BOLLING. How does the United States compare—I know it compares badly in its treatment of older people, with older developed countries.

Mr. SHEPPARD. As a general rule, yes, but other countries don't have an age discrimination clause in their employment act but maybe they don't need it.

It is not clear.

Representative BOLLING. Now, does it compare badly or well?

Ms. YOHALEM. It depends upon the area you are talking about.

Representative BOLLING. You are talking about the area within the society.

Ms. YOHALEM. I mentioned two areas where we compare poorly. We give lip service to being very family oriented and we have no real family policy.

Representative BOLLING. That is right. Everybody else does.

Ms. YOHALEM. These countries are way ahead of us in terms of what services they provide to mothers—and fathers—this is important—to families, to parents, not to mothers alone.

Representative BOLLING. Right. Well, I am going to have to go to the Rules Committee so I will leave it to you, if you want to continue it.

Mr. KASSALOW. I have a couple of questions.

Representative BOLLING. I apologize for having to leave, but we have all the appropriations bills coming before us in these 2 days.

Ms. MILLER. I would like to go back a few steps to the education of women in the labor force; that is, even a high school education.

Ms. YOHALEM. Yes.

Ms. MILLER. I have heard many complaints that you cannot get teenaged youth ready to move up the career ladder if they don't take basic courses such as math, or the sciences, etc.

What things are being done, that you know of, which would steer women away from home economics and that kind of thing. Toward the more traditionally male related avenues of education or toward just a stronger background in the subjects they will need to have for this upward mobility?

Ms. YOHALEM. I think you need a whole reorientation of teaching. I also think high school is too late. I think you have to go all the way back to infancy.

Mr. SHEPPARD. Including the parents.

Ms. YOHALEM. Yes, indeed, including the parents. This is starting now, but slowly. We have to change the whole mind set of people, of parents, of teachers and everybody else in society about what is proper for women to do. Anything is proper. By the time a girl gets to high school, it may be too late because little girls in elementary school are frequently told to take sewing, for example, when boys take shop; but we now have a law that prevents that.

Girls can even be on football teams, too, I believe. In other words, there is attention being paid to discrimination in education that consists of assigning students to certain programs purely on the basis of sex.

Then we have to get guidance counselors to tell girls who are in math and science that their only alternative is not nursing—nursing is a perfectly good field, and I don't want to denigrate it—but to give them a list of alternatives and to tell them that there is no reason why they can't go into engineering where women are being sought, or into dentistry. These are two professions where we have, compared to Europe, an infinitesimal number of women. For some reason these are two fields which are very hard to get women to enter. They are good fields for women, but we still have had a hard time persuading them.

There are now retraining programs: The National Science Foundation is doing some retraining of older women in nontraditional areas, for instance.

I will tell you one other place where I think reorientation of female goals can be encouraged, and that is in the media. I think a television show like "The Mary Tyler Moore Show" is a very good example because it showed a woman who was in an occupation and job that is often associated with males, alone. She was not married; she did her work very well; and she was pretty.

Mr. SHEPPARD. Why did they cancel the show?

Ms. YOHALEM. Well, she was tired.

Most of the stuff you see on television is silly. They concentrate on the so-called "typical" family with the mother at home, spending her time in the kitchen and so forth, and you are never shown how bored she may be.

I think we have to work on all facets of life in addition to the high school level.

Ms. MILLER. Have you looked at the impact of the women going in the military, into the armed forces?

JEC has held several hearings on this and it is a good employment opportunity for women.

Ms. YOHALEM. I know there has been a report on it.

Ms. MILLER. In the latest Time magazine there was a spread, too.

Ms. YOHALEM. I don't know whether the DOD put it out or who, but I know there was a study of women in the armed services. I think it may be too soon to know the impact. However, my impression is that many more women are going in. I think women should have any choice they want and they are now getting that choice. I think they should have a choice of either combat and noncombat duty also.

Mr. SHEPPARD. I think when you see a TV program with women marching with or separately in the armed forces, that has a fantastic impact on mind set, regardless of what you think about the military.

Ms. YOHALEM. Is there such a thing?

Mr. SHEPPARD. I am talking about newsreels—they don't call them newsreels any more—the TV news programs. Movietone, you know. [Laughter.]

Well, that has a tremendous impact and it sets the tone for other types of occupational roles. It doesn't bother me that they are in the military. I think we will always have a military establishment so why not have women in it?

It has always been a source for upward mobility for all previously disadvantaged groups, so what else is new?

I don't see any objection to it. I would encourage it.

Mr. NORTH. I think there is a body of research that the military itself is engaged in. I ran into somebody recently whose principal subject was the role of women in the military police, so there is a body of research in whatever the in-house think tank is of the Army.

Mr. SHEPPARD. The American Institutes for Research in the Palo Alto office has been doing a study of sex stereotyping in the textbooks of the schools, with the aim being to revise the textbooks, which I think will have an impact.

Mr. KASSALOW. You mentioned the fact that so many women are coming into the labor force and the rate is likely to stay up in the 1980's. You also indicated that part-time work, where desired, or splitting jobs into two pieces, was one plausible alternative or one plausible thing that could be done.

Have you thought much about the problem of costs in connection with these dual jobs?

You do have the problem that you might be doubling your unemployment compensation costs, for example, from the employer's point of view; and even to some extent your pension costs, and other fringe benefits would be doubled.

Ms. YOHALEM. I think there is no question but that many fringe benefit programs will have to be improved in the first place, or substantially improved—

Mr. KASSALOW. Improved. What do you mean?

Ms. YOHALEM. Some fringes, are not now applicable to part-time work, and they would have to be applied if you wanted to encourage women or men to go into this type of work.

I think that there is no question of additional costs, however. There was even, I think, some proposed legislation suggesting subsidization of employers introduced by Representative Conable, but the question of monitoring arose; being assured that the employers who were involved as in subsidized job training, are not those who would have hired part-time workers anyway.

But there may be benefits to balance the costs. One obvious one is that many of these people would otherwise be on the welfare rolls. They could not be employed if part-time work were unavailable. Hence, the availability of part-time work might serve to remove some of the public assistance, as well as to turn these women into taxpayers who would be contributing to tax revenues which they could not do previously.

It may even have weight in terms of saving child care costs, although I am not sure that part-time work is a real solution to this problem. But expenditures for child care are high for if decent services. If mothers could have some type of rearranged work week which would let them perform both work and home responsibilities this might decrease their own child care expenses.

Employers themselves might even find it beneficial to establish child care facilities. Employers who want to employ numbers of women have found in a few isolated instances that it is worthwhile in order to retain a stable work force.

Some people recommended that I not bring child care up at all at this hearing because it is so expensive and no legislator in his right mind is going to consider it in the near future—but I insisted that I

had to because I felt it was an important issue and the actual expense has never really been fully estimated. Some say it may cost about \$4,000 per child. Well, what does that mean? Maybe in a 1-to-1 relationship, but I am not asking for that and Europe doesn't have that.

I looked at a child care facility in Europe where they have relatively few adults and it seemed to be a very well managed and very well run program. When we set up something new in the United States it always has to be the best and the most sophisticated and it isn't necessarily necessary.

Mr. NORTH. Let me break in for a moment and return to the original question.

A colleague of mine at TransCentury, Brenda Eddy, conducted a study for the Labor Department about employer attitudes about part-time work.

I talked to her after it was done and they had interviewed a lot of employers about why they were enthusiastic or not about the use of part-time employees.

One of the questions that apparently didn't dawn on an appreciable number of the employers was the question you raised about unemployment insurance and social security.

They apparently had not factored that in as a major element in their decisionmaking about this.

Mr. KASSALOW. But employers certainly factor it in.

Mr. NORTH. But these did not.

Mr. KASSALOW. They factor it in and many times decide to work people overtime, and not hire new people. It is that heavy a cost.

Mr. NORTH. But what I am saying is that in this case they had not thought about it. I was shocked because that certainly is something that should be—that is almost automatic.

That was not their finding at all. They didn't find they were paying attention to that.

Ms. YOHALEM. There would have to be an adjustment made to take care of it. I think it has been pointed out that it may well be, considering social security requirements cheaper to have one \$20,000 employee than two \$10,000 employees.

Mr. NORTH. I am very aware of that.

Ms. YOHALEM. Something would have to be done about that.

Mr. NORTH. What I am saying is that because that is true doesn't mean the people realize it. Unemployment insurance is even more demanding.

Mr. SHEPPARD. On this point, regarding cost to the employer, cost to the individual woman and/or her family, are these things ever taken into consideration in what I consider somewhat grandiose projections of what the labor force participation rate of women will be?

I think there are going to be offsetting factors that become disincentives.

Ms. YOHALEM. Disincentives?

Mr. SHEPPARD. I think the rate of increase of women even in the labor force will start declining. It is not going to hit the peaks I have heard about unless they have also taken into consideration the disincentives.

If a woman can get \$200 a week working, she has to buy a car, she has to worry about her kids, she has to buy clothes, all these things—has it been wired in?

Ms. YOHALEM. This is nothing new, however.

Mr. SHEPPARD. I know it is not new.

Ms. YOHALEM. You seem to be talking about a middle class husband-wife family with a minimal number of children.

Mr. SHEPPARD. How do you know what I am talking about? As a matter of fact, I am not.

Ms. YOHALEM. The other women don't talk about cost. They have to go to work. We are talking about a woman who has the option of working or not working.

Mr. SHEPPARD. All right.

Ms. YOHALEM. With the increased educational attainment of women, with the social pressures and everything else, I believe that many husbands and wives as a unit will simply decide it is worth it, and it is usually only a cost initially.

Mr. SHEPPARD. You are not answering my question.

I simply want to point out that your projections don't take into account the possible offsets. I have not looked into the methodology of these projections. Some seem horribly high to me, that's all.

Ms. YOHALEM. The projections include, first, the rising number of female heads of households.

Mr. WALLACE. This is a fascinating discussion but the time is getting short and I would like to get back to Mr. North with a quick question on welfare.

You say that the illegal alien population was 3.8 million as of 1973, and has grown to between 4 and 5 million now?

Mr. NORTH. I would say that there were 3.8 million illegals estimated by the Social Security Administration in 1973.

Those were not necessarily workers. I would say 3 million were workers.

Mr. KRAUTHOFF. The media are talking about figures between 6 and 11 million at the moment. That is the standard media figure, how scientific it is, I can not say.

Mr. WALLACE. On that question of welfare transfer payments, I wonder if we may not be looking at the wrong mousehole.

Perhaps the problem, if there is a problem, is that these illegal aliens take jobs which become unavailable to other people who then are forced to go on welfare.

Mr. NORTH. That is exactly right.

Mr. WALLACE. So, there is a market for illegal alien workers because they take jobs other people don't want. The question then becomes whether people do not want these jobs because they do better on welfare than they would, say, as a bus boy?

In other words, could we cut welfare costs if we didn't have so many illegal workers because then people on welfare could get jobs? Or would they still not take the jobs so that the jobs would simply not be filled?

Mr. NORTH. I would like to give you a complicated answer to what sounds like a fairly simple question, and I apologize for this in advance.

First of all, I think we use the word "welfare" a little too loosely in terms of the impact of the illegals. I think that the impact of the

illegals is probably most indirect as opposed to direct and the indirect costs are more likely unemployment insurance and food stamps than certainly on supplemental security income or AFDC.

Now, I think that one of the reasons we have a situation where the illegals compete successfully in the labor market is because they are willing to take work, and come from much more desperate backgrounds than the U.S. unemployed with whom they are competing.

One of the things that we can do, of course, is to make the U.S. workers more desperate.

Now, to some extent the Congress has been doing this by cutting back on the extent to which unemployment insurance benefits last so there has been some movement in that direction.

Another thing that we can do is we can make the jobs more attractive by raising the minimum wage. We have been through that, too, and that's on going, but there are a whole series of adjustments that can or perhaps should be made in this arena.

What I find is that if there are a large number of illegal aliens clustering in a given job market, at a certain point it gets to be "a job for illegals" and nobody else gets much involved in that.

It gets to be a self-fulfilling prophecy. If the employer has no trouble by paying low wages and hiring workers that do what he wants to have done, he is not about to change his patterns.

He is not about to reach out for somebody else. Other people will look at that and say "nobody but illegals pick x crop, or does that work as a bus boy" and they don't compete.

So, you get a self-fulfilling prophecy which builds momentum of its own. There are a number of ways to break into that. One is to enforce the immigration law a little more.

Another way is to enforce the minimum wage more.

A third way is to perhaps tighten up on some of those transfer programs, in which there is a resultant possibility of causing somebody to seek work and I think the more beneficial effect is likely to be in unemployment insurance and food stamps than in welfare.

Ms. MILLER. To pursue the idea of the jobs that no one would want to have, there is a problem which is as follows: Because we are educating the work force and upgrading job descriptions; in other words, educating our labor force to a much greater degree than it used to be, the concern of the workers for job satisfaction is very high.

In effect, what we are doing is making people look only for jobs that they do not regard as dead end or dirty. What we are doing is disassociating a large segment of our population, especially those with the lower skills from those types of jobs and they don't want these jobs, and they never will want these jobs. I have seen several articles on the fact that illegal aliens in turn are providing the segment of the labor force which is willing to work at these jobs; and that our own work force has been educated out of even wanting those jobs.

Even a minority teenager, even if it made money for him, would rather not take the job in the beginning.

So, when you say it is a self-fulfilling prophecy, I am saying it is getting larger and larger. The workers don't even look for certain



jobs. They just say, "An illegal alien will take that job" and the worker just never would consider it.

Mr. NORTH. I think a couple of things are going on here. One is, as we build expectations in the labor force, we are not causing employers to meet those expectations. So, as we typically do in society we are operating in two different fields that have a great deal to do with each other without recognizing the fact that we do.

I think we are building some expectations and I think that we are not forcing employers to redesign their jobs; we are not doing as much as the Swedes are doing about making work more interesting; we are not doing what the French are doing in terms of trying to make manual labor something that is socially acceptable.

There is a Secretary of State for the Glorification of Manual Labor in the French Government—a loose translation.

But we are not intervening in the labor market the way we apparently are intervening in the education field in terms of building expectations.

I think that we should be doing both those things.

Ms. MILLER. But even the foreign workers in Germany and France are performing the jobs that the French and Germans will no longer consider.

Mr. KRAUTHOFF. The Algerians in France are a big labor market factor.

Ms. MILLER. How does one change picking strawberries, for example, to make manual labor more attractive to workers?

Mr. SHEPPARD. In the factories it is true and the French agency for improvement of working conditions has done it partly to reduce the pressure to bring in foreign workers, to redesign jobs so that the native French worker would be more willing to do it.

That certainly was one of the motivations for the improvements in work life in Sweden. They didn't want to have a large imported labor force. The younger Swedish workers wouldn't take a Volvo factory job the way they were previously designed.

Mr. KASSALOW. I came back to Saab 4 years after they broke up their assembly line, their engine assembly line, because they were concerned about having too many Finnish workers. When I walked through the factory on that second occasion, I saw women doing the less automated engine assembly job, in small work groups.

I said, "Who are those women." They said, "They are the wives of Finnish workers."

The Swedes were still not taking the jobs. That is only one case, but—

Mr. NORTH. I think you have a couple of options, and the easy option for society and for employers is to adjust the work force to meet the jobs as currently defined.

It is much tougher to redesign the jobs, and what typically has been happening and certainly it is true in Western Europe more so than here is that the labor force is being altered to meet the apparent needs or at least the desires of the employers.

That is one way of doing it.

That is clearly what they have done in Europe, but they are backing up a little from that. That is what we are doing on a de facto basis in this country. I am not sure that is the ideal course to take, but that seems to be what is happening.

Ms. YOHALEM. I wonder if we could bring up one thing. We talk about the illegal labor force and we also have something called illegal work and a lot of the people who will not take the jobs that the illegal workers will take are not really unemployed. Of course, they are technically unemployed, but they are actually engaged in illicit types of work, which pays them better and which they find more interesting.

Mr. NORTH. Not necessarily illicit, but off the books.

Ms. YOHALEM. All right, yes, but both.

Mr. SHEPPARD. Maybe I could say something a little unorthodox on this immigration question. It is possible that the vitality of a country periodically needs replenishment from outside population sources because, for example, as you said, Mr. North, the people who migrate typically are more ambitious than the people they leave behind and in some other studies I have done just within the United States, I have found some suggestions that the rural migrants moving into the large cities are also, for example, better educated than the urban peers of the neighborhood they move into.

Historically, you might say this country's growth has depended in part on bringing in not just in terms of quantity but a type of person characterized by these traits of a migrant versus nonmigrant, which the country needs to refreshen it. We might have to go through adjustment pains of that first generation thrust.

But they are the more ambitious people and they, in certain categories, will be the ones to move upward and onward. Congressman Bolling was giving the sort of analogy to what I am talking about, in the Kansas City family.

So, we should not always be looking at the negative dimension of this migration or immigrant problem, even if illegal.

As I say, it is unorthodox.

Mr. SHELDON. Mr. Krauthoff.

Mr. KRAUTHOFF. I just wanted to ask Mr. Sheppard about this middle aged going-on-to-senior-citizen group that he mentioned in the professional sphere, and their problems with reemployment.

To me that situation seems quite predictable because what you are talking about is burned out MBA's, burned out advertising executives, people who competed very vigorously for the highest executive suite and were payed, meanwhile, accordingly.

You start at 22 as an MBA, or you can be a Ph. D. in English and walk into an ad agency and start out at \$25,000. Then you enter a very competitive society, both in the way you live and work.

When I say "burned out," I mean burning out your physical plant, too, if you engage in that sort of three-martini lunch every day, and I don't think that it is surprising that when you get a cluster of these people out of work that they are difficult to reemploy.

They are not going to be easy to assimilate and find it difficult to go back to living like a "human being" after they have been in the stratosphere.

Mr. SHEPPARD. Well, No. 1, I think that this is one of the explanations for what I was saying.

Mr. KRAUTHOFF. They get selected out like the Foreign Service people did:

Mr. SHEPPARD. As I was saying, one, this phenomenon reflected in aggregate statistics contradicts the image that it is only the lower skilled people who are among these long-term unemployed.

No. 2, there are several factors that explain this plateau or burning out or malaise phenomenon. One of the things that has to be done with the results stemming from managerial practice, and it is too much neglected, I think; but they might tend to set up a system of management practice that leads to the burning out phenomenon.

Mr. KRAUTHOFF. But the free enterprise system is a pyramid. You can only have one president, two executive vice presidents.

Mr. SHEPPARD. Let's not talk about the pyramid approach and the top man, the president. I would like to refer the committee to the work of Hinrichs with, or formerly with, IBM International, and a book entitled "The Motivation Crisis," in which he deals with the question of plateauing or obsolescence and so on.

He talks essentially about that upper middle management group, the technician group, the professional group, who are rewarded for some time for being specialists in a narrow field and then the technology changes, for example, because, say, there is a defense contract change where they move from airplanes to missiles, and then that 43-year-old engineer is called obsolete.

I think it is the responsibility of management and if it is a Government contract, the contract ought to include costs by the Government to provide for this, to have constant skill refresher opportunities for those engineers.

I see a lot of the people with the Institute for Electrical and Electronics Engineers and that is one of their biggest issues.

The second point is that, of course, they bounce from one company to another, perhaps somewhat foolishly you might say, but they keep getting these upward and onward opportunities, never collecting any pension benefits.

It is theoretically possible to hit 55 or 60 and never have been in one company long enough to get any pension credits; however, with ERISA that might change, but that is beside the point.

I am saying that you get this problem of long-term unemployment among older higher educated workers not simply because of this burning out, which you say is a result of "too much ambition too soon" or whatever, but also there are things that management can be doing.

No. 3, as I indicated in my testimony, I think somewhere there has to be a social responsibility for providing these people with midcareer change opportunities instead of leaving it to the policy of drift.

They are long-term unemployed and we pay for the consequences of that.

Failures at that age, I believe, in that socioeconomic group—here, I get in trouble when I say that very often—are more dramatic—psychosomatic ailments and so on, more so than are blue collar workers, who, "are used to being unemployed frequently."

As you said, they have a style of life that they have been leading, they have a lot of family responsibilities, all these kids in college and, boom, they are without any job or without a decent income and they might skid.

The effects on them psychosomatically are terrific. Again, Mr. Brenner has data of an epidemiological nature with the demographics of the "victims."

Mr. SHELDON. The hour is getting late. I don't want to cut off anyone who still wants to be heard.

Are we at the point where we should call a halt?

I want to reflect that this has probably been the liveliest of the panel meetings so far in what most of us feel has been a very good series of hearings.

Therefore, on behalf of the committee, we are very appreciative of your taking the time to come here and it will be interesting to look over the record and where everyone was talking at once and where the stenotypist had to change his paper, you will have a chance to fill in what may be an occasional missing word or phrase.

Mr. Wallace.

Mr. WALLACE. We might invite all the panelists to submit additional comments. This has been, as you say, one of the very liveliest we have had, partly because we have gone into subjects that have not been pursued before.

So, we would welcome any additional comments that the panelists would care to provide to the committee, either commenting further on questions raised, or anything that you would like to raise in the general area.

Mr. SHELDON. That is certainly true.

Tomorrow, the committee will be meeting again, which is Thursday, June 8, at 10 a.m., and as always, we are moving and meeting tomorrow in room 345, Cannon House Office Building, which is the House Caucus Room.

Without anything else pending, the committee will stand in recess until tomorrow.

[Whereupon, at 12:12 p.m., the committee recessed, to reconvene at 10 a.m., Thursday, June 8, 1978.]

