85th Congress
2d Session } JOINT COMMITTEE PRINT

THE RELATIONSHIP OF PRICES TO ECONOMIC STABILITY AND GROWTH

COMMENTARIES

SUBMITTED BY ECONOMISTS
FROM LABOR AND INDUSTRY
APPEARING BEFORE
THE JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

OCTOBER 31, 1958

Printed for the use of the Joint Economic Committee

UNITED STATES
GOVERNMENT PRINTING OFFICE
31942 WASHINGTON : 1958

For sale by the Superintendent of Documents, U. S. Government Printing Office
Washington 25, D. C. - Price 65 cents

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LETTERS OF TRANSMITTAL

OCTOBER 31, 1958.

To Members of the Joint Economic Committee:

The papers transmitted with this letter were submitted by 15 leading economists from labor and industry who were invited to comment on the analyses and issues raised by the 47 experts from the colleges, universities, Government, and research groups who participated in the first two stages of the study: The Relationship of Prices to Economic Stability and Growth.

These commentaries are presented in advance of the committee's hearings, to be held December 15–18, to provide members of the committee, the public, the contributors, and the eight academic experts who have been invited to return as panelists an opportunity to examine all of the commentaries before they are developed in oral statements and discussions at the hearings.

WRIGHT PATMAN,
Chairman, Joint Economic Committee.

LETTERS OF TRANSMITTAL—Continued

OCTOBER 27, 1958.

Hon. WRIGHT PATMAN,
Chairman, Joint Economic Committee,
House of Representatives, Washington, D. C.

DEAR MR. PATMAN: The papers transmitted with this letter were submitted by 15 of the 16 leading economists from labor and industry who have been invited to appear before the Joint Economic Committee in public hearings December 15–18 as part of the committee's study: The Relationship of Prices to Economic Stability and Growth. One paper has not yet been received. This is in accordance with instructions to the staff approved by the committee October 7, 1957.

The papers are presented as submitted by the contributors without additions or deletions. They are arranged by panel topics in the order in which they are scheduled for discussion at the hearings.

The committee study on prices has been undertaken in four stages. The first phase consisted of a compendium of papers prepared by 47 economists from the colleges, universities, Government, and research groups, published as a committee print March 31, 1958; the second stage was a series of hearings in the form of panel discussions, held May 12–22, in which these contributors participated. The third and fourth stages of the study now underway consist of the commentaries by the labor and industry economists and the subsequent public hearings with these contributors and eight of the contributors to the first compendium as panelists.

RODERICK H. RILEY,
Executive Director.

OUTLINE OF MAJOR TOPICS AND NAMES OF CONTRIBUTORS TO COMMENTARIES ON THE RELATIONSHIP OF PRICES TO ECONOMIC STABILITY AND GROWTH

I

EMPLOYMENT ACT OBJECTIVES AND THE STABILIZATION OF PRICES

The participants in section I of these commentaries were asked to concentrate their comments on the analyses and issues raised by economists who contributed to panel I of the compendium of last March. We reproduce below the topics and questions which were posed to those contributors at the time they began work on their papers.

I. Employment Act objectives and the stabilization of prices:

A. What price behavior would be consistent with the attainment of the other policy objectives of the Employment Act "of creating and maintaining, in a manner calculated to foster and promote free competitive enterprise and the general welfare, conditions under which there will be afforded useful employment opportunities, including self-employment, for those able, willing, and seeking to work, and to promote maximum employment, production, and purchasing power" in both the short run and the long run? Under what conditions would stabilization of prices be inconsistent with attainment of Employment Act objectives?

B. What does "economic stability and growth" mean when used in reference to a dynamic private enterprise economy?

C. What changes in the distribution of income and wealth usually accompany changes in the general price level, and what weight should these be given in assigning priorities among the various objectives of the Employment Act?

1. What are the effects of price level changes upon the different income groups, especially upon the so-called "fixed income" groups?
2. How are holders of various types of assets affected by price level changes?
3. How do various types of debtors—financial and nonfinancial, corporate, individual, farmers, and small-business men—fare under conditions of changing price levels?
4. What is the effect of changing price levels on the relative position of Federal, State, and local governments, considering their traditional revenue sources, their expenditure programs and debtor positions?

MAXIMUM EMPLOYMENT AND A SELECTIVE ECONOMIC CONTROL POLICY

Solomon Barkin, Director of Research, Textile Workers Union of America

CONTENTS

I. Maximum Employment or Price Stability

The current debate on the causes and length of our depression, the rate of economic recovery and the threat of inflation underscores the vast areas of disagreement among economists and leaders of our political society. Over 4.5 million persons are unemployed, 89 major labor markets are officially labeled as distressed, a million people in hundreds of rural communities suffer underemployment, 13.5 million family units earned less than $3,000 in 1957. An FAO official laments America's real failure to solve the challege of rural poverty; industrial plants are closing and there are no boom areas to take up the slack. Retail prices are relatively stable and the Commissioner of Labor Statistics declared in August that "he sees no signs of general inflationary pressures at work on consumer prices." The general price level, he felt, would be stable for perhaps as long as a year. Other Washington economists join in this conclusion and some "speculate that the period of stability could last longer than that" (New York Times, August 10, 1958). The likely decline in food prices will offset the rise in other areas. Wholesale prices have been stable. Commodity prices, both spots and futures, have been declining since the beginning of August. World commodity prices have been dropping. On the international scene the Bank of England had lowered its money rates to fight deflation.

A. ADMINISTRATION THWARTS RECOVERY WITH GENERAL CREDIT CONTROL

But the President of the United States and the financial and industrial community are highlighting the problem of inflation. After a meeting of the White House economic command in the middle of August, a key official is reported to have declared that "we are shifting from antirecession to anti-inflation policies." President Eisenhower has continued his "jawbone price-control efforts," but he dismissed the rise in the price of steel because this "slight rise in steel costs is not in itself a very great factor in living costs." Following this apology for the steel and aluminum industries, both of which raised prices at a time of unusually low rates of operation, the President delivered an attack on a congressional "spending cycle." He has vetoed a number of spending bills and has ordered curbs on Federal expenditures. Despite these acts, and the suggestion that he will request Congress in 1959 to nullify some spending programs (particularly public works, Government guaranty of loans, mortgage insurance and direct loans), the current fiscal year will record an alltime high deficit for a peacetime year, probably in the neighborhood of $10 billion.

The stock market has punctuated this inflationary mood by the almost unbroken rise in prices beginning in late spring. Corporate bond and Government security prices are declining. The Federal Reserve System is using specific and general credit controls to check this inflationary upsurge. It has raised margin requirements for stock transactions from 50 to 70 percent. Several branch banks have raised discount rates and the "Open Market Committee" is beginning to sop up some surplus funds in the banking system. A growing fear is that the rise in the interest rates may again slow up residential construction and local public improvement and impede small-business recovery.

The executive branch of our Government has its eye on possible price rises and inflationary pressures. But its statisticians foresee a stable price level for some time ahead. The President has killed bills carrying appropriations to provide work for the unemployed, while the need for new employment opportunities is pressing as strongly as ever. Pleas for restraints on prices continue to be made, but they have had little influence on private business policies. And yet, no direct program for lowering prices has been announced.

B. BUSINESS LEADERS ACCENT INFLATION, NOT UNEMPLOYMENT

Some industrial and financial leaders in the current depression are also engaged in the act of deflecting attention from our serious unemployment problem to the issue of inflation. The ink was hardly dry on the proposals by the Committee for Economic Development to stimulate our economy through tax reductions, when this group issued a sophisticated exposition of its views on inflation.

Inflation suddenly loomed up as the major issue, peculiarly, at a time when overall price stability was most apparent. Moreover, the committee, seeking a scapegoat for its fears, found it in the trade unions. Latching onto the new theory of inflation described as the "wage-price" explanation, it declared that the "main problem is in the field of labor where there is no law or not even a public philosophy

or policy for the limitation of economic power." Yet, William Benton, a member of this organization's Research and Policy Committee, noted that the CED had "in its 16-year history not devoted itself to the implementation of the Sherman-Clayton acts," designed to control monopolistic business practices.

The CED blithely assumes, in this and in past documents, that antitrust laws are sufficient to harmonize private business pricing policies with the public interest, in face of the repeated criticism of these laws by businessmen, academic economists, and government. The same member of the committee with restraint chides his associates with the observation that "many distinguished economists feel the business community is today putting excessive emphasis on so-called labor monopoly as the whipping boy for inflation." Another member of the group, Elliot V. Bell, complains that the report fails to explain the "policies of recent years (which) have so signally failed to defend us against inflation."

C. NEW SETTING FOR DISCUSSION: INITIAL RECOVERY, WIDESPREAD UNEMPLOYMENT AND INFLATION FEARS

The change in the current setting adds a new complexity to the current discussion on the relation of "prices to economic stability and growth." Stable overall prices, lower food and higher aluminum and steel prices, inadequate recovery, large governmental deficits, new restraint on expenditures for public improvements and rising interest rates and stock prices present us with a markedly different background from that which faced the analysts in March and May 1958. They focused on continuing rising prices in the midst of a recession, on the postwar and Korean eras of outright demand inflation, or on the 1955–57 period when an investment boom provided high employment, pushing prices upward at a time when reductions occurred in housing construction, local government investments and the production of many durable and nondurable consumer goods.

D. ECONOMISTS POSITIONS

1. Add "price stability" as policy objective

In the earlier compendium of papers on the relation of prices to economic development, the offensive was taken by those who argued that the term "maximum purchasing power" provided insufficient guidance for those who wanted to accent price stability or at least give it a clear and unequivocal position of parity with "maximum employment (and) production." Most of these men supported the CED in proposing an amendment to the Employment Act of 1946, declaring that it is the Nation's objective to attain "maximum production, employment and purchasing power" through stable prices. But most of them rejected Congressman Reuss' proposal that the Employment Act be amended to provide "for the inclusion of recommendations concerning monetary policies in the President's (economic) program and to bring to bear an informed public opinion upon proposed inflationary price increases."

2. Act's present objective adequate

The major group of economists did not subscribe to the above proposals for amending the act or assigning any new preeminence to the objective of price stability. They argued that the present lan-

guage in the act was sufficiently flexible to permit administrative implementation of desired policies. Compromises and adjustments always had to be made among the specific objectives and varying emphasis had to be given to each of them at different times. The act allows for such a flexible adjustment of procedures and they were not alarmed at the results. Several economists remarked that the present administration was giving price stability greater consideration.

Some men argued that price stability should be specifically underlined as desirable, without giving it any more priority than it now had. They wanted to be certain that "maximum purchasing power" also meant stable prices. Others hoped that the general fiscal and monetary controls and enforcement of the current act would contribute to greater stability.

Finally, a number of economists in this group argued that growth, stability, and even stable prices could be best realized in our society if there were careful public surveillance of the policies and behavior of specific large centers of economic power which determine prices, and to some degree of those which negotiate wage changes. Private pricing policies should be brought into harmony with broader public economic goals. They were not averse to direct specific governmental intervention in the operation of the economy to achieve these purposes. Others proposed the use of direct specific monetary and fiscal policies to restrain excessive demand, credit, and investments in defined areas of our economy.

But the President of the United States, most business interests, and advocates of the "price stability" amendment to the Employment Act of 1946 are opposed to such direct controls. Recently, the President declared that "I am not yet ready or have not suggested to anyone any definite controls. I still believe the free economy is a better way to fix price levels than is Government fiat." The CED "rejects governmental controls of prices and wages, in peacetime, to restrain inflation." It is, however, quite ready to flirt with controls of labor unions in face of an explicit declaration in the Clayton antitrust law that labor is exempt from the act in its union activities because it is not a commodity.

3. "Maximum employment and production," preeminent objectives

But the debate could not end with only these two positions, for the underlying goal of the Employment Act of 1946 is the achievement of "maximum employment, production, and purchasing power." These policies necessarily demand an accent on the maintenance of maximum levels of employment and resource utilization. Those public leaders and economists who recognize these as having been the primary concerns in the passage of the act have underscored that these objectives must not be subordinated to a statistical index or even a complete program of price stability. Believing that our arsenal of economic tools, including fiscal, monetary, antitrust, and other controls or systems of review of prices, could effect general price stability and help harmonize private pricing policies and behavior with the public interest, they are ready to support many of these programs, but not at the expense of "maximum employment or production" or waste of our resources.

E. THE ISSUES

The administration and the CED have defined the issue for us. Shall we support the administration's opposition to appropriations for public works, for other aids to economic development, for assistance to the unemployed, to tax reductions designed to stimulate buying power at a time when almost 5 million persons, over 6 percent of the work force, are unemployed with dismal prospects, because the administration prefers to use general indirect monetary and fiscal controls to deal with local inflationary areas such as the stock market?

Shall we accept the CED position that there is no conflict between the goals of maximum employment and price stability because our "commitment to high employment is not * * * a commitment to keep unemployment lower than, say 4 percent of the labor force, or as ruling out larger unemployment for brief periods or in particular industries?" The CED believes that price stability can be maintained if "we were satisfied with, say 6 percent unemployment and if unionization were not widespread." Do the American people want to live with these high levels of unemployment and stop the spread of unionism in order to achieve price stability? Or are there alternative policies? Or would we prefer, in the last analysis, to put up with a "creeping" rise in the price level as long as we continue to maintain maximum employment and production and achieve a continuing high rate of growth? Or would we prefer to "maintain" maximum employment and production and seek to curb prices through the use of selective price, monetary, and fiscal controls which would impede, but not smother, inflationary price pressures without checking economic activity?

The position of the present contributor to this discussion is that the last is the policy which we should promote. This paper outlines some specific controls which should be developed.

1. Separate declaration for "stable prices" undesirable

Inflation creates inequities but unemployment also produces hardships.

The proponents of the revision of the Employment Act of 1946 have most vigorously argued the case of the inequities and hardships created by "creeping inflation." These analyses have not drawn major fire. For no one can deny that people are injured, and the economic interests of many weak groups have been adversely affected by rising prices. But their economic analysis of the effects of the slow rise in prices has been called into question. The differences in their approach lie in the fact that they have minimized or waved aside the human and economic costs of the alternative positions. They have decried inequities but have accepted large-scale unemployment. They have clung so ardently to classical competitive models of business organization that they have ruled out economic controls which would strengthen stabilizing trends in our economy.

"Creeping" or slow increase in prices do adversely affect fixed-income groups. The price increase means they can buy less and less with their incomes. Weaker sectors among the wage earners and salaried employees are unable to bargain for automatic cost-of-living adjustments. Employers' largesse is not always sufficient to main-

tain their real purchasing power. Federal and State minimum-wage legislation, where it exists, is updated only belatedly to eliminate the inequities. Such laws are lacking particularly in the very States where workers are least organized. Government employees have their wages raised only after protracted political efforts and battles. And then only when an alerted citizenry realizes that the quality of service is being undermined. Frequently, they have had to fight economy-minded administrations to get what the Congress or the State or local legislature has voted them.

The stronger and active economic groups of labor and capital have held their own; they have easier access to resources. The weaker and more passive have suffered. Countervailing forces arise slowly and inadequately and often not at all among the weak. Even when the Government undertakes to help them, the strong batter down the aids through legislation, unfriendly administrative appointments, and the judicial process as in the case of the unorganized workers.[1]

The correction of inequities suffered by one weak group does not assure benefits to all others. Each has to fight for itself. Complete balance and equity in adjustments to a rising price level are unlikely in our free economy. Nor do they exist within our society when the price level is stable.

One is tempted to ask the active proponents of this argument concerning the inequities created by a rising price level if they have been equally active in correcting other social and economic inequities. Are the weak, passive, and unorganized groups ever equal beneficiaries of society's gain and, if not, would it not be fitting to seek prior corrective action in these areas?

2. Unions blamed by classically oriented economists or employer apologists

An assumption running through the argument for urgent action to maintain the price level is the belief that the postwar years built permanent forces of continuing inflation into the American economy. The main villain is the trade-union movement and its insistence on wage increases. Its successful pressure for higher wages communicates itself to the entire society, for unorganized employers "must" follow suit to avoid unions, and, it is alleged, this forces prices up. These analysts are relatively inured to "demand inflation" such as we experienced immediately after the war. But they want to fasten down the current "creeping" category and find its cause. Since prices, they feel, will continue to rise, they are seeking a target to hit. The irony is that some of these men in another context often minimize the union's influence in affecting wage levels.

We presume that this conviction stems in part from the novelty of the many new institutions or forces we now face which these men do not fully understand since they are alien to the classical economic models. Instead of diagnosing and understanding them, the easier intellectual and emotional alternative is to disapprove and combat them.

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[1] Solomon Barkin, A Critique of Big Business, The Commercial and Financial Chronicle, December 30, 1954 (TWUA Research Publication E–36).

3. Indirect monetary controls slow in taking effect and cause recession

The conviction that prices will inevitably rise in our economy is usually associated with the advocacy of general fiscal and monetary controls to deflate excess demand. This position is of course subject to much criticism. Do we necessarily have the evidence that prices will rise if we have the will to isolate the specific causes of increases and the determination to restrain the pressures? Why should we favor general monetary controls when our experience indicates that they will not act to stop inflation quickly, and will slow up economic activity?

The argument that prices will continue to rise is reason for study of the causes and the development of programs for their restraint rather than an invitation to the use of improper policies which usher in a host of discriminatory effects. Certainly, older economic teachings concerning the effectiveness and relevancies of direct monetary control will not suffice to give us adequate current answers as to methods of holding down prices.

4. The issue is not indirect controls versus runaway inflation

The case for general fiscal and monetary controls has also been argued by alleging that creeping inflation cannot be bridled and will break out into an epidemic of chronic large-scale inflation. The minor costs of general controls are to be preferred to the devastation caused by runaway price movement. This is a scare which should be treated as such. Our choice is not between indirect controls and runaway inflation, but between creeping inflation and price stability by means of special controls over specific inflationary pressures.

5. Economic growth has occurred in periods of rising prices

Does a slow rise in the price level stimulate economic growth? The proponents of an outright declaration for price stability have contended that rising prices are not essential to growth. But many students have abundantly shown that economic expansion has tended to occur during periods of rising prices. They have argued in fact that price stability is not under all circumstances consistent with economic growth. Historic evidence of the operation of our economy provides formidable support for this entire position. The credit and fiscal restraints during 1955–57 did not stop creeping inflation, nor moderate the investment boom. It is, therefore, necessary for us to resist supporting groups favoring a specific declaration for "stable price policy" particularly as this policy may restrain current economic expansion. The administration's current preference for price stability over high employment illustrates the danger of this attitude to economic growth and employment and raises doubts concerning the wisdom of the position of these "price stabilizers."

6. Formal priority for "price stability" means continuing high levels of unemployment

The crucial question is whether price stability is consistent with "maximum employment and production." Certainly the positions of the more ardent advocates of this policy leave us little doubt that if "price stability" is given any special priority over the other objectives, we shall be subjected to continuing high levels of unemploy-

ment. As a contributor to the compendium, Joseph Aschheim concludes that

> price level stability appears unlikely to require unemployment in excess of 5 percent of the civilian labor force. While much more moderate than some other estimates, a 5-percent unemployment margin is apt to entail a significant sacrifice in terms of private domestic investment. (P. 30.)

Similarly, the CED suggests that the price of a stable price level is at least "4 percent of the labor force * * * (and) large unemployment for brief periods or in particular industries." There are still other estimates of an expected level of unemployment in an economy tied to a stable price level by means of general monetary and fiscal control, but the basic fact is that rigid price stability, or assignment of a higher priority to this goal than to full employment or full production, definitely spells in the context of available controls a less active economy.

The issue then becomes primarily that of determining the threshold of tolerance of unemployment in our economy. Certainly, we have been accustomed to much lower levels of unemployment than those chosen above and have become intolerant of excessive long-term unemployment as indicated by the adoption of the area redevelopment bill by Congress. We would therefore believe that the assumptions of the levels of unemployment underlying current demands of the "price-stability-first group" must necessarily be unacceptable to the American people.

Some economists and policy leaders are not urging that a priority be given to this objective but are proposing that it be clearly spelled out. In this way, they declare, the country will be assured that this objective will not be lost sight of. They, of course, are moved to this position by a concern that a different administration, not as publicly wedded to the "stable dollar" policy and more concerned with maintaining employment than the present one, would subordinate this objective. This group wishes the Government to apply itself continuously to securing stable prices. They are anxious to dispel impressions, which they contend are prevalent, that prices will inevitably rise and that the Government will continue to bail out the economy through higher expenditures or easy credit, resulting in temporary economic stability at a higher price level. They hope to dispel this attitude because it supports the movement to higher price levels.

7. Indirect monetary controls create inequities

The program for achieving price stability may also misfire because it will create greater inequities than now arise in a period of creeping inflation. Monetary restraints since 1955 have been particularly discriminatory against low-income groups, the housing industry, small-business and governmental services; they have had particularly little immediate effect on big businesses because they were able to insulate themselves from these controls. Banks were able to make a killing. The end result was that these restraints worked most severely on the very groups in the economy who were least responsible for the rising price level and whose continuing high activity would have a minimal inflationary effect. The pressures were highly concentrated and could have been dealt with by controls in specific areas. But the administration and the Federal Reserve Board preferred to

use generalized indirect fiscal and monetary controls which generally acted slowly and with minimum effect on the investment boom.

8. Concepts and measures of price stability inadequately defined

Many difficulties, of course, will arise in making any program for stable prices truly operative. Technically, we must agree on what is to be our measure of prices. The Consumer Price Index has been widely discussed as a measure of prices. It is a significant clue but it is not really adequate for the administration of prices. It reflects ultimate price effects, but actually its responses lag behind initial impulses. An economic policy administrator will be unable to initiate adequate restraints if he waited for the economic tides to be registered on the CPI. In the period of 1955–57, the rise in wholesale prices of manufactured durable goods was not substantially reflected in the Consumer Price Index because they are a small part of the index and the retail margins on these durable goods were cut. Which index shall it be? The Wholesale Price Index? The Consumer Price Index? General production deflaters?

The administrator would also have to know precisely what price stability means. Is it to be rigidly conceived? Fluctuations are considered desirable in a free economy. Which fluctuations are inflationary or deflationary and which are not? Which are conducive to stimulating production? Which restrain buying?

F. CONCLUSION

The advocates of a specific directive for price stabilization in the Employment Act of 1946 believe that indirect monetary and fiscal controls can restrain price increases. Our experience does not confirm this position. Among the basic reasons for the inadequacy, if not deficiency, of this approach is that our economic organization has beeen vastly changed from the model underlying this economic rationale. Our economy is no longer composed of small units whose behavior and prices are determined and set by the interplay of external competitive forces of the market. We are now highly organized. Large business enterprises dominate many markets. Various economic interests are organized for formal bargaining and the exercise of political and economic pressures. We, therefore, conclude that the enforcement of a priority for the objectives of "stable prices," however desirable the goal may be, would only tend to negate the broader objectives of the Employment Act, "maximum employment and production."

II. Price Restraints Through Specific Controls

In rejecting the proposal for "stable prices" to be added specifically to the objectives of the Employment Act of 1946, we are not questioning the desirability of this goal. Rather we have taken this position because we do not believe that a special accent on this objective, given current procedures for containing price increases, would be consistent with the basic goals of the act; namely, "maximum employment and production." The policies and programs designed to attain such stable prices should be adapted to promoting balanced economic growth and employment rather than subordinating them.

Our knowledge of the means of attaining a combination of economic growth, high employment and stable prices is, of course, limited. The concepts are still being defined and the different settings in which these problems have arisen are still being described. But the progress economists and administrators have made in recent years in developing theories and devising techniques for stimulating general economic growth and maintaining a high degree of stability provide us with the assurance that similar success may crown our efforts in the area of price stability. We must, therefore, be receptive to helpful and constructive suggestions.

Certainly, current policies of restraining demand by general credit, fiscal, and monetary techniques are not appropriate for a time when the inflationary threats are localized. When inflation is produced not by an overall surplus of demand spread throughout the economy, the executive branch of the Government should have available specific tools to deal with particular excesses in demand and individual abuses of monopolistic or oligopolistic powers.

The present committee is making a good start in the direction of familiarizing the American people with the problems we face in inhibiting inflationary movements and thereby helping to achieve stable growth and continuing full employment. Sufficient criticism has been addressed to the deficiencies of generalized fiscal and monetary controls and to the tools of measuring price changes to make the country all the more receptive to specific suggestions for direct controls. A number of proposals for such controls have already been made. Others will be offered in this and other papers. It is important to encourage closer study of these individual suggestions so that their merits may be more fully reviewed. Your committee can make a substantial contribution by inviting close analysis of each separate proposal.

It is our view that price increases can be restrained in periods such as we have experienced from 1954 to date, when there were few generalized inflationary pressures, if we will apply specific controls in particular areas where demand has grown unduly or where monopolistic or oligopolistic powers are being abused. Similarly, the executive branch of the Government should be better equipped to discourage price increases during our current recession and restrain the inflationary speculative pressures which pervade our stock and money markets. It is to the development of specific controls for each localized area that we shall address ourselves.

A. ADMINISTERED OLIGOPOLISTIC PRICES SHOULD BE OPEN TO PUBLIC EXAMINATION

In our economy it is hoped that prices will be determined by market forces. They will respond to demand and supply factors. No one buyer or seller will be able to fix or administer them. Competitive demand and supply forces would determine the volume of production and the use and allocation of resources. High prices would attract new investments, stimulate supply, and restore a balance, while low prices would effect a drop in investments and supply and a diversion of resources. Full employment would be maintained by a flexible price system. In this idealized state, there would be no need for governmental intervention in the market, since the adjustments of

price and supply to demand would occur automatically and demand would absorb output.

Our economy has seldom enjoyed this state of price flexibility or had such mobile resources. Booms and busts have been the unending rhythm of American economic history. Many different efforts have been made to achieve economic stability. Progress has been made through fiscal policies. Another persistent approach has been in the area of the market structure. Much legislation has been enacted to destroy monopolies and monopolistic business practices to establish a state of competition and flexible prices.

1. Antimonopoly laws have prevented some monopolistic conspiracies and practices but have not restored traditional competition

Many economists have argued that if conditions of free competition could be reestablished, the problems of controlling inflation would be eased in periods when the overall demand appeared in balance with supply. They have therefore urged a direct assault on the industry groups which force prices up to limit their power. Programs have been proposed to break up these concentrations and restrain these increases.

This same challenge, sounded for more than 70 years, led to the passage of our first antitrust legislation. Several additions have been made to the Sherman antitrust law which reinforced its basic purposes and closed loopholes. These laws made illegal business monopolies and conspiracies, price discrimination, exclusive dealings, tie-in controls, mergers and interlocking directorates which furthered these monopolistic ends, and unfair trade practices which coerce or injure small business. Congress is now considering proposals requiring prior notification of mergers as well as limitations on good faith defense in the case of price differentials. The effectiveness of the enforcement of these laws has varied; the courts have adopted rules of reason in their interpretations which sharply limited the reach of the law against business. The executive branch of the government has not uprooted the vast number of cases of monopolistic or unfair practices considered by the economists to be interfering with the operation of a freely competitive society.

But there is a widespread consensus of opinion that even if these laws have not been fully effective they have inhibited the growth of truly monopolistic trends within the United States. Some students have argued that the actual competitive forces have been more significant in preventing monopolies than the law. In any event, the laws have had some effect. Several monopolies and patent pools have been broken up. Outright price conspiracies and agreements are rare in this day and age. Understandings and agreements are now drafted so as to avoid running afoul of the law and the court's interpretation of these laws.

2. Big business and price administration

These restraints have not interfered with the growth of the large business enterprises. Rather the latter have multiplied in number. Whatever controversy there may be about the degree to which they have dominated our economy, there is no doubt that they have arisen in many new industries. With the increase in numbers and the spread of the economic areas in which they operate, their influence

has grown. Their power has become so mighty that we can, in truth, speak of the era as one of "oligopolistic capitalism" which has superseded the more competitive earlier forms of business organization.

Whatever the merits and necessity for the large business organization, their economic behavior is different from that found among smaller concerns operating in a competitive market economy. The latter tend to follow market prices. They cannot fix them. Prices are set for them through external, nonpersonal forces. The larger concerns, on the other hand, tend to follow a different practice. They are powerful enough in most instances to fix their prices for their products and services. They are dominant or significant within their areas, and their major and minor competitors respect their price announcements so that they establish prices in their branches of the market according to their own views of the best pricing policy.

3. Oligopolistic administered prices are inflationary

The prevalence of administered prices in vast areas of our economy is not seriously questioned. What is debated is whether the prices are sensitive to market changes; whether the sellers abuse this power to overprice the goods and services they market; and whether they tend to divert purchasing power from other areas to themselves to such an extent as to constitute a drag on the entire economy, to stimulate inflation and, subsequently, a recession.

May we consider the pricing policy and behavior of the large corporations in conflict with the declared objectives of the Employment Act? A considerable body of expert opinion now associates the appearance of "creeping inflation" with this control of our price structure by large, dominant corporations who act as price leaders and set prices according to predetermined cost-plus formulas, reinforce their own market positions through advertising and other forms of nonprice competition, and whose huge profits have goaded unions on to seek high wage increases. These men see, in the modification of price policies and behavior of these large companies, the possibility of substantially restraining creeping price increases and in stabilizing our price level and economy.

There is much support for the above position both on the basis of experience and theoretical grounds. Most of the price increases in recent years have taken place in the fields dominated by large corporations which tend to administer their own price systems. Moreover, there has been a marked tendency in some areas for prices to move only in one direction, namely, upward. The recent price reduction in the aluminum industry which was subsequently canceled, interestingly enough was attributable to the Russians underselling the Aluminium Corp. in British markets rather than any competitive factors in this country.

(*a*) *Administered prices rose when market prices declined (1955–58).*—Gardner Means, in his testimony before the Senate Antitrust and Monopoly Subcommittee, reported on his analysis of wholesale price changes from June 1955 to June 1957. For 80 commodities, "wholesale prices changed less than 8 times in an 8-year period and for 93 commodities * * * prices changed more than 77 times in the same period." He found that "market prices declined on the average 1.4 percent while the administered prices rose on the average 10.2

percent." He concluded that "insofar as these data represent a fair sample of wholesale price behavior for market prices and for the least changing administrative prices, they indicated that the major movement in the last 2 years has come in the most administered prices and not in market prices as a group." After a study of food and agricultural prices which he found had declined, and physical food consumption, which had remained stationary, he concluded that "the current inflation is not the result of a general rise in demand but is a product either of a specialized increase in demand which has not spread out, or lifted demand in general, or is a product of upward price revisions within the area of pricing discretion."

(*b*) *Durable goods prices rise more than unit labor costs (1947–57).*—Additional evidence of the overriding influence of the administered price sector upon our economy is supplied by the relative price behavior of the durable and nondurable goods industries over the period from 1947 through 1957. The wholesale price of durable goods manufactured (which were identified as consisting of the prices for consumer durable and producer finished goods in the wholesale price series), in which area a substantial proportion of the producers are subjected to administrative price control, rose by 53 percent as compared with the 10 percent for the nondurable goods industries. During this same period the comparative rise in unit labor costs for the durable goods industries was 15 percent and the nondurable goods industries, 11 percent. The wholesale prices for durable goods increased more than three times the rise in unit labor costs, whereas the increase in wholesale prices for the nondurable goods actually was less than the rise in unit labor cost (table I).

The overwhelming power of these large corporations in setting prices for major sectors of American industry has been particularly evident during the last boom and the current depression. A general state of excess demand was absent; but the large capital goods industries boomed and they pushed prices upward. Under the impetus of an upswing in consumer buying in 1954, induced in part by a cut in personal income tax, a drop in the rate of personal savings and a liberal credit policy for home construction at the end of 1953 and through 1954, an impressive increase in demand occurred for consumer durables, particularly for automobiles and homes. With the repeal of the excess-profits tax in 1953, the introduction of accelerated depreciation allowances under the corporate income-tax law and the expansion of Government purchases, industry began its capital expansion which produced the recent investment boom. During this period, demand was clearly concentrated in the capital goods areas. Manufacturers used the opportunity to put across the price increases which Gardner Means reported. But, most significantly, they repeated the same pattern in 1958 in a period of much reduced operations when there was no boom or demand for their goods and some of these industries were operating at about one-half of their capacity.

In part, this story is revealed in the analysis by the Bureau of Labor Statistics of wholesale prices in the three recessions of 1948–49; 1953–54; and 1957–58. The Bureau reports that in the third recession (which they measure as extending from July 1957 to May 1958) the prices of all wholesale commodities increased, though they had declined or been stationary in the previous two recessions. One of the

major reasons was the 6.8-percent rise in farm products and processed foods which compares with a 7.7-percent decline in 1948–49 and a 1.6-percent rise in the second recession. Crude and intermediate materials declined in all three recessions as did consumer nondurable goods, with the drop in the current recession larger than in 1953–54. Both the prices of producer goods and durable consumer goods rose more sharply than in the 1953–54 period and the current increase must be compared with a reduction in the prices for these goods in the 1948–49 period (table II).

(*c*) *Steel price rises in 1956 and 1957 broaden profit margin.*—The power of those corporations administering prices in the key industries is best exemplified through the analysis of individual industries. The report by the Kefauver Subcommittee on Antitrust and Monopoly highlights this issue in the steel industry as revealed by the study of the price increase of July 1957. The industry has been highly concentrated, with the United States Steel Corp. maintaining a dominant position and acting as price leader. The "practice of price leadership * * * appears to operate just as effectively when prices are increased as when they are reduced." The report finds that there have been relatively few entrants into the industry in recent years and several constructed their facilities with the aid of the Federal Government.

An elaborate price system has been in use in the steel industry which was derived from an earlier basing-point arrangement which has "produced complete identity of delivered prices at any given point of destination." As for prices, they—

> have moved on a number of occasions in the opposite direction to that which would have been indicated by the changes in demand. Thus the steel price index continued its virtually unbroken rise even when demand and production declined (as they did in 1949, 1954, and 1957). It also continued its climb even when unit labor costs declined (as they did in 1950 and 1955) * * *.

The committee also concluded that—

> the price increase substantially exceeded the cost increase in 1957 and apparently also in 1956. It is also reasonably clear that at the time the 1957 price increase was made there was nothing in the information available to suggest a forthcoming increase in demand which would support the higher prices.

Most significant, the committee found that the 1956 and probably the 1957 price increase widened the margins between unit costs and prices. The "break-even" point for "both the steel industry as a whole and the United States Steel Corp. individually is shown to be slightly below an operating rate of 40 percent of sales." One of its expert witnesses, a management consultant formerly associated with the industry, estimated that in the third quarter of 1957 the break-even point for the United States Steel Corp. had dropped to 32 percent of capacity. This estimate of the break-even point within the industry, coincides with those currently used in the financial community in estimating profits. The latter place it at 37 percent of capacity for the United States Steel Corp. and at a comparable level for other leading producers.

The price increase was set "at a level above what the market can support." The industry made no effort to help customers develop markets through lower prices. This possibility it has discounted on the assumption common among many oligopolists that the demand for

steel was essentially inelastic. While many users of steel are definitely responsive to price and are handicapped by these increases, the industry minimizes its significance in affecting its total operations.

The hearings for the automobile industry have been concluded. We presume that the evidence will lead the subcommittee to reach similar conclusions about the abuse of economic power in this industry. The list does not end there. Economists are ready and able to submit further illustrations of oligopolists which are sufficiently powerful to set their own price policies according to their own concepts.

A close investigation of the synthetic yarn industry would reveal a similar play of power. Where competitive forces, such as foreign imports or alternative fibers at approximately the same price level were available, prices have been responsive to demand; otherwise the producer sets them according to his own concepts of appropriate profits and the scope of the market which he wishes to penetrate. The pricing history of the individual noncellulosic fibers by Du Pont makes a good start for such an inquiry (Table III).

(*d*) *Administered price polices designed to keep prices inflationary.*—The inflationary nature of these prices is further confirmed by the policies followed by these corporations. Recent surveys carefully report them. Fundamentally, they tend to be based on cost plus formulas. Their goal is to reach predetermined profit targets. Robert F. Lanzillotti, after his intensive study, properly concludes that it is "more accurate to think of the pricing policies being designed and administered to achieve administered profits as well as administered prices." The officials generally use "standard or normal cost methods" rather than actual costs in reaching their pricing decisions and give little weight to the influence of different possible prices upon sales in established lines—total demand being taken for granted and not much concern expressed for sensitivity to either small- or large-price changes.

The basic procedure in such calculations is for the company to select a target rate of return which usually varies from "a low of 10 percent to a high of 20 percent (on investment) after taxes or an equivalent before tax target of approximately 20 to 40 percent." In defining cost the officials tend to select an arbitary rate of operations for normal capacity, such as 80 percent of rated capacity for the United States Steel Corp. Moreover, their depreciation charges are adjusted for price changes and further allowances are at times added to enable the companies to finance further expansion from their own financial resources. Prices built upon this theory have produced the great profits of the steel and automobile industries which have financed their expansion.

Besides being inflationary, the policy of setting prices high enough to enable a business enterprise to finance its own expansion, presents a serious challenge to our entire financial community and our economy which depends on power checks and balances. These corporations have freed themselves from the review and checks of the money market and are able to proceed in their growth without control by the investing community as a whole.

(*e*) *Conclusion.*—Administered prices in most instances are not responsive to demand and are set on artificial and questionable assumptions. Their profit targets tend to be unduly high and designed

to finance all or a substantial portion of the company's expansion from internal sources. Sellers utilize their economic power to maintain high prices. Concessions in the form of lower prices are seldom made when operations rise above standard levels and few efforts are made to encourage demand through price cuts where production is low. The companies have stood by these higher prices irrespective of national economic policy and objectives. They feel no responsibility for making their pricing policies jibe with the Nation's objective of attaining "maximum employment and production." Their practices, moreover, stimulate inflation.

4. Public review of administered prices is essential

One cause of the recent inflationary trend is the excessive margins and inflexible nature of the administered prices set by the large oligopolistic corporations in major American industries. They dominate a substantial proportion of American industry and their products enter into the stream of the Nation's economy. If a serious effort is to be made to deal with inflationary processes derived from the seller's power, it is necessary to supervise these centers of economic power.

First, Congress should determine whether any of these large aggregates of power should and can be broken up. There has been a tacit assumption that large corporations are necessary for an efficient industrial system. Actually, there are many facts which controvert this argument, or at least call it into question. Certainly, the central headquarters organization of many corporate giants serves primarily as a financing agency for a conglomerate structure of unrelated units. There is a definite need for more intensified study and determination of the implications of the proliferation of multi-industry operations by big business organizations. These investigations and public inquires should start from the proposition that reasonable and practical fractionalization of these large corporations would be desirable in the public interest.

Second, these large corporations are charged with a vast public interest. Their policies can frustrate the very goals set by our Government. It is therefore essential that we give renewed consideration to the proposals offered by Senator Joseph C. O'Mahoney for the Federal incorporation of such large organizations. The Federal agency charged with the administration of this proposed incorporation act should be furnished with regular reports on price and production policy, performance and results, and should be entitled, on its own motion or public complaint, to survey corporations for their policies and performance allegedly in conflict with the public interest (75th Cong., 1st sess., S. 10).

One phase of this review should be a regular examination of announcements of proposed price increases which would be filed with the agency administering this act. The agency could hold hearings if there was sufficient public interest and demand. Reports on these hearings and on investigations initiated by the agency should be filed with the President and the Congress, and made available to the public.

The agency should be charged with developing criteria of public interest in the field of corporate price and production policies, so that private actions could be harmonized with national economic goals.

Provision might be made that price increases by the large corporations, based on claims of higher costs due to wage increases com-

pensating workers for annual increases in productivity, would be enjoined until passed upon by the Federal agency. Productivity wage increases should not be reason for higher prices since employer's own gains in advanced productivity should offset these increases.

B. WAGE DEMANDS WILL BE MODERATED IN A NONINFLATIONARY ECONOMY

Confronted with rising prices during the last few years, at a time when there was no generalized excess buying power, when facilities were idle or only partially utilized, business apologists have made the trade-union movement the scapegoat for price increases. Other economists who wanted to prove their impartiality and moderate the seeming animus against business resulting from charges of abuse of economic power in price administration glibly coupled the business corporation and labor as the causes for price increases. By a sleight of speech, they have implied that labor means organized labor and, therefore, the trade-union movement. The cause of the price rises lies, they reasoned, with the abuse of power by both corporations and trade unions. Consequently, proposals for control of business policy and the administration of prices automatically included the trade-union movement.

This identification of both corporations and unions with price determination has been an easy one for them to make. Wages, in traditional economic analysis, are a price, and workers, a commodity. These can be manipulated in the same way as commodity prices. If the term for control of prices is "administered prices," it has been obvious to these men that the equivalent for wages is "administered wages." If there is oligopoly in the product markets, there is also wage oligopoly.

Despite the passage of more than 40 years the economist has not absorbed into his theoretical framework the dictum of the Clayton antitrust law that "the labor of a human being is not a commodity or article of commerce." Political leaders also make this quick identification of the two. Do they not see for themselves the images of "big business" and "big labor"? Have not some individual labor leaders abused their positions? The rationale used for castigating the business society would be equally applicable to the trade unions and the processes of wage determination.

The congressional committees investigating these problems of inflation and price policy should examine the wage and industrial relations aspects of our economy more thoroughly before they glibly accept the above conclusions. The use of the same price-and-supply analysis for both prices and wages is invalid.

1. "Cost inflation" theory is built upon false assumptions

Among some businessmen and economists, it has become popular to speak of the inflation experienced from 1955 to 1957 as having been produced by pressures from the cost and not the demand side. They found it easy to accept and understand the typical inflationary cycle created by an excessive demand from pent-up buying power or other unusual factors such as a war period and speculation. This phenomenon has been well known and the culprit is usually identified as the Government. Fixing the blame on Government rather than on business policy or behavior came easy to economists and businessmen.

The recent experience, however, was new and baffling. Superficially, they witnessed price rises. Wage rates also tended to be increased by reason of the progressive upward movement of the Consumer Price Index. It was easy to characterize the result as a "cost-push" inflation overlooking the role of the oligopolist. There was not much difficulty for these men then to switch the characterization to "wage-cost" inflation. The whipping boy thus became the trade unions which had forced sellers to increase their prices. This new phrase also took big business off the hook.

The reason for the identification of the inflation with the "cost-push" and "wage-push" is explained very naively by the CED. An analysis of the distribution of corporate income from 1922 to date suggests that labor's share has been stable. Consequently, it concludes that labor "in a free market is unlikely to change the share materially." Therefore, any rise in wages not offset by a comparable increase in productivity must be automatically reflected in higher prices and cause inflation. Thus, our recent price increases have been caused by higher wages.

Apparently, it did not dawn on the CED that many economists, congressional committees, and public leaders have long contended, and publicly declaimed, that profit margins and prices of many ologopolistic industries are excessive and basically inflationary and truly the root of many of our economic difficulties. Every effort to maintain prices must be economically disastrous. Yet the CED naively completed its syllogism by saying that American business enterprises were acting "naturally" according to "past performance" and only trade unions could be the cause for upsetting the apple cart.

Fortunately, several contributors to your original compendium pointed out the fallacies of this argument. Both Messrs. Ackley and Lerner developed a more neutral terminology to explain that inflation could come from industrial price practices as well as trade union wage proposals. Gardner Ackley speaks of "markup inflation" in which the cause of inflation may be due to an excessive markup of either the profit margin or the wage level. Abba P. Lerner speaks of a "sellers' inflation" which can be started by an increase in price markups as well as wages. These men have opened the way for a more considered analysis of the entire problem of trade-union responsibility but have not, themselves, provided it.

Professor Lerner expresses the opinion that "the 'who started it first' debate is a complete waste of time, because there is no original situation in which there was a 'just' or 'normal' distribution of the product between wages and profits." While this curt dismissal of the problem may satisfy his overall analysis, further thought must be given to this basic issue. Public debate tends to center about the cause as well as the evidence of difficulties.

Wage adjustments are not necessarily the cause of "cost inflation" and it is equally true that cost increases may not in themselves have been the primary cause of the price rise. Our analysis of the role of the oligopolist in modern industry has clearly demonstrated that his insistence on high profit margins is a central threat to price stability.

2. Trade union demand for reduction of excessive profit margins

The wage policies followed by national and local trade unions have been greatly conditioned both by the economic environment in which

they operate and the long-term aspirations which brought them into being. As for the economic environment, large-scale industry and corporations antedated the appearance of the current industrial unions. The administered price policies of many large companies can be traced back to the twenties or earlier. Price leadership, product differentiation, and price formulas were adopted as substitutes for outright mergers, collusion and monopoly when legislative restraints became effective. These now prevail in many industries and corporations where unions are nonexistent or weak.

Similarly, industry patterns for wage movements and terms of employment were in vogue long before unions appeared in the basic industries. These were usually set by the same companies which were price leaders. The same practices continue to be followed in substantially unorganized industries. They appeared before the thirties and have continued to date.

Industrial trade unions in the primary industries were developed to deal with the large profitable corporations of those industries. Their aims were to establish bargaining rights within the plant and on the job, and to negotiate benefits for employees. They strove to gain acceptance for principles of wage determination based upon workers' historic goals. One of these is the desire for a "fair share" of a company's profits.

They also have sought a regular share in the rising productivity of our Nation. During the twenties economists like Rexford Tugwell urged the wisdom of such a policy upon unions. It was adopted in the 1948 General Motors contract and subsequently followed in other industries. The conditions surrounding the acceptance of this program are often lost sight of; they are a long-term contract and forfeiture by unions of rights to interfere with technological change. Management in the automobile industry has repeatedly declared that the wage increases flowing from this type of agreement have been regularly offset by productivity increases and should not be the cause for price increases. The Wage Stabilization Board, during the Korean war period, approved these wage formulas as noninflationary.

Certainly the provision for automatic wage adjustments to the rising cost of living cannot be an excuse for higher price levels. They stem from prior price increases. Finally, unions have sought to improve the fringe benefits in order to protect workers against the vicissitudes of life as well as to equalize their benefits with those received by other classes of employees.

The trade unions in the mass production industries dominated by the large corporations have been quite insistent in their pleas to managements to reduce prices and absorb wage increases within the existing profit margins. These union appeals have been spurned and rejected as not being properly within their province. Workers and unions concerned with the heavy drain placed upon the economy by exorbitant prices demanded by the industries in which they are employed are considered impertinent, even though such prices have serious effects on employment regularity and opportunities.

In each of the major negotiations since the conclusion of the war, the economics of the proposed wage increase has been regularly brought before the public. The facts have been paraded by the union. The one common refrain has been that the wage increases could be

absorbed. Subsequent to the wage concession and the announcement of the price increase the unions have regularly publicized their proof that the price increase exceeded the cost of the wage concessions, and have reiterated the fact that they could have been absorbed without a price rise. But this evidence has been left unstudied by the business apologists or their economists.

Fortunately, these data have been studied by the Senate Subcommittee on Antitrust and Monopoly in the case of the steel and automobile industries. The published report for the steel industry finds conclusively that "the price increase substantially exceeded the cost increase in 1957 and, apparently, also in 1956." In its detailed analysis of the cost of the 1957 wage increase both to the union and nonunion employers, the committee concluded that it fell "somewhere between $2.50 and $3 per ton of finished steel" compared to an average price increase of $6 per ton. After considering the increase in "other costs," it found that they do not account for the difference. On the contrary, the industry's break-even point dropped and profit margins increased.

As for the relation of wages and prices to productivity increases, here again a careful understanding of the evidence is indicated. A recent study by the United States Bureau of Labor Statistics, covering the period from 1947 to 1956, concludes that "the index for unit labor costs was lower than the price index for every year prior to 1956 although the difference was very slight and probably insignificant in 1953 and 1954." In its June 1, 1957, issue, Business Week magazine interprets this report as follows: "Unit labor costs seem to have followed prices uphill through most of the postwar years and particularly in those years when the inflationary peak was most intense."

Between 1947 and 1957, hourly money earnings in the manufacturing industries rose by some 67 percent but real hourly earnings rose only 33 percent. This compares to a rise of 42 percent in output per man-hour during the same period. While unit labor costs in terms of current earnings rose by 15 percent, workers' real income did not keep abreast of productivity advances. Even if allowance is made for the cost of fringe benefits the results will not be different.

The record will show that the prices for manufactured goods have increased far beyond the 15-percent rise in unit labor costs. According to the 1954 census of manufacturers, wages and salaries constituted 57 percent of value added by manufacture and about 25 percent of the cost of manufacturing. Thus, one might have expected that the 15-percent increase in unit labor costs would be reflected in a much lower rise in wholesale prices. Actually, the wholesale prices of manufactured goods rose by 28 percent. Clearly, the prices of manufactured goods have risen beyond the rise in labor costs. Manufacturers, in other words, have not held to their part of the bargain.

This conclusion is particularly evident in the case of the durable goods industries, where the widening of profit margins is clearly reflected in the relevant statistics. Thus, from 1947 to 1957 hourly money earnings rose by 70 percent, but real hourly earnings increased by only 35 percent; while output per man-hour rose by 44 percent, real hourly earnings fell some 9 percent below this rise in produc-

tivity. At the same time, wholesale prices for these durable goods rose by 53 percent—more than 3 times as much as the 15-percent increase in unit labor costs.

Of course, the story is considerably different in many of the durable goods industries where competition is keen and the manufacturers cannot administer their prices at will. In the nondurable goods sector of the economy in the period from 1947 to 1957, money hourly earnings rose by 61 percent, real hourly earnings by 28 percent, and output per man-hour by 38 percent. Despite an increase of 10 percent in wholesale prices, unit labor costs in the nondurable sector rose by only 11 percent during this period. Even so, employers in this sector of the economy were much more conservative in their pricing policies.

While the evidence supports the trade-union claims that in monopolistic industries profit margins have risen, no responsible Government official has undertaken action to get these manufacturers and sellers to revise their prices downward. Union wage action must therefore be considered as a plea not only for equity for its members, but also an invitation for public action to correct the exorbitant levies and markups imposed by these sellers and industries upon our economy.

3. Trade union role in influencing total wage rise is intentionally overstated

A number of assumptions have been made in the presentation of the influence of wage increases on our economy which need further clarification. The charge, direct or implied, that trade unions are responsible for the price movements should be challenged. First, union contracts are not as pervasive as is implied. Significant employers remained unorganized even in the most highly unionized manufacturing industries. Moreover, many industries are only partially and feebly organized. The policies followed by many companies, therefore, are unilaterally determined.

Second, the blue-collar or production-worker segment of our economy is being materially reduced so that wage increases negotiated by unions have a decreasing impact upon the final cost. Recent evidence on the changes in employment in the manufacturing industries indicates that the ratio of production workers to all employees has declined from 83.7 percent in 1947 to 76.9 percent in 1957. While the total number of production workers had increased over the 10-year period by 1 percent, the nonproduction workers had expanded by 55 percent. The greatest rise had taken place among professional and sales personnel. What is most significant is that the ratio of nonproduction workers has been particularly high in some of the expanding and oligopolistic industries.

Third, the rate of wage increase among the nonproduction workers appears to have been even greater than among blue-collar workers. In the survey of the operation of administered prices in the steel industry, the senatorial Subcommittee on Antitrust and Monopoly found that the average salary increases for nonunion members in 1957 was 37 percent more than for the employees covered by the union contract.

Similar evidence appears from study of the overall trends of wages and salaries in the manufacturing industries. Salaries constituted an increasing proportion of the total manufacturing payrolls, rising from 25 percent in 1947 to 32 percent in 1957. Partly, this increase was accounted for by the growth of the proportion of nonproduction workers to the total. However, in addition, comparatively greater increases have occurred in salaries as compared with wages in these industries. Average employee salaries in manufacturing industries increased by 67 percent in the 1947–57 period, as compared with a 61-percent rise in average production worker wages. The higher rate of salary increases has been most marked since 1953. The increases in salaries and in wages per employee were 22 percent and 13 percent, respectively (table IV).

Fourth, many unions have negotiated varying amounts of wage increases much below the patterns set by the pacemakers, because the bargaining and economic situations in their areas were not favorable or their economic power was insufficient to yield more equitable results. In an industry such as textiles, workers have not enjoyed a general wage increase for some time. The larger textile employers who have been gaining higher profits than the average established firm have not been willing to share their special advantages with their employees.

These facts highlight significant qualifications to the broad generalizations concerning union influence on wage and salary trends in the United States. They underscore the fact that employers unilaterally set wages for the overwhelming majority of American employees and the unions' influence is considerably limited.

Finally, the discussion of the influence of unions on wages frequently proceeds from the assumption that the union administers wage policies and that they stem exclusively from the rooms of executive and negotiating committees and mass meetings of the union. Unlike the procedure followed in the administration of prices, wages are bilaterally determined in unionized industries. They are negotiated between two contending parties, each seeking to promote the interests of its own constituency. Management is there to represent the enterprise and to further its economic objectives.

There is no conspiracy; there is a frank confrontation of negotiators of different interests. The concept one member of your committee has of the way negotiations are conducted is a misconception which, while not held by many in this bald form, is unfortunately, part of the thinking of many economists. This Congressman declared: "I think that the big corporations, many of them, go to their union leaders or the union leaders come to them and say: 'Listen, we want a wage increase, and all you have to do is * * * raise your prices.' They get together and they do it." Dr. E. Nourse set this Congressman straight. If this impression needs further correction, the steel and automobile strikes of former years and the prolonged negotiations between the auto union and the automobile companies this year should point up the error.

The responsibility for negotiations and wage policy from the point of view of the enterprise, and even the full economy, rests with management. If there is public dissatisfaction with the wage package it agrees to, based on criticism of management's assumptions concern-

ing its capacity and the propriety of passing on higher costs and higher margins to the public in the form of higher prices, the remedy rests in limiting this power to increase prices rather than in interfering with the collective-bargaining process itself.

Many writers on economic problems conceive of unions as following a single wage policy which is centrally determined. They often allude to the possible competition among unions in their wage demands but seldom make allowance for this fact in their conception of the existence of a uniform and single union wage policy. Actually, these are determined by each national union separately and, in many cases by local unions despite the several well-publicized cases such as automobiles, steel, coal, and rubber, where the unions deal with a small group of large companies which follow each other's patterns. There is no single predetermined policy for all locals. Negotiations are for the most part highly decentralized and each sector or even local or plant committee may develop specific demands suited to its own situation.

The appeal that unions should develop one or another specific wage policy is, therefore, misdirected in terms of the mechanics and procedures of policy determination and wage negotiations on the American scene. Unlike other countries, the overall federation of American trade unions, the American Federation of Labor and Congress of Industrial Organizations, does not participate in the formulation or determination of bargaining demands and policies. There is little coordination among unions. It is exceptional to find local unions of different internationals which negotiate with the same company exchanging information or even agreeing on common procedures.

To ask the trade-union movement to adopt any specific coordinated wage policy to promote stabilization objectives is not only at a variance with the prevailing practice, but also presumes that any such policy could be implemented by the unilateral decisions of the trade unions. Obviously such a conception is foreign to the situation in the United States. Unions cannot unilaterally adopt such policies, individually or as a group, without commitments being accepted by the other side. These have been baldly rejected. Moreover, there is no way for enforcing such uniformity of policy among trade unions since each unit is its own ultimate authority as to bargaining policies and decisions.

A policy formulated in terms of national economic interest would also have to be tested as to its appropriateness for each case independently. The present assumption is that the employer in each instance is best able to do so. If a uniform policy is to be developed, each employer's views must be tested by some outside authority. It is quite evident, therefore, that the suggestions concerning union policy and procedure are born out of inadequate knowledge and hasty improvisation.

Union influence on wage negotiations is often described as originating with its monopolistic power to control the supply of labor. Obviously, if unions are to negotiate with the employers in a free society, they must be able to strike. The withholding of labor is a rightful use of freedom. The alternative is for workers to compete with one another for jobs by underbidding one another. This choice

has been ruled out by public policy which affirms workers' right to organize and to bargain collectively.

Employers who, like the CED, speak of the need of a "review to see whether the existing laws give or leave a degree of power to labor organizations that is not in the public interest" are really raising questions about the propriety of the existence of unions. They have not clearly defined their concepts or even understood the implications of this demand but they are ready to challenge the operations of unions at a time when they themselves have not fully justified the existence of longstanding centers of business and corporate power which they themselves represent.

4. National labor-management conference for reaching consensus on economic policies

The present procedures in collective bargaining rest on the assumption that the parties in each collective bargaining situation are fully prepared to conclude agreements in consonance with the Nation's economic goals. We have already seen that this assumption is highly optimistic. Both the Government and trade unions have argued that more guidance is necessary to the parties if there is going to be greater harmony between the results of negotiations and national policies. Trade unions have no access to management price and production policies and must proceed in formulating their programs on the basis of their surmises of the likely course of action which the employer will follow. There is no chance in collective bargaining to reach an understanding concerning such policies even if the parties desired to do so, since such a course would have to involve a broader group than the participants in any single collective bargaining situation. Moreover, such a procedure would certainly run afoul of the antitrust laws.

If we continue our current practices, we shall be governed by the agreements and patterns worked out in individual negotiations irrespective of whether or not they conform with the general public interest. They will rest, in the last analysis, on management's own interests and views respecting prices. Neither the public nor Government should complain about the results, since they have taken no part in defining the goals for the participants.

To enable the parties to better understand or even agree on national economic objectives, it is proposed that there be instituted a national conference of key leaders of trade unions and management who would, long before the start of negotiations, seek to examine economic trends and goals and discuss corporate pricing and production policies as well as wage and employment policies which would most nearly coincide with the national interest. While it is certain that in the early years such conferences will only help to acquaint the parties with their respective views of basic economic policy, they will also enable them to take better account of these views in their own plans for the negotiations and in their own formulations of demands and policies. It would be hoped that in time a consensus would be reached on policies which would be a significant influence or guide in negotiations.

Such a series of conferences could lead to changes in current price and production policies in the direction of more modest markups and price movements. As a result, trade-union demands and concepts

would also be considerably moderated and greater price stability would be effected in the economy as a whole.

C. STABILIZED OR LOWER AGRICULTURAL PRICES SHOULD BE ACCOMPANIED BY A PROGRAM DESIGNED TO RAISE INCOMES OF LOW-INCOME FARMER

The drop in retail food prices from 1952 through 1955 did much to offset the rise in prices in the other sectors of the consumers' budget. The consummate result was a relatively even overall index for a 3-year period. The subsequent rise in food prices beginning particularly in the latter half of 1957, tended to reinforce the impact of the rise in other sectors. The prices of food and other farm products are of great consequence to the course of the cost of living in the United States. The continued sharp rise in foods since the beginning of this year reinforced the inflationary character of this period. Similarly, a likely future drop in food prices will offset price increases in other areas.

Continuing attention must be given to this important sector. On the one hand, there is the great desire for lower costs and abundant supply by consumers. On the other hand, there is a responsibility of providing adequate returns to the farmer and of raising the standard of living among the 2.7 million small farmers. The farm bill which has just been passed provides for a progressive drop in the support price of cotton from 81 to 65 percent of parity in 1962. Small farms have their acreage preserved while those wishing to expand production can do so, but will have only the immediate support price whereas those who hold by the lower output allotment system will receive 80 percent of parity for the next year. While the acreage for rice is increased, supports have been dropped to 65 percent of parity. The acreage allotments for corn have been dropped and supports have been lowered to 65 percent. New "fair and reasonable" support prices are to be set for oats, rye, barley, and grains or sorghums. The overall effort is to provide for a possible increase in production and a reduction in prices. Dire predictions have been sounded from the hog areas suggesting that the new corn prices of $1.14 (reflecting a reduction of 22 cents per bushel) will induce such expansion in production that support expenditures will increase.

Not one of these measures adequately deals with the very small farmer. His economic fate must be improved by a composite of programs such as those proposed by Senator Sparkman of Alabama, much of which is contained in the area redevelopment bill passed by the current session of Congress and vetoed by the President.

D. OVERALL NATIONAL PRODUCTIVITY PROGRAMS SHOULD BE DEVELOPED IN MAJOR SERVICE AREAS

Many commentators have already observed that price increases for the service components of the Consumer Price Index have pressed hard upon our cost of living. Much of the overall inflation has stemmed from this source. While the Consumer Price Index increased by 8.1 percent from June 1955 to June 1958, the rise among the services was 9.8 percent. In each of the last 3 years, the rise in the service component was more than in the commodity components.

From June 1955 to June 1956, the rise in the commodities as compared with the services was 1.3 percent to 2.1 percent; for the year from June 1956 to June 1957, 3.1 percent to 3.9 percent; and for the last year, from June 1957 to June 1958, 2.6 percent to 3.5 percent (table V).

The highest increase in prices for the 3-year period was in medical care, 12.8 percent. The others in descending order were as follows: Personal care, 12.1 percent; transportation, 10.4 percent; reading and recreation, 9.9 percent; and housing, 6.7 percent. All of the items but housing exceeded the overall rise in the Consumer Price Index.

1. Causes of cost increases

The increases in the cost of services may originate from either one of two sources. First, they may represent higher prices for the articles being used such as drugs in the case of medical care, automobiles in transportation, toilet goods for personal care, radios for recreation, or fuel for homes. Second, the services themselves may cost more as in the case of hospital care, higher doctor or dentist fees, transportation fares, barber and beautician prices, home maintenance costs, or postage rates.

Unlike other areas in the cost of living most of the impact of the higher prices and charges are transmitted directly and in full to the consumer; compensating improvements in efficiency have been modest. The prices for materials passed on to the consumer reflect in part the power of the ologopolist to raise and maintain his charges. This phenomenon is well illustrated in the case of the automobile. Competition forced the dealers to reduce their retail margins but has not affected the producers of automobiles. Competition at the retail level led to the abandonment of retail price maintenance for many consumer goods, but the manufacturers continue to charge their own fixed prices.

Another complication in appraising the cost of services relates to the level of labor rates. There are basically three types of groups insofar as our analysis is concerned. There are, first, the hundreds of thousands of workers in these fields whose pay has been and continues to be substandard. These include workers in laundries, dry-cleaning establishments, hospitals, buildings, and telephone and telegraph industries. Upward adjustments in wages for these persons are imperative if we are to eliminate repressive wage rates in this country. Second, there are those workers whose rates are more nearly in line with most other groups and whose wages are set either unilaterally, which is true for the greater number, or through collective bargaining.

Finally, there are the independent professionals such as doctors, dentists, lawyers, and others whose professional fees have risen markedly. Many questions have been asked concerning this group. They set their own fees. Have they unconscionably raised fees? Have their incomes become excessive? Is more economic and efficient utilization of their services necessary to make these fees economically feasible for the American people? Have they raised their fees without reevaluating the changes in their professional life cycle so that they owe it to the country to work out a more rational scale of payment?

Of course, as in other instances, one of the questions arising respecting prices is whether the profit margins have been raised as well. There is some evidence that such a rise has occurred in many service fields.

2. Reorganization of medical care

The above discussion has brought to light the major issue posed by the services; namely, have our methods of providing them become obsolete and inefficient. The dramatic technological revolution in retailing which brought the self-service store, the large supermarket, and the discount house epitomize the types of innovations necessary to reduce costs. Unfortunately, we have not yet begun a systematic reorganization in the various services. There is an increasing awareness of the problems in the fields of housing, transportation, and medical care. Various movements are under way to develop new approaches which would not necessarily reduce labor income or professional fees but would reorganize the services so that they are performed more efficiently and more economically. But progress has been slow.

This problem can be illustrated in the case of medical care where we have progressed considerably in defining the issues and are beginning to wrestle with the challenge of reorganization. The trade unions have been foremost among the consumer groups demanding greater economy. In fact, they are becoming the community's spokesmen in protecting the consumer in this area since there is no other group ready to represent the general population, not even the regulatory insurance departments.

The reason for the trade-union interest is quite obvious. They have assigned substantial parts of their wage gains to health benefits but have found that these gains have been nullified by the rise in prices. The Blue Cross agencies have become automatic transmission lines for rising hospital rates and the questionable accounting practices followed by the private and so-called voluntary hospitals. The user has been asked also to carry costs which had hitherto been shouldered by philanthropy and public funds. Union members have observed that increases in insurance coverage have been followed by boosts in professional fees so that their net gain has been negligible. Workers have come to resent the fact that their hard-won advances have been captured by the powerful medical groups in this way.

The trade unions have few allies in their fight for a reevaluation of the medical care services. The Blue Cross agencies have actually been dominated by the hospital representatives and the medical profession. Similarly, Blue Shield has been an agency of the local medical societies. The commercial insurance companies have had no interest in medical services since they have limited themselves to the job of covering the cost of medicine and have refrained from becoming involved in what the cost covers. The medical societies have resisted any change in the organization of medicine. Attacking all programs for reform, they have charged into battle with slogans decrying "socialized medicine." They have yielded to full prepayment systems only slowly and still offer much resistance to service programs. They are stanchly protecting the fee-for-service system behind the banner of "freedom of choice." Currently, the medical associations are balking at the provision of the United Mine Workers' welfare fund for review

of therapeutic and surgical care which has eliminated unnecessary treatment and insured high-quality medical care at a lower cost.

In face of the lack of rationalized systems of medical care, unions have developed a number of their own, or have stimulated community activities in these fields. Medical clinics and health centers have been established by unions to provide diagnostic care, health education, and some types of ambulatory care. In other communities they have set up full medical-care programs. Finally, they have brought their welfare programs within such organized medical care systems as Health Insurance Plan of New York City.

The importance of finding a solution to these medical cost problems is indicated by the rise in expenditures in this field. In 1956, private medical expenditures amounted to $12 billion which reflected a 45-percent rise over 1948 in per capita medical expenditures. Three-quarters of the increase was accounted for by higher prices.

The rising costs of medical care, therefore, demand a careful overall review of our entire system. Economies and improvements can be introduced in each segment and into the program as a whole to insure better health and possibly a lower total outlay. Many different developments can now be reported, but there has been no organized channel for overall planning. Although we have had ad hoc research commissions, the need for a permanent evaluative and planning agency is evident.

The current advances in productivity in medical care follow many different channels. Among the most interesting and dramatic is, of course, research. The human and financial savings resulting from the Salk vaccine have dramatized ultimate economies to be obtained for this source. Others have worked along the lines of public health and education. Every forward step in these areas reduces the demands for advanced medical attention. Diagnostic programs have also been pushed. Union medical-care programs often limit themselves to this service. Many hospitals and medical groups specialize in diagnostic work. Multiphase examinations have been popularized by a number of health associations as well as public agencies. Such advances, of course, mean earlier and better diagnosis; their purpose is preventive. The Federal aid program for the construction of hospitals is an outstanding postwar program, as is also aid to medical education and assistance in the recruitment of technicians and other auxiliary professionals. Greater professional competency has received a great deal of Federal and professional attention.

One area which is receiving much attention is hospital care. The rates in this field have skyrocketed and the public is protesting. The organization of hospitals under the Blue Cross has made the rates accessible to public examination. Trade unions led the challenge to the recent requests for rate increases and forced an examination of rates as well as hospital, operational, and financial practices. As a result of the decision by the Pennsylvania and New York insurance commissioners, programs for study of current practice have been initiated. Definite pressure is being exerted for hospitals to reexamine their own operations.

The study of hospital costs is proceeding in many directions. There are, of course, many studies underway concerned with the maintenance and commissary operations. But even with respect to medical care,

new ideas are appearing. Many people are troubled by the fact that due to extensive hospitalization insurance coverage and the relative lack of other medical-care insurance, excessive use has been made of hospital facilities. A Michigan study found that faulty utilization of hospitals occurred in as many as one-third of the admissions involving third-party payments, and accounting for almost one-fifth of the total costs. Similar results are coming from other studies. Patients are being hospitalized for trivial ailments which would not have led to hospitalization for persons without insurance. This same conclusion is evident from the study of the experience of Health Insurance Plan, a relatively complete medical-care program. The rate of hospitalization among its members was found lower than for nonmembers.

Better supervision of admissions and discharges has been found to be necessary to avoid many inefficiencies and the unnecessary extensions of stays which have become common. These could be reduced through cooperation of the hospital and the doctors. Hospitals are also working on methods of lowering the in-hospital drug costs.

Most interesting is the increased thought being given to the task of defining more precisely the function of hospital, convalescent institution, and at-home medical care. The latter two systems are obviously cheaper, and more thought is being given to developing supplementary programs incorporating them in order to lower the actual use of the costly hospital facilities.

Other developments include the promotion of group medicine which assures the public easy access to competent medical care by a general practitioner and specialists. Another challenge has arisen with respect to the proliferation of union health centers in a number of communities. More action is necessary in the direction of consolidating them to eliminate duplication in this field.

The above provides only the barest outline of the problems and possibilities in medical care. Unfortunately, only casual attention is being given to the planning of an overall medical-care program for the United States to insure better service at a lower cost. Certainly if we are to achieve both goals and, incidentally, contain the rising cost of living, it is essential that we devote ourselves to these problems. Ad hoc national investigations must be replaced by a permanent group which applies itself constantly and regularly to the issues and helps private and public groups in their experiments with more productive systems of insuring better health for Americans.

3. Other service areas

The importance of the service items in the Consumers Price Index cannot be minimized. In December 1947 they constituted 34.2 percent of the total. Medical care services represented 3.4 percent. The others in order of their significance were household operation, 6.7 percent; rent, 5.8 percent; reading and recreation, 5.3 percent; transportation, 4 percent; and other personal care, 2.2 percent.

Every effort to reduce costs through lower prices or more economic use of the materials and services would hold down the cost of living. The above outline for the medical-care program could be paralleled by one for transportation. Here again we have high prices for vehicles and materials. But the major issues center in other fields.

There is the question of the present car design. It has not only raised prices but has inflicted huge costs upon the user, the municipalities and State and Federal Governments, and created endless problems in our large urban centers. Intracity transit systems, whether privately or publicly owned, are in financial difficulty. Suburban commuting systems are facing bankruptcy. We must realize that the problems in these areas cannot be solved by bailing out one or another type of service or raising the fares for one or another line. These solutions only prolong the agony. They require a complete overhaul of local transit systems which would consider not only the railroads, buses, trolleys, subways, and airways but also the private cars. Planning must be done for all facilities and the programs should be integrated.

4. National productivity agency for service industries

The above sketchy analysis has shown that a substantial part of the rise in the cost of living has resulted from the increases in the cost of the services and lack of impressive improvements in productivity in these fields. Until the latter occur, our efforts to control the Consumer Price Index will be most difficult. To achieve any type of restraint in price rises in this section, the problems must be dealt with as a whole.

Our Nation has made an outstanding contribution to the promotion of productivity in foreign economies. We have exported our technical know-how to help other countries advance their efficiency. One of the proposals which we have invariably made is for these countries to establish national productivity centers to study their problems of low productivity and to help in their solution. It appears only reasonable that we should take a chapter from our own book and organize a similar national productivity center for the service industries to increase the effectiveness of our consumer services. In this way we can assure marked advances in efficiency and lower costs in this field. The Consumers Price Index and the cost of living will be held down as a result.

E. SPECIALIZED MONETARY PRICE CONTROLS SHOULD DEAL WITH SPECIFIC INFLATIONARY PRESSURES

The Federal Reserve System has very limited means to deal with inflationary and speculative pressure in the money market. It can control the supply of money and credit through changes in the reserve requirements for banks, variation of the discount rates and purchase or sale of Government securities, as well as control of the size of the deposit on margin accounts in the purchase of securities. Only the latter is focused toward a specific area. In the past the Federal Reserve Board also was able to regulate the volume and terms of consumer credit. But this authority has lapsed and the Federal Reserve bank has not been desirous of reestablishing its authority.

By and large, these general controls and the one specific control were inadequate for fighting the inflationary pressures we faced from 1955 to 1957, or, for that matter, the subsequent recession and the speculative outbursts in the current security markets. Therefore, it is essential that we clearly investigate the proposals for supplementary spe-

cific controls to determine whether they can be of value in improving the operation of the monetary and credit controls.

As it now stands the disillusionment with these techniques is widespread. Business Week comments that—

Indirect monetary controls have proved a lamentable failure in the years since 1955. They not only failed to stop inflation. They contributed to the business recession that started in the middle of 1957 * * * and we cannot expect to curb the threat of renewed inflation by application of the classic method of clamping down on the money supply. The insufficiencies of the current monetary policies are evident.

The challenge is to supplement the current monetary tools to make our policy more adequate for our economy. Our present problem is to promote recovery, finance a huge Government deficit and snuff out the embers of inflation.

1. Inadequacies of policy during investment boom of 1955–57

The shortcomings of the present system were particularly evidenced during the period from 1955 to 1957, when this country experienced a selective investment boom. It followed on a housing and consumer-buying boom which stimulated the optimism and expansion plans of the capital goods industries to the point where they entered upon a period of major capital expansion. As the boom developed, the Federal Reserve System invoked a tight money policy, arousing the bitter protest of many groups in the community which were adversely affected. It raised the discount rate over the course of the period from a low of 1½ percent to a high of 3½ percent. Margin requirements on the credit for security purchases were raised to 70 percent. Purchases of Government securities by member banks lowered the outstanding supply of money. As a result, the publicly held money supply showed practically no rise from December 1955 through December 1957. Nevertheless, prices rose and we experienced a distinctly inflationary episode.

Though prices kept climbing there was no general excess in demand. The gross national product remained practically stable through the latter part of the period and many industries suffered from excess capacity.

The inflationary pressures were largely concentrated in particular capital goods industries led by steel. They were enjoying the prosperity even though they felt the pressures of excess capacity. These were the industries which increased prices and in which wage patterns were set. These industries are controlled by groups of large companies which administer prices to meet their profit goals. The selective boom in these industries communicated a mood of inflation to the entire economy. Their price increases prodded further price increases in fabricated products using their materials where conditions permitted sellers to pass the higher costs on.

The monetary checks instituted by the Federal Reserve System were inadequate to the situation. There were too many ways of avoiding their impact. It took too long for them to be effective among the industries directly affected by the investment boom.

Many elements in the economy soon devised ways or already possessed the power to avoid these controls. While the money supply was limited, the banks increased their lending power by selling Government securities. Bank loans wound up as time and savings de-

posits. These operations tended to leave the money supply unchanged but they increased the velocity of monetary circulation. In addition, nonbank investors aided this increase in velocity by buying short-term Government securities with their idle funds. These operations plus the fact that the Federal Government retired or bought up Government securities released further funds to the economy which offset the tight money policy pursued by the Federal Reserve System.

Other factors also worked against the Federal Reserve System's tight money policy. The Government itself was increasing its expenditures on national security, and there was a substantial net export balance.

Most large corporations, concentrated in these boom industries feeding the inflation, were also able to escape control. The limitations on credit did not touch many of them because they already had preferential credit positions at the banks and other financial institutions. Many of them had substantial funds of their own, gained from depreciation allowances and high rates of profits, to finance themselves. Actually, American corporations as a whole during these years derived more than 60 percent of their corporate funds from internal sources, including both depreciation allowances and retained profits. The large corporations in the booming capital goods industries did even better. As a result they were quite unconcerned by the problem of tight money. Moreover, they felt they had a better excuse to raise their prices to finance their expansion internally. This was one of the arguments used by the United States Steel Corp. to justify its price increases in the postwar years. In addition to being able to pass these increases in interest rates on to the public in the form of higher prices, they could share its cost with the Government since the higher interest rates reduced their tax bill. The overall result was that these groups which had bred the inflationary pressures and had provoked these credit controls were least affected by them.

The weaker sectors of the economy were adversely affected; most significantly, residential construction. As interest rates increased, funds were diverted from the FHA-insured and VA-guaranteed mortgages so that construction financed by these means dropped off sharply. Agricultural interests and small businesses felt the lash of high interest rates. Not only was money more expensive but the banks became more selective as to whom they would grant credit. Consumers who used credit found that their charges had increased, but the volume of credit was cut only at the end of the boom period.

Another group hit by the overall effect of tight money were State and local governments which found the higher rates an excessive burden and therefore canceled or postponed many undertakings. In addition, the taxpayer found that higher interest rates were passed on to them in the form of higher taxes.

The tight money policy increased interest rates and thereby reinforced the inflationary tide in the boom industries insofar as these higher costs were reflected in higher prices. It restrained residential construction and public improvements and the activities of small businesses and agriculture. But it did not substantially curtail the capital goods industries which were the vortex of the boom. They

carried on until their output and new industrial capacity were built up beyond the limits of the buying power generated during the boom period. The tight money policy restrained inflationary pressures in areas not at the center of the boom but did little to curb these booming investment programs. Production continued at top speed in these industries which fed the boom, and dwindled in others. The consummate result was a delayed control inadequate in effect and discriminatory in impact.

2. Monetary policy minor stimulant to recovery

The Federal Reserve System has played a minor role in overcoming the current recession. Its tight money policy had weakened the economy; its inability to curb the investment boom had left an overexpanded physical structure. It turned belatedly to a new program of easing up the general restraints on money. Discount rates were cut from the peak of 3½ percent down to 1¾ percent. Bank reserves were cut from 20 to 18 percent for the central Reserve cities; from 18 to 16½ percent for Reserve cities, and from 12 to 11 percent in country banks. Member bank indebtedness was reduced from a level of $1 billion down to a level of almost zero. Excess reserves increased markedly. Money rates dropped and stock margin requirements were cut from 70 to 50 percent. The result has been a marked reduction in the cost of borrowing funds.

But the major challenge in a depression is to convert this easier credit into actual business activity. The impact has been felt in construction. Lower interest rates and the easing of provisions for Government-guaranteed mortgages helped to stimulate activity. Permissible contract rates were raised and smaller downpayments on home purchases are now being required. Other changes in the regulation of mortgage discounts and provisions for builders to pay commitment fees up to 1 percent of the amount of the mortgage are helping to make FHA mortgages competitive. This is not equally true of the VA loans. Further authority has also been given to the Federal Mortgage Association to make commitments to purchase at par up to $1 billion of federally underwritten mortgages on new houses to cost no more than $13,500.

As a result, non-farm-housing starts have already picked up from the low annual rate of 915,000 in February to 1,160,000 in July. There is a possibility of the rate rising as high as 1,300,000 by the end of the year if the current rise in interest rates doesn't throttle the improvement.

Among the major factors which helped sustain the economy during this depression are the built-in stabilizers such as unemployment insurance, old-age benefits, pensions, supplementary unemployment benefits, disability benefits, and other similar items. These expenditures increased from the third quarter of 1957 to the second quarter of 1958 at an annual rate of $4.7 billion which offset 70 percent of the drop in the wage-and-salary bill. The additional wage increases announced by the Federal Government and private industry since July 1, will further narrow this gap if not eliminate it.

Wages have truly been a stabilizing force during the depression. In the words of Sumner Slichter, they are "saving us from grave hardships by offsetting marked retrenchment reaction of business to this recession and, at the other extreme the Government's minimum

policy of action." The result has been a marked stability in personal consumption expenditures. The reduction in expenditures on durable goods was offset primarily by the rise in spending on services.

The current recession witnessed a sharp reduction in inventories. During the first quarter of 1958 the liquidation occurred at the annual rate of $9 billion; and in the second quarter, at the rate of $7.8 billion. Current estimates are that this movement has been cut very sharply so that inventories may be a neutral factor in the near future.

A truly significant factor in the process of recovery has been Government expenditures. They have grown at an annual rate of $3.9 billion between the third quarter of 1957 and the second quarter of 1958. Of this amount, $3 billion is accounted for by increased State and local expenditures. With the large new defense appropriations of $39.6 billion, it is likely that the economy will be further strengthened by Federal expenditures.

Many additional public and private projects could be released if lower interest rates were available. Such a provision would have been established by the community facilities bill killed in the last session of Congress, and the Area Redevelopment Act vetoed by the President.

It is apparent that fiscal policy can be of more significance than monetary policy in helping the country raise itself out of the depression.

3. The current dilemma; continued recovery without inflation

Hardly has the corner been turned on the depression than we are again confronted by the older conundrum of how to help the recovery along without impelling a new wave of inflation. As we have seen, the administration and the Federal Reserve System are determined not to be caught short this time. The latter has been alerted and has begun to invoke a number of new controls which are inhibiting the spread of an inflationary atmosphere. But again, the great fear is that these measures may impede recovery without dampening the inflationary spirit. We are again relying on overall indirect monetary policies and the Federal Reserve System is carrying the burden of the fight against the inflationary trends even though its philosophy and weapons are ill-suited to the current job.

The first evidence of the pressures in this era is to be found in the stock market. The speculative splurge has sent stock prices soaring. The Federal Reserve Board has raised the margin requirements to 70 percent and several regional banks have raised discount rates. We have, again, the beginnings of a tight money policy.

These moves have only raised interest rates. But stock-market speculation continues apace and attracts funds away from governments, corporate bonds, and other areas. While there is widespread agreement that this stock-market rise is speculative and dangerous, the Federal Reserve System has not yet taken adequate action to curtail it. It does not have the powers to control bank lending activities so as to dry up funds used for such speculative purposes. Moreover, there are other sources for funds outside of the commercial banking institutions that would have to be curbed and these the Federal Reserve Board has no power to reach.

Impressed with the force of the speculative mood on the stock exchanges and the likelihood of this outlook spreading as it has in the

past, and unwilling to consider other alternatives for containing these pressures, the administration has become obsessed with a fear of inflation even to the point of seeking to curtail expenditures and instituting another economy wave. Because of the overwhelming influence of the Treasury and its spokesmen and the Federal Reserve representatives, the accent is on the traditional general monetary restraints.

But we face a real dilemma. The large budgetary deficit will make it necessary to float huge issues of Federal securities. They should be long-term issues. But if the Federal Reserve System follows a tight money policy, Government bonds will be difficult to sell and a riskier investment. Resorting to the sale of short-term obligations to commercial banks would only kindle the inflationary influences, since these short-term obligations could become the basis for a larger money supply. Maturing issues would also have to be monetized through short-term issues. By following this routine program the Federal Reserve System would create a real money inflation of the traditional type despite its tight money objectives.

More than ever before the American economy is earnestly in need of new tools and approaches in order to enable the administration to solve this dilemma of speculative pressures on the market. The easy money policy must be continued without contributing to inflationary pressures. Only a new set of supplementary monetary and fiscal controls directed to specific areas can effectively deal with these problems. So long as the administration and the Federal Reserve System resist these suggestions, they will be merely shadowboxing with monetary inflation.

What compounds the seriousness of the problem is that the present approach will tend to raise the cost of money rates, as it has to date, and create an increasingly greater obstacle to all public works and private construction. The higher rates could well stop many public works and nip the construction boom in the bud. If they go higher, builders will not be able to reach out to satisfy the low-income market. The upturn would be stopped and possibly a further drop in business would occur.

Already the speculative surge has enabled the steel and aluminum industry to ride the crest of business optimism to launch their new price increases. Despite the fact that their operations were below 50 percent of capacity, they raised prices, thereby inflicting greater hardships upon the users of their products who, in most instances, cannot pass on the price increases. Their profits will rise as the rate of capacity utilization increases. The resulting profits would have been more than enough to absorb the wage increases to which they had voluntarily committed themselves by instituting long-term labor agreements. Price restraint would have been a truly constructive contribution to their own self-interest by assuring a continuing growing demand, and to the recovery of the nation's economy.

We are sitting on a powder keg which may break out into a new cycle of monetary inflation. The speculative attitudes in the stock markets, combined with the impending need for the Federal Government to borrow vast sums to make up its deficit, plus the need to stimulate industry to absorb the unemployed, are strong forces for inflation. But the vast amount of idle capacity and capital, the declining prices on the commodity futures exchanges, and the large

number of unemployed should have guaranteed against increases in prices. We have no such assurance, since our oligopolistic price systems enable large corporations to raise prices at a time when they are operating at low capacity, minimizing the effectiveness of these economic restraints.

The use of general monetary controls has yet to be proved effective in face of the Treasury's needs for funds and in light of the demands of an underemployed economy. Should the Federal Reserve System further ease the restraints to accommodate the Treasury, there will be greater pressures for monetary inflation.

4. Specialized monetary and fiscal controls for containing the inflationary pressures

The need for specialized monetary and fiscal controls appears quite urgent. These should be intensively examined and a program developed for Federal authorities to use in the present era. My first suggestion is that the Joint Economic Committee follow up this set of discussions with a detailed investigation of specific monetary and fiscal controls so that the Congress may consider these for legislative enactment.

The types of proposals which we believe should be considered to supplement the current, indirect monetary and general fiscal powers would be the following:

(*a*) Develop a system of coordination between monetary authorities, expenditure and tax agencies and debt managers. Congressman Reuss, of Wisconsin, made one proposal to deal with the problem through the President's Economic Report. There is great urgency for implementing the proposal for an overall money, credit, and debt policy agency to coordinate all relevant Federal controls and actions.

(*b*) Consumer credit should be subject to controls. Such provisions could have restrained part of the demand in 1955–57 and thereby reduced the pressures on the steel industry and minimized its extraordinary price-boosting powers.

(*c*) More control over the rate and direction of investment must be established in this era of competing demands. A suggestion has been made for controlling the composition of bank portfolios.

(*d*) Controls over the credit and investment policies of the nonbanking financial institutions, including life-insurance companies, savings and loan associations, sales and commercial finance companies, mutual savings banks, private pension funds, credit unions, other consumer and mortgage finance agencies, and the liquid assets of corporations, in order to coordinate and unify the nation's monetary and credit policies and economic objectives.

(*e*) A variable depreciation rate has been suggested so that rates would be lower during periods of investment booms and higher when investments are sluggish. This mechanism can affect marginal areas of investment, which would dampen booms and stimulate activity during a recession.

(*f*) Government agencies should provide loans at lower than prevailing interest rates to groups discriminated against in times of tight money controls. This provision would enable stiffer controls to be imposed upon the truly overexpanded areas and correct exuberant business projections.

(*g*) These monetary and fiscal controls could be supplemented with authority for allocation of key materials. During the height of the inflationary boom, the present witness suggested to the Federal Reserve Board that a system of allocations, or set-asides, such as is now employed for military purposes, might be useful in dampening the excessive demands for steel.

(*h*) Controls over margin requirements now applicable to securities on national exchanges should be extended to all types of securities and lenders.

(*i*) Greater coordination must be established among the credit agencies of the Government, such as the Federal Home-Loan Bank, the Federal National Mortgage Association, and others which either extend or guarantee loans or insure or guarantee mortgages.

(*j*) In view of the usurious rates exacted by personal loan companies in many States in which there are no State regulations, it would be desirable to review the possibilities of Federal limitations on these practices.

The great fear associated with the use of these and other specialized controls is that they are discriminatory and require the greatest care and insight, that they are of such overriding importance that they should not be entrusted to the administrative agencies. It is also suggested that political pressures may affect the decisions. The principal response to these arguments is that current controls are also discriminatory. Moreover, the responsibility for directing the economy through the periods of excessive inflation and recession rests with the Government under the Employment Act of 1946. Without adequate tools, this responsibility cannot be discharged. The failure to implement these provisions would make a mockery of the entire act.

F. SUMMARY OF PROPOSED SPECIALIZED CONTROLS

We have considered a number of the more significant areas of inflationary pressure in our economy. The emphasis has been on the causes of rising prices rather than on the problems of maintaining "maximum employment and production." We have had considerable experience with the latter problems and have learned many approaches for assuring the desired objective through fiscal monetary and market procedures. Our primary intention in this paper has been to outline areas of control within our economy to moderate inflationary price pressures.

The principal proposals we offered are the following:

1. Immediate determination of whether many large business corporations and aggregates of power can and should be broken up and the procedures for accomplishing such an undertaking.
2. Federal incorporation of business enterprises.
3. Regular examinations of announcements of proposed price increases by a Federal agency which will hold hearings or investigations on corporate price, production, and other policies and performance on its own motion or public petition, and publish its findings.
4. Annual labor-management conferences to reach a consensus on economic policy in anticipation of annual collective bargaining.
5. Adoption of an area redevelopment bill and a full program of assistance to low-income farmers along with the abandonment of farm price supports.

6. Establishment of a national productivity agency for service industries.

7. Institution of specialized monetary and fiscal controls to improve Federal control over particular sources of inflationary pressures such as:

(*a*) A Federal system coordinating monetary, credit, and debt policy and administration.

(*b*) Federal Reserve System controls of consumer credit, bank portfolios, credit and investment policies of nonbanking financial institutions and margin requirements on all types of lenders and security investors.

(*c*) A variable depreciation rate structure for capital investments.

APPENDIX A

Original data used in computing percentage changes in manufacturing production, payrolls, average hourly earnings, and wholesale prices, from 1947 to 1956 and 1957

Item and unit	All manufactures	Durable goods	Nondurable goods
Production index (1947–49=100):			
1947	100	101	99
1956	144	159	129
1957	145	160	130
Payrolls index (1947–49=100):			
1947	97.7	98.9	96.1
1956	161.4	178	139.4
1957	162.7	179.4	140.7
Average hourly earnings (dollars):			
1947	1.237	1.292	1.171
1956	1.98	2.10	1.80
1957	2.07	2.20	1.89
Consumer Price Index [1] (1947–49=100):			
1947	95.5	----------	----------
1956	116.2	----------	----------
1957	120.2	----------	----------
Wholesale Price Index (1947–49=100):			
1947	95.9	92.7	98.5
1956	119.5	136.8	103.8
1957	123.2	142.0	108.4

[1] All items and commodity groups.

Source: Bureau of Labor Statistics (except for production index, Board of Governors, Federal Reserve System).

TABLE I.—*Percentage increases in manufacturing production, payroll earnings, unit labor costs, and wholesale prices in manufacturing industries, by division, 1947–57*

	All manufacturers	Durable goods	Nondurable goods
(*a*) Production	45	58	31
(*b*) Payrolls	67	81	46
(*c*) Output per man-hour	42	44	38
(*d*) Average hourly earnings	67	70	61
(*e*) Real average hourly earnings	33	35	28
(*f*) Unit labor costs	15	15	11
(*g*) Wholesale prices	28	53	10

Sources:
(*a*) Federal Reserve Board.
(*b*) Bureau of Labor Statistics (special tabulation).
(*c*) U. S. Congress, Joint Economic Committee, TWUA research estimates for durable and nondurable goods.
(*d*) Bureau of Labor Statistics.
(*e*) Line (*d*) adjusted for cost-of-living changes.
(*f*) Divide line (*b*) by line (*a*).
(*g*) Bureau of Labor Statistics (special tabulation) (see appendix A for original data).

TABLE II.—*Percent changes in major categories of wholesale prices, 1st 11 months of 1948–49, 1953–54, and 1957–58, recessions*

Commodity group	Percent changes from—		
	November 1948 to September 1949	July 1953 to May 1954	July 1957 to May 1958
All commodities	−6.1	0	+1.1
Farm products and processed foods	−7.7	+1.6	+6.8
All commodities less farm and food	−5.2	−.3	−.3
Crude materials	−12.7	−7.0	−9.6
Intermediate materials	−6.3	−.9	−.8
Finished goods	−3.2	+.3	+.6
Producer goods	−.2	+.7	+2.4
Consumer goods:			
Nondurable	−5.9	−.1	−1.2
Durable	−1.5	+.6	+1.5

Source: U. S. Bureau of Labor Statistics.

TABLE III.—*Changes in list prices of specified man-made fibers and yarns, 1947–58* [1]

[Cents per pound]

	Filament yarn				Staple fiber					
	Viscose	Acetate	Nylon	Dacron [2]	Viscose	Acetate	Nylon [3]	Dacron [4]	Orlon [3]	Acrilan [3]
1947—February	+5 (67)	+4 (67)			+4 (32)	+2 (48)				
1948—January	+7 (74)	+7 (74)			+4 (36)					
September	+3 (77)		+15 (195)		+1 (37)					
1949—March						−6 (42)				
June	−6 (71)	−2 (72)			−2 (35)					
1950—February		+2 (74)								
August	+3 (74)	+2 (76)			+2 (37)					
October	+2 (76)									
December	+2 (78)				+3 (40)	+6 (48)				
1952—March		−6 (70)				−6 (42)				
July		+3 (73)								
November					−3 (37)	−3 (39)				
1953—April					−3 (34)	−5 (34)				
November		+1 (74)								
1954—January										−45 (140)
February							−20 (150)	−20 (160)	−30 (150)	
1955—March	+5 (83)	+6 (80)				+3 (37)				
November					−2 (32)	−5 (32)				−28 (112)
December								−25 (135)	−25 (125)	
1956—January	+3 (86)	−4 (76)								
April			−30 (165)	−45 (190)			+3 (128)	+6 (141)	+3 (128)	
December	+5 (91)	+3 (79)								
1957—February			+5 (170)	+11 (201)						
March					−3 (29)					
July						+2 (34)				
August					+2 (31)					
October										+4 (116)
1958—July	−15 (76)									

[1] Figures in parentheses are the new prices. Specifications are as follows:

Filament yarns: Viscose, 150 denier; acetate, 150 denier; nylon, 100 denier, 34 filament, type 300; dacron, 70 denier, 34 filament.

Staple fibers: Viscose, 1½ inches, 1½ denier; acetate, 8 denier; nylon, 1½ to 4½ inches, 3 denier; dacron, 1½ to 4½ inches, 3 to 6 denier; orlon, 3 denier; acrilan, 3 and 5 denier.

[2] Series starts in 1954.
[3] Series starts in 1952.
[4] Series starts in 1953.

Sources: Viscose and acetate: Textile Economics Bureau, Inc.; Others: Modern Textiles Magazine.

TABLE IV.—*Employment, wages, and salaries in all manufacturing industries*

Year	Employment (thousands)				Wages and salaries				
	Total	Production workers	Nonproduction workers	Percent production workers	Wages, percent of total	Average per employee		Index 1947=100	
						Wages	Salaries	Wages	Salaries
1947 [1]	14,294	11,918	2,376	83	76	$2,538	$3,978	100	100
1949	13,880	11,016	2,864	79	71	2,746	4,363	108	110
1950	14,770	11,779	2,991	80	72	2,937	4,444	116	112
1951	15,638	12,509	3,129	80	72	3,250	4,995	128	126
1952	16,061	12,706	3,355	79	72	3,444	5,179	136	130
1953	17,093	13,501	3,592	79	71	3,628	5,460	143	137
1954	16,126	12,373	3,753	77	68	3,604	5,697	142	143
1955	16,819	12,957	3,862	77	68	3,799	5,929	150	149
1956 [2]	17,172	13,087	4,085	76	67	3,972	6,254	157	157
1957 [2]	17,038	12,814	4,224	75	65	4,088	6,655	161	167

[1] Excludes employees at central administrative offices and auxiliary units.
[2] Extended from 1955 on the basis of percentage changes in Bureau of Labor Statistics data on employment and payrolls and Commerce Department data on wages and salaries.

Source: Department of Commerce.

TABLE V.—*Changes in selected service items in Consumer Price Index, June 1955–58*

[1947–49=100]

Items	June 1955	June 1958	Percent increase
Consumer Price Index	114.4	123.7	8.1
All commodities	108.9	116.6	7.1
All services	129.6	142.3	9.8
All services, less rent	129.9	143.8	10.7
Selected services:			
Housing	119.7	127.8	6.7
Rent	130.4	137.7	5.5
Gas and electricity	110.7	116.9	5.6
Solid fuels and fuel oils	122.7	131.7	7.0
House furnishings	103.8	104.1	.2
Household operation	119.2	131.1	10.0
Laundry service	126.1	141.8	12.5
Dry cleaning and pressing	117.9	128.6	9.1
Telephone	119.7	127.5	6.5
Postage	129.9	131.0	1.8
Household maintenance and repair	105.8	116.9	10.5
Transportation	125.8	138.9	10.4
Private	116.5	128.0	9.9
Public	165.1	187.7	13.7
Medical care	127.6	143.9	12.8
Physicians' fees	123.0	137.0	11.3
Dentists' fees	121.6	131.3	8.0
Hospital rates	165.0	197.6	20.0
Prescriptions and drugs	111.0	120.8	8.8
Personal care	114.7	128.6	12.1
Men's haircuts	139.7	162.0	16.0
Beauty shop services	111.4	124.5	11.8
Toilet goods	103.0	113.8	10.4
Reading and recreation	106.2	116.7	9.9

Source: U. S. Bureau of Labor Statistics.

COMMENTARY ON EMPLOYMENT ACT OBJECTIVES AND THE STABILIZATION OF PRICES

Ira T. Ellis, Economist, E. I. du Pont de Nemours & Co.

My task is to comment upon the papers presented by the contributors in the hearings earlier this year on the subject "Employment Act Objectives and the Stabilization of Prices."

Each of these papers dealt directly or indirectly with the following four questions:

1. Is price stability a desirable objective of national economic policy?
2. If so, should a specific statement to this effect be included among the Employment Act objectives?
3. Would such a statement be inconsistent with the other objectives of the Employment Act?
4. How might the objective of stable prices be achieved?

The answer to question No. 1 by the panelists was uniformly "Yes"—a conclusion with which I am in wholehearted agreement.

The concept of price stability requires some definition, however, as not everyone derives the same meaning from these words. Most of the panelists interpreted this concept broadly. They recognized the need for flexible individual prices and also that the level of prices may fluctuate from time to time. I am in sympathy with their interpretation because of its realism.

The actual prices of products in the market place are the end result of a multitude of circumstances affecting both buyers and sellers: the quantity of the items available, the existence of similar products, the strength of demand for the product, the income of consumers, their perception of quality and style features, their expectations regarding their future income, future prices, the costs of production, desired profit margins, etc.

These factors are always changing in relative importance. New or improved products are developed and put on the market; old products disappear. Demand may also rise importantly because inventories are being accumulated, or fall because they are being liquidated, as in 1957–58. Consumers have more or less money to spend from time to time, and a great deal of discretion as to where and when to spend it. The net result is that individual prices change as the "mix" of these influences change. This is the process whereby our economic resources are adjusted to meet the demands of consumers.

Since the level of prices is nothing more nor less than the composite of all individual prices, it too must be allowed to fluctuate. It would be unrealistic to permit individual prices to move freely and not to expect the level to change from time to time. The panelists recognize this situation in their definition of price stability.

Price stability, to the panelists, means essentially the avoidance of an "uninterrupted" or "persistent" increase in the general price level. Their concern is with the consequences of a steadily rising level of prices. In general, these consequences, as they discussed them, are of two kinds:

(1) The inequities and hardships that exist in periods of steadily rising prices because many groups in society, e. g., retired persons, older workers, employees of industries which may be suffering from stable or declining demand, government employees, etc., are unable to raise their incomes as fast as prices rise; and

(2) The fear that a creeping rise in the price level cannot be kept creeping but must give way to ever more rapid increases as more and more groups in the economy adapt their actions to the fact of a rising price level. The ultimate result of a rapidly rising price level could be economic collapse.

I share their concerns. The danger that our recent and present creeping inflation will speed up is a possibility not to be taken lightly today, in my judgment.

The argument often has been made that our economy can function indefinitely with a moderate annual rise in prices. But such an argument overlooks the fact that people, in their economic capacity as consumers, management, or labor, will try to hedge against this situation. In so doing they may cause the rate of price rise to accelerate.

Consumers, convinced that prices will rise without end, might well shift their savings from bonds, savings deposits, life-insurance reserves, etc., into common stock, or real estate, or even into consumption. Home builders, State and local governments, and the Federal Government, the public utilities, and others who finance activities importantly with borrowed funds would find the supply of loanable funds restricted. Prices of common stock and real estate would be bid up to unrealistic levels. Businessmen would be more interested in speculative considerations than long-term production or marketing considerations.

The possibility that prices might get out of control increases with each passing month or year that sees a further increase in the price level. While it is true that the trend of prices has been upward for more than half a century, this trend has been broken from time to time so that the public never has oriented its thinking and action uniformly toward higher prices, except for short periods. The danger today lies in the increasing number of people who regard raising prices as inevitable, and who, therefore, plan their actions accordingly.

The panelists generally did not think it necessary to include a specific statement on price stability in the Employment Act. This position seems justified because the policy section of the act, section 2, is itself expressed in very general terms. If the American people are in favor of the objectives of the act, including maintenance of the purchasing power of the dollar, this end will be achieved even without a specific statement to that effect in the Employment Act. If the American people are not in favor of such a result, including

the statement would have little effect on the attainment of price stability.

With regard to whether such a statement would be in conflict with the other objectives of the act, my answer is "no," and I am glad to note that a majority of the panelists feel likewise. Only if price stability and maximum employment, production, and purchasing power are defined in some absolute or extreme sense do they appear incompatible. The more realistic objectives of "reasonable price stability" and "reasonably full employment" certainly are consistent. They have been achieved in the past and can be achieved again. In fact, over the longer term relative price stability is a prerequisite to the realization of the present objectives of the Employment Act. Without a stable price level, distortions and imbalances will develop in the economy which are bound to slow the growth of output and employment. And should a gradual price rise get out of control, the maintenance of maximum employment, production, and purchasing power would be virtually impossible.

Over the short term, economic policies and programs might give greater priority to one objective or another, and to some extent the results might be inconsistent. A vigorous price-restraint program when costs are rising would very likely reduce production and employment. A broadly expansionary fiscal and monetary program could create conditions in which price increases might occur as well as increases in employment and production.

However, a realistic interpretation of the Employment Act objectives must recognize and allow for both possibilities. Price stability, as defined by the panelists, includes some fluctuation of the price level. The phrase "maximum employment, production, and purchasing power," also is interpreted as permitting moderate fluctuations. Our economic system requires fluctuations in all areas in order to function. It is pointless to define the concepts of price stability and maximum employment in such a way as to prove they are inconsistent. Over the long term, general price level stability must be a corollary objective of public policies aimed at promoting maximum employment, production, and purchasing power. The two cannot be separated.

How to achieve both a stable price level and maximum employment, production, and purchasing power represents perhaps the most critical economic problem of our times. In the short run either might be accomplished at the expense of the other, but to do so for long is self-defeating. Full employment that is maintained by continuous inflation of the money supply and rising prices for commodities and services will almost surely end in a collapse of the price-credit structure. Price stability that depends upon substantial unemployment will result in political and social unrest.

A healthy balance between these objectives can be reached, but only if the people of the country are willing to take the steps necessary to achieve this balance.

Unfortunately, many of the steps required to achieve price stability today are restrictive in nature and appear to be in conflict with the self-interest of many groups. However, it would be far better for the Nation if some broad restrictive measures are taken at a time when they can be taken voluntarily and with understanding,

than if more restrictive direct controls must be imposed on the economy as a consequence of an upward price spiral.

A large part of the burden of fighting rising prices must of necessity be borne by the Government and the Federal Reserve System. Without an expansionary fiscal-monetary policy, a continuing rise in prices would be difficult to achieve. The Federal Reserve System has a proven set of tools with which to restrain credit expansion when necessary, and the independence to follow a wise course in the face of opposition from business, labor, and even Government.

Monetary policy cannot do the job alone, however. Financial developments over the past two decades have reduced the scope of influence of commercial banks and the Federal Reserve System. Fiscal policies of the Federal Government must play an increasing role in the effort to maintain stability of the price level.

In times of prosperity, when tax receipts are high and rising, the administration, with Congress' help, should strive for a substantial budgetary surplus and should resist the desire to use the increased revenues for new expenditures. Even within the framework of a balanced budget, however, Government spending may have an inflationary impact on the economy. And certainly in times of recession it is quite likely that Government expenditures will exceed receipts and that sizable deficits will be incurred. To the extent that these are financed by the commercial banking system, the money supply will be increased, providing the liquidity to finance future price rises. A fiscal policy oriented to the problem of avoiding excessive increases in the money supply will have to be an essential element in any overall national effort to stabilize the price level.

This will not be easy to apply in practice, as the pressures to expand Government spending are great. Many of the desired expenditures are fully justified in terms of their benefit to the people. But if these demands come at a time when the economy is at or near capacity, some of them must be rejected or postponed.

Both the fiscal and monetary policies of Government are directed at limiting one important cause of rising prices—excessive monetary demand. But there is another cause which has become increasingly important in recent years—rising costs. Many factors have contributed to cost increases. We are faced with high costs of defense, of constructing and operating our school and road systems, of our State welfare programs, of our farm programs, of our social-security programs, etc. These programs are financed largely by taxes, and many of these taxes result in increased business costs of providing goods and services. Therefore, they stimulate rising prices. We cannot avoid these costs by raising wages and salaries to offset them on the basis of escalation tied to the Consumer Price Index.

But the most important single cost of business is, of course, its payroll cost, including "fringe benefits" as well as wages and salaries paid for time worked. These costs are also rising. If we are to restrain price increases, we must restrain wage and salary increases as well as other costs.

Note that I use the word "restrain" in the above paragraph rather than "prevent." The long-term tendency of wage and salary rates in this country is upward as labor productivity and the productivity of capital rise. Our difficulty in recent years has occurred because we

tried to get more out of our economy than we were willing to put into it, i. e., we raised taxes, wages, salaries, and fringe benefits at rates faster than could be offset by the increase in productivity of labor and capital.

In summary, I believe general price stability in our economy is desirable and it is already included as an objective of the Employment Act of 1946. Price stability or the protection of the purchasing power of the dollar is not inconsistent with other goals of the act. Price stability can be achieved by restraining business costs and stimulating the productivity of capital and labor. We can have both price stability and economic growth.

THE RELATIONSHIP OF PRICES TO ECONOMIC STABILITY AND GROWTH—EMPLOYMENT ACT OBJECTIVES AND THE STABILIZATION OF PRICES

Everett M. Kassalow, Director of Research, Industrial Union Department, AFL–CIO [1]

The joint committee's study of prices, economic stability, and growth could hardly have come at a more opportune moment. In the first place the Nation has now undergone the somewhat unusual experience of falling to the bottom of a severe recession without any accompanying price relief. The phenomenon of "creeping inflation" more than ever demands analysis and effective action.

Secondly, of equal or greater importance, recent Soviet achievements in space exploration and rocketry—with threats that similar United States "defeats" may be in the making as regards the application of atomic energy for peacetime uses—indicate that we cannot take for granted American supremacy in economic growth and development.

Dr. Eric A. Walker, president of Pennsylvania State University, and the Vice Chairman of the President's Committee on Scientists and Engineers only recently stated:

> We haven't yet fully awakened to the enormous implications of Russia's formidable scientific achievements * * *. I am not referring merely to the threat of missiles and other super weapons in Russian hands. Even if the weapons could somehow be rendered inoperable overnight, we would still be in serious danger.[2]

Dr. Walker cites outstanding Soviet achievements in forestry, steel production and research and development, among others. He concludes:

> At their present rate of technological progress in comparison to ours, the Soviet bloc could capture the world without firing a shot.

No less an authority on the Soviets than Allen Dulles, Director of the United States Central Intelligence Agency, states that the Soviet economy is presently growing at a rate twice that of the American economy. If the respective rates of growth are projected they show that the total annual output of the U. S. S. R. would surpass that of the United States in approximately 30 years.

This type of forecasting involves many estimates and assumptions and is not necessarily completely reliable. Neverthless, these evaluations of Soviet economic development should warn us agains neglecting the economic growth side of the Employment Act in this inquiry.

Under the propaganda pressure of a variety of institutions, many of them fiduciary in nature with a built-in bias for and a vested inter-

[1] I should like to express my thanks to colleagues in my department, Edmund Ayoub, Irving Beller, and Mrs. Mildred Joiner who assisted with some of the tabulations and also made helpful comments.

[2] The President's Committee on Scientists and Engineers, summary of remarks by Dr. Eric A. Walker, vice chairman, at press conference, Thursday, January 16, 1958.

est in deflation in the past few years an unduly large part of economic thinking in the United States has been devoted exclusively to the price-stability issue. Obviously, the problem of maintaining full employment without inflation is one of the important economic questions of our time. We cannot, however, take for granted the question of full employment and the attainment of a growth rate commensurate with America's security and economic needs.

The truth of the matter is that the achievement of reasonable price stability in the United States is now intimately related to the rate of economic growth and the two must be realized together. It is especially important to keep both sides of the coin in view, since the greater part of this inquiry, like so much of traditional economics, might otherwise concern itself with the price question alone.

An evaluation of the prospects for growth and stability in our national economy ought to begin with a careful consideration of some of the initial institutional changes in American life in the past decade or two. These are changes of both a national and international character, the full significance of which have not yet been grasped by many economists thus:

For the first time in our history our country finds itself at the very center of a state of strong and persistent international tension; this tension generates tremendous and continuing military and economic pressures on all world price structures, including our own.

On the domestic side, the general economic environment today is also fundamentally different from the past. The era of social reform which culminated in the Employment Act of 1946 has had important implications for the movement of prices in the United States. In brief, as a result of these social reforms and Government's commitment to a policy of "maximum employment," it appears reasonably certain that major depressions are now a thing of the past. This has some serious consequences for price movements in America.

In combination these great domestic and international changes also have an important effect upon other institutions or areas of United States economic policy. Monetary and credit policy, tax policy, wage-price-profit relationships, all of these are influenced by the "new" domestic and international forces and need reexamination in light of the twin needs of growth and stability.

It is obviously impossible to treat all of these subjects fully in a short paper. I have, instead, tried to raise some aspects of them which I feel have been neglected in these hearings, to date, as well as in present day economic discussion in the United States. What follows, therefore may at times seem to lack continuity, but within the given limits it seemed to me more worthwhile to concentrate on some of these neglected aspects of the growth and stability question.

INTERNATIONAL PRESSURES ON PRICES

Political and economic conditions in the mid-20th century world are not favorable to price stability. War, reconstruction, rampant nationalism and revolution place most countries under a sustained inflationary threat which seems to be much greater than in the past. Indeed, if we grant the rather close economic relationship between our economy and that of the remainder of the non-Communist world, the

United States price record hasn't been too bad. A comparison between the movement of consumer prices among some 20 selected (non-Communist) countries all of whom have achieved some significant degree of industrialization shows the following results:

TABLE I.—*Changes in Consumer Price Index, selected countries, 1948, 1955, 1957*

	1948	1955	1957		1948	1955	1957
Switzerland	100	106	109	Sweden	100	135	147
Belgium	100	106	113	Norway	100	142	151
Germany	100	110	114	United Kingdom	100	138	151
India	100	99	114	New Zealand	100	145	153
United States	100	111	117	Spain	100	133	156
Canada	100	120	126	Japan	100	169	176
Italy	100	123	131	France	100	168	177
Denmark	100	132	143	Mexico	100	172	190
Union of South Africa	100	136	143	Australia	100	186	202
Netherlands	100	136	146	Austria	100	210	224

NOTE.—Data adapted from International Labor Office, Yearbook, 1955-56-57 editions and 1958 ILO supplement. The reader is cautioned that the components and weights in these indexes vary widely from country to country. In no sense should this table be construed as measuring intercountry price differences. For these and other reasons the table is useful for showing broad trends only, and not for very refined or specific comparisons.

The first and most striking thing revealed by this table is that the upward price movement has been general and worldwide. This is true not only for the 9-year period as a whole, but it also holds for the recent 1955–57 period.

Of interest too, is the relatively good showing of the United States. It places fifth best among the 20 selected nations, so far as a price stability showing is concerned.

On the other hand it is probably true that among these industrialized nations the United States was unique in having at least in some of these years an industrial capacity adequate to the demands being made upon it. In the 1955–57 period, for instance, practically all of the other industrial nations of the free world continued to be under a demand type of inflationary pressure. In contrast, during these same years industrial capacity tended to be well in balance with or actually in excess of demand in most basic industries in the United States. Our price showing for these years is therefore somewhat disappointing.

The fact remains, though, that by no means are we completely free agents in respect to world price movements. The cold war, large armament budgets, the need to concentrate resources on military development, these and other forces exert an almost never-ending, tightening influence on world price movements.

Need for Government standby stabilization powers.—One can hope that the hiss of the serpent of the Nile may give way to the coos of the dove of Geneva, but this isn't too likely.

More probably we shall continue to be confronted with large armament budgets (which have a way of producing enormous and in many ways useful economic deficits in recessions—deficits which prevent drastic price declines, however) and an occasional limited shooting war. It is the latter, incidentally, which probably is the single greatest price-pushing force in this era.

For example, nearly half of the increase in the Consumer Price Index in the past decade can be directly attributed to the speculation, buying, hoarding, etc., which were let loose by the Korean war. This

bulge was built into the price level in a short period, and it never came out.

What can we do about this persistent threat to price stability which grows out of international conditions?

If the Government were equipped with adequate standby stabilization authority to meet quickly and decisively the inflationary forces which may grow out of a short-lived shooting war, this might prove to be more important than almost all the other conventional anti-inflation measures and policies, so far as long-term price stability is concerned. (Fortunately, for human life and economic stability these brush fires are likely to be short lived with only short-term pressures on the economy.) It appears likely that from one-half to two-thirds of the 1950–51 Korean price rise could have been "permanently" avoided or prevented by a sufficiently armed and resolute Federal Government.

To those who oppose standby stabilization legislation as interference with our traditional way of life, one can only suggest that this way of life has already been fractured in many respects in the grim world about us. At least these same people should stop making hollow sounds about inflation, if they are not ready to adopt nontraditional approaches in a world where tradition seems to count for less every day.

FULL EMPLOYMENT, DEPRESSIONS, AND PRICE STABILITY

The great era of social reform legislation and activity which culminated in the passage of the Employment Act of 1946 has had important consequences for the movement of prices in the United States. The now widely accepted national policy that depressions are intolerable has price consequences which are occasionally overlooked.

Looking back at American economic history it might appear that the price level, in general, was more stable before World War II than it has been in the past decade. This apparent stability was something of an illusion, however, and was frequently just a byproduct of panics or depressions.

Superficial examination, for example, shows that the Consumer Price Index in 1942 was about at exactly the same level as in 1922 (a long period free from war except at its very end). A closer study, however, suggests that prices were anything but stable in this period. Between the high year of 1926 and the low year of 1933 there was more than a 28-percent difference. The apparent long-range stability was actually achieved by the medium of the terrific wringing out of prices in the great depression of 1929–34. Prices went off 28 percent from 1926 to 1933, and took 8 or 9 years to climb back even to the 1922 level. This represented a type of long-term price stability but I doubt if anyone in the United States is prepared to pay the social costs of a great depression to achieve similar price stability.

TABLE II.—*Consumer Price Index (cities over 50,000 in population, NICB, 1922=100), selected years 1922–42*

All items:	
1922	100.0
1926	107.4
1929	103.5
1933	77.0
1937	89.9
1942	101.4

Source: National Industrial Conference Board, the Economic Almanac, 1958, p. 62.

A good part of the price stability in other periods had similar origins. Thus, prices in 1900 were at about the same level of 1890; but in between came the 1893–94 panic and an accompanying drop of over 10 percent in prices. This price drop was not erased until 1900, when the 1890 level was once more reached. Again apparent price stability over a whole decade was in part, at least, a byproduct of a business depression.

Viewed in this broad framework, the decades preceding World War II may not have been, in reality, any more stable pricewise than the past 10 or 12 years. Yet, in the sense that the sharp declines in the price level, formerly associated with depressions, are now unlikely, there may be a steadier upward bias in the price level. If, as seems probable, the process of economic expansion is not always an even one, each new "boom" may well take off from a relatively higher price level than was the case in the past.

UNITED STATES HAS LOWER THRESHOLD TO INFLATION

As we have seen in the preceding sections, international and domestic needs, both economic and military, place us in a state wherein we have what scientists might call a lower threshold to inflation. In the light of this lower threshold, as well as the necessity to insure sustained economic growth, it is necessary to reexamine other more conventional areas of economic activity and policy which influence price stability. Let me note, however, that in discussing monetary policy, wage-price-profit relationships, etc., below, I am primarily concerned with some neglected aspects of these areas. I am also concentrating on those aspects which I think may offer the possibility of some new and fruitful action for stability and growth.

For although it might be sufficient for the economic historian to see and accept the near inevitability of a rising price level, for the responsible labor, management, or Government official to take a similar position and accept such inevitability as his guide to policy or action, would be to help translate a probable mild inflation trend into something far more critical. One of the dangers in a mildly rising price situation is that all groups may conceivably begin to play their economic roles with an inevitable inflation in view. Under these circumstances sound economic growth itself might even be impaired, and this, after all, would be the gravest threat of all to our well being as a people.

MONETARY AND CREDIT POLICY

We are presently operating under several handicaps in the monetary and credit field, so far as our objectives of sustained, stable economic growth is concerned. For example, the basic legislation in the mone-

tary and credit area was laid down before the passage of our modern system of social- and economic-reform legislation which culminated in the Employment Act of 1946.

It is really questionable whether any government can enforce the Employment Act with full success without doing something about drawing central banking policy into more effective relationship with other instruments of national economic policy. This is not to suggest that the independence of the Federal Reserve Board can or should necessarily be completely eliminated. But there is an unavoidable necessity for improved coordination of Board action, with the rest of Government economic policy, within the context of the objectives of the Employment Act.[3]

Prof. Sumner Slichter just recently called attention to the fact that the recent Federal Reserve Board action on monetary policy may well delay full economic recovery in the United States as much as one whole year. He also noted that there was no certainty that the long run rise in the price level would be retarded by the Board's action.[4] Without debating the merits of this action, the idea that it or anything like it, can or should be taken independently of general economic policy and policymakers seems absurd.

In the broad realm of credit policy itself, it would be well to reduce some of the strain on the Board by the judicious use of other Federal credit instruments. There is a tendency on the part of the public and probably of some Board officials to arrogate too much power and responsibility to the Board.

Federal Reserve action is almost necessarily of a blunderbuss character, with results that are often very imprecise, economically speaking. To temper this, those responsible for overall economic, as against mere Federal Reserve policy, ought to recognize, explicitly, that it may often be necessary to take action in 1 or 2 specific credit areas which may run counter to what is being done generally.

Thus, in the spring and summer of 1957, for example, at a time when the Fed was tightening the general screws on credit, the Nation was already experiencing the spectacle of unused resources, both industrial and human, in an industry as basic as construction. At this moment it should have been perfectly proper and even desirable to ease credit for construction through the operation of such agencies as FNMA.[5]

Unfortunately a kind of "mystique" has grown up about the Board and its policies which inhibits flexibility in Government policy.

In the long run if the Board is to retain some independence in general credit and monetary operations, we must encourage such other countervailing types of action when they make economic sense in terms of the Nation's resources. And the Board itself should see the wisdom of such policy, for to do otherwise is to risk eventual popular reaction

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[3] More or less informal efforts that have been made to date do not appear to be adequate. I am here referring to the ad hoc committee of the Secretary of the Treasury, the Chairman of the Council of Economic Advisers, Mr. Hauge, former Economic Assistant to the President and the Chairman of the Board itself. A vague effort in this direction also was made in the form of the Advisory Board for Economic Growth and Stability on which the Federal Reserve Board, along with some Government departments, was represented; but this, too, seems to have had little lasting influence.

[4] See New York Times, September 9, 1958, letters to the editor.

[5] A similar case could have been made for special credit treatment of schools and some other public facilities.

which could restrict its general credit and monetary function more thoroughly.

This question of the Board's independence poses some other difficult issues. I have already noted that the basic statutes governing the Board's operations and structure were laid down many years ago.

At the time the basic banking legislation was passed, and even as late as the middle thirties when some important amendments were made in the Federal Reserve Act, the Federal debt was relatively small, and it was owned by a small group in the community. With the great increase in and broader distribution of the Federal debt this situation has changed drastically.

Considering, for example, the great power now inherent in the Open Market Committee—a power by no means fully anticipated in our basic banking legislation—it is disturbing to think how completely it is dominated by the banking community. What might have seemed tolerable 2 or 3 decades ago now becomes a source of social irritation.

The very preservation of the Board's independence may well depend upon broadening the representative character of its officers, both at the national and district level. Despite the original language of the Federal Reserve Act, Board officerships have tended to be dominated by members of one branch or another of the financial community. This is not to argue that the Board should become an interest-group, representative body. It can and must reach its policy decisions on the basis of national economic needs and considerations. These latter, however, are not the special province of one part of the community. The Board's deliberations and decisions have grown so important for the national economy that they must increasingly reflect the opinion and experiences of a broader mixture of the population.

Broadening the membership of the Board would be useful in other ways. If the social distribution of the Board's officers were more representative of the community as a whole, it would be less subject to attack as the "tool" of the banking community when it felt constrained to pursue a hard-money policy.

PRICE-WAGE-PROFIT RELATIONSHIPS: IN SEARCH OF MORE NATIONAL VALUES

This second phase of the joint committee's hearings has wisely provided for treatment of the price-wage-profit problem generally, as well as in specific industries. Perhaps nothing more than a few comments intended to place this aspect of the problem within the broad context of the Employment Act objectives are therefore in order right here.

With the great degree of economic concentration that has grown up in a number of industries, price setting as a function of the market place has lost its meanings for important areas of our economy. In these industries competitive price setting has given way to price administration. In recognition of this Dr. Edwin Nourse has several times in recent years called attention to the growing need for

economic statesmanship on the part of some corporation price-making executives and some top labor union wage negotiating leaders.[6]

Price administration has been a problem in the economy for some time, but I believe that it has taken on some new and more critical aspects in the era of the Employment Act. In the past the so-called administered price industries, were generally characterized by a higher degree of stability over the cycle. The prices of their products rose and fell relatively less than those of other products in booms or depressions.

With the Nation now committed to positive action for full employment, and with the prospect that there will be no very deep and long-lasting downturns, some of the administered price industries now appear to be headed for persistent price increases. In other words, what used to be relative price inflexibility on both the up and down sides, now tends to become a steady upward movement. While we have not yet had a long period to assess this new trend, the behavior of steel prices, as an example, during the past few years is quite disturbing.

Professor Turner, in a paper already published in these hearings, has argued that in these so-called concentrated and administered price industries "much of the exploitative power of cryptomonopoly," which 20 years ago "could be exerted downward on workers," is now subject to union counter action through collective bargaining. As a result, most of this "cryptomonopoly" is now exerted upward on consumers.[7]

Under these circumstances there is a growing need to introduce considerations of public interest into the process of price determination in these administered areas of the economy. With the usual market restraints no longer operative, some substitute mechanism is called for to assure restraint and more responsible action.

One proposal, which has recently been given renewed consideration, would call for public hearings on some aspects of the pricing policies of those great corporations which dominate important industries. This would require advance notice and justification of price increases to be put into effect by any corporation which accounts for more than a specified percentage of the total sales of an industry. Unions bargaining with these corporations would also find themselves subject to public pressures if their demands could not be met without price increases.[8]

The institutional barriers, both on the labor and management side, in the path of developing or encouraging a more nationally conscious wage and price policy are admittedly very great. And, in fact, some of the very dynamism of the United States economy, in contrast to some European countries where such national wage and price policies have been developed, may be attributable to this "lack" of national consciousness or direction. Some better balance and cooperation in this area of price-wage-profit stabilization does, however, seem to be a worthwhile objective.

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[6] See, for example, the Relationship of Prices to Economic Stability and Growth, Joint Economic Committee print, 85th Cong., 2d sess., 1958, p. 20.

[7] See ibid., p. 676.

[8] See Administered Prices in the Automobile Industry, statement by Walter P. Reuther before the Subcommittee on Antitrust and Monopoly, U. S. Senate, January 28, 1958, pp. 104–110.

While it was only a modest step, I believe that the Council of Economic Advisers' original practice of regular consultations with the leaders of the major labor, business, and farm organizations were of considerable value. If we are eventually to build a deeper sense of national economic values and cooperation in the private economic community, meetings of this type can be of importance. (I say this even though the meetings were always held separately with each organization.) The discontinuance of these meetings in the past few years is regrettable.

At the very least the Council of Economic Advisers should take steps to restore the system of regular meetings with the various groups, and even explore the possibility of meeting with the groups jointly.

There are other "traditional" areas of economic policy which are also obviously of great importance in any long-run consideration of price stability, notably fiscal (including tax) and agricultural policy.

The joint committee has held frequent hearings on tax and fiscal policy. But it appears, right now, that with our budget obligations so high, even in the face of a serious recession hopes for a tax and fiscal policy geared more flexibly to the problems of growth and stability may be in vain for the time being.

If we could at least make a beginning step toward an economically sound fiscal policy by putting an end to the nonsense, so dear to the heart of some people in public life, of equating Federal and family budgets, there might be a better chance for eventual progress in this area.

On agricultural policy, I believe that the joint committee would perform an outstanding service if it could devote a special inquiry into agricultural policies as they fit into the Nation's overall economic needs and objectives.

My own personal feeling leads me to believe that the prime need, on the stability side, is to find some "farm-support system" which will allow for some better and fuller sharing of the fruits of rising agricultural productivity, while at the same time affording improved protection of the farmer. A production payment system which included some safeguarding productivity features in it might make sense in this area. But production payments should probably be geared to a farm *income* rather than a farm *price* formula. Thus, if large increases in productivity occurred, gains would accrue to consumers through lower prices; and these gains would not be automatically offset by commensurate increases in support payments which would have to be financed by higher taxation.[9]

To repeat, however, the subject of agricultural policy warrants a special inquiry by this committee.

ECONOMIC GROWTH, PRODUCTIVITY AND INFLATION, TRENDS AND PROSPECTS

Confronted as we are with what I have described as a lowered threshold to inflation, and recognizing that conflicting pressures will limit the full effectiveness of action in such areas as monetary, fiscal, wage-price-profit and agricultural policy, it becomes all the more necessary to reevaluate economic growth as it relates to the problem of stability.

[9] See the interesting proposal made some years back by John D. Black and Maxine S. Kiefer, Future Food and Agricultural Policy, 1948, especially ch. XXI.

A high rate of economic growth is, of course, one means of reducing the price pressures usually associated with a classical, demand type of inflation. A high and sustained growth rate is also essential to satisfy the ever-rising demands of the American people (be they for goods or leisure). Finally, a high growth rate is necessary to help us maintain a strong, world economic and military position, while avoiding destructive inflation.

THE PROSPECTS FOR PRODUCTIVITY

Intimately related to the question of the rate of United States economic growth is, of course, the question of man-hour productivity. The prospects for productivity in our economy are not bad, but they can and should be improved.

For the decade 1947–57 the President has estimated the increase of productivity at 3.4 percent, in terms of man-hours paid, and 3.9 percent in terms of man-hours worked (certainly the better measure for "physical" volume changes), for the entire private economy. Even this estimate may be a bit low, in view of the recent revisions in the Department of Commerce output series. Moreover, there is evidence that the annual rate of productivity increase has been accelerating, viewing the past 50 years or so as a whole.

Some temporary slowing down in the productivity rate in the last year or two was probably due to shifts going on in the economy as well as difficulties of measurement related to some of these shifts. A very great expansion in business outlays on research and development in the last few years seems to have loaded up the labor input side of the productivity equation without as yet producing commensurate output increases. However, these increases seem to be coming with a "rush," as we pull out of the current recession. Given quick and full economic recovery, we shall probably witness a spectacular increase in the productivity rate.

In evaluating long-run productivity trends and their measurement one must also take into account the important shift in demand and employment toward the services which is occurring in the United States. As it happens our usual measures of productivity have been most finely developed to gage changes of output per man-hour in commodity-producing and related industries. With the services rising in economic importance, the standard productivity measures may be understating output in some of them, and thereby understating the pace of development for the economy as a whole.

A few examples are of interest and help to illustrate this problem of productivity measurements in some services. Nonprofit institutions are doubtless on the rise, and will continue so in the United States. Yet according to the usually employed productivity measures no increase in productivity can be imputed to this sector. Thus, if manpower is tranferred to this sector, it must have a "dragging" effect on overall, national productivity rates.

Even more curious is the phenomenon presented by employment in education. Now, since public employment and its "output," be it State, local, or Federal, is not encompassed either in the input or output side of the standard productivity measures, it might seem that trends in this sector would have no effect upon the measurable private

economy rate of productivity. Consider, however, that by 1956 there were some 130 people employed in the public educational field (teachers, administrators, etc.) per every 10,000 members of the population, as contrasted with only 88 per 10,000 in 1936; [10] if you also assume that this expansion which dates from 1945 only, probably came from the younger (and, presumably, potentially most productive) elements of the labor force, you have a depressing influence of an unknown and unmeasurable magnitude on the total, private economy rate of productivity.

To show the difficulties of measurement, we can carry the education problem to the private sector. The input and output of private educational institutions are included in the global productivity totals of the private economy. The actual measurement of productivity in private educational institutions is largely a function of the pupil-teacher (plus administrators, janitors, etc.) ratio. Thus, if the American people choose to expand their outlays on education (including private education) relative to other sectors of the economy, and the pupil-teacher ratio declines (something fondly hoped for by most American parents), the measurable productivity rate in this sector and consequently for the economy as a whole will be unfavorably affected.

It is, of course, perfectly clear that over time this shift in demand toward the services involves a major institutional change in the economy. Under these circumstances the current, standard productivity measures will naturally have reduced value.

Needless to say, shifts of this nature are not rapid, they nevertheless cannot be ignored as we assess productivity data.

Putting aside those areas where measurement is impossible or even self-defeating, it is possible that the general economic transition (reflected in important shifts in demand) to a more service-oriented as against a more purely commodity-oriented society might in itself result in some temporary, relative slippage in the productivity rate. I am thinking here of the expanding demand for restaurant, hotel, and other conventional private profit-making services where we can measure productivity more accurately. Some of this temporary relative loss in efficiency may be a price paid by society to bring about a large-scale movement of resources in our economy.[11]

Up till now, for example, the commodity-producing and related industries have attracted the potentially more productive manpower. Low wages in the service industries have also kept productivity down. As demand for the services rises, relative to the commodity sector of the economy, some of these obstacles to productivity should be overcome.

Moreover, the process of systematic rationalization and mechanization which has long since taken hold in the commodity producing industries has barely begun in many of the services. This too may lead to temporary relative disadvantages in the productivity rate. As

[10] Monthly Labor Review, July 1957, U. S. Department of Labor. Government Employment Trends, 1929 to 1956, by Irving Stern, p. 812. Even if one allows for the relatively larger expansion in the school-age population these trends are still striking. Thus, in 1936 there were 376 employees in public education for every 10,000 people in the 5-to-17 age bracket, but by 1956 this ratio was 590 to 10,000.

[11] Between 1947 and 1957 consumer expenditures (in constant dollars) on services increased 48.4 percent, as against a 32.8-percent increase for all durable and nondurable goods. In the same period, the commodity component of the U. S. Bureau of Labor Statistics' Consumer Price Index went up 18 percent, while all services (excluding rent) in the CPI went up 46 percent.

mechanization increases in the services, significant advances in productivity should be realized.

But, once again, these factors are either temporary or apt to be very slow acting on the economy as a whole, anyway, and they may be of prime interest only to the economist and statistician for the time being.

Our basic problem so far as productivity is concerned is how can we, as a nation, improve the rate of man-hour output.

IMPROVING PRODUCTIVITY: KEY TO GROWTH AND STABILITY

The threat of Soviet economic competition as well as the nagging pressure of creeping inflation make it imperative that we take a fresh look at the possibilities of stepping up the rate of economic growth in the United States. As previously noted, the rate of man-hour output increase in our country has been relatively good in the recent past, but it may well be inadequate for the future.

A recent Rockefeller Bros. Fund report, for example, states that although the growth in United States gross national product between 1870 and 1930 was 3 percent per year and in the past decade we have been following a 4-percent trend, "a growth rate of 5 percent is possible if we realize fully our impressive opportunities for economic expansion." Moreover, this same report adds, that under the pressure of necessary defense and security programs—

> unless we achieve a 5-percent growth rate, we shall have to hold back otherwise desirable expenditures in the Government field and keep the growth of private expenditures below a level commensurate with our aspirations.[12]

An increase in the overall rate of growth in the economy presupposes some increase in the rate of productivity. (I am ruling out the possibility of either a sustained expansion in work hours or any sharp step-up in labor force participation as a whole.)

By the very nature of the American economic system we must look to management and labor for the major share of direct help, in this respect.

The role of Government, however, cannot be minimized. The very execution of the mandate of the Employment Act—the maintenance of maximum employment and production—is a basic precondition of a sustained high rate of growth and of man-hour productivity.

The colossal losses from even short-run recessions take on special significance in the light of our great national and international needs. On the basis of 1 year alone—assuming that full recovery is already in full swing (something which is certainly not yet well demonstrated) the 1957–58 recession cost the Nation a minimum of $25 billion in potential wealth.[13] Let those who each year question the size

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[12] The Challenge to America: Its Economic and Social Aspects, Special Studies Project Report IV, Rockefeller Bros. Fund, 1958, p. 64.

[13] This loss estimate is really a very conservative one. Gross national product in the second quarter of 1957, before the recession officially began, was at an annual rate of $441.2 billion. If one were to project a growth rate based on the average annual productivity rate for the 1947–57 decade plus the growth due to the net increase in the labor force, he would get a figure of over $460 billion for the second quarter of 1958: this in contrast to the actual recession figure of $429 billion. Moreover, as Leon Keyserling and the Conference on Economic Progress have well pointed out, the growth rate itself has been lower than economically possible for the past few years, so that even the second quarter of 1957 was not a fully adequate starting point for this measurement. See Wages and the Public Interest, Conference on Economic Progress, January 1958.

of the budget in light of our economic and military needs ponder this loss or deficit, and what should have been done to prevent or minimize it.

But Government's role in the area of economic growth must go beyond general economic policies and activities aimed at maintaining maximum employment.

Government participation in technological research and development.—The evidence of the past 15 years points to the growing significance of direct Federal assistance in the field of research and development. When the technological history of these decades is written certainly the harnessing of the atom and the development of electronics may well rank as its most significant achievements. Yet both of these areas were pried open as a result of heavy Government investment and direction. Moreover, reported British and Soviet advances in the application of atomic energy for peacetime uses suggest that the failure of our Government to maintain sufficient activity and leadership in this field may have cost us precious time in the economic growth race.

While technological innovation and development in the United States will obviously continue to depend in largest part on private enterprise, the history of the past 15 years should be convincing evidence that we cannot afford to indulge in old stereotypes about the possibilities of constructive Government activity in some key economic fields.

In general the Government must be prepared to play a major role in the research and development field. As we experiment with new sources of energy, the wider application of electronics, etc., we simply cannot always afford to base these programs on the calculus of whether they may or may not pay off in profits in 4 or 5 years or even 10 years. Adequate Government support for some worthwhile program today may be the key to major productivity advances tomorrow.

But it is not only in the narrow field of technology that we must re-examine possible Government contributions to the growth rate of the economy. If we view this problem with enough imagination the possibilities broaden considerably.

Take for example the problem of distribution in our major urban areas. Just imagine the general increase in the overall efficiency of the economy, if through sound urban redevelopment programs we could reduce by only 5 percent the man-hours now required to distribute goods coming into New York, Chicago, and any of our presently clogged metropolitan areas.

In addition we must not overlook the fact that advances resulting from Government research or enterprise are immediately available to all groups in the population. Thus, if redevelopment reduces handling time in metropolitan distribution by 5 percent, there is a good prospect that the benefits from this saving will flow directly and fully to the population as a whole. The same is true for significant scientific breakthroughs which flow from properly administered Government research programs. On the other hand, productivity advances in the private sector are often not immediately or fully available to the public at large, as investors, management, and labor may seek special bonuses in the development of private productivity breakthroughs.

There is, however, no real conflict between private and public enterprise. The very nature of some types of research—its less immediate relation to the realizable profits, its sharp break with already built up vested interest-type of capital structures, etc.—demands that Government play an active role in certain fields.[14]

CONCLUSION

For the reasons already outlined, the Nation faces the prospect of continuing upward pressures on prices. At the same time the need for a strong and sustained rate of growth in the economy is greater than ever.

The Employment Act of 1946 certainly establishes a broad enough framework to take effective action on both of these fronts. Rather than engage in a fruitless attempt to change the language of this statute by incorporating the specific goal of stability, we should concentrate our efforts on those areas of policy and action which can yield results for both growth and stability.

I have suggested, for example, the necessity to enact legislative safeguards against the speculative price increases which are likely to occur in the event of other "limited" wars of the Korean type. We must also try to develop some new mechanism whereby national considerations can be brought to bear in the wage-price-profit process. Monetary, fiscal, and agricultural policy must also be reexamined in light of the necessity to insure a high rate of stable economic growth.

Above all, we must not lose sight of the fact that economic growth has become a matter of national survival as well as social necessity in the present era. We must be ready for bold new programs to insure this growth.

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[14] It doesn't seem necessary to refer to basic areas like education, health, or resource development, where Government's contribution to the long-run productivity of the economy is more or less unique.

MAINTAINING ECONOMIC GROWTH, STABILITY, AND STABLE PRICES

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I. Objectives of Employment Act

A. FACTS AND INTERPRETATIONS

The Employment Act of 1946 declared a national policy on "employment, production, and purchasing power." The essence of the act appears to be that Congress declared that it is the continuing policy of the Federal Government to create and maintain under free competitive enterprise "conditions which will promote maximum employment, production, and purchasing power." The words economic growth, stability, and stable prices were not mentioned in the declaration of policy. The words "maximum employment, production" can, without apparent violence to the language, be taken to mean maximum growth in output of goods and services over the long term as well as the maintenance of a relatively high degree of stability in employment and production over the business cycle.

Greater difficulty arises in attempting to interpret the meaning of "maximum purchasing power." Interpreted somewhat literally, the phrase indicates it was the intent of Congress to promote conditions which would make it possible for buyers to acquire the maximum amount of real goods and services. However, if interpreted in this manner, this is merely a restatement of the aforementioned goal of promoting maximum employment and production. For it is only through maximum economic growth that the economy can produce the maximum size "pie" to be distributed among income recipients. In other words, maximum real consumption and investment can occur only under conditions of maximum real production. Conceivably, it may be possible to achieve a maximum "average standard of living" with considerable fluctuation in the general price level. Hence, if maximum purchasing power is interpreted in this way, it gives no direction as to the optimum trend in prices. Since it is unlikely Congress would have stated the same idea twice in the same phrase, something different must have been intended.

One could interpret "maximum purchasing power" to mean maximum purchasing power of the existing stock of money. If this is the meaning, then the directive would imply a constantly falling price level. Because of the admitted practical difficulties of maintaining relatively high levels of employment and production with declining prices, it appears this interpretation, if followed, would inevitably

[1] The views expressed are the author's and not necessarily those of the Harris Trust & Savings Bank.

lead to difficulties. There appears to be no evidence to indicate the above interpretation was the intent of Congress.

If the stated objective had been "stable purchasing power," then it would have clearly meant a stable price level. Yet some writers interpret the objective to include a price mandate (Nourse), while others contend just as persuasively that it is not clearly understood that price stability is the intended objective (Bach). Since respected professional economists clearly disagree as to the meaning of the phrase "maximum purchasing power," it is not surprising that the general public appears to regard the act as a statement of intent to maintain maximum employment and production with no statement regarding price stability.

B. RECOMMENDATIÓN AND SUPPORTING ARGUMENTS

Regardless of the original intent of Congress, the widespread disagreement as to the meaning of the act suggests that it would be desirable to clear up the uncertainty with an appropriate amendment to the Employment Act of 1946. None of the economists who prepared papers for the Joint Economic Committee denied the inequitable redistribution of income and wealth resulting from inflation and deflation, although many recognized that if the inflation was generally anticipated, much of the regressive redistribution effects could be avoided. Furthermore, some argued that maintaining stable prices was tantamount to restricting economic growth and therefore should not be a Government policy. Even those authors recognized that if maintaining price stability would not limit growth, stable prices would be desirable because of the fact that inflation imposes burdens on the elements of society least able to bear the burden.

Since several careful students such as Bach and Friedman demonstrated rather conclusively that there is no clear empirical evidence that price rises either increase or decrease economic growth, and furthermore, since there is the danger that a moderate inflation will become a sharp inflation once it is generally anticipated, it is my belief that price stabilization should be an explicit goal of national policy.

Some object that even though the general public and many economists may not recognize the act implies the objective of maintaining a stable price level, nonetheless, responsible public agencies such as the United States Treasury, the Council of Economic Advisers, and the Federal Reserve Board do recognize the responsibility to promote stable prices. Even if this is true, as appears to be the case, there remains ample justification for amending the Employment Act of 1946 to include stable prices as a goal of economic policy. An explicit statement of the price stability goal would most likely encourage public agencies to err less on the side of a rising price trend than if the agencies were merely relying on their own interpretation of the act. But perhaps more important, stabilizing actions on the part of the private sector of the economy can be expected only when there is no doubt as to the intent of Government to maintain a stable price level. To the extent private buyers expect prices to rise, there is the danger purchases will be made earlier to avoid higher prices and hence bring about the very condition predicted plus other misallocations of resources. Conversely, if generally lower prices are anticipated, de-

ferred buying may result in depressed business activity and deflation. Only if the general public knows the "rules of the game" before the game is played will their actions be stabilizing.

C. SUMMARY

Due to the widespread disagreement as to whether the Employment Act of 1946 includes a declaration of policy to maintain stable prices, it would be desirable to eliminate this disagreement by a suitable amendment to the act. Since empirical evidence does not disprove the contention that stable prices are consistent with economic growth, it would be desirable to include stable prices as an objective of national policy because of the obvious inequities arising from rising or falling prices. A clear statement of policy is more likely to elicit stabilizing action on the part of the private sector of the economy, as well as responsible public agencies, than if price stabilization remains an implied objective.

II. Nature of Apparent Impediments to Achieving Objectives

A. DEFINITION AND MEASUREMENT OF OBJECTIVES

If the general objectives of economic growth, stability, and stable prices may be assumed to be clearly understood, the next relevant task is one of precise definition and measurement of results. Even though it is well that the Employment Act wording be kept as broad and general as possible, so as to remain flexible under changing conditions, nonetheless, policymakers as well as those charged with evaluating results must resort to finer distinctions.

Although the Employment Act calls for maximum employment, this phrase is not generally interpreted to mean "zero" unemployment, which would be approximately possible only if substantial excess demand for labor and goods was maintained. It is generally agreed that some frictional unemployment is unavoidable and indeed desirable in a free-enterprise economy. Although a precise maximum unemployment figure cannot be established, most observers would be satisfied if an average level of 4 to 5 percent was maintained over the long pull. In periods of recession the level would no doubt exceed the above goal, but the variation would indicate need for countercyclical measures. As indicated by Rees, there appears to be little bias in the measurement of employment statistics. Recent improvements in the population surveys and reduction in sampling error have occurred. The concept of unemployment has been improved and data on partial employment are now available. Therefore, it is possible to measure with considerable accuracy the changes that occur over the business cycle in total employment and unemployment, adjusted for changes in the workweek as well as seasonal factors.

In measuring the overall performance of the economy, it would also be desirable to know the extent to which capital is being fully utilized. Although there is less public concern about the degree of unemployment of capital than of labor for obvious humane reasons, nonetheless, unemployed capital represents wasted resources in the form of excess capacity. Such a condition may exist because the economy is operating at less than optimum levels or because the cap-

ital stock is too high relative to the labor force under current production techniques. Recent estimates of the Federal Reserve Board pertaining to percentage of capacity operation in various areas are useful for this purpose. One hundred percent utilization of capital cannot be the goal due to shifting demands for final products and the time needed for transferring capital from one area to another. Further development of data in this area would improve our knowledge of the extent to which excess capacity in various areas exists. Not only would such information be useful to policymakers, but it would also provide factual guidance to business investors and would tend to hasten corrective action.

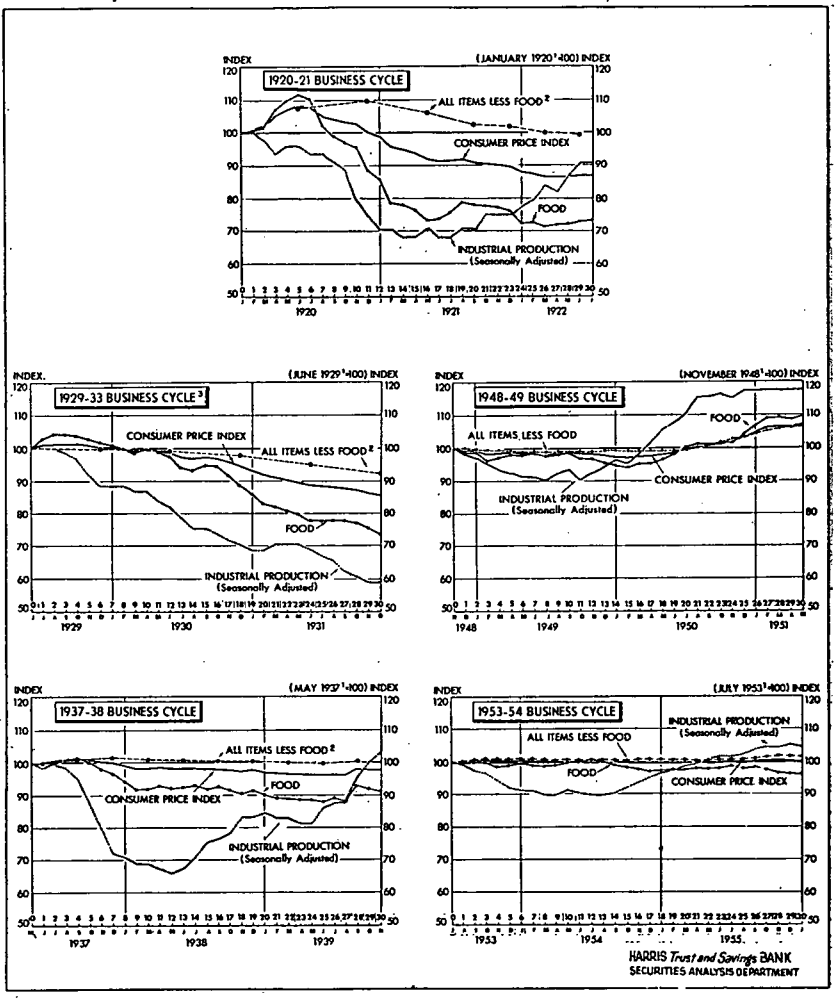
As indicated by Rees, Bailey, and others, there is too little known about what has happened to our price level as contrasted with the Consumer Price Index and the Wholesale Price Index. There can be no doubt but what our price indexes are among the best in the world and are now better than ever before. Why be concerned about even further refinements? The answer lies in the fact that never before has our range of public tolerance for economic fluctuations been so narrow. In fact, the current range of tolerance may be too narrow, given the tools available for achieving our objectives. In earlier years moderate swings in employment and prices received little public attention; such developments are now front-page news. However, rather than decry current interest in and concern for economic affairs, it behooves policymakers to be sure the gages used to measure economic change and trigger policy actions are "correct."

It seems clear that insufficient weight is given in our price indexes to improvement in quality of production over time, or to the shifting patterns of consumption as relative prices change and consumers buy relatively more of lower cost substitute items. Both omissions give an upward bias to the price indexes. This would not be serious if it were not for the fact that such developments may trigger policy actions detrimental to the achievement of the objectives of the Employment Act. Also, it would be helpful if price indexes were seasonally adjusted to eliminate price changes due to recurring seasonal factors.

Furthermore, Bailey and others rather clearly demonstrated that actual prices are much more flexible over the cycle than is indicated by published list prices. This information is in accord with impressions received from businessmen during the current recession. Sellers are seldom willing to admit transactions are occurring at below published list prices. Price indexes have never been flexible downward during periods of modest cyclical declines and the present is no exception (charts I and II). However, there is reason to believe that

CHART I

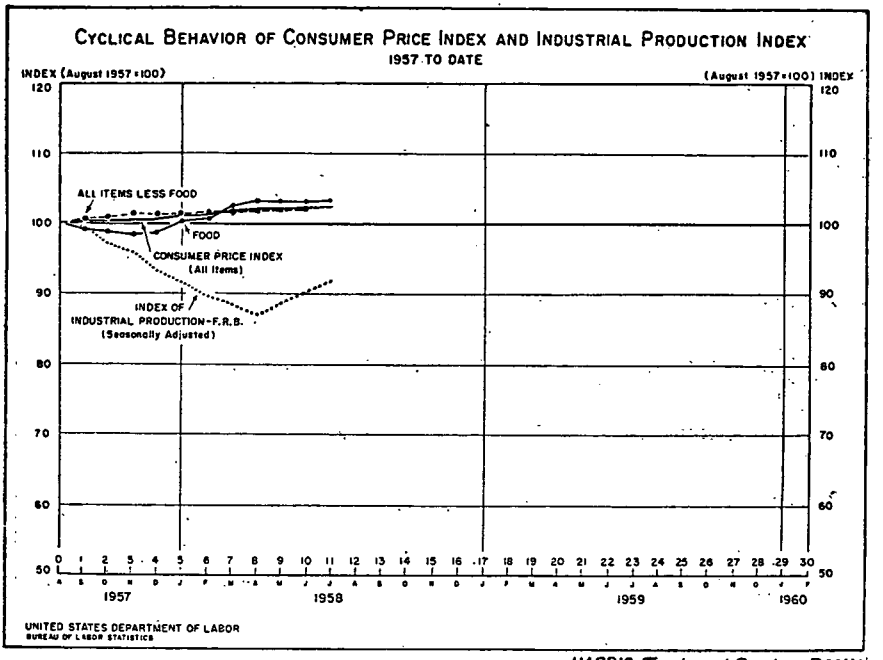
Cyclical Behavior of Consumer Price Index and Industrial Production Index



[1] Business cycle peak as determined by National Bureau of Economic Research.
[2] Data for selected months.
[3] Only contraction period of cycle charted.

Source: Industrial Production Index, Board of Governors, Federal Reserve System; Consumer Price Index, Bureau of Labor Statistics.

CHART II



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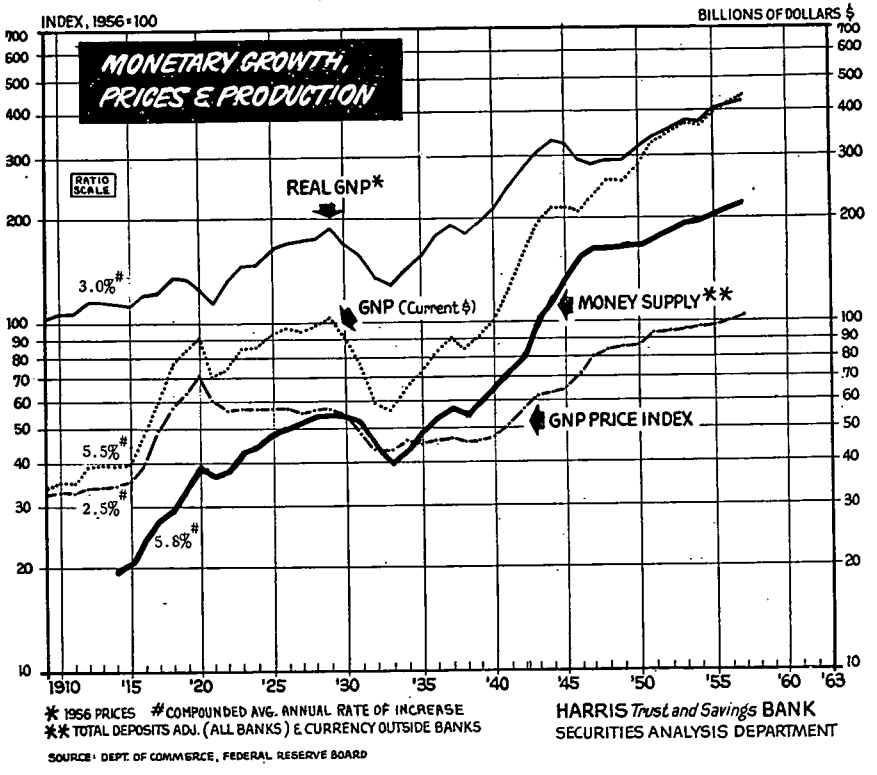
prices are considerably more flexible than the price indexes. The same argument probably applies to periods of price increases. Increases in list prices may not account for the total price rise during periods of rising business activity since many previously indirect price concessions are probably eliminated. Therefore, the lack of flexibility in price indexes may not increase the long-run distortion in true price changes, but may lead to policy mistakes in the short run.

As suggested by Rees, it does not appear that more money for improving sampling techniques is as important as more money for basic research on the concept of a price index. Money used for experimenting on current indexes based on present knowledge might prove fruitful. Unless we have the best possible measures of price changes, it is difficult for responsible monetary-fiscal authorities to properly formulate policies and also difficult for Congress and the general public to properly evaluate results. It would indeed be tragic if public disenchantment with monetary-fiscal tools led to direct control measures, which interfere seriously with resource allocation in a free-enterprise system, merely because our measures of price changes are reflecting misinformation. In other words, the objective of high levels of employment, growth, and stable prices may not be so difficult to attain as the data indicate if it is established that price indexes moderately overstated the inflation of recent years and also understated the degree of price flexibility.

B. REVIEW OF PAST RECORD

Even if we assume that our price measures overstate the "actual" price increases by an average of 1 to 1½ percent a year, it is clear that the record of our competitive economy over the past half century is unacceptable for the future as measured against both the price and employment standards of today. During this period the annual compound rate of rise in the price level has averaged 2.5 percent as measured by the GNP price deflator (chart III), about 3.1 percent as measured by consumer prices and 2.3 percent by wholesale prices. It is relevant to note, however, that the bulk of the increase occurred during and immediately after World War I, World War II, and the Korean war.

CHART III



The annual compound rate of growth in real output has averaged 3 percent with especially sharp fluctuations in 1920–21 and 1929–33. Furthermore, throughout most of the decade of the 1930's, the economy functioned at substantially less than full employment. Throughout most of the post World War II period near-full employment has been maintained.

It is important to note that during the past 5 decades spending has risen at an average compound rate of 5.5 percent per year, nearly double the rise in real output and only slightly less than the rise in the money stock.

The shorter term record from 1946 to 1951 would be acceptable on the employment criteria, but the average annual compound rate of rise in prices amounted to 5.4 percent as measured by the GNP Price Index, 5 percent by the Consumer Price Index and 7.9 percent by the Wholesale Price Index. In retrospect, it is clear the economy was suffering from too much war-created liquidity. Although the Federal budget was approximately balanced during this period, a surplus would have been appropriate, and, even more important, the peg monetary policy with respect to Government bonds merely enhanced the excess liquidity already in existence. It is clearly impossible to argue that countercyclical monetary-fiscal policies were tried and found lacking during this period. They were not tried.

The record since 1951, when a flexible monetary policy was adopted, has been superior to either the long-term record or the early post World War II performance. During this period the Consumer Price Index has risen at an average annual compound rate of 1.3 percent, while the GNP price deflator rose at a rate of 1.8 percent and wholesale prices rose at a rate of only five-tenths of 1 percent. Real output has enjoyed a rate of rise of 3.8 percent to the high in 1957 and unemployment has remained low most of the time. Until we know how much our price indexes overstated the actual price increases, it is impossible to make a final judgment as to whether the recent price record is consistent with present-day standards of tolerance.

C. CAUSAL FORCES

Some observers contend that a basic structural change has occurred in our economy, such that autonomous wage demands by labor unions and autonomous price increases by oligopolistic producers result inevitably in inflation or unemployment. Certainly one can visualize a situation where such autonomous wage and price increases could "price labor and goods out of the market" and force either declining output or easier monetary-fiscal action which would in effect validate the price and wage increases. Other analysts contend that the basic cause of past inflations has been excess demand and that prevention of excess demand is paramount in any anti-inflation program. Again, it is conceptually easy to visualize this portrayal of the real world. In other words, there is nothing logically inconsistent in either formulation of causal forces. The basic question is, What are the facts in our present world? Logic will never solve this debate. Empirical evidence is critically necessary. Although it is tempting to rely on general impressions in this area, it is unlikely that correct conclusions will emerge.

Various data are cited to substantiate the cost-push hypothesis. Some refer to the rising price trend in the recent recession as evidence that we have an economy of largely "administered" as contrasted with "competitive" prices in earlier periods. This evidence is not convincing for two reasons: (1) As indicated previously, there is good reason for believing that price indexes understate the degree of price weakness which actually occurs in the market place during periods of declining demand; (2) furthermore, the price performance in the recent recession has not differed significantly from the price performance in previous mild recessions as indicated above. It was only during periods of

protracted recession or depression that price indexes declined significantly in the past. There is little doubt that a severe depression would be accompanied by weakness in price indexes in our present economy. However, for good reasons, we are unwilling to bear the costs of a protracted decline in economic activity for the express purpose of raising the value of the dollar.

Some analysts cite the fact that since wages rose more than physical productivity in recent years, it is clear that excessive wage boosts caused the inflation. Such data are consistent with either a demand-pull or cost-push inflation and consequently cannot be cited to support either hypothesis. Theorists adhering to the competitive theory of relative price determination and the demand-pull version of inflation argue correctly that excessive final demands increase the dollar value of the marginal physical product of labor and hence bid up the price of labor more than physical productivity increases.

Furthermore, as pointed out by Rees, there is little data to support the contention that costs, either in terms of wages or profits, were primarily responsible for the inflation of 1956–57. The price rise in these years was largely in services and farm products where unionization is weak and in producers' goods where the investment boom could have caused a classical demand inflation. Furthermore, corporate profits trended downward during this period.

In conclusion, even though there is no logical fallacy in either the cost-push or demand-pull inflation version, the data typically cited to support the former are not convincing. Before we hastily conclude that the recent price rise was unique and that new tools for controlling prices in the future are necessary, we should first do a much better job of documenting the case. Also we must make sure that further refinements in our conventional monetary-fiscal and antitrust techniques, which are consistent with a free market economy, will not do the job.

III. Means of Achieving Policy Objectives

A. DIRECT CONTROLS

Those writers subscribing to the cost-push version of inflation generally favored either Government control of prices in those areas where prices are allegedly "administered" or public hearings before some Government body prior to a change in prices. It was hoped the glare of publicity would prevent "unjustified" price and wage increases. In view of the lack of clear statistical evidence indicating the validity of the cost-push interpretation of inflation, the writer is extremely reluctant to subscribe to such a procedure. Even assuming the cost-push analysis of inflation is correct, there are good reasons for rejecting such an approach. If prices are too inflexible downward now, it is clear that the matter would become worse if industry thought it might have to face a public justification if it ever attempted to raise prices to restore a previous cut. The probabilities of lower prices in periods of slack demand would be even less than now. Rather than follow policies making prices even less responsive to market forces, Government policies should be directed toward increasing price flexibility, even though recognizing perfect price flexibility is impossible and in fact never existed in the past.

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Furthermore, on what basis would a Government authority decide a price rise was or was not justified? Clearly, if price increases were to be permitted only when justified by costs, difficulties would arise. Regardless of whether the cost-push argument is correct, if the cost criterion was observed, all wage-excuse price rises would be permitted. Probably the next recommendation would be one for also subjecting wage changes to public scrutiny. Inadequate controls in one sector of the economy frequently lead to requests for controls in other sectors. Also there are clearly situations in which price increases should occur even though the rise is not justified by short-run cost changes. In a dynamic economy such as ours, prices relay much information to buyers and sellers which is not otherwise available. A rapid rise in demand for a particular product or service should lead to a higher price even though costs do not rise proportionately, if the economy is to remain responsive to final demands. The higher price performs the important function of discouraging consumption of a relatively scarce good or service and rations the stock to the most pressing demands. Furthermore, since profits to producers would rise in such a situation, the price rise would encourage the transfer of resources to this line so as to increase output in a later period. Rather than discourage the flow of resources from relatively inefficient lines to more productive lines, Government policy should be directed toward reducing the barriers to the movement of labor and capital.

As Rees pointed out, if Government is to condemn private enterprise for using rigid prices, it should itself cease being the "greatest single source of price rigidity in the economy." There are many things that could be done besides attempting to make antitrust policy more effective. Such things as our farm program, regulation of transportation rates, Federal support of retail-price maintenance, tariffs on products produced by large industry no longer qualifying as an infant industry, and quotas on production of petroleum going into interstate commerce, all serve to decrease price flexibility.

B. ANTITRUST ACTION

A more militant application of antitrust laws to secure freedom of entry and exit into and out of alternative lines would be rewarding. Also, there appears to be no good reason why labor should be exempt from antitrust laws. Restraints on production and employment should be removed wherever they are found. In retrospect, it appears that much of the prolabor legislation of the 1930's was basically an outgrowth of the depression which resulted from inadequate demands for goods and services. Since it was the purpose of the Employment Act to eliminate such possibilities in the future, there appears little reason for continuing special antitrust exemption for this important economic group. "Featherbedding" and other restrictive labor practices are highly detrimental to price flexibility as well as long-term growth.

In view of the lack of documented reasons for resorting to direct control of prices as a means of stopping inflation, plus the dangerous interference with the allocative function of the price system which is inherent in such a scheme, is there anything that can be attempted

which will insure a better attainment of economic policy goals in the future than in the past? A categorical answer cannot be given but promising approaches can be suggested.

C. AUTOMATIC STABILIZERS

In view of the admitted reluctance of Government authorities to base policy actions on predictions of future business and price trends, it would seem prudent to rely as much as possible on automatic stabilizers as tools for achieving economic stability. The stabilizing budget recommended by the CED [2] and Milton Friedman [3] is perhaps the best approach so far developed along these lines. If total tax receipts were set so as to achieve a balanced budget at noninflationary full employment, fluctuations in the economy from this ideal would automatically and promptly set up stabilizing budget responses. Inflationary pressures would immediately create a budget surplus which would impose a restrictive force on the economy. A decline in economic activity would immediately create a deficit thereby stimulating the economy. One measure for strengthening the antideflationary effects of such a program would involve broadening unemployment coverage, and extending the time period for which workers could qualify for coverage. The prime advantage of this form of stepped-up spending would lie in the fact that once a recession is over, these expenses would immediately decline and hence reduce the deficit. Also, this program would have the effect of supporting incomes where the greatest declines are suffered during recessions.

D. DISCRETIONARY ACTION AND POSSIBILITIES FOR REFINEMENT

1. Spending policy

Recent as well as long-term experience strongly suggests that countercyclical public works programs are inappropriate measures for maintaining economic stability except during periods of deep protracted declines. As emphasized by Brownlee, decisions relative to public works programs should be based on public views as to whether the Federal Government can more effectively provide a particular service than can State and local governments or private business. Ideally, the marginal rate of return from Government investment should be equated with the marginal rate of return from private investment in order to attain maximum production with our resources. Even though there is no ideal mechanism for determining this balance, this should be the objective of the legislative process. This means that except when widespread and prolonged unemployment would otherwise exist, changes in Government spending should not be used as a countercyclical measure.

Another significant reason for avoiding variable public spending programs lies in the fact that there is a considerable timelag between the need for action and the eventual outpouring of dollars being spent for public works. If automatic stabilizers and monetary policy are promptly utilized, the economy will almost inevitably be in an up-

[2] Committee For Economic Development, Taxes and the Budget: A Program for Prosperity in a Free Economy, November 1947.
[3] Friedman, Milton, A Monetary and Fiscal Framework for Economic Stability, The American Economic Review, vol. 38, 1948, pp. 245–264.

trend prior to the impact of increased spending. Hence, as inflationary forces reassert themselves in the boom phase of the economy, increased public works programs will merely increase the inflationary pressures. If it is difficult to increase public works spending in the early phase of a recession, it is even more difficult to decrease these outlays in the subsequent recovery. Vested interests as well as compulsions to complete projects once started make it difficult, if not impossible, to reduce such outlays during periods of business boom. In the past two recessions, reductions in Federal outlays occurred while the economy was declining and subsequent increases occurred only after the economy was in the recovery phase. In summary, public works programs are usually an inappropriate mechanism for achieving the objectives of the Employment Act because (1) sharp fluctuations in these outlays destroy the balance between the Government and private sector of the economy, and (2) of the long timelags such programs cannot expand and contract when the change is needed.

2. Tax-rate policy

Strong arguments can be made for establishing in the hands of the Executive some discretionary power for tax-rate changes. The obvious advantage lies in the reduction in the lag between the time of need for action and the actual reduction or increase in tax rates. The disadvantage lies in the fact that such a scheme would involve delegation of taxing power by Congress to the executive branch of the Government. Disregarding the political difficulties of achieving such an objective, there remains the basic question of whether it would be desirable to set such a precedent. Furthermore, there is little doubt that Congress would authorize a tax change if basic conditions warranted such a move—witness the fact that taxes were cut in both the 1948–49 and the 1953–54 recessions. If business had continued to decline through mid-1958, it appears probable such a move would have occurred in the recent decline. As to tax increases, there is no evidence to indicate Congress is willing to run substantial deficits when faced by strong inflationary pressures; witness the near stability in the Federal debt in the post World War II period. In any event discretionary changes in tax rates are preferable to discretionary changes in Federal spending since the timelag is probably less. Numerous businesses and individuals program spending changes rather than the Federal Government. Also, unless tax rates are occasionally reduced, Federal revenues increase with economic growth. It is unlikely such revenues will result in surpluses as there are always numerous pressures for increased Federal spending. Hence, the occasional reduction in tax rates combined with the congressional tradition of avoiding deficits during booms serves to strengthen fiscal discipline.

3. Monetary policy

(*a*) *Alternative approaches.*—Even though the record of monetary policy since the accord of March 1951 has been far superior to the earlier record, there is still room for improvement. In the opinion of this writer, the real hope for achieving the objectives of the Employment Act of 1946 lies in the maintenance of a flexible monetary

policy and a stabilizing Federal budget with primary reliance on automatic stabilizers. Action by the Federal Reserve is sometimes unpopular with banks when an easy money policy is being followed and is frequently unpopular with businessmen and sometimes legislators when a tight money policy is maintained. Yet, if we are to maintain a tolerable degree of employment and make impossible the independent attempts by spending units to spend more than our economy is capable of producing at stable prices, a flexible monetary policy is critically important.

Perhaps a constant rate of monetary growth is the best that we can hope to achieve from a monetary policy, as contended by Friedman. Such a plan would have been superior to the historical record. In the past the rate of growth in the stock of money has contracted in the early phase of recessions or depressions, thereby reinforcing the depressing effects of a declining velocity. Also, monetary growth frequently rose during periods of business boom and inflation. Maintaining a stable growth rate in the money stock does not imply that the Federal Reserve would perpetually maintain the same degree of ease in the money market. In periods of rapid rise in the economy, a tight money policy would have to be applied immediately to prevent a sharp increase in the stock of money as banks increase their borrowing from the Federal Reserve and also decrease the volume of excess reserves maintained in response to higher credit demands. Conversely, during periods of economic decline such as late 1957 and early 1958, a very easy policy would be necessary to prevent liquidation of bank credit and hence the money stock.

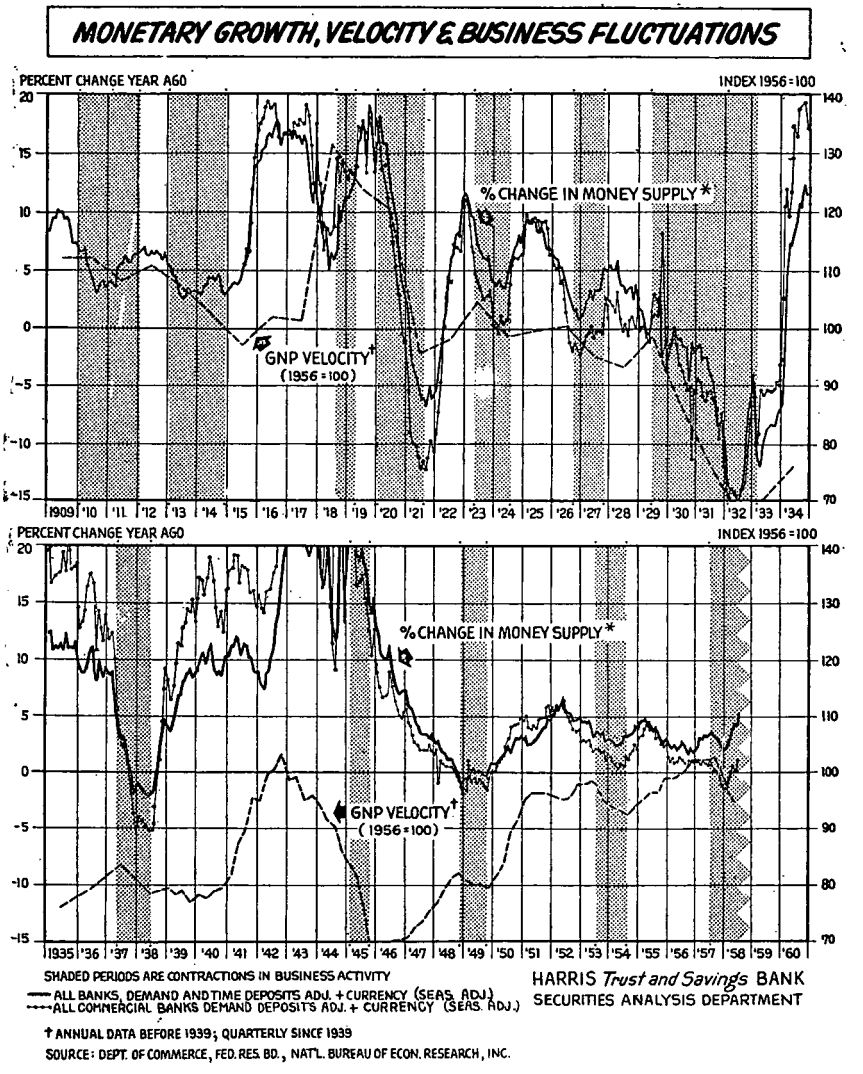
Yet the relation between monetary growth and business trends is sufficiently stable to suggest that it may be possible to utilize changes in monetary growth to compensate for changes in velocity sometimes induced by nonmonetary factors in the economy.

(*b*) *Conclusions based on monetary record over past business cycles.*—Monetary theorists have long contended that changes in monetary growth have significant effects upon subsequent business trends and hence monetary policy can be a useful stabilization tool. Warburton [4] and Friedman have both vigorously defended this position in the post World War II period. In the 1930's, 1940's, and again in recent months, other authors, including several who prepared papers for the 1958 Joint Economic Committee deliberations, contended monetary policy was either impotent or was capable of squelching a boom, but incapable of generating a recovery. A careful review of unpublished data recently compiled by Milton Friedman and Anna J. Schwartz strongly supports the promonetary policy point of view.

Four important conclusions emerge from a review of the Friedman-Schwartz monthly monetary series extending back to 1909 as recorded in chart IV.

[4] Warburton, Clark. The Misplaced Emphasis in Contemporary Business Fluctuation Theory, the Journal of Business, the University of Chicago, 19 (1946), pp. 199–220.

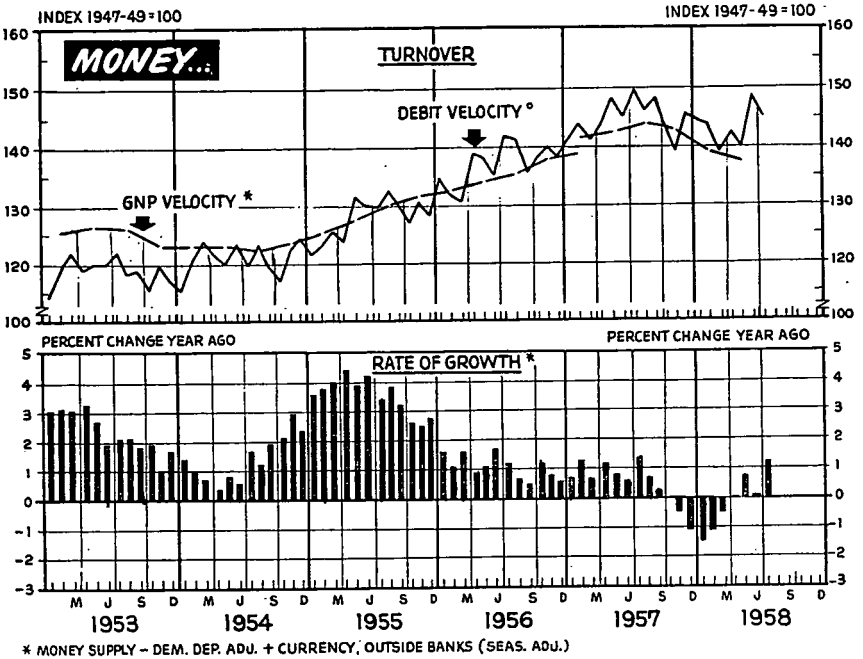
CHART IV



(1) All business declines since 1909 were preceded by a reduction in the rate of monetary growth. The lead has not been the same for all periods, but the average lead has been about 12 months, excluding the early post World War II period when liquidity was extremely high due to war financing.

(2) Typically, the income velocity of money tends to rise for a relatively short period as the rate of monetary growth declines, and also tends to decline for a short period when monetary growth rises. In fact, changes in the trend of velocity appear to be coincident with the peaks and troughs of business cycles. This fact has long been known as a result of earlier research. Unfortunately, the lack of monthly data on income velocity makes it difficult to be sure that the turning points are exactly coincident, but information supplied by

CHART V



* MONEY SUPPLY – DEM. DEP. ADJ. + CURRENCY, OUTSIDE BANKS (SEAS. ADJ.)
° 337 OTHER REPORTING CENTERS (SEAS. ADJ.)

SOURCE: DEPARTMENT OF COMMERCE
FEDERAL RESERVE BANK OF NEW YORK
FEDERAL RESERVE BOARD

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another series, namely, transactions velocity, indicates that this is the case in recent years (chart V). It appears, therefore, that those contending that changes in the money stock would not be indefinitely offset by changes in velocity are correct. On the other hand, it is quite clear that there is a tendency for velocity to rise in the very short run as monetary growth is reduced, thereby softening and delaying the impact of a changing stock of money. Conversely, during a recession as monetary growth begins to rise, velocity continues downward until the trough of the business cycle is reached, again delaying the impact of a changing money stock for a brief period.

The above conclusion does not mean that changes in the money stock are useless as an economic control tool, but rather that offsetting changes in velocity merely insert some "slippage" in the system. It should be recognized that from a control standpoint, the short-run compensation of velocity changes means that some range of error is possible in monetary policy without promptly causing a serious business downturn or inflation. Unfortunately, the existence of the lag also means that a rise in the money stock initiated by an easy Federal Reserve money policy during a recession period does not immediately result in a recovery in total spending and hence a rise in business activity and, conversely, a tight money policy, if delayed until inflation occurs, will not immediately eliminate the inflation. Historically, the lag in business recovery following a rise in monetary growth has been much shorter than the lag between a declining monetary growth trend and its effect upon business activity.

Even though it is quite clear that velocity changes do not indefinitely offset changes in the stock of money, there remains an interesting question as to why in the very short run such offsets occur. The solution to this puzzler is only partly known and hence this may be a fertile area for further research. It appears clear that the short-run offset has something to do with the liquidity of business and consumers. For example, in the early phase of a declining monetary growth trend, liquidity is apparently sufficiently high to allow spenders to economize on cash and thereby turn it over more frequently. If liquidity is further reduced due to a further reduction in monetary growth, eventually additional economizing of cash becomes impossible. When this condition is reached, a change in total spending occurs. The converse appears to be true when monetary growth begins to grow as a recession deepens.

Interest rates play a part in encouraging cash economizing as the monetary growth rate declines. Such periods are likely to be characterized by high and rising interest rates. Hence, it is more costly to maintain idle funds, and business is encouraged to economize on cash in such periods. Conversely, lower rates during a recession mean that it is less costly to maintain idle cash and hence an increase in the money stock may not in the very short run lead to additional spending. Fortunately, from our point of view, it is not necessary to completely understand this relation since we have a long record which demonstrates that velocity cannot for a long period offset changes in the money stock.

(3) Recoveries are consistently preceded by a rise in the rate of monetary growth. The only exception to this general statement appeared to occur in 1921, where it appears the rise in monetary growth was coincident with the rise in business activity. The average lead time for this relation has been 7 months although there has been considerable variation.

(4) There is evidence to indicate the intensity of the changes in the rate of monetary growth is positively correlated with the intensity of the subsequent changes in the economy. The most severe recessions or depressions which have been recorded since 1909 occurred in 1920–21, 1929–33, and 1937–38. Also the most severe monetary contractions occurred immediately prior to and during those periods. In early post-World War II the rate of monetary growth dropped substantially but the superabundance of liquidity prevented a contraction in business. Also, it is clear that variations in the rate of monetary growth since 1951, when a flexible monetary policy was adopted, have been quite modest in contrast to earlier periods. It is probably not accidental that the economic fluctuations during that period have also been relatively mild. Finally, the most rapid growth in the money stock following contractions occurred after the 1920–21, 1929–33, and 1937–38 downturns. It is significant that the most rapid rate of business recoveries followed the above contractions.

The above data and interpretations demonstrate that the historical evidence is consistent with the contention that changes in monetary growth, which is subject to Federal Reserve control, affects spending changes and hence business cycles. In other words, one would expect, for theoretical reasons, that changes in the stock of money would exert important influences upon the trend of the economy, and the data pre-

sented are consistent with the hypothesis that monetary changes are causal. More important, from our present point of view, changes in the rate of monetary growth have a sufficiently consistent relation to changes in the business trend to make monetary policy a useful policy tool.

(*c*) *Determinants of the rate of monetary growth.*—But what determines the rate of monetary growth? The quantity theory of money assumes that the money stock is a dependent variable so far as velocity, prices, and output are concerned, even though it is recognized that the money stock can be controlled by the monetary authority. Certainly the simple and largely correct observation is that monetary policy can determine the stock of money. Assuming this to be true for the moment, this implies that we can conclude that changes from a "tight" to an "easy" monetary policy will promote monetary growth while the reverse will depress growth in the money stock. However, again there are some lags that must be investigated and understood. For example, most observers concede that the Federal Reserve System began shifting from a tight to an easy money policy at about mid-year 1953. Yet, the growth in the money supply continued to decline until the second quarter of 1954. Also, it is conceded that the Federal Reserve began to shift toward a tighter monetary policy in the last quarter of 1954. Growth in the money stock continued to rise until the first quarter of 1955. A more recent example occurred last year, when in November of 1957 the Federal Reserve shifted to an easier money policy, but monetary growth did not begin rising until February 1958.

Why the slippage between the provision of additional reserves and the succeeding rise in the money stock, and also, why the slippage between a reduction in reserves and the eventual contraction in the stock of money? It appears quite clear that this slippage arises because of institutional factors; namely, the existence of a discount mechanism whereby banks can, at their own initiative, borrow additional reserve funds or pay off debts to the Fed, and, hence, reduce reserve funds, as well as the ability of banks to independently vary the volume of excess reserves. At a time of tight money, interest rates tend to be high and the demands for credit by private borrowers are likely to be high and rising. Since under such conditions the Federal Reserve, when operating under a flexible monetary policy, restricts the volume of reserve funds, banks tend to be heavily in debt to the Federal Reserve. Since banks are in business for profit, they are inclined to concentrate their borrowing from the Federal Reserve at a time when it is advantageous from a profit point of view to do so. Also, excess reserves tend to be low in such periods since banks tend to keep their funds fully invested rather than maintain a high level of excess reserves from which they receive no return. Yet, even in such periods, excess reserves for the entire banking system do not decline to zero since it is uneconomical for small banks to devote the necessary time to remain fully invested. As monetary policy is eased, presumably when the economy begins a descent into a recession, the Federal Reserve provides additional reserves and at the same time, the demand for money declines and interest rates drop. The typical reaction of banks is to first pay off their debt to the Federal Reserve in an attempt to restore liquidity which was reduced during the boom phase. Also, since the demand for money and interest rates are declining, it becomes less profitable for the banks to borrow.

Furthermore, there is a tendency for the banking system to allow excess reserves to rise due to the reduced profitability of investing marginal funds. These adjustments mean that even though the Federal Reserve may be providing additional funds to the banking system, the actual effective reserves may be growing less rapidly or even declining. Hence, we find the anomalous situation where an increase in the amount of reserve funds provided directly by the Federal Reserve System does not lead to an immediate increase in total bank assets and, hence, the money stock. Depending upon how vigorously the Federal Reserve pursues its easy-money policy, there will be a varying timelag prior to an increase in the money stock. Eventually, borrowing from the Federal Reserve will approach zero, and excess reserves will be sufficiently high that additional funds will be invested. Since a period of declining business activity will be characterized by a declining loan trend, investments must rise more rapidly than loans are declining before the total money stock increases.

CHART VI

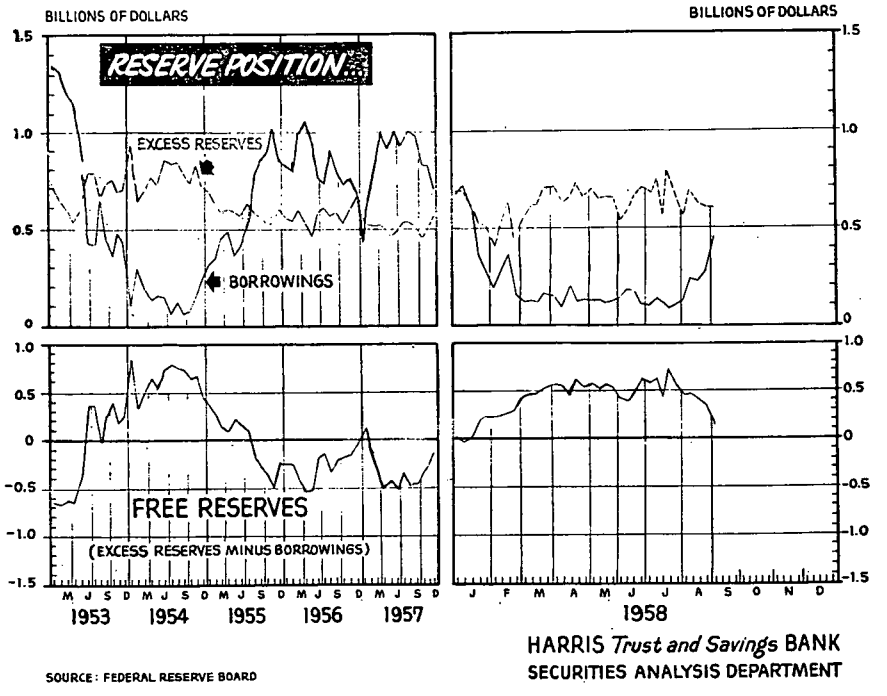

Chart VI indicates that in early 1953, borrowings from the Federal Reserve were in excess of $1 billion. As the Federal Reserve provided additional funds and the money market eased, borrowings dropped sharply to an eventual $100 million. At the same time, excess reserves rose moderately. As indicated earlier, it was not until early in the second quarter of 1954 that the total money stock began to rise. Also, the data indicate that as monetary policy tightened in late 1954, excess reserves declined and borrowings rose, thereby making it possible for the banking system to continue expanding the money stock

until early in the second quarter of 1955. Putting the argument somewhat differently, free reserves (excess reserves minus borrowings) rose to a figure in excess of $500 million in early 1954, before the money stock began to expand, and contracted to nearly zero before the upward trend in monetary growth was reversed.

During the beginning phase of the most recent recession, borrowings from the Federal Reserve totaled about $1 billion, and excess reserves were approximately $500 million, thereby placing free reserves at approximately −$500 million. As the recession began and the money market eased, borrowings were reduced sharply to a level slightly in excess of $100 million, and excess reserves increased to approximately $700 million. During the first 6 months of the recent recession, the monetary growth trend continued downward, but once free reserves reached the range of $300 million to $500 million, the money stock began to expand. The data, therefore, appear to be consistent with the argument that early changes in the supply of reserves made available by the Federal Reserve in either the beginning recession or beginning recovery phase of a business cycle, will be temporarily offset by action taken by the banking system. Hence, there will be no immediate effect upon monetary growth. To the extent the Federal Reserve changes reserve availability by large amounts in the beginning phase of a policy change, the time required for achieving a change in the money stock will almost certainly be reduced. So long as the Federal Reserve limits early changes to modest amounts, which appeared to be the policy until recently, a considerable slippage will remain.

The oftmade statement that the Federal Reserve can determine the stock of money appears to be approximately correct, recognizing, however, that during beginning phases of a policy change some slippage is introduced by the reaction of the private banking system. Some analysts have argued that the Federal Reserve cannot alone increase the money stock due to the fact that the final step can be accomplished only if the banking system utilizes the reserves made available. Even though this statement is technically correct, it must be recognized that the profit incentive provides considerable assurance that additional reserve funds will be utilized, and that eventually an easier money policy by the Federal Reserve will increase the money stock. The mere fact that some slippage is introduced, for the reasons stated above, does not invalidate the general statement that the Federal Reserve can determine the money supply.

Some point to the large levels of excess reserves existing during much of the 1930 decade as evidence that banks will not always utilize additional funds provided by the Federal Reserve. It is certainly true that a low level of interest rates, accompanied by severely adverse anticipations, will reduce the willingness of banks to expand their total assets. Provided, however, that a countercyclical monetary policy is followed, such a condition is unlikely to occur. Futhermore, it appears entirely possible that if additional reserve funds had been provided in the 1930's, liquidity demands would have been met at some point, and an even sharper rise in the money stock would have occurred. It is at least possible to demonstrate the converse since the Federal Reserve actually doubled reserve requirements in 1936 and 1937 in an attempt to eliminate what was then considered to be a dangerous inflationary potential, and the banking system immediately

reacted by liquidating loans and investments even though excess reserves were not reduced to zero. This liquidation of loans and investments, of course, resulted in a sharp reduction in the rate of growth in the money supply, as indicated in chart IV and, interpreted in the light of the arguments above, was a major factor accounting for the ensuing sharp recession. In any event, there appears to be no reason for believing that changes in Federal Reserve policy cannot affect the money stock in a more normal economic environment. It would therefore appear that the Federal Reserve can change the rate of monetary growth at will as conditions warrant.

(*d*) *Monetary policy conclusions.*—The relevant policy conclusions emerging so far as a monetary policy designed to facilitate the achievement of the objectives of the Employment Act are these:

(1) Extreme fluctuations in monetary growth should be avoided as has been the case since 1951.

(2) When changes in the direction of the trend in the monetary growth rate are desired, substantial action by the Federal Reserve upon reserve accounts should be made so as to reduce the slippage resulting from changes in commercial-bank borrowing from the Fed and modest variations in the excess reserves of the banking system. Such action need not imply sharp changes in the rate of growth of the money stock as explained earlier.

(3) Because of the inevitable lag between changes in monetary growth and the effect upon the business cycle, sharp increases in monetary growth, such as occurred in early 1955, should be avoided in the early phase of a business recovery. Undoubtedly the sharp buildup in liquidity during that period increased the inflationary pressures in 1956–57.

(4) Rather than permit the growth rate in the money stock to decline in the early phase of a recession or depression, a rise in the growth rate should occur. Since the historical lag in this direction has been relatively short, a prompt response in the business trend is likely.

(5) As a business boom matures, i. e., when it is 2 to 3 years old, it would appear desirable to decrease the downward pressure on monetary growth if a recession is to be avoided.

(6) Finally, greater care should be exercised in selecting the guides to policy action. For example, even though the objective of monetary policy may be to stabilize the Consumer Price Index, this index is inferior as a guide to policy compared to the Wholesale Price Index. Wholesale prices are more sensitive to changing market conditions. To note a recent example, wholesale prices began rising in mid-1955 whereas the Consumer Price Index remained stable until mid-1956. Wholesale prices have declined slightly in recent months after displaying leveling tendencies by mid-1957 whereas consumer prices are only now leveling out. In general, it would appear desirable to maintain a monetary growth rate of 3 to 4 percent when the economy is functioning at full employment with price stability; more than 3 to 4 percent when recessionary tendencies are developing and less than 3 to 4 percent when strong inflationary tendencies are transcendent. Sensitive indicators such as the National Bureau's "leading, coincident, and lagging indicators" are useful in detecting changes in the business climate.

IV. Summary of Conclusions

The main conclusions as to the feasibility of achieving the objectives of the Employment Act of 1946 drawn from the reports submitted to the Joint Economic Committee, testimony of the participants and other sources are these:

A. The Employment Act as now written does not clearly imply price stabilization as an objective of economic policy.

B. Since empirical evidence indicates no necessary inconsistency between price stability and rapid economic growth, stable prices should be a goal of national economic policy in order to prevent inequities resulting from fluctuating prices. This goal should be made explicit by a suitable amendment to the Employment Act of 1946 in order to elicit stabilizing action from the private sector of the economy as well as to provide definite guidance to responsible public policy agencies.

C. Although data on unemployment of the labor force now appear to be adequate, additional data on excess capacity of capital in industry would be useful in evaluating the performance of the economy.

D. Due to the current narrow range of public tolerance for price changes and the consequent impact upon public policy, it would be desirable to devote more money for basic research on refining price indexes. It seems probable that our present indexes are biased upward due to insufficient weight given to improved quality of production as well as shifting patterns of consumption as relative prices change and consumers buy relatively more of lower cost items.

E. Also greater effort should be made to adjust price indexes currently based on published list prices to actual price changes over the business cycle. There is a strong presumption that prices are more flexible over the business cycle than our price indexes indicate.

F. There is presently no clear justification for abandoning traditional monetary-fiscal and antitrust techniques as tools for achieving the objectives of the Employment Act. Further refinement of these techniques, rather than resort to direct economic controls largely inconsistent with a free market economy, promises more fruitful results.

G. Greater price flexibility as well as more efficient production and growth would result from a more militant enforcement of our antitrust laws and elimination of both private and Government restrictive practices. Labor as well as business should be subject to the antitrust laws.

H. Primary reliance should be placed on automatic stabilizers as a fiscal means of achieving the objectives of the Employment Act because of reductions in timelags between the existence of need for action and the eventual stabilizing effects resulting from action. A stabilizing budget designed to achieve a balanced budget at full-employment price stability, a surplus in inflation and a deficit during deflation should be the goal sought. Variable spending programs are usually inappropriate means for achieving stability. Tax-rate changes are less objectionable.

I. Discretionary monetary-fiscal action should be largely restricted to the maintenance of a flexible monetary policy designed to prevent wide fluctuation in the rate of monetary growth. Such fluctuations as do occur should be stabilizing in the sense that monetary growth should rise during recession and decline during periods of inflationary pressures. Changes in monetary policy should be closely attuned to sensitive business indicators rather than inflexible lagging barometers such as the Consumer Price Index.

II

THE ANALYSIS OF THE CAUSES OF PRICE CHANGES AND OF THE EFFECTS OF PRICE CHANGES ON ECONOMIC ACTIVITY

The participants in section II of these commentaries were asked to concentrate their comments on the analyses and issues raised by economists who contributed to panels II through V of the compendium of last March. We reproduce below the topics and questions which were posed to those contributors at the time they began work on their papers.

II. The measurement of price changes and price relationships:
   - A. How do changing technology, changing physical characteristics, changing uses of products and services, affect the significance and usefulness of price comparisons between different time periods?
   - B. What is the distinction between relative price movements and changes in "the price level"?
   - C. Given today's markets and institutions, what are the identifying characteristics of "administered" compared with "competitive" prices?
   - D. What would be the characteristics of a general price index adequate for economic policy purposes? Would more than one index be needed? If so, why?
   - E. When "the price level" enters into decisions about policies to promote economic stability and growth, which of the available indexes would, in theory, be best as a measure of general price movements; e. g., the Consumer Price Index, a Wholesale Price Index, the gross national product deflators, or other? How could existing indexes be improved to come closer to the ideal?

III. Past price behavior viewed in the context of cyclical and secular economic changes:
   - A. What have been the general price movements based on the various available indexes? What cyclical and secular economic changes have been associated with these price movements?
   - B. In studying price trends, particularly those of recent years, what has been the relationship between price changes and changes in the cost of the various factors of production?
     1. To what extent have price changes preceded or lagged behind changes in labor costs?
     2. To what extent have price changes exceeded changes in labor costs?
     3. What has been the effect of changes in capital costs—i. e., interest rates and other costs—on prices?

IV. Interrelationships among prices, demands, and costs:

A. General price movements.

1. Under what circumstances can we expect general price movements—inflation or deflation—to originate in an excess of demand over the supply forthcoming at constant prices? To originate in changes in unit costs? Can a cost-push price movement continue to operate in the absence of an "excess demand situation"? If so, then for how long, and under what conditions?

2. Accepting relative price movements as proper and necessary under a dynamic economy, will a change in relative prices induce more general price movements—i. e., are there any individual products or services so "important" to the economy as a whole that changes in their prices are necessarily followed by widespread changes in prices of other products and services? In other words, should policies for the control of inflation or deflation be substantially concerned with influencing prices of certain particular goods or services?

3. To what extent do general price level changes tend to feed upon themselves, with accelerating or cumulative movements away from a stabilized price level?

B. In short-run situations, do movements of prices of some products and services tend to be determined mainly by changes in demand while others reflect mainly changes in unit costs? If this distinction seems useful, what products and services would you put in each classification, and why?

C. Relationships between prices and—

1. Aggregate demand.

(*a*) What are the relationships between the level of, and changes in, the supply of money, and the level of, and changes in, the general average of prices of goods and services? Of productive factors?

(*b*) How and to what extent are prices in the United States affected by developments in other countries, especially changes in international prices? Under what circumstances does this relationship run in the reverse direction from changes in the United States to changes in international prices?

2. Consumer demand.

3. Investment demand.

4. Government demand.

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IV. Interrelationships among prices, demands, and costs—Continued
D. Relationships between prices and costs.
1. The determinants of costs—
(*a*) How are unit costs affected by the rate of utilization of plants and equipment? Of labor force? Of other resources?
(*b*) How are unit costs affected by changes in the technical efficiency of productive factors or of the way in which they are combined?
(*c*) How are unit costs affected by the size and scale of enterprises?
(*d*) How are unit costs affected by changes in the prices of productive factors?
2. Factors affecting prices of productice resources—
(*a*) What influences the price of productive factors: Wages? Profits? Interest? Rents? etc.
(*b*) How are changes in demand for goods and services related to changes in prices of productive resources?
3. How are unit costs related to prices in the long run? In the short run? What classes of costs are relevant to the analysis of such cost-price relationships?

V. Interrelationships among prices, employment, output, incomes, and resources:
A. Price changes and the allocation of resources.
1. What may impede shifts in the proportions in which factors are used when changes in their relative prices call for such a shift? How can the mobility of resources be increased?
2. It is often said that in a dynamic economy high-profits opportunities are needed in order to attract additional resources to industries with rapidly expanding demand and thus bring down prices and profits in the long run.
Does existing evidence show that industries and corporations making "high" profits tend to expand production and productive capacity more rapidly than industries and corporations making "lower" profits?
3. Do prices behave differently where capacity is being expanded rapidly from industries where capacity is more stable or declining? If so, why?
4. What are likely to be the effects of price level changes upon patterns of real investment and the allocation of resources?
5. To what extent are past and prospective price changes likely to affect personal consumption and savings patterns?

V. Interrelationships among prices, etc.—Continued
A. Price changes and the allocation of resources—Continued
6. To what extent and under what circumstances is the choice of personal investment patterns of individuals affected by past and prospective changes in the general price level?
B. Relationship of prices to aggregate economic activity.
1. How, and to what extent, are aggregate employment and output affected by the direction and rate of change in the general price level? In relative prices?
2. Does inflation tend to generate an ensuing collapse of employment, production, and purchasing power, as well as of prices? If so, by what process? Does the rate of increase in prices influence the outcome?
3. What are the effects of price changes on profit margins, on rates of return, on investments, and on the stimulus for technical progress and expansion?
4. What effects do general price level changes have upon the size and composition of the labor force, and upon labor and managerial incentives?
5. What are the effects of price level changes on business financial structures—on depreciation of fixed assets, on requirements for working capital versus those for fixed assets, etc.? What are the effects on ability to finance technical improvements which make possible greater productivity and improved products? On ability to finance expansion? What are the characteristics of an "ideal" financial structure for a business enterprise—internal versus external funds, equity versus debt, etc.?
From existing data, what can be stated about the relative amount of investment by firms of various sizes in each industrial segment and about the principal sources of capital utilized by each size of firm?

THE RELATIONSHIP OF PRICES TO ECONOMIC STABILITY AND GROWTH

Walter D. Fackler, Assistant Director, Economic Research Department, United States Chamber of Commerce

The compendium of papers entitled "The Relationship of Prices to Economic Stability and Growth," [1] recently published by the Joint Economic Committee, represents another constructive attempt by the committee to inject rationality into public debate in a controversial area of public policy. The committee's technique of publishing a collection of papers by a diverse group of experts on a series of closely related topics and then holding hearings after all participants have had an opportunity to review the contributions of others is an effective investigative device [2]—one which various legislative committees might occasionally copy to good advantage.

Whatever direct impact this study may or may not have on the formulation of public policies concerned with stability and growth, it is bound to have a beneficial indirect influence by stimulating further discussion and research. The economics profession, teachers and private organizations interested in public policy, are indebted to the committee for making this collection of materials available.

As one should expect in a study of this kind, the contributors repeatedly expose their divided counsels. This is good. A symposium of this kind is valuable even if it does nothing more than to help to mark out major areas of disagreement. Moreover, as Jacob Viner once suggested, diversity of opinion itself is some small reward to which public officials are entitled for the patience and generosity they display toward their often unrealistic economic advisers. It could be quite awkward for the policymaker if all the experts did agree—especially if the advice were unpalatable. This compendium will create no such problem.

Diversity of opinion should also be gratifying to the critic. It gives him ample opportunity to point out where important elements were left out of the analyses, to reconcile apparent disagreements, to reflect on distorted values and to deplore some of the bad advice given by his colleagues. Here, the problem for the critic is a surfeit of such opportunities—not only because the panelists disagree, but also because the range of different issues covered is so vast. As a result, the critic is forced to be highly selective, if not discerning. The most he can attempt to do is select certain questions or issues and add to the diversity and confusion by tossing his own opinions into the general pot.

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[1] Hereafter cited as Compendium.

[2] This compendium represents the fourth study of its type in recent years. The three others were: Federal Tax Policy for Economic Stability and Growth (1955); Federal Expenditure Policy for Economic Stability and Growth (1957); and Policy for Commercial Agriculture, Its Relation to Economic Growth and Stability (1957). More limited use was also made of this technique in some important earlier inquiries by the committee.

What follows is, therefore, a series of fragments rather than a connected discourse. It is intended to fill some gaps, reinforce some conclusions, and restate some of the major problems analyzed in more detail by the panelists. On some points the treatment may be critical, but it is, in no sense, meant to be a comprehensive critique.

What Are Administered Prices?

While economists should not be expected to agree on policy prescriptions, a fair degree of unanimity should properly be expected on technical or analytical matters. Expectations, however, are often overly optimistic. There were high hopes when this study of prices was undertaken by the Joint Economic Committee that the "administered price question" would be thoroughly thrashed out—that some firm consensus would be reached as to just what is really meant by "administered prices." With the exception of Martin Bailey's excellent paper [3] dealing specifically with the nature of administered pricing and scattered observations in some of the other more thoughtful papers, the results were disappointing.

The term, "administered prices," has been used so often recently in so many ways that for practical purposes it is devoid of meaning. Furthermore, even those who define the term to their own satisfaction often blithely ignore their own definitions in subsequent discussion. If the problem were merely one of semantics within the economics profession, little harm would be done. But when the term is bandied about vaguely and loosely by the public (and, unfortunately, by some economists) in political debate and public policy discussions, it becomes a menace.

To illustrate what a piece of obscurantism the term "administered prices" has become, one need only recapitulate some of the meanings, implied or explicit, attached to it by various contributors to the compendium and by other participants in public debate. The following list is not exhaustive:

1. Monopoly prices or prices charged by large-scale, oligopolistic firms presumed to have a significant degree of market power.
2. Imperfectly competitive prices charged by firms in industries which do not meet the criteria of a theoretical norm of perfect competition. (Firms may or may not have significant market power.)
3. Quoted prices, that is, price established and adjusted by deliberate managerial decision—that is, prices which reflect the discretionary behavior of a "price maker" in response to market forces as opposed to those which are passively accepted by a "price taker."
4. "Sticky" prices in a statistical sense which change more infrequently (or appear to) than some other prices and usually by quite discrete jumps.
5. Inflexible prices in the sense that price variations are small and are associated with much larger proportionate changes in output and sales for the industry concerned.
6. Rigid prices set by custom or regulatory agencies which for a variety of reasons remain fixed over a considerable period of time.
7. Cost-plus prices, that is, those set on a cost plus or markup basis as a matter of business policy or contract.

[3] Administered Prices in the American Economy, Compendium, pp. 89–105.

8. Prices which do not fall or seem to fall in the face of falling demand (with cost and other conditions usually unspecified).

9. "Administered prices" as an epithet of general disapprobation, variously directed at big business, business in general, manufacturers, employers, capitalists, labor unions, the opposite political party, or the corpse of "supply and demand."

These sample definitions are not, of course, mutually exclusive; and where they overlap, confusion is compounded. Some may be taken seriously; others should promptly be discarded with distaste and contempt. They are cited here, not with negative intent or for pedantic reasons, but to illustrate the plight of the policymaker or the intelligent citizen when he endeavors to understand how "administered prices" affect the general performance of the economic system.

It is incumbent on the economist (as it should be for any responsible person) to state clearly what he means by administered prices and then "stick to his guns." If the term is restricted to monopoloid situations where firms have sufficient market power to seriously affect the allocation of resources and distribution of real income, then we cannot identify administered prices with those that do not fluctuate or appear to fluctuate quickly and easily in a statistical sense, nor with industries which appear to have higher statistical concentration ratios than others. On empirical and analytical grounds there is no reason to expect there to be qualitative difference in the observed and observable price behavior of firms with market power and that of firms with little or no market power. Whenever a firm produces a differentiated product, prices will be set by managerial decision; and price behavior, of itself, will provide no clue to the degree of competition or the amount of discretionary price jurisdiction that exists.

What then? Shall we broaden the term to cover all "price-makers" as opposed to "price-takers" who must passively accept the prices ruling from day to day? If so, we should have to apply the term to almost the entire economy. Prices are administered, quoted, and adjusted, by managerial decision throughout the economy. Administered pricing, in this sense, is typical in wholesaling and retailing, in the service industries and manufacturing. It prevails in highly competitive situations. When broadened so much, "administered pricing" becomes a neutral term used to describe the price adjustment response of almost all firms except, perhaps, those selling agricultural products and a few other staples. Clearly, if administered pricing is pervasive throughout the economy (as so many admit), then it is nonsense to speak glibly of the "administered price sector" vis-a-vis the "competitive sector"—or to refer to administered prices as noncompetitive prices.

When the term "administered prices" is used to describe certain statistical characteristics of the observed prices of products (not firms), it again becomes a neutral term of little use. As Bailey carefully pointed out, quoted prices on which statistics are based are often not real prices. Discounts, covert price shaving, changing the package or bundle of services, changing the terms and countless other adjustments do constitute very real and often very competitive price movements. What is a price? What is the product being priced? These are old and thorny questions which are too often ignored.[4] Moreover,

[4] Cf. The Dimensions of Price, ch. III of Cost Behavior and Price Policy (New York: National Bureau of Economic Research), 1943.

the time element is a crucial factor. The speed of reaction varies greatly from one market to another, e. g., from a livestock auction to a real-estate brokerage. In economic theory we can deal abstractly with instantaneous relationships, but in the real world there are time lags and frictions in the adjustment process. The market mechanism will work much more slowly in one case than in another, even in highly competitive situations. Statistical comparisons of price movements, which make no qualitative evaluation of relevant time factors, should be taken with very large doses of skepticism or discarded.

If price inflexibility as related to output behavior is used as a criterion for isolating "administered prices," chaos results. Where demand and supply schedules are fairly elastic, one would expect the percentage changes in output to be proportionately much greater than the percentage price changes associated with them—even where competition exists in its purest form. To go further and charge "administered prices" when prices rise as demand falls without considering the cost structure of the industry or possible concurrent shifts in costs, is to sink into a mire of economic illiteracy.

All this is not to say that market structures do not have an important bearing on problems of economic stability and growth. Nor is it intended to minimize in the least the dangers and damage of monopoly power in product and labor markets. But, if by "administered prices" we mean monopoly or market power, we should say so and attack those problems directly at their roots. If by "administered prices" we mean half a dozen other things, it would be well to discard the term and use other more precise or more descriptive terminology. However, since the term, "administered prices," has become so popular, it will probably be difficult to adopt more meaningful substitutes.[5] We should, therefore, make every effort to secure general agreement on how it is to be used, and, above all, we should use consistently whatever definition we adopt.

As matters now stand, I concur wholeheartedly with Bailey—

> that the subject of administered prices in the free or unregulated part of the economy is not, of itself, a proper concern of public policy nor a subject worthy of the attention of Congress.[6]

Administered Prices and Inflation

Much has been said in recent months about administered prices as a cause of inflation. While most popular discussion smacks of political (or union) propaganda, the subject (as opposed to many of the arguments) merits serious consideration. A number of contributors to the Compendium start with the implicit or explicit assumption that "administered pricing" constitutes an autonomous inflationary force. If this be true, however administered prices are defined, then it is the responsibility of the proponents of this view to describe the mechanism by which business pricing policies generate and propagate inflation. This has not yet been done to the satisfaction of the great majority of economists.

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[5] It is possible that a general and theoretically meaningful concept of "administered prices" based on long-run profit considerations may now be in the process of development—not as a policy guide, but as a useful analytical tool explaining price behavior in a great variety of different industrial and market situations; see especially Franco Modigliani, New Developments on the Oligopoly Front, Journal of Political Economy (June 1958), 66: 215–232. P. P. Frucht, a colleague of mine, is also working along similar lines.

[6] Op. cit., p. 89.

Price rigidities on the downward side stemming from a wide variety of causes—but mainly because costs too are inflexible downward—may help to create an inflationary bias in a period of fairly sustained or rapid growth. As some prices go up, others do not readily go down. To this extent, administered prices, in a broad sense, may accentuate inflationary pressures. Monopoly prices may affect economic growth by distorting resource allocation and exploiting consumers. But neither monopoly prices nor "administered prices" (competitive or otherwise), in themselves, create inflationary pressures. In fact, all the evidence points to the contrary. Business pricing policy (whether a firm has market power or not) is generally based on long-run considerations; it, therefore, tends to be conservative. When demand is rising, a businessman is not anxious to tempt new entrants by raising prices to capture temporary, short-term profits at the expense of his long-run market position. When demand is falling, on the other hand, the possibility of new competition is much less pressing, and existing firms can maintain their prices without undermining their long-run market position and earning capacity. It seems, therefore, that where firms have some discretionary latitude in pricing policies, their price responses will tend to dampen both inflationary and deflationary price movements.

What About "Administered" Wages?

Wage rates are prices—probably the most important set of prices in the whole constellation of economic variables. Wages established by collective bargaining and fixed by contract are certainly "administered prices" in a broad sense. But, as with the term "administered prices," to talk of "administered wages" in such general terms creates impossible semantic and analytical complications. Some unions have a great deal of monopoly power and discretionary wage jurisdiction, while others probably have very little. In the interest of clarity, it is probably best to speak of negotiated wages or union wages, in general, and monopolistic wages where wage negotiations are backed by a significant degree of monopoly power.

One of the crucial problems of the day is whether monopolistic wage determination can act as a semiautonomous force in generating inflation. In other words, do money wage rates, which on the average advance more rapidly than average productivity for the economy as a whole, cause inflation, accentuate inflation, or are they the result of inflation? Are monetary and demand factors the main causal inflationary force, or can the upward push of costs—chiefly wage costs—exert an independent pressure on the general level of prices in the absence of excess money demand or with the money supply being a permissive factor?

This is far too large a question to be dealt with here in a comprehensive way. Only a few critical aspects will be discussed.

First, cost-induced inflation, if it is to occur at all, requires a certain kind of institutional setting. Where the Government has a responsibility for helping to maintain full employment, and the level of politically tolerable unemployment is low, the market sanctions—unemployment and decreased output and sales—against excessive money wage claims passed on to the consumer in higher prices are seriously

weakened. The problem is likely to be aggravated by wages and prices which are rigid downward, for whatever reason. If strong unions operating in such an environment continuously strive to increase money incomes and thereby raise costs, the Government is put into a position of having to "validate" a higher cost-price level by fiscal and monetary measures taken to prevent intolerable unemployment from developing.

But can unions really force indigestible wage demands on the economy? By what mechanism is the general level of costs and prices pushed up? Is the process self-generating, and, if so, how? One explanation runs in terms of monopolistic wage settlements and their spread through the economy.

If industries where productivity is rising at a faster rate than the average for the economy as a whole face monopoly union power, wage settlements will probably be based on the ability-to-pay principle. In such cases, money wage increases may be offset by rising productivity, so unit costs and prices need not necessarily rise—depending on the size of the settlements. But what of other industries where productivity is rising at or less than the national average? Workers in these industries, whether unionized or nonunionized, will not sit still while other workers, perhaps of the same skills and trades, enjoy ever-rising money and real incomes. They, too, will demand higher money wages—and not unjustifiably so, for the most part. In the lower productivity industries, such money wage increases cannot be offset by greater output per man-hour, so unit costs and prices must rise and unemployment may also develop. In other words, employers in less productive industries are caught in a cost squeeze caused by a "spillover" of wage demands based on wage patterns set where productivity is rising faster than the national average.

Unless expansive monetary and fiscal policies allow these prices, and, therefore, the general price level, to rise, chronic unemployment will result—but not necessarily in the industries causing the trouble.

The spillover may be self-reinforcing for two reasons:

(*a*) Wage leadership among union leaders who must, to hold their jobs, try to get for their members wage increases comparable to those obtained by other successful leaders in the labor fraternity. One has only to read the papers to know that union officials scrutinize wage settlements made by other unions as zealously as competing supermarket operators watch each other's prices.

(*b*) Escalator clauses calling for built-in wage increases over the contract period and cost-of-living increases as consumer prices rise. To the extent that such wage practices become general, they reduce or eliminate wage lags and produce persistent and generalized cost pressures, even in a period of falling demand.

This short explanation of the so-called spillover oversimplifies. It leaves out many complicating factors—labor mobility, shifts in demand, and effects on growth patterns. Some of these other factors will be discussed more fully below, but the present stripped-down, spillover model will suffice for purposes here. The important thing to realize is that, in large part, the problem of the wage-price spiral boils down to a *conflict over the distribution of real income, not so much between labor and capital, but among various labor groups themselves.* When large, well-organized unions exercise their monopoly powers to secure the lion's share of annual increases in national

productivity, because they happen to be strategically placed in high productivity industries, other workers (union and nonunion alike) will try to protect themselves by seeking roughly comparable increases in money wages. If they did not or could not obtain such increases, uneconomic wage differentials and intolerable inequities would develop in the labor market.

To the extent the spillover does occur, inflation is a matter of arithmetic. As average money wage rates rise faster than average output per man-hour for the economy as a whole, unit costs rise. Prices, then, must rise too, unless the labor share of real income increases at the expense of nonlabor shares. While some fluctuation between labor and nonlabor income shares may be possible in the short run, labor cannot progressively, year after year, get increases in real income in excess of productivity gains without eroding the smaller nonlabor income share (profits and property incomes) quickly toward zero. Of course, this cannot occur in a free economy. The balance is redressed by inflation; rising prices keep labor's real income gains within the physical limits of productivity.

Does such a spillover really occur? And is it really a significant inflationary factor? This is a moot, or rather an empirical, question. Unfortunately, however, it is not a question that can easily be settled by appeal to statistical facts for several reasons:

(*a*) In an inflationary situation both cost and demand factors may be operating to reinforce each other. Even if we had adequate statistical data, which we do not, it would be impossible to separate out and appraise the strength of the various forces which are interacting.

(*b*) Comparison of union and nonunion wage data cannot yield conclusive results, since part of the spillover presumably is reflected in union as well as nonunion wages in lower productivity industries. Besides, as Abba Lerner pointed out so clearly in his paper,[7] the spillover may be reinforced by shifts in demand causing wages in low-productivity industries (such as services) to spurt up faster than the monopolistic wage increases in the high-productivity sector. Suppose, for example, that wage settlements were so large in durable goods industries that costs and prices were pushed up. If these higher prices caused consumers to shift demand to other goods and services, there would be falling sales and rising unemployment in durables and an increased demand for services and nondurables. The twin effects of spillover wage claims plus the increased demand for services and nondurables (tending to bid up prices and factor payments) could cause wage rates in the "spillover sector" to rise faster, percentagewise, than those in durables where the trouble started.

(*c*) "Spillover" wage demands may run in absolute terms rather than percentage terms, that is, approximately the same number of cents per hour rather than equal percentage increases. This is likely to be true when wage differentials are narrowing, owing to other long-run market forces in operation. If such were the case, nonunion wage increases starting from a lower base might show a faster rise (greater percentage increase) than union wages. Likewise, union wages in low-productivity industries, such as services, could show a faster rise than union wages in high-productivity industries.

[7] Inflationary Recession and the Regulation of Administered Prices, Compendium, pp. 257–268.

(*d*) It is difficult or impossible by statistical analysis to break into the circle; there is no "equilibrium" position to start from. Old wage contracts are expiring and new ones are being made all the time. The "spillover" process, if it occurs, takes place in an overlapping "stairstep" or "leapfrog" fashion. What is a statistical lead using one starting date, becomes a statistical lag if a different starting point is used.

For all these reasons, the empirical question of "spillover" is an open one. To what extent "spillover" occurs and how significant it may be are issues that cannot be settled unambiguously. It is doubtful whether we shall be able to settle them by statistical analysis in the near future. But at least the "spillover" thesis does provide a reasonable explanation of a mechanism by which autonomous wage pressures may generate and propagate cost-induced inflation.

"Administered Prices" Again

As mentioned earlier, it is sometimes argued that "administered prices" exert independent and pervasive inflationary pressures—that inflation is generated by autonomous price increases in the "administered price sector" of the economy. For example, Lerner states:

> There is, however, no essential asymmetry between the wage element and the profit element in the price asked for the product. A sellers' inflation could just as well be started by an increase not in the wage asked, but in the percentage markup of prices above cost.[8]

For the individual firm, Lerner is quite right; a particular price increase may result from an increase in any component thereof. But for the economy as a whole, Lerner is, I feel sure, wrong on two counts: (*a*) an autonomous increase in the profit margin in any firm or industry, however monopolistic, cannot start a sellers' inflation; and (*b*) there is an important asymmetry between administered prices and administered wages, if by such terms we imply a significant degree of market or monopoly power in both instances.[9]

First, it is difficult to see how an autonomous increase in profit margins (price increases unrelated to costs) in one sector of the economy could cause general inflation. Suppose one firm or a group of firms marks up prices. The relative price structure is changed, to be sure, but the effects on the general price level will probably be minor. If the price increase occurs in a basic industry, there will be some additional repercussions as the price increase is transmitted as added cost of materials to related industries. But as these repercussions work themselves out down the line to the final product, the matter ends. There is no "spillover" to completely unrelated industries as may occur in the case of autonomous wage bargains. The textile producer does not attempt to raise his price simply because he reads that the price of newsprint has advanced. The gas producer does not raise his price because the profit margin in the price of cigarettes has become larger. In short, there is no powerful mechanism for spreading "administered" price increases throughout the economy to unre-

[8] Op. cit., p. 259.

[9] Because I disagree with one of Professor Lerner's starting assumptions (and, I might add, his policy recommendations, which fortunately are not necessarily related to his analysis), does not mean I am disparaging his brilliant essay. On the contrary, his was one of the genuinely enlightening contributions to the Compendium.

lated industries, as is the case with pattern bargaining, wage leadership, and widening wage differentials.

Second, consider the basic asymmetry between administered prices (profit margins) and administered wages (where both terms connote market power). Business firms are interested in total profits and return on investment. Total profits are determined not only by the markup but also by sales volume. Where profits can be increased by a lower markup and greater volume, it is to the firm's advantage to lower margins and price. A worker, on the other hand, has no incentive to cut his wage (unless it is to avoid unemployment) for he never can increase his total income by doing so.

The asymmetry is even more fundamental. Although labor is a commodity sold at a price, it is different in a special sense from physical commodities as union people often maintain. There are only 24 hours in a day. Within very definite physical limits, the only way a person can significantly raise his money income, and hence his real income, by selling his labor is to obtain more dollars per working hour; that is, raise the price of his labor—assuming, of course, stable prices. Physical commodities, on the other hand, are not subject to the same strictures (or incentives). The seller of commodities may increase his money and real income tremendously by selling a great many more units per time period without raising his price. He may, in some cases, even increase his income still more by lowering his price.

In other words, for the individual, the supply of labor per time period is strictly limited; he can produce just so many hours of labor per day. The price of labor, that is, the wage rate, has a special significance that the price of a car or a bag of peanuts does not have.

For basic sociological reasons, therefore, a vast difference exists between administered prices and administered wages. A change in the structure of relative prices of goods need cause no divisive social tensions, while a major change in relative wages may create severe stresses and strains which set in motion a complex chain of reactions and interactions—a struggle among *people* to maintain or increase real income in the face of changed economic circumstances.

An example will make the implications more clear. Suppose the price of umbrellas rises, for whatever reason, while the price of hats falls. The hat does not look longingly, perhaps enviously, at the umbrella with its new-found per-unit income and decide to ask for more money. It may well be that both the wages and profits of hatmakers are higher after the relative price change than wages and profits in the umbrella industry.

Now, let there be a change in the structure of relative wages. Suppose machinists' wages rise while plumbers' wages fall (or remain the same). The plumber will look enviously (or rather longingly) at the machinist, and all the more so if the differential continuously grows. He may decide to become a machinist. With sufficient competition and mobility in the labor market, wage differentials, and, hence, the distribution of real income among individuals, are kept to tolerable proportions. At best, however, there are frictions and impediments to labor mobility; the older labor force particularly tends to become stratified into partially noncompeting groups in a direct sense. To be sure, a good deal of long-run labor mobility will be provided

by new entrants to the labor force who tend to seek employment in the more lucrative occupations. Given sufficient time, an increasing supply of machinists relative to plumbers will pull the wage differential back into an acceptable income distribution pattern.

But time for adjustment is just what unions do not like or permit. According to current tenets of collective bargaining, all labor groups are "entitled" to a share of rising national productivity, no matter what segment of the labor market they may be in. Furthermore, workers are told they should have their "share" here and now (or even in advance), and always in the form of higher money wages rather than through competitive market adjustments in relative prices and wages. Monopolistic wage determination in industries where productivity is rising rapidly, therefore, creates a very serious problem. Strategic wage settlements drive a wedge into the distribution of income. If workers in other industries react by trying "to keep up with the Joneses," inflation or unemployment or both will operate to reconcile the conflicting claims.

That there is a fundamental difference between administered prices and administered wages seems beyond dispute. Tremendous changes can take place in relative prices; some can increase a hundredfold while others fall to a fraction of their former level. But tremendous changes simply cannot take place in relative wages without creating drastic and far-reaching changes in the distribution of income among different labor groups.

The preceding analysis in no way implies that unions are the chief or sole cause of inflation. Nor is it, in any sense, a defense of monopoly pricing or an attempt to divert attention away from "administered prices" where market power is present. Monopoly prices in product markets are bad. They distort the allocation of resources, warp the pattern of economic growth, and exploit the consumer. Situations of monopoly power should be attacked and reduced by vigorous enforcement of antitrust laws and other appropriate public policies. Monopoly wages, too, are bad for the same reasons. But, in addition, they have important side effects which monopoly prices, in the very nature of the case, can never have.

The sole purpose of this section is to point out some crucial factors that have almost completely been ignored in the whole confused wage-price spiral debate. To attribute inflation to "administered prices," or even to rank them on a par with "administered wages" (however the terms are defined), as a real or potential inflationary force, is to mock reason.

Inflation in Perspective

Most economists, it is to be hoped, agree that, with a given or expanding real output, a significant and sustained rise in the general price level must be financed by an increased supply of money. In the short run, changes in the velocity of money may be highly important, but, apart from situations of hyperinflation, there are institutional upper limits to the volume of aggregate demand which can be financed by a given stock of money. It is not surprising, therefore, that historical movements in the general price level tend to show a strong, positive correlation with the money supply.

To demonstrate the important role of the money supply and excess demand in most inflationary situations, however, does not dispose of the wage-price issue. It is clearly possible, in theory and fact, for the general price level to go up or down without there being either excess or deficient money demand. As Lerner points out in his paper,[10] inflation in the sense of rising prices and excess buyers' demand are different things which need not be concurrent, although they often are. More and more economists are beginning to recognize that cost-induced inflation is becoming a very real possibility—if not an alarming probability—and that there may be both cost-induced and demand-induced elements in a particular inflationary situation. One type of inflation may be imposed upon the other.[11]

Since World War II, we have had sporadic and chronic inflationary price movements. Clearly, neither administered prices nor administered wages have been the main cause of the inflationary problems of our recent past—especially those of the 1946–48 period and of the Korean War period. Excess demand financed by excess liquidity and an expanding money supply, Government financial mismanagement, dynamic growth changes which lower the inflationary threshold of the economy,[12] large and rapid economic adjustments in response to external political and economic forces, high and uneconomic taxes,[13] real labor shortages in the prime working-age segment of the labor force, political reluctance to recognize or deal with uncomfortable issues and imperfections in the democratic process—all these factors and others have created an inflationary economic milieu. The monopoly power of labor unions has been only one of many inflationary elements in this generally inflationary postwar environment. Many observers believe that the monopoly power of organized labor makes secular (or ratchet) inflation almost inevitable. Certainly, few people now deny that it constitutes a real long-run inflationary threat in one or more ways—as a generating force, as a conductor of inflation, or as an impediment to effective anti-inflationary monetary and fiscal policy.

The long-run problem of chronic inflation is too much too serious to be obscured by biased charges and countercharges. We have many inflationary biases built into our economic system—the monopoly power of organized labor is certainly one of them. This is not to say that union leaders actively promote or want inflation. In fact, it has been suggested that the relative income position of union labor as opposed to nonunion labor may actually be improved by mild recession while inflation may help nonunion workers to make relative gains on their organized brethren.[14] Be that as it may, with the great growth of pension funds and fringe benefits, labor, generally, union and nonunion alike, is gradually developing a larger and larger stake in fairly stable monetary values.

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[10] Lerner, op. cit., p. 258 et passim.
[11] For an excellent analysis of the interaction of various inflationary forces in differing inflationary situations, see F. A. Lutz, Cost- and Demand-Induced Inflation, Quarterly Review (Rome: Banca Nazionale del Lavoro), No. 44, March 1958, pp. 3–18.
[12] The bottleneck thesis; see Otto Eckstein, Inflation, the Wage-Price Spiral and Economic Growth, Compendium, pp. 361–374.
[13] The "Colin Clark" thesis.
[14] I am indebted to P. P. Frucht for this observation.

The real problem is that union leaders and businessmen alike are forced to take part in a danse macabre, a vicious system of pattern bargaining and wage leadership, about which they can do little, individually, even if they would like to stop the music. It is not an anti-labor sentiment to suggest that, for the good of labor and the country, it is time to restudy the whole question of economic power and the loci of power in our economic system—the power of either organized labor or business to disrupt normal market adjustments and interfere in the market processes of income determination. If economic stability, perhaps even our economic freedom, is being jeopardized by a power struggle over the distribution of real income among different economic power blocs, including blocs within segments of the labor force itself, the problem should be dragged out into the open and faced squarely. Surely, candor and careful study do not endanger the legitimate goals of either organized labor or business enterprise. The individual citizen deserves nothing less.

PRICE MOVEMENTS IN RECENT YEARS

Peter Henle,[1] Assistant Director of Research, AFL–CIO

SIX STOCKS TO MEET MORE WAGE INFLATION

Investments To Protect Your Capital and Profit From Wage-Price Spiral (Heading of advertisement by investment advisory service, August 31, 1958)

The heading on this advertisement with its emphasis on "wage inflation" illustrates the extent to which organized labor has been made the "fall guy" responsible for the Nation's steadily rising price level for the past 2 years.

Such matter-of-fact use of the term "wage inflation" could never have been achieved without the veritable barrage that has been leveled in recent months at the wage policies of organized labor. Newspaper editorials, private research groups, and even some eminent economists as well as antiunion employer groups, have joined in spreading alarm about the power of organized labor to force "inflationary" wage increases into the economy.

All this barrage has helped the Nation's preoccupation with "inflation" to reach new heights. Almost every month bold headlines portray the economy on the brink of disaster as the Consumer Price Index reaches a new high. The size of the headline does not seem to vary whether the index actually records a significant rise or whether it merely nudges up one-tenth or two-tenths of 1 percent. In either case, the diagnosis is simply "inflation." Normally, in economic terms the word "inflation" has been reserved for quite serious situations in which prices are increasing rapidly with a consequent sharp decline in the value of money. More recently, the meaning of the term seems to have changed to connote any type of a general price increase, even a quite gradual one.

In all this publicity, the labor unions have been receiving the lion's share of the blame for the price increases. As one example, consider the replies received by the Senate Finance Committee to a questionnaire circulated among selected businessmen, bankers, and professional economists.[2]

One of the questions read as follows:

Beginning in August 1956 there was an increase in the Consumer Price Index each month through September 1957, thereby causing a decline in the value of the dollar. What factors contributed most to this decline in the value of the dollar?

Not everyone answered this question, either directly or indirectly, but of the 48 who did, 40 laid major stress on rising wage costs, some-

[1] The views expressed are the author's and not necessarily those of the American Federation of Labor and Congress of Industrial Organizations.

[2] Investigation of the Financial Condition of the United States, Compendium of Comments * * * in Response to the Questionnaire of the Committee on Finance, U. S. Senate, 85th Cong., 2d sess.

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times in conjunction with other factors, but more frequently as the prime cause. Twenty-two stressed the direct responsibility of "powerful labor unions" in causing the "wage-push" inflation.

Bankers, corporation heads, and trade association executives were almost unanimous in pointing the finger at labor unions. Professional economists were somewhat more divided.

This paper will attempt to weigh the merits of this attack on organized labor in the light of the price and wage developments since World War II.

The period chosen for analysis of price developments is the 12-year period, June 1946 to June 1958. Although somewhat more recent price information is available, on the whole, prices have risen only slowly since June 1958, and because of seasonal variations, it seems best to consider an even 12-year period.

For June 1946, the index number for the Consumer Price Index is 79.8 (1947–49=100). For June 1958, it is 123.7. Thus in this 12-year period consumer prices have risen 55 percent, an average of 3.7 percent compounded annually.

While this is hardly a record of price stability, it should be noted that an annual increase of 3.7 percent is a far better record than that compiled during the same period by the economies of practically all other countries. In fact, an international comparison of price changes between 1947 and 1957 shows that the annual rate at which the value of money has depreciated in the United States is lower than 21 of the 24 nations being compared. The criterion for making this comparison was the particular country's index of consumer prices.[3]

However, the more advanced United States' economy is expected to compile a better record on this score than other countries. Having performed well in an international comparison can be no excuse for the failure to take steps to achieve an even better record of price stability.

PRICE CHANGES, 1946–58

What then have been the basic reasons for this postwar price rise? As a start toward answering this question it is important to recognize that this postwar price increase has not occurred steadily over this 12-year period. Instead, the increases have been concentrated in three relatively short periods of time.

1. In the 2 years from June 1946 to June 1948, the index rose 23.3 points.
2. In the 1 year from June 1950 to June 1951, the index rose 9 points.
3. In the 2 years from March 1956 to March 1958, the index rose 8.6 points.

Thus in these 3 periods covering less than half the 12-year period, the index rose a total of 40.9 points, or 93 percent of the entire postwar rise. Thus, for more than half the postwar period, the price level has been relatively stable.

A more specific analysis of price changes must focus on the economic circumstances that prevailed during these three periods of sharply rising prices. Each of them needs to be examined separately.

[3] The First National City Bank Letter, June 1958, p. 71.

1. June 1946 to June 1948

In June 1946 price controls were lifted. The war had been over less than a year, but the reconversion period had proved less troublesome than expected. Employment was high, and most families had relatively large purchasing power available because of the savings they had accumulated during the war years. Price controls and other governmental regulations which had proved relatively successful during the wartime period were becoming harder to enforce.

Since such civilian goods as autos, appliances, etc., were just beginning to come on the market in quantity, there was a tremendous demand for them. Consumers were ready and willing to use their available cash to make these purchases. Similarly, business firms anxious to achieve maximum production were interested in obtaining scarce materials and parts as quickly as possible.

When price controls were lifted, the result was scarcely unexpected. Consumers and business firms with available resources quickly created a heavy demand for goods, thus developing a favorable opportunity for prices to rise. It was a classic example of how a heavy demand for goods pressing upon a limited supply can lead to a general price increase. The rise in prices was quite spectacular in the last half of 1946, but slowed somewhat during 1947 and 1948 as the shortages were overcome and as the postwar boom began to lose its force.

2. June 1950 to June 1951

By June 1948 prices became more stabilized and eventually dropped slightly as the Nation's first postwar recession got underway. By the spring of 1950, the Nation was pulling out of the 1949 recession when the Soviet puppet regime of North Korea crossed the boundary line and invaded South Korea. In addition to setting off an international crisis, the development had further repercussions around the globe since business, consumers, and governments all began to buy and stockpile various scarce materials and goods in anticipation of a possible third world war.

The result of this heavily increased demand was a spectacular increase in the prices of raw materials and, to some extent, finished goods. In the United States eventually wage and price stabilization measures became necessary, but these were imposed only after most of the damage was done. By the summer of 1951, when it became clear that the Korean conflict was a localized affair, consumer and business buying abated, and prices began to stabilize.

3. March 1956 to March 1958

Following the stability in prices after the Korean period, prices fluctuated within a relatively narrow range for a period of almost 5 years. This included the prosperous years of 1952, 1953, and 1955 as well as the recession year of 1954. In fact, during this period consumer prices rose at a rate of less than 1 percent a year. But in the spring of 1956 once again the average price level started to rise. Food prices which during the previous few years had been declining slightly, offsetting price rises in other goods, became more stable while prices of other goods and services led the Consumer Price Index to higher levels.

The increase amounted to 3.7 percent from March 1956 to March 1957 and another 3.7 percent for the following year. Price increases continued to appear even after signs of recession appeared on the horizon. The index has continued to increase since March 1958 but the rate has slowed down considerably, although it is too early to say whether the economy has entered a new period of relative price stability.

It is clear from this review that different factors have characterized the three postwar periods of rising prices. In the immediate postwar period the shortage of goods and the availability of purchasing power saved up from World War II created the conditions that led to spectacular price increases. In the second period of rising prices the impact of the Korean war caused scare buying, by both consumers and businessmen, that led to higher prices. In these two periods the basic factor leading to higher prices was the pressure of heavy demand on a relatively limited supply of goods. Almost three-fourths of the entire postwar rise in the Consumer Price Index occurred in these two periods of extraordinary demand.

The more recent period, March 1956 to March 1958, has proved more puzzling to economists. There has been no general shortage of goods, although the heavy boom in business spending for plant and equipment has caused shortages of particular materials. While this has been a prosperous period, there have been no special external events to cause a period of scare buying.

MOVEMENT OF CONSUMER PRICES, 1956–58

Perhaps because they could find no simple key to these recent price increases, some economists have decided that the major factor responsible has been union-wage pressure. They have argued that such union pressure is responsible for forcing continually higher wages; that these wage increases have gone beyond the increase in productivity and thus caused businessmen higher costs and forced higher prices. The conclusion from this argument is that action needs to be taken to curb organized labor.

This charge requires careful examination. This paper attempts to do this in two ways: first, by examining in more detail the specific price changes that occurred during this period and, second, by analyzing the movement of wages, prices, and productivity.

Particular analysis is needed of the specific price increases that occurred from March 1956 to March 1958. If this charge against the unions is correct, it should be possible to document it by discovering that pressure for increasing prices has been most serious in those industries in which unions and union-won wage increases have played a prominent role.

To examine this charge, the price movement of each individual item in the Consumer Price Index has been carefully examined for this 2-year period. The normal breakdowns provided by the Bureau of Labor Statistics are not adequate for this purpose since they group under one heading a number of different products or services from diverse industries, and with diverse patterns of union organization.

The following table shows a finer breakdown of items in the Consumer Price Index and their price movements for this 2-year period.

Also included is a table showing how individual items of the Consumer Price Index were classified for this analysis.

Changes in consumer prices, March 1956 to March 1958

[Groups listed in order of price increase]

Industry classification	Weight, December 1957	Percent increase		
		1956–58	1957–58	1956–57
Total index	100.0	7.5	3.7	3.7
Newspapers	1.1	16.6	14.8	1.5
Services	14.4	10.2	5.2	4.7
Labor services	5.4	7.2	3.1	4.0
Professional services	3.0	6.7	2.6	4.0
Finance and insurance	2.9	17.0	9.7	6.7
Amusement	1.7	11.5	6.8	4.4
Hospital care	1.4	14.3	7.7	6.1
Food, liquor, tobacco	33.0	9.5	5.6	3.7
Perishable foods	13.9	17.4	12.8	4.1
Nonperishable foods	8.3	5.2	2.1	3.0
Food away from home	4.8	7.1	3.4	3.5
Alcoholic beverages	2.3	3.7	0	3.7
Tobacco products	2.1	6.4	5.1	1.2
Beverages	1.6	−2.5	−8.1	6.1
Government services and taxes	1.7	9.4	6.3	2.9
Taxes	1.4	11.5	7.6	3.7
Government services	.3	.8	.8	0
Metal products	10.9	6.3	1.4	4.8
Transport equipment	4.6	10.3	1.4	8.7
Electrical machinery	2.8	−1.5	−1.2	−.2
Fabricated-metal products	2.1	6.3	2.7	3.6
Miscellaneous manufactured goods	1.4	6.6	4.2	2.3
Appliances		−1.7	−1.2	−.5
Oil, chemicals, rubber, and pottery products	7.5	6.0	.6	5.4
Petroleum and coal products	4.0	4.6	−2.1	6.8
Chemical products	3.0	8.1	4.6	3.3
Rubber products	.3	2.9	4.5	−1.5
Pottery	.2	12.0	3.7	8.1
Public utilities	5.0	5.8	3.5	2.2
Water, gas, and electricity	2.4	3.3	1.8	1.4
Transit and railroad fares	1.5	9.0	5.7	3.0
Communications	1.1	4.9	2.8	2.1
Housing	12.7	4.9	2.9	2.0
Home purchase	5.9	4.5	3.6	.9
Rent	5.8	4.2	2.0	2.1
Home repairs	1.0	11.8	5.2	6.3
Textile-mill products	1.4	3.9	.6	3.3
Housefurnishings	.8	.4	−.9	1.4
Floor coverings	.5	5.9	1.8	4.0
Other	.1	15.0	3.6	11.0
Wood and paper products	2.3	3.5	.1	3.5
Apparel	8.8	2.0	0	2.0
Textile	7.5	1.2	−.3	1.4
Leather	1.3	6.1	1.4	4.6
Total weights (December 1957)	98.8			
Weights not included (price indexes not available)	1.2			
Housing away from home	.4			
Miscellaneous services (legal, banking, burial)	.8			

Detailed classification of items in Consumer Price Index

Item	Weight, December 1957
Newspapers	1.1
Services	14.4
Labor services	5.4
Dry cleaning and pressing	1.4
Laundry	.9
Domestic	.6
Shoe repairs	.2
Auto repairs	1.2
Men's haircuts	.8
Beauty-shop services	.3
TV repairs	(1)
Professional services	3.0
Physicians' fees; Dentists' fees	2.2
Optometrist	.8
Finance and Insurance	2.9
Mortgage interest	1.7
Auto insurance	1.0
Property insurance	.2
Amusement: Motion-picture admissions	1.7
Hospital care	1.4
Group hospitalization insurance	1.1
Hospital room rates	.3
Food, liquor, tobacco	33.0
Perishable foods	13.9
Beef and veal	2.1
Pork	2.2
Lamb	.2
Frankfurters	.7
Poultry	.8
Fresh fruits and vegetables	2.6
Dairy products	4.0
Eggs	1.3
Nonperishable foods	8.3
Cereals and bakery products	3.2
Canned luncheon meat	.2
Canned and frozen fish	.6
Vegetables and fruits (canned, dried, frozen)	1.6
Tomato soup	.4
Beans with pork	.2
Sweet pickles	.2
Tomato catsup	.1
Fats and oils	.9
Miscellaneous (gelatin)	.1
Sugar and sweets	.8
Food away from home	4.8
Alcoholic beverages	2.3
Beer	1.4
Whisky	.9
Tobacco products	2.1
Cigarettes	2.0
Cigars	.1
Beverages	1.6
Coffee	1.1
Tea	.1
Cola drinks	.4
Government services and taxes	1.7
Taxes	1.4
Real estate	1.1
Auto registration	.3
Government service: Postage	.3
Metal products	10.9
Transportation equipment	4.6
New cars	3.0
Used cars	1.6
Electrical machinery[2]	2.8
Refrigerators	.5
Washing machines	.5
Vacuum cleaners	.2
Toasters	.2
Sewing machines	.2
Television sets	.8
Radios	.3
Electric light bulbs	.1

Detailed classification of items in Consumer Price Index—Continued

Item	Weight, December 1957
Metal products—Continued	
Fabricated metal products	2.1
Stoves	.4
Water heaters	.7
Cabinet kitchen sinks	.1
Faucets, sink	.4
Saucepans, aluminum	.4
Razor blades	.1
Miscellaneous manufactured goods	1.4
Toys	.3
Sporting goods	1.1
Oil, chemical, rubber, and pottery products	7.5
Petroleum and coal products	4.0
Gasoline	2.4
Motor oil	.2
Solid fuels and fuel oil	1.4
Chemical products	3.0
Laundry soap and detergents	.7
Toilet soap	.2
Prescriptions and drugs	.9
Toothpaste	.2
Face powder	.1
Shaving cream	.1
Face cream	.1
Shampoo	.1
Home permanent refill	(1)
Exterior house paint	.6
Rubber products: Tires	.3
Pottery products: Dinnerware	.3
Public utilities	5.0
Water, gas, electricity	2.4
Water	.4
Gas and electricity	2.0
Transit and railroad fares	1.5
Transit fares	1.2
Railroad fares, coach	.3
Communication: Telephone	1.1
Housing	12.7
Home purchase	5.9
Rent	5.8
Home repairs	1.0
Repainting rooms	.3
Repainting garage	.2
Refinishing floors	.2
Reshingling roof	.3
Textile mill products	1.4
Housefurnishings	.8
Towels, bath	.1
Sheets, muslin	.2
Curtains	.1
Blankets, wool	.1
Bedspreads, cotton	.1
Drapery fabrics, cotton	.2
Floor coverings	.5
Rugs, wool axminster	.2
Carpets, wool broadloom	.2
Rugs, felt base	.1
Rugs, rayon or cotton	(1)
Other: sanitary napkins	.1
Wood and paper products	2.3
Wood products	2.0
Furniture and bedding	1.7
Porch flooring	.3
Paper products	0.3
Toilet tissue	.2
Cleansing tissue	.1
Paper napkins	(1)
Apparel	8.8
Textile	7.5
Men's and boys' apparel	2.8
Women's and girls' apparel	3.9
Other apparel	.8
Leather: shoes	1.3

[1] Less than 0.05 percent.

[2] "Electrical machinery" consists mainly of appliances. Classified under the usual CPI grouping, however, "appliances" exclude electric light bulbs and include stoves.

This table makes possible a closer look at the movement of prices during the past 2 years. The figures give little support to the contention that the highly unionized industries have been largely responsible for higher living costs. In fact price increases in those industries in which a large proportion of workers are organized into unions, and in which collectively bargained wage settlements receive prominent attention, are significantly lower than in those areas of the economy where unions are either weak or nonexistent.

In fact, the items in the Consumer Price Index can be divided roughly in two parts: those in which the unions play a prominent role in wage determinations and those in which unions do not. The following grouping reflects these two categories.[4]

Relatively unionized section of the economy:	Relatively nonunionized section of the economy:
Newspapers	Professional services
Labor services	Finance and insurance
Amusement	Hospital care
Liquor	Perishable foods
Tobacco	Nonperishable foods
Metal products	Food away from Home
Oil, chemical, rubber and pottery products	Beverages
Public utilities	Government services and taxes
Housing	
Textile-mill products	
Wood and paper products	
Apparel	

Average prices for the unionized sector increased 5.5 percent during the 2-year period, March 1956 to March 1958, while for the nonunionized sector the increase was 10.2 percent.

While the unionized sector comprises over 61 percent of the total index, it accounts for only 45 percent of the total price increase.

Surely this comparison is a clear indication that the influence of union-won wage increases has played but a small role in the price movements during this 2-year period. Obviously, many other factors have been at work on the pricing process.

PRICE INCREASES BY INDUSTRY GROUPS

A more detailed discussion of the table will bring out the many complex causal factors behind these price increases.

Among the groups listed in the table, the highest percentage increase has taken place in the price of newspapers. While labor costs are certainly one factor in the business of running a newspaper (and this has been included in the unionized sector of the economy), it would appear that the sharp rise in price has been the result of many forces accumulating over a number of years. Newspapers obviously cannot be subject to frequent repricing. There has been a reluctance to move away from the newsstand price of 5 cents a copy. The price rise over this 2-year period came after a 3-year period when prices remained almost stable. Thus the sharp price rise has to be

[4] There may be some disagreement regarding the degree of union influence in some of these industries. For example, "textile mill products" has been listed as "relatively unionized", because collective bargaining settlements are given prominent attention even though the majority of textile plants are not unionized. On the other hand, the processing and distribution of nonperishable foods and beverages are often done by union members, but unions are not normally involved in the preparation of the basic product. Very little change in the price increase recorded for the groups as a whole would result if any items such as these were transferred to the opposite column.

viewed as a reaction from demand-and-cost factors that have been accumulating for several years, rather than an indication of special demand or cost pressures in this particular 2-year period.

The second highest price increase (10.2 percent) was registered for the category of services. It has become commonplace for economists discussing "wage inflation" to point to the rise in the price of those services, emphasize the importance of labor costs in their pricing, and carry the argument further by blaming wage increases won by organized labor.

However, these services are a very diverse group, including work performed by highly skilled practitioners as well as by unskilled labor. In a number of cases the element of labor costs in the services is not nearly as important as it has been imagined.

Within the group the highest price increase has been recorded for finance and insurance charges (17 percent), including mortgage interest, automobile and property insurance, and for hospital care (14.3 percent).

In both these cases, special factors seem to have been at work. The increases in interest rates come from the greater demand for loanable funds during a time of a capital-goods boom as well as the Government's attempt to stem price rises by raising interest rates. The higher automobile-insurance rates are caused at least partly by an increased level of claims and higher repair costs caused by the structural characteristics of the newer model cars.

In the case of hospitals, a number of factors seem to be at work. The increase in the figure for hospital care may reflect not only increases in price but also the more highly skilled technical services required in modern hospitals. The group-hospitalization component may reflect the increased extent to which families have to resort to hospital care. While wage and salary costs form a large part of hospital expenses and have increased substantially, part of this increase reflects a higher proportion of skilled workers rather than an increase in wage rates. At the same time, labor unions and other groups using hospital service have sometimes questioned the need for some of the rate increases that have been put into effect.

At any rate, both in the Nation's hospitals and in the various finance and insurance institutions, union membership is extremely weak. While there may, of course, be some carryover effect from union-won increases in other industries, it would nevertheless require extremely tortuous reasoning to argue that the labor unions have been responsible for this sharp increase in the price of these services.

Other services, too, have increased during this 2-year period. The rise in professional fees charged by the medical profession can hardly be said to be directly related to the union-won wage increases.

Even in the group labeled "labor services" involving less skilled work, union organization is relatively weak in a number of areas (domestic service and shoe repair, for example). Wages in these industries are among the lowest in the entire economy and, because of a relatively low rate of productivity advance, wage increases might ordinarily be expected to be reflected in higher prices. Yet prices for this group of services over the 2-year period increased less than the average for the index.

The group with the third highest price increase (9.5 percent) is the food component of the index. Here, the largest increases have been

recorded by the perishable foods. In fact, increases in this sector account for almost one-third of the 2-year rise in the index. While union organization may be prominent in handling some of these foods after they leave the farm, certainly the major influences on prices have been specific crop conditions that have affected the market price for these commodities. The freeze affecting the citrus fruits in Florida and the drought conditions on the Great Plains during this period affecting meat prices have both had a far greater influence on food prices than union organization or wage pressure.

Ranked next in terms of price increases (9.4 percent) is the group headed, "Government and taxes." The Consumer Price Index does not measure Federal or State income taxes but it does include various State and local taxes, including real-estate and auto-registration fees. These prices have increased quite markedly in the 2-year period. Some of this increase may be related to higher wages (note that unions are not a major factor among State and local government employees) but basically the increase has been caused by expanding demands for State and local government services.

Moreover, there is some real doubt whether any index can accurately measure the price increases for government activities. The index does measure the increased payments which the average city worker has to make for local government services. However, if State and local governments have been improving the quantity and the quality of services rendered to the taxpayer, the higher taxes paid reflect not only an increase in price but also a better product for the taxpayer.

Making up the rest of the table are the numerous product industries in which workers are relatively well organized. While price increases for a few of these items were above the average, increases for the groups of chemical, metal, wood, textile, and apparel products generally fell below the increases for foods and services.

It should be noted that increases in the so-called "administered price" areas of the economy (metals, oil, chemicals, etc.) run higher than the more competitive pricing areas (textiles and apparel). This paper does not attempt to explore the influence of company-administered pricing practices on the price level. Others have examined the extent to which prices in these industries have been raised beyond levels required by demand or increased costs—or the extent to which failure to reduce prices where practical has failed to provide necessary offsets to price advances required in other sectors of the economy. These are certainly important issues, even if the influence of the "administered price" area may seem rather limited in a study of changes in the Consumer Price Index. In fact, the problem is greater than the foregoing table would indicate, since the products subject to administered pricing practices (steel, for example), rather than being listed separately as a consumer product, become important components of other consumer articles.

One of the highest percentage increases has been for new and used cars. This has certainly been an area in which workers have been well organized and in which collective-bargaining settlements have received wide publicity. However, this is also an industry in which there has been serious criticism of the price and production policies of the automobile manufacturers. While a detailed discussion of these pricing practices is not possible in this article, it is certainly an open question

whether union-won wage increases or corporation pricing and production practices have been responsible for the higher price of automobiles.

Although automobile prices have risen quite sharply, the prices of many products of other industries in which unions have played a prominent role have increased very little. This is particularly true for the apparel industry, whose prices have increased but 2 percent over the 2-year period. Yet this is an industry in which union organization is very strong, and wages have steadily increased. The answer lies in the more highly competitive nature of the clothing industry, and the question naturally arises whether the prices of other products would behave similarly if a greater degree of competitive pricing could be introduced.

Special mention is required for appliance prices, which have actually declined over the 2 years. Here the influence of the discount store is clearly evident. This is not to say that the introduction of discount houses into the BLS sample automatically lowers the price level for electrical appliances. In fact the prices of new stores added to the index are "linked in" so that the index is not affected by the lower prices in the new store. However, the effect of discount pricing has been to force reductions in appliance prices at such established outlets as department stores, a movement which is reflected in the index. Again, a question arises whether similar savings in distribution costs could be made with regard to other products.

This brief rundown of price changes during the past few years indicates the complex nature of the pricing process. Today's American economy offers an almost bewildering variety of products (and therefore prices) to the American consumer. Specialized factors affect the demand, supply, or both, of different products and services to different degrees.

No attempt has been made here to argue that wages do not represent an element of cost to the firm or that the level of prices is independent of changes in wage rates. What has been shown is that examination of specific price changes over the past 2 years does not support the charge that union-won wage increases have been a major factor causing higher prices during the past 2 years.

WAGES, PRICES, AND PRODUCTIVITY

In discussing price increases in recent years, economists have tended to ignore analysis of specific price changes but have preferred instead a broader discussion of the relative movements of wages, prices, and productivity.

Here the primary basis for economists' concern is the fact that in some recent years the average increase in wages appears to have exceeded the economy's increase in productivity. From this analysis the conclusion has been drawn that action must be taken (if necessary by Government) to confine wage increases to the increase in the productivity of the economy; otherwise, it has been argued, wage increases above this allowable amount will inevitably force price increases throughout the economy.

In comparing wages with productivity, some observers have simply compared productivity changes with changes in wages or earnings in

current dollars. Such a comparison is obviously fallacious because in effect it says that the buying power of a worker's wages must fall with any increase in the price level. No matter what the cause of the price rise (crop conditions, higher demand, international factors), under this approach the worker would be entitled only to raise his money wage by the annual increase in productivity.

A comparison based on real wages is obviously more in line with economic reality since it recognizes that the economy's gains in productivity are real gains which are available for distribution over and above any changes in income necessary to offset price movements.

How serious a discrepancy has actually developed between real wages and productivity? The pertinent figures for the postwar period are given in the following table.

Indexes of labor and nonlabor costs, prices, employee compensation, and productivity

[1947=100]

Year	Comparison of nonfarm labor and nonlabor payments and prices			Comparison of real earnings and productivity	
	Employee compensation per dollar of real product	Nonlabor payments per dollar of real product	Implicit price change of nonfarm sector	Average hourly compensation in constant purchasing power [1]	Real product per man-hour, all persons, total private sector
	(1)	(2)	(3)	(4)	(5)
1947	100.0	100.0	100.0	100.0	100.0
1948	106.0	107.4	106.6	101.0	104.9
1949	105.0	112.1	108 1	105.2	107.0
1950	104.9	114.8	109.3	110.1	115.6
1951	112.9	121.0	116.4	110.8	118.1
1952	117.0	120.8	118.6	114.7	121.7
1953	120.6	121.3	120.9	119.4	126.2
1954	121.7	123.2	122.4	123.1	129.0
1955	121.9	126.4	123.9	127.7	133.5
1956	128.1	126.2	127.2	132.8	134.6
1957	133.0	129.9	131.6	135.2	137.0

[1] Hourly compensation includes wages, salaries, and fringe benefits of all nonfarm wage and salary earners, including managerial and executive personnel.

Source: The Relationship of Prices to Economic Stability and Growth. Joint Economic Committee, Mar. 31, 1958. Table 50 (revised), p. 697.

To this observer, the single most impressive fact about this table is that for each of the items the postwar increase is roughly of the same magnitude.

Unit labor and nonlabor payments (cols. 1 and 2) have increased about at the same rate during the postwar period. Since the 2 shares are roughly equal (one study indicates that labor payments comprise 56 percent of total price tags),[5] this means that the nonlabor part of the price tag, including such items as capital consumption allowances, interest payments, rental income, and profits, has been creating just about as much pressure on costs and prices as labor costs. The price rise (col. 3) is the net result of the increased payments.

The same point can be made with regard to the movement of real wages and productivity. Real average hourly compensation in constant purchasing power has been increasing roughly at the same

[5] Productivity, Earnings, Costs, and Prices in the Private Nonagricultural Sector of the Economy, 1947–56, Bureau of Labor Statistics, May 29, 1957, p. 4.

rate as the underlying increase in productivity for the entire private sector of the economy. In fact, starting with 1947 the increase in productivity has been ahead of the increase in real hourly compensation throughout the following 10 years.

These figures certainly do not point to any evidence that wage rates or total employee compensation in real terms has been outstripping the economy's productivity gains during the postwar period. It is true that if the period 1955–57 is considered by itself, the figures show an increase in unit labor payments somewhat greater than the increase in nonlabor payments and prices. Similarly, real average hourly compensation increased slightly more than productivity gains made by the economy. However, other 2-year periods could easily be chosen to show the opposite story. The important point is that, even with this reversal during the 1955–57 period, productivity gains for the entire postwar period remain higher than the increase in real hourly compensation.

Moreover, the fact that real wage gains slightly outran improvements in productivity for a 2-year period does not appear to have had serious effects on the price level. There may have been some additional upward pressure on prices of particular products as a result of this increase in hourly compensation but, judging by the previous analysis of specific price changes, other special factors, such as crop conditions, were of even greater importance in causing the Consumer Price Index to rise during this 2-year period.

Was it union-won wage increases during this period that caused real wages to advance more rapidly than productivity?

As usual, in the American economy, these increases varied considerably, depending on the collective-bargaining situation faced by individual firms and industries. In a number of manufacturing industries, construction, and transportation, substantial wage increases were negotiated. In other areas of the economy, textiles, for example, unions were able to win only nominal increases. Considering relatively highly unionized sectors of the economy, it is found that for manufacturing, real straight-time hourly earnings increased 5.4 percent from 1955 to 1957. On the basis of average hourly earnings the increase for contract construction is 5.9 percent and for gas and electric utilities 5.7 percent.

The important point is that these increases are roughly equivalent to the average rate at which productivity has been advancing in the postwar period.[6] Unions had every right to expect continued productivity gains at this rate. The discrepancy between movements of wages and productivity during this 2-year period thus was not the result of excessive union-won wage rates but rather the result of 2 years of relatively low productivity increases. From 1955 to 1957 output per man-hour for the private economy increased a total of only 3.4 percent,[7] well below its average postwar rate of growth.

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[6] From 1947 to 1957 output per man-hour in the private economy increased at an average annual rate of 3.9 percent, based on man-hours worked or 3.4 percent based on man-hours paid. See Economic Report of the President, January 1958, p. 107.

[7] The Relationship of Prices to Economic Stability and Growth, Joint Economic Committee March 31, 1958, table 3A, p. 687.

NOTE.—Productivity increase based on man-hours worked; increase based on man-hours paid is 2.6 percent.

While there is much that remains obscure about the manner in which productivity improvements take place, statistics show that the rate of improvement does not maintain a steady course but often fluctuates from year to year. Productivity rates seem to vary with the business cycle and show the greatest vigor during the period of recovery following a recession.

One particular reason why the rate of increase fell so low for 1956–57 was the hiring of large numbers of technical personnel in this period. Eventually the work of this group obviously will help to stimulate productivity but initially the presence of additional numbers of technicians on the payroll would serve, statistically, to depress the rate of productivity advance.

There is every reason to believe that the low rate of productivity compiled from 1955 to 1957 is being reversed at the present time. In fact, preliminary indications are that 1958 will be a year of above-average increase in productivity. In all likelihood, the below-average productivity rates for 1956 and 1957 do not signal any change in the postwar trend but are simply the results of special conditions that prevailed toward the top and down swing of the business cycle.

RELATING WAGES TO PRODUCTIVITY IN COLLECTIVE BARGAINING

Some economists pointing to the 1955–57 data on wages and productivity have argued that Government action was needed to assure that wages did not increase more rapidly than the increase in productivity. The implications of this proposal are very broad indeed.

It is certainly true that the concept of productivity has become better known among both management and trade-union officials. At the bargaining table both sides increasingly recognize the important role which productivity plays in making possible increased living standards. In some cases, most notably in the automobile industry, a specific wage increase known as the "improvement factor," based on the long-term rate of productivity improvement has become part of the collective-bargaining agreement.

However, this recognition of productivity at the bargaining table is a far different matter from requiring by Government regulation or otherwise that wage increases be tied to increases in productivity. To begin with, it should be noted that there is nothing sacred about the wage-price-productivity relationship prevailing at any one point in time. There is a danger in picking a particular time period from which to measure changes in this relationship and thus implying that optimum economic relations prevailed during this particular period. It is doubtful whether wage-price-productivity relationships can or ever should be frozen as of a particular period and certainly there would be considerable disagreement over the choice of any particular period. For the long-run health of the economy, there may well be occasions when these relations should be altered, and when, for example, wages should rise at a higher rate than productivity.

Even granting that some way could be found on the theoretical level to relate wage increases to changes in productivity, how could this principle be given practical application? Although unions recognize the importance of productivity increases and recognize the limit which they place on real improvements in living standards, it would be

difficult, if not impossible, to develop a practical wage-productivity formula which would govern the determination of wage changes. Certainly it would not be possible to relate wages to current changes in productivity, since reliable statistics on productivity are at least 6 months behind the period to which they refer. Even for long-run indicators, the technique of determining productivity has not reached the point where there is agreement among economists on the proper methods of measurement.

Any formal effort to link directly wages with productivity would run into a host of difficult issues. Would industries and firms with higher than average productivity have the right to claim additional wage increases? If so, what proportion of such excess productivity would such firms and industries be allowed to retain as wage increases? If not, would price reductions be required? What about collective-bargaining situations where the union is unable to win increases equivalent to the productivity advance? Would these workers be awarded additional sums? To what extent would other criteria for wage determination, such as maintenance of the buying power of the individual's wage and elimination of inequities, be recognized? In the automobile industry agreements, for example, the "improvement factor" increase is over and above such other increases in compensation as cost-of-living increases and a variety of fringe benetfis.

Any governmental attempt to tie wage increases to productivity would almost certainly lead to a full-scale wage stabilization program. If the attempt were limited to particular industries or collective-bargaining situations, knotty questions would inevitably arise involving closely related firms and groups of workers.

Moreover, there should be some hesitation about tampering with the American system of collective bargaining, which, though obviously not perfect, has proved an efficient and democratic mechanism for wage determination. While partisans from both the labor and management sides have been arguing for many years regarding the extent of Government intervention in the collective-bargaining process, both groups demonstrably prefer the process of mutual accommodation in wage setting to a system with greater Government intervention.

On the whole, collective bargaining has proved flexible to changing economic circumstances. The American system with its emphasis on local or company bargaining rather than national collective bargaining yields a great diversity of wage settlements. In effect, most of the wage bargains have been fashioned with an eye to the specific conditions prevailing in the industry, locality, or firm concerned. Experience in the textile and coal industries, for example, demonstrates how collective-bargaining results are affected by economic conditions. The extent to which particular wage settlements have become the "pattern" for other industries is probably less today than it was 10 years ago.

Of course, it will always be possible for economists to find particular collective-bargaining settlements which they feel have increased wages at a higher rate than productivity. But the positive values of collective bargaining should not be lightly sacrificed. The critical question is whether the system of collective bargaining—not an isolated case or

even groups of cases—persistently produces a condition in which real wage advances as a whole outrun improvements in productivity and for price rises.

CONCLUSION

The heading on the advertisement quoted at the start of this paper emphasized the phrase, "wage inflation" and implied that the American people could expect a continuous dose of higher prices caused by union-negotiated wage increases.

But is the economy confronted with such a choice?

As a result of this exploratory examination of price and wage behavior over the postwar period, the following conclusions can be advanced:

1. The record of the American economy regarding prices during the postwar period is a relatively good one.

2. By far the largest proportion of price increases in the postwar period have been the result of special circumstances arising either from the aftermath of World War II or the Korean hostilities.

3. Even during the past 2 years when some economists have assigned the blame to "wage inflation," most of the price increases recorded by the Consumer Price Index can be attributed to special circumstances, such as crop conditions, rather than to union-won wage increases.

4. Although real wages seem to have risen more than productivity during the 2-year period 1955–57, when viewed in the context of the entire postwar period, it is clear that employees have not gained a greater share of the benefits of productivity than other groups in society.

5. It appears likely that the relatively low rate of productivity increase in 1955–57 is a temporary phenomenon, already giving way to more rapid increases. Thus any gap that may have developed between the rate of productivity advances and employees' compensation will be eliminated as productivity returns to its normal postwar level.

6. Even if it is desirable to stress the importance of productivity as the source for improvements in living standards, it is neither desirable nor practical to attempt to establish by Government or private policy a fixed relation between the two.

7. There is no compelling reason for altering the basically voluntary character of wage settlements negotiated through collective bargaining.

Does this mean that the Nation is helpless to prevent general increases in prices such as those which developed in the past 2 years? Not at all. The analysis does suggest that by and large the record of the postwar economy with regard to prices has not been a complete failure and that much of the Nation's obsession with "wage inflation" (or inflation in general) may be misplaced.

There still remains the question of appropriate public policy. Here the choice of objectives becomes important. Absolute price stability may not prove to be quite so attractive if it can be achieved only in an economy operating substantially below capacity. A more desirable goal might be relative price stability.

Outside of appropriate monetary and fiscal policy, what steps can Government take to achieve this objective? On this point, the analysis suggests that any search for a magic formula to apply to all prices would be a fruitless one. Instead, a more rewarding task might be to spend more time examining a whole host of Government and private policies which affect the prices for particular products. Among the Government activities which could be so scrutinized are antimonopoly laws, resale price maintenance, agricultural programs, and tax policies. Examining specific laws and policies affecting specific prices may appear a more roundabout method of attacking the problem, but it could prove to be the more effective if it leads to removing obstacles to more competitive pricing and thus assuring a more effective functioning of the pricing process.

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CAUSES OF PRICE CHANGES AND EFFECTS ON ECONOMIC ACTIVITY

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Prices in a free-choice economy are a key factor in balancing production and consumption and in influencing the allocation of resources. Price changes are both a symptom and a cause of changes in economic activity. It is essential, therefore, that Government policies "to promote maximum employment, production and purchasing power under free competitive enterprise" be based upon recognition of pricing impacts.

Unfortunately, there is much confusion and disagreement as to (1) what determines prices, (2) what price movements are most conducive to optimum use of resources, and (3) what Government policies should be adopted toward prices. Some disagreement is to be expected because of the complexity in economic relationships. The economy is based on circular flow and identity relationships that make it difficult to ascertain cause and effect. Public confusion is compounded, however, by analyses based on only partial examination of the facts and on inconsistent reasoning.

PRICE DETERMINATION FOR INDIVIDUAL PRODUCTS AND SERVICES

Alternative combinations of price, volume, and costs

Prices are determined in the interaction of forces among sellers and buyers. The seller attempts to obtain that combination of price and volume which, relative to his costs, will provide optimum return on his investment. The buyer attempts to obtain that combination of price and product which, relative to his income, will provide an optimum standard of living. Price is thus one factor, but not the only one, in the equation for both buyer and seller.

In trying to establish a price, the seller looks at his cost of doing business—the materials, labor, interest on borrowed money, rent on leased facilities, depreciation on owned plant and equipment, and taxes—and the rate of return on invested capital that is necessary to continue as a healthy business. Cost and desired return on investment, however, are only part of the pricing decision. The unit volume that will be purchased by customers at varying prices must be taken into consideration in adjusting prices. This volume will depend on customer demand for the seller's product versus other products and services. Other sellers of the same product may have a different cost and desired return on investment with which the particular seller may have to compete. If he charges more than his competitors, he usually loses volume. If he prices competitively, he still will not match the profits of his competitors.

The seller's problem may be illustrated by the following examples involving different combinations of costs, prices, and volume. In example A, the seller has these given facts: variable costs of $700 per unit, total fixed costs of $4,000, and invested capital of $8,000. His objective is to find a combination of price and volume that will yield 25 percent return on investment before taxes, or $2,000. This would amount to 12 percent after taxes for a corporation at present tax rates. The left half of the table illustrates one combination of price and volume. The right half illustrates how much increase in volume would be necessary at a lower price to obtain the same return, if no changes in costs or investment occur.

Example A

	Unit volume with price of $1,000			Unit volume required at price of $950		
	Dollars per unit of sales	Units sold	Total dollars	Dollars per unit of sales	Units sold	Total dollars
Price	$1,000	20	$20,000	$950	24	$22,800
Variable cost	700	20	14,000	700	24	16,800
Fixed cost	200	20	4,000	166⅔	24	4,000
Profit before taxes	100	20	2,000	83⅓	24	2,000

The fixed costs of $4,000 include such items as depreciation and amortization of owned plant and equipment, rents on leased facilities, interest on borrowed money, taxes other than on profits, and that portion of labor and materials which does not vary appreciably with volume. Costs which fluctuate roughly in proportion to volume of sales amount to $700 per unit. There are various options of price and volume combinations open to the seller. At a price of $1,000 a unit, he can sell 20 units. The resulting gross of $6,000 ($300 per unit) over his variable costs is enough to cover the $4,000 of fixed costs and leave the desired $2,000 profit before taxes. He must sell 13⅓ units at the gross margin of $300 to cover the fixed costs of $4,000. This is known as the break-even point because there is neither profit nor loss.

If he reduces his price by 5 percent, he will have a unit margin of only $250 over variable costs. To gross $6,000 before fixed costs and profit would require the sale of 24 units (or 20 percent more than at the $1,000 price). This assumes no increase in fixed costs or investment to handle the 20 percent rise in volume. His break-even point is also raised 20 percent (to 16 units) by the narrowing in price spread over unit variable cost.

If he raises his price by 5 percent (not shown in the example) the margin of price over unit variable cost increases to $350. It would then be necessary to sell only 17⅐ units (or about 14 percent less) to yield the same total dollar profit. The break-even point would be reduced to about 11⅞ units.

Example B shows the effect on price-volume-profit combinations of different relationships in unit variable cost and total fixed cost. The assumed invested capital and the return on investment objective are unchanged from example A.

Example B

	Unit volume with price of $1,000			Unit volume required at price of $950		
	Dollars per unit of sales	Units sold	Total dollars	Dollars per unit of sales	Units sold	Total dollars
Price	$1,000	20	$20,000	$950	22	$20,900
Variable cost	450	20	9,000	450	22	9,900
Fixed cost	450	20	9,000	409	22	9,000
Profit before taxes	100	20	2,000	91	22	2,000

In this case, a price of $1,000 gives a gross margin of $550 over unit variable costs. If he sells 20 units at that price, he can gross $11,000. This will cover the $9,000 of fixed costs and give the desired $2,000 in profit before taxes. The break-even point, however, will be higher than in example A. A volume of 16.36 units is necessary to break even ($9,000 total fixed cost divided by $550 margin of price over unit variable costs).

A price decrease of 5 percent in this example would reduce the margin to $500 over unit variable cost. He would have to sell 22 units (or only 10 percent more) to yield the same profits as before the price reduction. The break-even point increases by the same 10 percent (to 18 units).

Not shown is the result of raising price by 5 percent. In this case, the margin of price over unit variable cost increases to $600. It would be necessary to sell 18⅓ units (or about 8 percent less) to yield the same total profit. The break-even point would be reduced to 15 units.

Comparison of examples A and B shows that as variable costs increase in proportion to price, a greater elasticity of demand relative to price change is required. In example A, with a starting ratio of 70 percent in variable costs to price, volume would have to increase 4 times as rapidly as prices were reduced in order to yield the same total dollar profit. (In economic terminology, the required elasticity factor relative to price is −4.0). In example B, with a beginning ratio of 45 percent in variable costs to price, volume would have to increase only 2 times as fast as prices (or a required elasticity factor of −2.0).

In actual practice, cost-volume relationships would not hold with the precision shown in these examples. Fixed costs are not completely rigid and variable costs do not vary in exact proportion to volume. Furthermore, changes in volume may require adjustment of facilities and capital investment. The examples are adequate, however, for exposing the danger in making broad statements that sellers can increase profits by lowering prices. Whether or not this is so depends on the cost and price-volume relationships for particular commodities and services.

The individual seller is subject to the discipline of the market place in trying to obtain the right combination of price and volume relative to his costs and capital investment. He has to compete against other sellers whose costs, products, and acceptable return on investment differ from his. Customers are not only free to choose among other sellers of the same product or service, but they can also substitute other products or services.

Administered prices

There has been much discussion of "administered" or "inflexible" prices as indicative of the ability of particular sellers to insulate themselves from this discipline of the market place. Although there is no universally accepted definition of administered prices, the term is most often used to cover prices that are changed only occasionally and are not constantly responsive to changes in demand-supply relationships. The price of the product or service is also about the same for all sellers.

The statistical analyses presented in support of this terminology are the prices shown in the wholesale price index published by the Bureau of Labor Statistics. Price volatility shows up largely in agricultural raw materials, processed goods with a high cost content in agricultural materials, and other raw materials for industry. Because production of these items is usually dominated by large numbers of small producers, the assumption is made that price stability comes with concentration of economic power.

This is another example of broad statement based upon incomplete examination of the facts. The same type of administered or inflexible price behavior is found for many products and services sold at retail by small-business operations. In fact, this price behavior has been encouraged by legislative action in the form of fair-trade laws. Price support of agricultural products is a less extreme example because these prices are still flexible, although the flexibility on the down side is lessened. It would appear that it is not price inflexibility that is the evil, but rather who is doing the selling and buying.

Competition of sellers and buyers does not necessarily call for vast numbers of small unit sellers and buyers trading in auction markets. Our economy has long since passed this stage. Heavy capital investment is required for most efficient production of many goods and services. Frequent and large changes in prices are not conducive to maximum growth and stability of production and consumption. This is true also of most items produced by smaller-scale enterprises.

The degree of price flexibility is associated more with the type of product or service involved than with the size of firm. Prices will be most flexible where supplies do not respond quickly to demand. This occurs when—

1. There is a long production and distribution cycle. Production cannot respond to changes in demand, except with considerable lag.
2. Inventories are large relative to sales. This acts as a brake on upward price flexibility, but puts downward pressure on prices when demand falls.
3. Inventories deteriorate in value or are expensive to maintain.
4. Demand is volatile.
5. Demand is highly elastic relative to price. This encourages sellers to lower prices to dispose of surplus production.
6. Unit variable costs are low relative to price. (See earlier example.)
7. Costs of material and labor used are sensitive to changes in demand.

Flexible price commodities generally contain one or more of these characteristics. Agricultural commodities, for example, fall in the categories of long production cycle, inventories that deteriorate in

value or are expensive to maintain, and unit variable costs which are low relative to price. The textile and apparel industries have seasonal and style problems that complicate the adjustment of supply to demand. Inventories of finished apparel generally cannot be carried over. At the factory level, demand is volatile because of fluctuating inventory demand by distributors. Costs of material are sensitive because they are tied in to a large extent with agriculture.

Automobiles are quite sensitive in price at the retail level; as the dealer profit margin fluctuates. Mass production at the factory requires a more stable price during the model year to avoid chaos in production resulting from dealer speculation on factory prices. In the latter part of the model year, however, factory prices also are quite sensitive to changes in demand on the down side. Production of the outgoing models is already committed and cutbacks in schedules are costly. Price concessions are made to the dealers in such an event. Concessions are also often given earlier in the model year if production and inventories cannot be adjusted quickly to changed demand. Other consumer durable goods are faced with somewhat similar problems.

An essential element of a free-choice economy is the ability of individual sellers and buyers to make their own decisions on what combination of price and volume they wish to adopt. Each seller can "administer" his own price or his own volume, but he cannot "administer" both. Other sellers and customers influence this combination. The particular combination of price and volume that results will differ among products and sellers. Attempts to interfere directly with the adjustments made by individual sellers and buyers can hinder, rather than help, the achievement of national economic goals. Government policies should be restricted to inducing the proper economic environment within which freedom of individual choice can function effectively. This involves prevention of monopoly power which unduly restricts freedom of choice for individual buyers and sellers.

AGGREGATE PRICE MOVEMENTS

Problems arising from general rise or fall in prices

When individual price changes cumulate to a broad movement in one direction, problems are created for economic growth and stability. Such changes are both a symptom and a cause of imbalances in the economy that can endanger future levels of economic activity. General price inflation is symptomatic of demand, costs, and/or profits rising faster than the quantity of goods and services produced. Such inflation distorts the distribution of income from production and the willingness to spend relative to income. Rising prices curtail buying power for those whose incomes do not keep pace or whose savings are in dollar repayment form. On the other hand, inflation encourages borrowing more to obtain goods at present prices and repay debt with cheaper dollars. These distortions can lead to lower production and consumption.

Conversely, general price deflation is symptomatic of demand, costs, and profits falling faster than the quantity of goods and services produced. Such deflations also distort the distribution of income from production and the willingness to spend relative to income, with a resulting adverse impact on production and consumption.

The impact of rising or falling prices will differ depending on the underlying cause. Demand inflations are usually accompanied by a high volume of production and consumption until the distortions created by price inflation upset the productive process. Rising prices initiated from the supply side—whether from wages, other costs, or profits—may not be accompanied by rising demand. In this case, the volume of production and consumption may not increase, even in the short run.

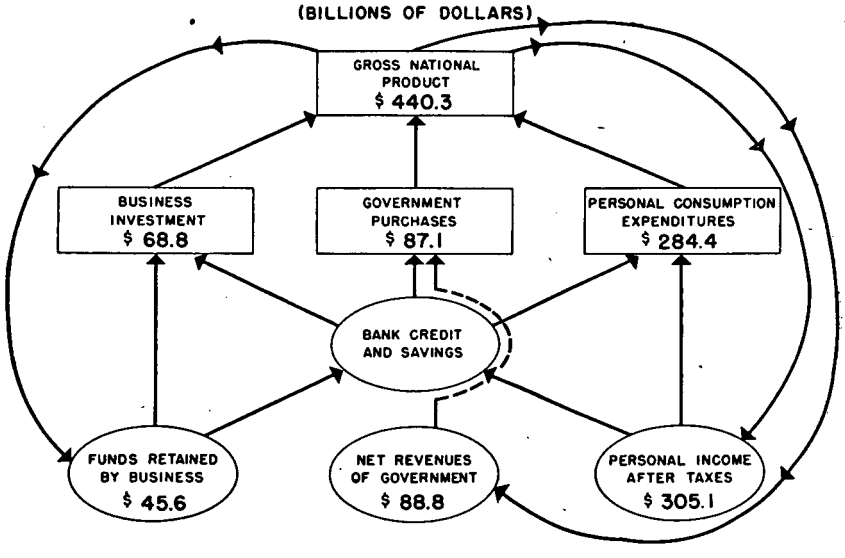
Income and expenditure flow relative to production

Changes in aggregate prices and their impact on economic activity are related to the circular flow of total production, incomes, and expenditures. A cross section of this flow for the United States economy in 1957 is illustrated in the following chart.

CHART I

INCOME AND EXPENDITURES FLOW RELATIVE TO GROSS NATIONAL PRODUCT

YEAR 1957
(BILLIONS OF DOLLARS)



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For the year 1957, the total dollar value of goods and services produced (gross national product) amounted to $440.3 billion. Income and expenditures for the 3 segments of the economy—business, government, and consumers—totaled the same amount.[1] Production, income, and expenditures are equal in total because income flows to some recipient from the sale of production and likewise all production is absorbed by some purchaser. There is not an identity of income and expenditure for each segment of the economy, however, or for the individual units within these segments. Some business firms, governmental units, and individuals spend more than their income, while

[1] The slight difference in total income from production and expenditures arises from statistical discrepancies in measurement, rather than from conceptual difference.

others spend less. The sum of borrowing and use of credit by those with deficits is matched by additions to savings or repayment of debt by those with surpluses.

It follows, then, that an increase in prices will be accompanied by a similar rise in incomes and expenditures per unit of production. There must also be an equivalent increase in the supply and/or turnover of money per unit of production. The problem is to determine for any particular period which are the causal factors and which are the resultant factors.

The same problem exists in determining the impact of prices on economic activity. Do rising prices stimulate economic growth and stability, or is this better achieved with stability or decline in prices as a whole? The answers depend on how price changes affect distribution of purchasing power to the various groups in the economy and the desire to use bank credit and savings.

Many observers make the mistake of looking at only one segment in the total flow without regard to the other segments. For example, some people advocate a price policy to stimulate consumption without regard to its impact on business investment and total production. They would encourage a rise in wage rates without increasing prices, or a reduction in prices without changing wage rates. To the extent that this cannot be fully offset by equivalent cost savings in the form of less man-hours, materials, or capital equipment per unit of production, there is a reduction in profits. This requires a cut in either dividends (included in personal income on the flow chart) or undistributed profits (included in funds retained by business). The net effect on the economy depends on how much business investment spending is curtailed as against a rise in consumer spending. There would be a depressing effect on total production if the marginal amount of business investment eliminated would have been financed on credit and savings to a greater extent than the marginal amount of consumption expenditures added.

On the opposite side are those who advocate a price policy to stimulate investment without regard to its impact on consumption. They would urge that an increase in prices or reduction in costs be drained off entirely in higher profits to encourage business investment expenditures. If prices are rising rapidly, there could be a short-run tendency for both business and consumers to use more bank credit and savings to boost spending by both business and consumers. For those on fixed incomes or those using previously accumulated savings in dollar repayment form, however, rising prices will curtail buying power and probably spending in real terms. It is the net effect on total production that is important.

These short-run impacts could be followed by longer run impacts in the opposite direction. For example, rising prices could stimulate speculative buying in the short run, only to be followed by reduced buying once the speculative fever builds up to a collapse. Short-run stimulation of investment spending without an equivalent increase in consumption could lead to later declines in investment expenditures if capacity increases outrun consumption. Higher wage rates at the expense of profits could stimulate consumption without immediately affecting investment adversely, but later on there could be a serious curtailment of investment spending as a result of lower profits.

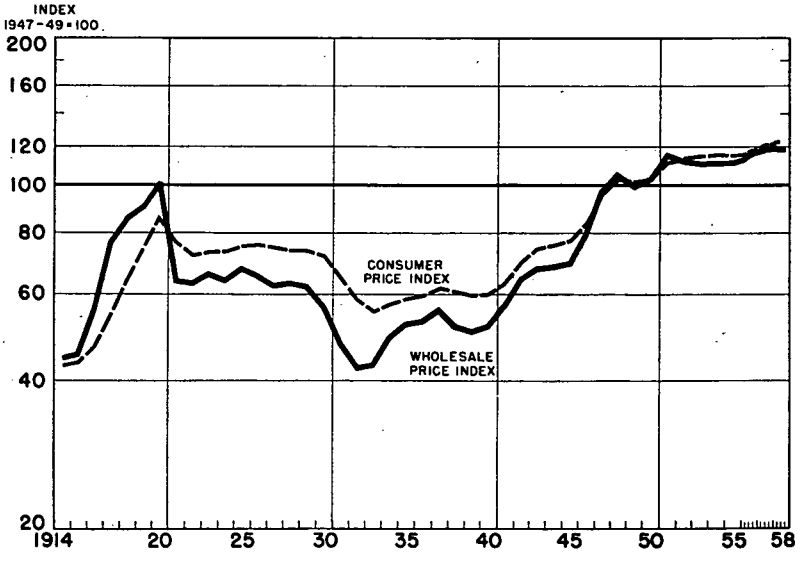
There are also those who advocate single-purpose policies on bank credit and the money supply, without regard to their impact on total economic activity. Since prices cannot rise without an increase in the quantity and/or turnover of money per unit of production, they would attempt to control prices through restrictions on availability of credit regardless of the impact on the flow of total economic activity. Such a policy is valid if rising prices are initiated by excessive use of credit and money, but it could restrict economic growth in cases where the price rise is generated elsewhere and credit is merely validating the rise. In this instance, it would be better to attack the initiating factors in the price rise.

These examples of circular flow and identity relationships are sufficient to indicate the complex nature of price changes and their impact on economic growth and stability. To determine what factors have been primarily responsible for price changes in the past, it is necessary to study the patterns of prices, income, expenditure, and money supply relationships.

General price movements since 1914

CHART II

WHOLESALE AND CONSUMER PRICES[A]



(A) ANNUAL FIGURES 1914-1955; THIRD MONTH OF QUARTER BEGINNING MARCH 1956
SOURCE: BLS

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Wholesale and consumer prices (1947–49=100)

Year	Wholesale price index	Consumer price index	Year	Wholesale price index	Consumer price index
1914	44.2	42.9	1941	56.8	62.9
1915	45.1	43.4	1942	64.2	69.7
1916	55.6	46.6	1943	67.0	74.0
1917	76.3	54.8	1944	67.6	75.2
1918	85.2	64.3	1945	68.8	76.9
1919	90.0	74.0	1946	78.5	83.4
1920	100.3	85.7	1947	96.4	95.5
1921	63.5	76.4	1948	104.4	102.8
1922	62.8	71.6	1949	99.2	101.8
1923	65.4	72.9	1950	103.1	102.8
1924	63.6	73.1	1951	114.8	111.0
1925	67.2	75.0	1952	111.6	113.5
1926	65.0	75.6	1953	110.1	114.4
1927	62.0	74.2	1954	110.3	114.8
1928	62.9	73.3	1955	110.7	114.5
1929	61.9	73.3	1956—March	112.8	114.7
1930	56.1	71.4	June	114.2	116.2
1931	47.4	65.0	September	115.5	117.1
1932	42.1	58.4	December	116.3	118.0
1933	42.8	55.3	1957—March	116.9	118.9
1934	48.7	57.2	June	117.4	120.2
1935	52.0	58.7	September	118.0	121.1
1936	52.5	59.3	December	118.5	121.6
1937	56.1	61.4	1958—March	119.7	123.3
1938	51.1	60.3	June	119.2	123.7
1939	50.1	59.4	September	119.1	123.7
1940	51.1	59.9			

Source: Bureau of Labor Statistics.

The movement of prices since 1914 is shown in the above chart and table for wholesale and consumer prices. Substantial price inflation has been confined to the two war and immediate postwar periods of 1915–20 and 1940–48. Price control and rationing temporarily stemmed the rise during 1943–45, but the dammed-up forces broke loose in the following 3 years.

There was also a sharp rise in prices after outbreak of war in Korea, but the period was not long enough to cumulate into substantial inflation. Limited war did not create problems similar to World Wars I and II. Prices also rose substantially during 1933–37, but this only made up in part for the previous sharp decline. Our other experience with rising prices has come during 1955–58. This rise has been gradual, but persistent. The nature of the increase has also been different from the earlier periods of price rise.

The only periods of significant price deflation were 1920–21 and 1929–33. During 1921–29, 1937–40, 1948–49, and 1951–54, prices were relatively steady.

Money supply as a factor in general price movements

The inflations of 1915–20 and 1940–45 involved a substantial increase in the money supply relative to the physical quantity of goods and services produced.

Time periods [1]	Money supply versus gross national product in constant dollars (percent increase)			Factors affecting deposits and currency—total banking and monetary system (increase in billions of dollars)				
	Gross national product in constant dollars [1]	Demand deposits and currency	Time deposits	Total deposits and currency	Loans and investments excluding U. S. Government securities	U. S. Government securities less U. S. Treasury balances	Gold and U. S. Treasury currency less Treasury cash	Less: foreign bank deposits, capital, and miscellaneous accounts
Price increase:								
June 1915 to June 1920	13.9	108.1	71.5	18.9	16.3	3.9	.7	2.0
June 1933 to June 1937	44.9	60.1	19.6	15.8	.8	10.4	5.4	.7
December 1940 to December 1945	52.6	142.1	74.7	80.8	5.8	79.6	−.8	3.8
December 1945 to December 1948	−6.7	9.0	18.7	18.3	20.8	−5.7	5.4	2.2
December 1949 to December 1951	16.8	12.0	4.8	16.2	21.3	−2.4	−1.6	1.1
December 1954 to December 1957	12.1	3.1	18.4	18.0	31.9	−13.0	1.3	2.2
Price stability:								
June 1921 to June 1929	57.6	25.9	72.5	18.4	17.8	1.1	1.3	1.8
June 1937 to December 1940	12.2	37.7	7.1	13.4	.5	3.5	11.4	2.1
December 1948 to December 1949	−.1	−.4	1.9	.7	2.5	−.7	.2	1.3
December 1951 to December 1954	6.2	7.9	22.5	23.7	22.7	5.8	−.2	4.5
Price decline:								
June 1920 to June 1921	−8.5	−12.4	4.7	−2.2	−1.4	−.4	.5	.9
June 1929 to June 1933	−30.4	−26.8	−24.3	−14.0	−21.1	4.1	.2	−2.8

[1] Year-to-year comparisons.

From mid-1915 to mid-1920, demand deposits and currency increased 108 percent and time deposits 72 percent. The rise in physical quantity of gross national product amounted to 14 percent according to the Joint Economic Committee.[2] From the end of 1940 to the end of 1945, demand deposits and currency increased 142 percent and time deposits 75 percent. Gross national product in constant dollars increased 53 percent.

Expansion of deposits and currency during 1915–20 largely reflected increased bank credit to business. This was 4 times as much of a factor as net bank credit to the United States Government. During 1940–45, by contrast, the expansion of deposits and currency came almost entirely from net bank credit to the Government. Bank credit to business and individuals was a minor factor.

There is no question that use of bank credit to finance increased money expenditures relative to physical production was the major factor in these two inflation periods. The further inflation from the end of 1945 to the end of 1948 was not associated with much increase in the money supply relative to production. Demand deposits and currency increased 9 percent and time deposits 19 percent, while gross national product in constant dollars declined 7 percent. Increased

[2] Joint Economic Committee, Productivity, Prices, and Incomes (1957)—table 1, p. 85.

bank credit to business was responsible for the moderate rise in deposits and currency. Idle deposits accumulated during the war, coupled with deferred demand for goods previously in short supply, underwrote the inflation of 1945–48. Other factors also contributed, as will be shown later.

The other periods of generally rising prices have been 1933–37, 1949–51, and 1954–57. From June 1933 to June 1937, demand deposits and currency increased 60 percent and time deposits 20 percent, compared with a rise of 45 percent in constant dollar gross national product. The increase in deposits and currency arose from United States Government deficit financing through the banks and from the inflow of gold from abroad. In view of the vast amount of idle resources and insufficient demand during this period, this increase in the money supply cannot be blamed for the price rise. In part, the price rise was a recovery from the sharp deflation of prices and the money supply during 1929–33.

The most recent experience with rising prices in 1949–51 and 1954–57 is quite different with regard to the money supply than earlier periods. In both instances, the increase in money was not as great as the rise in quantity of production. Increased velocity of turnover in the money supply was the accompanying factor to the price rise.

From December 1949 to December 1951, demand deposits and currency increased 12 percent and time deposits 5 percent, compared with a rise of 17 percent during 1949–51 in constant dollar gross national product. Bank credit to business and consumers accounted for the rise in deposits and currency.

From December 1954 to December 1957, demand deposits and currency increased only 3 percent and time deposits 18 percent. Gross national product in constant dollars rose 12 percent between 1954 and 1957. Bank credit to business and consumers expanded sharply, but the impact on deposits was lessened by liquidation of United States Government securities held by banks.

The periods of relative stability or slight decline in aggregate prices show mixed results for change in money supply relative to quantity of production. From June 1937 to December 1940, demand deposits and currency increased 38 percent and time deposits 7 percent compared with a rise of only 12 percent in constant dollar gross national product from 1937 to 1940. The expansion of deposits arose largely from gold inflow, aided to some extent by United States Government borrowing from the banking system. As in 1933–37, the existence of idle resources and insufficient demand indicated that growth in the money supply was not a factor in upward pressure on prices. The increased money supply was offset by a lower rate of turnover.

For the 1921–29 period, the reverse was true. Demand deposits and currency rose only 26 percent from June 1921 to June 1929, and time deposits 73 percent. Gross national product in constant dollars increased 58 percent. The expansion of bank deposits and currency arose from bank credit to business and individuals.

Since World War II, our only experience with stability of aggregate prices has been in 1948–49 and 1951–54. From December 1948 to December 1949, there was virtually no change in deposits and currency. Product in constant dollars was also about the same for the year 1949 as for 1948. The results of this short period were colored by the recession in business activity.

From December 1951 to December 1954, there was a slightly larger increase in the money supply than in physical product. Demand deposits and currency increased 8 percent and time deposits 23 percent. Gross national product in constant dollars rose 6 percent from 1951 to 1954. The greater increase in deposits and currency occurred in the year 1954. Deposits and currency continued to rise in that year, while production declined. For the period as a whole, the expansion of bank deposits and currency came largely from bank credit to business and consumers with a mild assist from bank purchases of United States Government securities.

The only periods of significant price decline since 1914 were in 1920–21 and 1929–33, when severe drops occurred in both the quantity of money and production. From June 1920 to June 1921, demand deposits and currency declined 12 percent, but time deposits increased 5 percent. The year-to-year decline in production amounted to 9 percent.

From June 1929 to June 1933 there was a decline of 27 percent in demand deposits and currency, and 24 percent in time deposits. Gross national product in constant dollars was 30 percent lower in 1933 than in 1929. The collapse of the money supply was both a symptom and cause of the unusually severe decline in physical volume of business activity. Reduced bank credit to business and individuals was the factor in lower deposits, both in 1929–33 and 1920–21. The decline in the money supply was about the same as in production, however, so that reduced velocity of turnover in money was a factor in lower prices.

It is clear that changes in the quantity of money relative to physical output are not enough in themselves to explain the changes in price level, except during the two war periods. Changes in the rate at which money is used are at least of equal, if not greater, importance in the other periods.

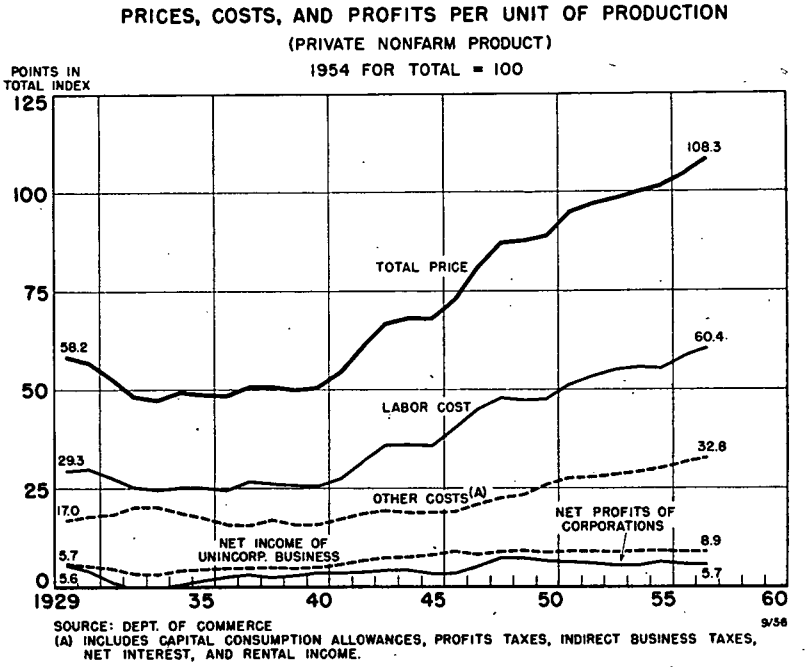
Costs and profits as a factor in general price movements

The money supply is only one facet of the change in prices. It can be either a cause or a symptom of price change. Of equal importance is the change in costs and profits associated with general price movements. In this case, also, the cause and effect relationship is not always clear.

The chart below shows for the private nonfarm economy (total economy exclusive of government and agriculture) the average price of all goods and services produced, and the breakdown of costs and profits per unit produced for the period 1929–57. Government product is excluded because it consists solely of Government-employee compensation, and adequate measures of employee product are not available from which to compute unit labor cost. Farm product also is excluded because it differs markedly from nonfarm product and can be measured separately in terms of costs and profits per unit of production.

The figures are derived from national product and income accounts. Revenues from gross national product are divided by the physical volume of production (gross national product in 1954 prices) to obtain prices, costs, and profits per unit of production. The index of total price is expressed in terms of 1954=100, and the component costs and profits are shown as points in the total price index. This price index reflects the changing composition of all goods and services in addition to price changes for a fixed market basket of selected items, such as are measured in the Consumer Price Index.

CHART III



Prices, costs, and profits per unit of production, private nonfarm product,

	Total price (Index 1954=100)	Labor cost	Other costs [1]	Net profits of corporations	Net income of unincorporated business
		Points in total index			
1929	58.2	29.3	17.0	5.6	5.7
1930	56.9	29.7	17.9	4.2	5.3
1931	52.6	27.5	18.4	1.0	4.5
1932	48.2	25.2	20.4	−2.2	3.3
1933	47.3	24.6	20.3	−2.5	3.2
1934	49.3	25.1	18.5	.3	4.1
1935	48.8	25.1	17.3	1.6	4.4
1936	48.6	24.4	15.7	2.5	4.6
1937	50.5	26.7	15.6	3.1	4.7
1938	50.6	26.0	16.7	2.3	4.8
1939	49.9	25.6	15.7	2.8	4.7
1940	50.4	25.4	15.6	3.7	4.9
1941	54.3	27.4	17.2	3.5	5.5
1942	60.9	32.0	18.6	3.8	6.5
1943	66.6	36.0	19.4	4.2	7.4
1944	68.0	36.1	18.8	4.2	7.5
1945	67.9	35.9	18.8	3.2	8.0
1946	72.8	40.3	18.9	3.5	9.1
1947	81.1	45.0	20.9	5.1	8.2
1948	86.9	48.0	22.6	7.3	8.9
1949	87.6	47.4	23.5	7.1	9.0
1950	88.8	47.7	26.0	6.5	8.6
1951	94.9	51.3	27.7	6.3	8.9
1952	97.2	53.4	27.9	6.0	8.9
1953	98.7	55.0	28.6	5.4	8.7
1954	100.0	55.6	29.3	5.3	8.9
1955	101.4	55.2	30.2	6.3	9.0
1956	104.5	58.3	31.5	5.9	8.9
1957	108.3	60.4	32.8	5.7	8.9

[1] Includes capital consumption allowances, profits taxes, indirect business taxes, net interest, and rental income. Does not include business transfer payments, net subsidies of Government enterprises to nonfarm business, and the statistical discrepancy between measures of income and production. Total costs, net profits, and net income of unincorporated business will differ from total price by the total of these excluded items.

[2] Excludes profits and losses from inventory revaluation.

Source: Indexes computed by the author from Department of Commerce data on national income and product.

Labor cost (employee compensation) is the largest element in total price, currently accounting for 60.4 points in the 1957 price index of 108.3 (or 56 percent). Other costs, which amount to 32.8 points (or 30 percent of price) include net interest, rents, depreciation and other capital consumption allowances, indirect business taxes, and profits taxes.[3] Some people object to inclusion of profits taxes as a cost, on the basis that employee income is shown before income taxes. The answer to this objection is that profits after taxes represent income before taxes to stockholders. To the extent that dividends are paid out of profits after taxes, an income tax is collected on the stockholder. To the extent that profits after taxes are retained in the business and the stockholders realize capital gains from increased stock values, a capital gains tax is collected.

Corporation profits after taxes[4] in 1957 accounted for only 5.7 points (or 5 percent) of the total price index. Income of unincorporated business amounted to 8.9 points (or 8 percent) of the price.

Despite the low proportion of income accruing to the owners of nonfarm business, the charge is often made that high profits are responsible for high prices generally. This is obviously not supported by either the level or movement of unit profits since 1929. The only

[3] Not included in other costs are these minor miscellaneous items in gross national product—net subsidies of Government enterprises, business transfer payments, and the statistical discrepancy between gross national product and gross national income.

[4] These profit figures exclude inventory profits and losses, which are not recognized as income produced in national income accounting.

period of significant advance in unit profits after taxes was during 1946–48 when high demand pressed against available production.

The rise in prices from an index of 50 in 1940 to 108 in 1957 was accounted for almost entirely by higher unit costs. Labor cost contributed 35 points in the total rise of 58 points (or 60 percent). Other costs accounted for 17 points (or 30 percent). The remaining 6 points (or 10 percent) represented increased corporation net profits and income of unincorporated business.

As with the money supply per unit of production, this chart does not by itself prove conclusively what is cause and what is effect, or who is responsible. Higher prices yield higher unit costs and/or higher unit profits. The reverse is also true—higher unit costs and/or higher unit profits yield higher prices. Higher labor costs may be the fault of either poor management or monopoly labor power. Increases in other costs may be associated with an increased Government share in production, with more capital equipment and borrowing relative to production, or with higher prices for both Government purchases and capital equipment. If the quantity of capital equipment is excessive, management may not be operating most efficiently. If prices are higher, labor may be at fault for forcing higher costs for these items.

During 1940–43, a good case can be made for the assumption that excess demand financed by credit was the initiating force in the rise of prices and unit costs. In 1945–48, excess demand and rising unit labor costs reinforced one another on the up side. Rising unit profits reflected strong demand and elimination of wartime restrictions. Under such conditions, management resistance to labor demands was not as strong. In most cases, the increased costs could be passed on in higher prices. This in turn led to higher labor demands, and the upward cycle received continuous reinforcement. The terms "wage-price" and "price-wage spirals" came into existence.

Since 1948, after-tax corporation profits per unit of production have actually shown a net decline, and unit income of unincorporated business has remained unchanged. Excess-profits taxes held down unit profits after taxes during 1950–53. There has been little change in unit profits since 1953, either before or after taxes. For the total economy, it is clear that profits per unit of production have not been a factor for several years in rising prices. Net profits have been not only a small portion of the total price, but have also failed to rise relative to production. The same is true for net income of unincorporated business.

Unit labor cost, on the other hand, has risen substantially since 1950. The price rise in 1950–51 was not initiated by higher unit labor cost, but by excess demand financed through increased turnover of the money supply. Higher unit labor costs in 1951 assured continuation of the higher price structure, however, just as in the 1915–20, and 1940–48 inflations.

Since 1951, rising unit labor costs have been a major causal factor, rather than result, of price increases for private nonfarm production. These costs have accounted for 9 points of the 13-point rise (or 68 percent) in the price index. The remainder consists of higher unit costs for depreciation, indirect business taxes, and interest.

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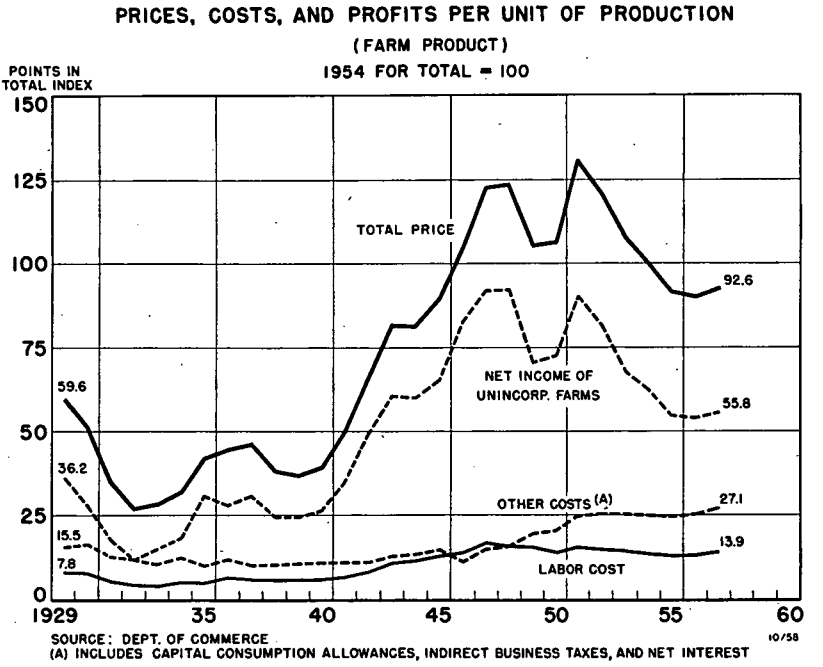
In contrast with a rising average price for nonfarm output, the average price for farm production has declined sharply since 1951.

CHART IV



Prices, costs, and profits per unit of production farm product

	Total price (Index 1954=100)	Labor cost	Net income of unincorporated farms[1]	Other costs[2]		Total price (Index 1954=100)	Labor cost	Net income of unincorporated farms[1]	Other costs[2]
		Points in total index					Points in total index		
1929	59.6	7.8	36.2	15.5	1944	81.4	11.6	60.0	13.1
1930	51.3	7.8	27.4	16.3	1945	89.5	12.8	65.3	14.7
1931	35.1	5.2	17.9	12.5	1946	104.9	13.9	82.8	11.0
1932	26.9	4.0	11.6	11.6	1947	122.8	16.7	92.0	14.8
1933	28.1	3.8	14.9	10.3	1948	123.6	15.8	92.2	15.8
1934	32.0	5.0	18.1	12.1	1949	105.2	15.7	70.6	19.3
1935	42.1	4.7	30.5	9.8	1950	106.2	13.9	72.5	20.3
1936	44.4	6.1	28.0	11.8	1951	130.4	15.5	90.2	24.9
1937	45.9	5.6	31.9	10.0	1952	121.0	15.0	81.6	25.4
1938	37.8	5.5	24.4	10.1	1953	107.4	14.4	68.1	25.4
1939	36.6	5.6	24.3	10.4	1954	100.0	13.4	62.5	25.0
1940	39.2	5.9	26.1	10.6	1955	91.6	12.8	55.0	24.6
1941	49.8	6.7	34.6	10.8	1956	90.1	13.1	54.1	25.1
1942	65.5	8.1	49.1	10.9	1957	92.6	13.9	55.8	27.1
1943	81.5	10.9	60.4	12.5					

[1] Excludes profits and losses from inventory revaluation.
[2] Includes capital consumption allowances, indirect business taxes, and net interest. Does not include farm corporate profits after tax, profits taxes, and subsidies of government enterprises to farms. Total costs and net farm income will differ from total price by the total of these excluded items.

Source: Indexes computed by the author from Department of Commerce data on farm income and product.

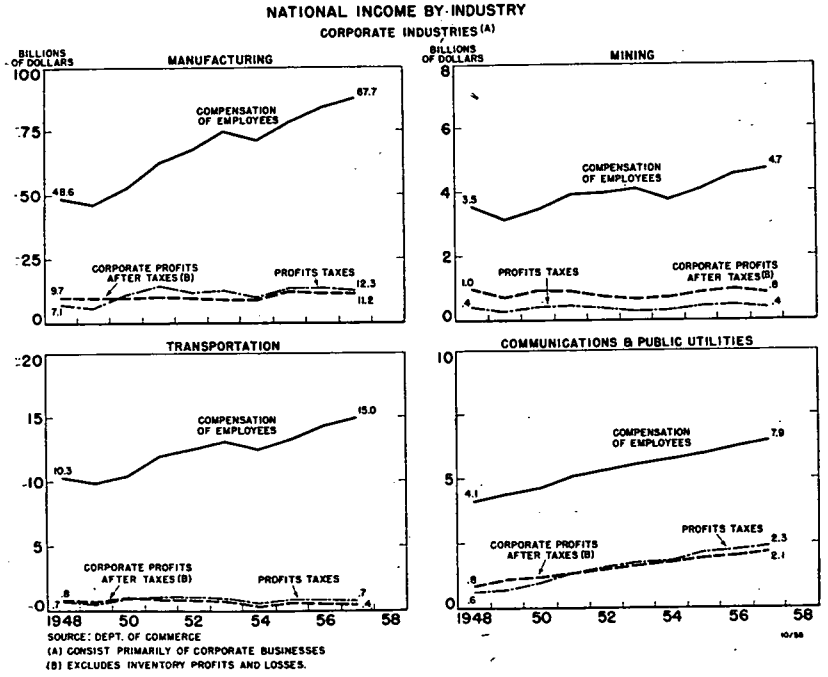
Unit labor cost has remained relatively stable throughout this period. Other costs have increased only slightly per unit of output. Included in these other costs are depreciation, indirect business taxes and interest. The price decline was thus concentrated in the unit net income of farmers. There was a 38-percent drop in such income between 1951 and 1957.

It should be noted, however, that the reverse situation was true during 1940–48. Rising farm prices in this period were associated primarily with higher net income to farm proprietors per unit of production.

As noted in the earlier examples of cost-price-volume relationships, agricultural products are in a different category than others. Supplies cannot readily be adjusted to demand so that wide swings in prices result. Costs are a relatively small proportion of the price because production is accomplished to a large extent with capital equipment, in combination with labor of the proprietor and his unpaid family help.

There is a great deal of variation also within the nonfarm industry groups. The following charts show the comparison of employee compensation with owners' income. Data are not published in the national income accounts for physical volume of output, or for such costs as depreciation and indirect business taxes. A direct comparison of prices, costs, and profits per unit of production for these groups is thus not possible. The national income accounts do provide, however, an industry breakdown of income items.

CHART V



National income by industry—Corporate industries [1]

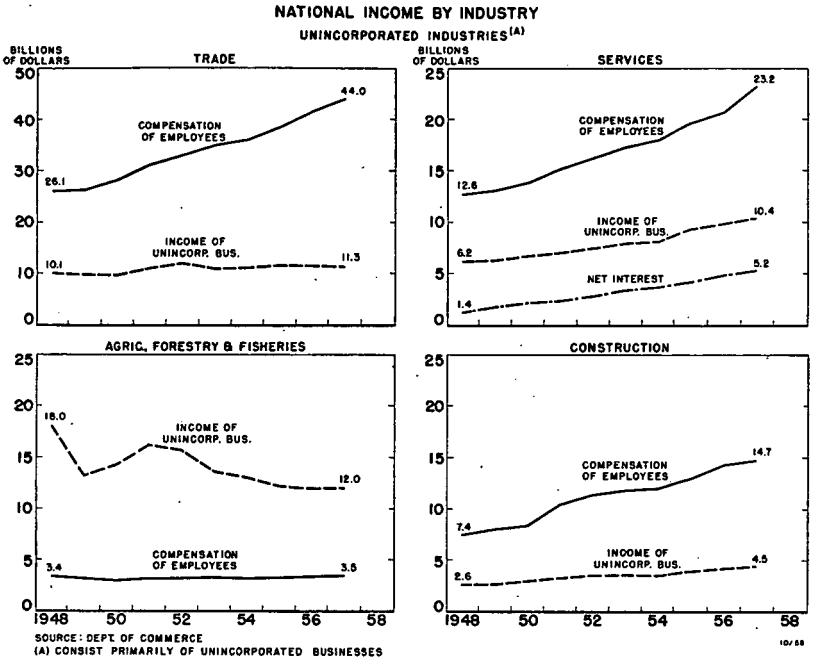
[In billions of dollars]

	Manufacturing			Mining			Transportation			Communications and public utilities		
	Compensation of employees	Corporate profits after taxes [2]	Profits taxes	Compensation of employees	Corporate profits after taxes [2]	Profits taxes	Compensation of employees	Corporate profits after taxes [2]	Profits taxes	Compensation of employees	Corporate profits after taxes [2]	Profits taxes
1948	48.6	9.7	7.1	3.54	0.97	0.40	10.29	0.79	0.68	4.12	0.81	0.58
1949	46.1	9.6	5.7	3.13	.69	.26	9.88	.66	.47	4.38	1.06	.67
1950	52.5	9.5	10.9	3.44	.92	.40	10.42	.98	.90	4.62	1.15	.94
1951	62.4	10.0	14.4	3.91	.90	.45	11.97	.84	1.04	5.11	1.29	1.34
1952	67.4	9.5	11.6	3.97	.72	.35	12.51	.81	1.02	5.61	1.44	1.54
1953	74.8	9.0	12.4	4.08	.65	.27	13.08	.69	.92	6.13	1.60	1.72
1954	71.1	8.8	9.6	3.74	.69	.29	12.47	.30	.59	6.46	1.71	1.78
1955	78.0	11.9	13.1	4.06	.86	.42	13.25	.58	.84	6.85	1.90	2.10
1956	83.9	11.3	13.2	4.53	.96	.47	14.32	.51	.82	7.44	1.99	2.22
1957	87.7	11.2	12.3	4.68	.82	.36	14.99	.42	.72	7.92	2.13	2.34

[1] Consist primarily of corporate businesses.
[2] Exclusive of inventory profits and losses.

Source: Department of Commerce.

CHART VI



National income by industry—Unincorporated industries [1]

[Billions of dollars]

	Trade		Services			Agriculture, forestry, and fisheries		Construction	
	Compensation of employees	Income of unincorporated businesses	Compensation of employees	Income of unincorporated businesses	Net interest	Compensation of employees	Income of unincorporated businesses	Compensation of employees	Income of unincorporated businesses
1948	26.15	10.06	12.57	6.17	1.37	3.35	18.03	7.44	2.61
1949	26.43	9.81	12.95	6.24	1.66	3.18	13.19	7.27	2.66
1950	28.33	9.57	13.82	6.68	2.12	3.01	14.27	8.35	3.00
1951	31.23	10.94	15.14	7.01	2.36	3.18	16.63	10.37	3.28
1952	32.99	11.20	16.22	7.45	2.72	3.22	15.65	11.26	3.51
1953	35.09	10.88	17.30	7.99	3.39	3.24	13.60	11.80	3.58
1954	36.09	10.99	17.96	8.13	3.63	3.18	13.03	12.02	3.54
1955	38.62	11.51	19.61	9.38	4.18	3.23	12.13	12.93	4.00
1956	41.66	11.35	21.58	9.87	4.81	3.35	12.02	14.30	4.26
1957	44.01	11.30	23.17	10.38	5.21	3.45	11.99	14.72	4.50

[1] Consist primarily of unincorporated businesses.
Source: Department of Commerce.

The first group of four charts shows employee compensation, corporate profits after taxes, and profits taxes for the industries with predominately corporate business. These include manufacturing, mining, transportation, and communications and public utilities. The second group of four charts shows employee compensation and proprietors' income for the industries with predominately unincorporated business. These include trade, service, construction, and agriculture, forestry, and fisheries. In the panel for the service industry, a line

has also been included for net interest payments because they are a sizable item for this industry. The interest payments are concentrated largely in private households, which are included in the service industry.

In manufacturing, mining, and transportation, employee compensation has climbed rapidly since 1948, while profits after taxes have risen only slightly or declined. Manufacturing shows a rise of $39.1 billion in employee compensation, compared with only $1.5 billion in profits after taxes. This is the industrial group so often accused of administering price increases in this period to obtain higher profits. Mining shows a rise of $1.14 billion in employee compensation, compared with a decline of $0.15 billion in profits after taxes. In transportation, employee compensation increased $4.7 billion, while profits declined $0.4 billion. The one exception is communication and public utilities, where a rise of $3.8 billion in employee compensation was accompanied by an increase of $1.3 billion in profits after tax. Prices in this industry are subject to Government regulation.

In the group dominated largely by small unincorporated businesses, service and construction have had sizable increases in both total employee compensation and proprietors' income. The service industry shows a rise of $10.6 billion in employee compensation and $4.2 billion in proprietors' income. In construction, employee compensation increased $7.3 billion and proprietors' income $1.9 billion. The trade segment, on the other hand, shows an increase of only $1.2 billion in proprietors' income, compared with $17.9 billion in employee compensation. Corporations, which are of some importance in the trade total, had a substantial percentage decline in profits.

Farms, which account for the bulk of the agriculture, forestry, and fisheries segment, have already been covered on a unit cost and profit basis. For this combined group of agriculture, forestry and fisheries, proprietors' income declined $6 billion, while employee compensation showed virtually no change. Reduction in hours worked and number of employees offset the rise in wage rates.

Not shown are the other industries in the national income total—the finance, real estate, and insurance group, government and government industries, and "rest of the world." The latter consists of corporate profits after taxes and net interest. Government represents only the compensation of government employees. The finance, real estate and insurance group is a mixture of corporate and unincorporated business. In addition, it is complicated by rental income and interest in the real estate segment.

The national income accounts show conclusively that insofar as costs and profits are concerned, the primary upward push on nonfarm prices since 1948 has been caused or reflected largely in higher unit labor costs. Neither unit profits after taxes nor net income of unincorporated businesses has been a factor in the rise for the economy as a whole since 1948.

Since 1951, other data indicate that the upward pressure on prices has come largely from the cost side. The money supply has not been expanded unduly. There has not been any general excess demand relative to productive resources. If there had been, corporate profits and income of unincorporated business would have benefited. Only in selected areas of producers' durable goods and construction has excess money demand pressed against capacity for occasional periods.

PRICE POLICIES FOR ECONOMIC GROWTH AND STABILITY

There is no basis in fact for assuming that rising prices are a necessary stimulus to economic activity. The type of increase in quantity of goods and services produced that is stimulated by rising prices is likely to be of a short-run and unstabilizing nature. It induces speculative buying of commodities, real estate, and stocks in anticipation of further price increases.

Rising prices were not necessary during the two world wars or Korea in order to obtain maximum production. Government demands superimposed on civilian demands were enough to assure maximum use of resources. Rising prices also were not necessary in the postwar periods of 1918–20 and 1945–48. Civilian demands were large enough to take up the slack of declining government demands. Of course, the economy did not operate with the stresses and strains of wartime, but most people would agree that such extreme operations are not desirable in peacetime.

A philosophy of "reflating" prices as a stimulus to business activity was tried during 1933–37. The results of this period in terms of resource utilization are so poor, however, that it is doubtful that rising prices had much beneficial impact on the volume of activity.

There is also no basis in fact for assuming that increases in wage rates and fringe benefits for the economy as a whole should exceed the rate of advance in output per employee-hour. Real purchasing power is increased only by expanding production in constant dollar values. Excess wage and fringe packages either raise prices or create unemployment if the market will not buy the same, or greater, quantities at the higher prices. As previously stated, rising prices are not necessary to achieve real economic growth and stability.

The Federal Government already has ample powers to keep swings in business activity to reasonable amplitude. It can do so through credit, tax, and expenditure policies to influence the flow of income, spending, and production. These powers should be used to promote orderly growth, rather than to put the economy under inflationary pressure from attempts to move faster in monetary terms than physical output permits.

There is a growing reluctance to use these powers fully to encourage expansion or stop a decline. This reluctance stems from a fear that rising prices will create greater problems at a future date. It is essential, therefore, that the underlying causes of general and sustained price increases be dealt with so that full application can be made of credit, tax, and expenditure policies to promote optimum economic growth and stability.

PRICE STABILITY AND RETAILING

Ben B. Seligman, Director of Research, Retail Clerks International Association, AFL–CIO

The recent shift in the state of our economic health has highlighted in striking fashion the area of prices and economic growth. This underscores more than anything I know the uncanny prescience with which this committee has been able to successfully point up the central problems that face us.

Only a year ago, we were in the midst of the third of the postwar recessions. Production, sales, personal income, and capital investment had begun to decline in mid-1957 so that by the end of the year we heard demands for decisive, positive action to rectify a condition in which unemployment was beginning to reach the 5 million mark. The index of industrial production had dropped from a 1957 high of 148 to 128 in March 1958. The construction industry, a primary factor in an expanding economy, was beginning to falter. Outlays on private building dropped from a high of some $35 billion in 1957 to roughly $33 billion by mid-1958. What was disturbing in this was the fact that industrial construction, outlays on plants and factories, continued to decline, suggesting a persistent mood of pessimism in the area of capital investment. Total business investments in new plants were down $6½ billion, with the prospect that they would continue to decline at least another $3 billion.

The auto and steel industries did not appear to have recovered their 1955 elan, burdened as they were with excess capacity. The burden of redundant equipment was a significant factor inhibiting a recovery in these industries. It seems a matter of general agreement now that the vast 1955–56 capital boom was at the root of the recession. After World War II, manufacturing enterprises were in short capacity, at least as measured by a burgeoning postwar effective demand. Facilities were increased between 1947 and 1955 at the rate of about 6 percent a year. Between 1955 and 1957 capital investment leaped ahead by 40 percent, with a clear-cut direct impact on prices, forcing some up as much as 20 percent. With retirements of obsolete equipment, the net increase in capacity was perhaps 10 or 12 percent, a substantial jump nevertheless. But during the same 2 years, output increased only about 4 percent, explaining a good deal of the projected cutbacks in expansion plans for 1959.

Now, many of the indicators have begun to turn upward again. While corporate profits for the second quarter of 1958 were still below the same period of 1957, the rate of decline began to slacken, so that year-to-year earnings did not appear as unfavorable as one might ordinarily believe. Furthermore, orders for machine tools were beginning to rise and some of the leading indicators which Dr. Geoffrey Moore, of the National Bureau of Economic Research, has been using with such telling effect, have displayed signs of moving

upward again. Retail sales in most of the marketing centers have been fairly steady, although the Federal Reserve Board recently reported dollar volume for the first 6 months of 1958 still 3 percent under a year ago. It is well worth noting that in the industrial centers such as the Chicago and Cleveland Federal Reserve districts, department store sales have not recovered as rapidly as elsewhere.

Nevertheless, there seems to have been a resurgence of concern with rising prices once more. This was exemplified in the recent increase in rediscount rates. Yet it appears almost indecent to raise this question when we are just beginning to shake the effects of the last recession. There are still substantial numbers of unemployed workers and gross private domestic investment still hovers around the $48 billion to $50 billion mark as compared with a high of $68 billion in 1956. Nevertheless, the index of industrial production did move up in May and June while both gross national product and personal income recovered some of the losses earlier in the year.

As usual, the inflationary tag is being placed on wages. The argument, as recently propounded in the pages of the New York Times (August 3, 1958) is that wages continued to rise during the slump. Much of this is poorly grounded, however, for conclusions are being drawn from alleged facts concerning wage rates in certain industries without regard to the impact that the recent decline may have had on labor's total purchasing power. Average weekly earnings (in 1957 prices) in durable goods manufacturing, according to the Council of Economic Advisers, dropped from a high of well over $90 at the beginning of 1957 to a low of about $85 in the early part of this year. The recovery thus far has been quite modest. If one points to the remarkable way in which personal income was sustained, it is quite evident that this phenomenon would not have manifested itself without the supporting strength of rising farm income and Government transfer payments.

More significant in an impending inflationary situation perhaps is the continuing Federal budgetary deficit and the impact that a more than adequate monetary supply might have. The deficit for the present fiscal year was estimated at $12 billion, resulting clearly in the injection of additional purchasing power through governmental sources. Whether this will have the effect that some economists say remains to be seen. Milton Friedman's argument in his contribution to the compendium suggests that such action cannot avoid exerting long-run inflationary pressures. But if it is also true that the significant relation is that of money to output, a rise of the latter, particularly in conditions of underutilization of plant and resources, can make certain that a theoretically inflationary impact need not come about. More immediately, I should be tempted to agree with Dr. Friedman's conclusion that there are distinct limits to the possibility of controlling price movements through changes in the supply of money (compendium, p. 251).

Fears have been recently expressed that the $8¼ billion expansion in bank loans and investments for the first half of the year will facilitate a great rise in prices once the economy is able to shake loose permanently from recent doldrums. The support of the Government bond market which the Federal Reserve System entered upon recently will also, it is argued, contribute to inflationary pressure. What evi-

dently happened was an unloading of Treasury obligations, causing Government bond prices to sag even though there seemed to be no inherent reason for this aside from the fact that speculators were discouraged by improved economic conditions. The open market committee's action and support of Government bonds older than one year adds an additional source of money which some fear will contribute to the inflationary push.

But such diagnoses do not come to grips with the genuinely critical issues of price movements. While I do not wish to discuss at great length the problem of administered prices, I must agree with my colleagues in the AFL–CIO and in some academic quarters, that the administrative capability of setting a price for commodities without any direct relationship to market conditions is a very significant question when evaluating price problems. This certainly seems a good deal more significant than the more recondite matters of the available supply of money or the state of the security market. It is only necessary, I think, to call attention to the recent increases in steel prices, which most reasonable men will acknowledge can only result in giving the price ratchet another twist. It is ironic that industry spokesmen should assert that these increases, averaging about $4.50 a ton, would not have a harmful impact on prices. Edwin Dale, Jr., of the New York Times, reported several days after the announced price rise that since steel was but a relatively small component of most fabricated goods a $4.50 per ton average increase would not create any general havoc. The comment is particularly ironic because the same informed sources that advised Mr. Dale have been known to reflect adversely on a 6-cent-an-hour increase in wages.

It is increasingly recognized that the ratio of wage cost to total output is a good deal smaller than we have been led to believe. If the wages of production workers in manufacturing industry is 38 percent of the value added in that sector (as of 1954), what would the ratio be if the base were the total inflow of materials, fuel, depreciation, and the like? Existing data do not permit even a good guess at this. I suppose what is needed is an input-output analysis to show the flow of resources and the relationship of direct labor cost to total resource utilization. A recent Prentice-Hall survey as reported in the Washington Post indicated that unit labor costs in real terms in the hard goods industries went up 16 percent in the 1948–58 decade—a good deal less than the 23.9-percent increase in the BLS Consumer Price Index for the same period. This suggests that the attribution of price increases solely or largely to labor is not completely accurate. As William Benton recently warned there is an excessive emphasis on labor as the cause for inflationary pressures. A dispassionate examination of the facts would substantiate Mr. Benton's cautionary word, which he had directed to his fellow businessmen in the Committee for Economic Development. Those close to the situation in the steel industry have observed that had prices been reduced in 1957 rather than increased $6 a ton the United States Steel Corp., for example, would still have earned a greater net after taxes than ever before. The steel industry has adjusted its prices upward 23 times in recent years as compared to 10 wage increases. For each dollar of increased wages, revenues in the steel industry were up by $3.23. In July 1957, the United Steelworkers Union estimated that the increased wage

and fringe benefits cost $2.49 a ton. How this justified an increase of $6 a ton in the price of steel is difficult to comprehend.

But it is not difficult to understand that the problems we deal with are not those of the traditional free market. For in reality that market is simply nonexistent. We deal in the major areas of our economy with markets which in no way reflect the characteristics of ease of entry, uniformity of products and resources, full knowledge of conditions, and the competitive vigor that all the economic textbooks reiterate over and over again. We deal rather with markets in industry and in distribution which are circumscribed and controlled by business concerns that have developed an economic capability of predetermining the prices of goods they put up for sale and disposal. In some quarters this is described as the problem of "administered prices" and for want of a more effective description this would appear to be a fairly useful label.

This kind of pricing takes place in a context in which production is carried on by large aggregations of capital organized along corporate lines. As Gardner Means and Adolph A. Berle demonstrated as far back as 1933, ownership and control in these enterprises have been severed. As this economic structure developed, it became possible to combine large quantities of capital and labor to create a huge flow of commodities. Corporate managers would have been derelict in their duties and would have failed to meet their responsibilities to the numerous stockholders investing in their companies had they allowed the output of their enterprises to be subjected to the impersonal influences of the market. There simply was too much at stake to allow classical market theory to prevail. Too much had been committed to fixed capital to allow the exigencies of supply and demand to determine the course of economic events. Uncertainty and risk, predominant features of a market characterized by atomistic business units, were not deemed to be desirable features in a situation where millions of dollars of savings and investment were at stake. Control of the enterprises' fate and sound administration of resources became the quintessential character of the new corporate capitalism. The coordinating instrumentality was no longer Adam Smith's market but the corporate wisdom as expressed through administrative directives.

That prices should be allowed to be set by external forces was now unthinkable. Not only did management deem it desirable to establish the selling price of its output but insofar as it was possible it preferred to "administer" the purchasing prices of the resources it employed in its enterprises as well. It seems obvious that management considered it useful to dictate, if it could, the price paid for raw materials and the price paid for the services of labor. A market in which the supply and demand for labor establishes the wage rate became a fiction to be taught to nascent economists who would then later be required to unlearn the theory. Labor services are inseparable from the person embodying those services; labor as a factor of production provides specific skills and must be able to perform specific tasks to be useful to the enterprise. This demands administration of the price of labor. The question in the past has been: Who shall administer the price paid for labor services? Perhaps this explains why it became essential to have trade-union organization. Insofar as the retail trade is concerned the point is well taken, as I shall shortly specify in fuller fashion.

The foregoing situation underscores the possibility that prices may rise through pressures on the part of sellers. This point was well emphasized by Prof. Abba Lerner's contribution to the committee's compendium. It was pointed out by Professor Lerner that while an employer may say he is innocent of exerting price pressures so long as a constant percentage markup on cost is maintained this nevertheless does not absolve him of some responsibility for the round-robin price-cost sequence. To underscore Professor Lerner's point, it might be well to observe that a constant percentage markup on an ever-increasing base leads to a rapidly rising curve of an almost exponential character rather than a simple positively inclined straight line. That is to say, the possibility of a rapidly accelerated price rise is heightened by the common practice of employing constant percentage markups.

The uncritical use of habitual pricing practices was observed by George Katona almost a decade ago in his Psychological Analysis of Economic Behavior (New York, 1951). A given percentage added to the purchase price and/or cost of manufacture of a commodity to determine the selling price seems to be a not unusual business habit. Actually Dr. Katona noted, price movements come about as a result of what are rigid habits. In large concerns the pricing system is frequently incorporated in memorandums and instruction manuals without regard to the effect that this might have on general price stability. In smaller concerns a traditional markup is added to cost without any effort to determine what the price ought to be in accordance with putative market conditions. Even seasonal sales may follow the law of custom and tradition rather than competition.

The curious thing is that this seemingly unsophisticated price policy contributes to price instability. As Professor Lerner has effectively shown, this can lead to seller's inflation, in which there may be increased expenditure outlays fully in consonance with a lag in buyer's demand. This is his model D (compendium, p. 263) in which we find unemployment and rising prices moving together. Inflation, he says, is caused not by excess demand but by the insistence on the part of sellers to force prices upward. Of course, his dispassionate academic approach compels him to assess equal blame on both unions and corporations, but I would suggest that an empirical testing of the Lerner model would reveal far less culpability on the part of labor than the business community presumes to be the case. Beardsley Ruml has suggested, for example, that the persistent effort of business to recover as much as possible of the corporate profits tax through shifting its incidence via higher prices may have some impact on an upward price movement. Ruml argued that the burden of such taxes is ultimately placed on the consumer up to the point where management feels it has attained a satisfactory ratio of after-tax profits to capital investment.

This complex of pricing problems, of administered techniques and traditional approaches makes the viewpoint advanced by Martin Bailey (compendium, p. 89) somewhat otiose. Mr. Bailey does not find that administered prices in the retail trade are a matter for concern since, he asserts, retail margins are competitive and flexible. In fact, administered pricing, wherever they occurred, were dismissed by him as of no great consequence. Views of this nature, which, in essence, tend to close off discussion, are not especially helpful. The impact that retail pricing has on the entire economy is pervasive, not

merely local. One need but think of escalation and the Consumer Price Index to become aware of the implication that retail prices have for economic stability. One cannot but help agree with Dr. S. C. Hollander (compendium, p. 425) who remarked that retailers' price decisions "constitute a substantial portion of the total price influence upon the overall economy."

Dr. Hollander was quite right in pointing to the markup and the manner in which decisions regarding it are arrived at as a significant factor in the total pricing complex. Various types of retail businesses appear to have developed customary markups which they believe are required to cover operating costs and to provide an adequate return. Thus, department stores operate at margins of between 32 and 36 percent, food stores at about 20 percent, variety chains at about 39 percent, and furniture stores at margins of frequently close to 100 percent. Now, when business habitually applies customary percentage markups in these ways it seems more reasonable to attribute the price spiral to this phenomenon rather than to wages, as is so often done.

Malcolm P. McNair has argued that average hourly earnings in department stores between 1950 and 1956 advanced twice as rapidly as the department-store price index. Yet the fact remains that department-store wages, initially substandard even in 1950, are at an average of $1.37 an hour far less than the average in other industries. By Professor McNair's own figures in his June 1957 Bulletin of Department Store Operating Results (Harvard Business School) direct and general selling expenses approximate 9 percent of net sales. This is usually the largest payroll account and represents about half the total department-store labor costs, the remainder being divided among accounting, promotion, building maintenance, material handling, and merchandising. That is to say, 9 cents out of every dollar of net sales may be attributed to direct retail-sales costs. In food chains the correlative figure was found to be 6.6 percent; in 8 national variety chains, payrolls for sales personnel were found to be 8.5 percent of total chain net sales.

These figures do not suggest the kind of relationship between retail prices and wages that Professor McNair believes there is. In fact, retail wages are extraordinarily low despite the efforts of trade unions to improve standards. It is interesting to observe, though, that wherever unions have developed a modicum of strength, as in the case of the RCIA, standards have improved, to the great benefit of regional economies. Nevertheless, even in the more effectively organized areas, retail wages are generally less than the standards established in other occupations. The California Department of Labor reported in July 1957 that average hourly wages in construction in the Los Angeles-Long Beach area were $3.28 an hour; in retailing they were $1.92 an hour. Yet retail clerks in other parts of the country are not so fortunate.

It would be an understatement to describe the pattern of retail earnings as woefully inadequate. Drawing on materials made available through a United States Department of Labor study of average hourly straight time earnings of nonsupervisory employees in retailing, we found that a substantial proportion of retail employees were in low-wage categories. These data were previously submitted to the

subcommittee of the Committee on Education and Labor of the House of Representatives at the beginning of the year and bear repetition.

For the United States as a whole the poorest conditions were found in the variety-store field, where 78 percent of women and 44 percent of men earn less than $1 an hour. The tables appended show the full story. Drugstores also show a poor picture with 60.7 percent of women and over 32 percent of men in the low-earnings category of less than $1 an hour. On the average, well over one-third of female employees are below the $1 line; in fact, taking all retail stores into account, the percent of women employees receiving earnings of less than $1 an hour is over 41. Nor is it possible to say that all male employees are in a better position. In variety stores, certain general merchandise, grocery, women's apparel, and drugstores, male employees appear to be almost as poorly paid as female employees. In these lines the average wage for male retail workers is either less than or somewhere around $1.50 an hour. The average hourly earnings for male retail employees in the United States as a whole is $1.45, while for females the figure is $1.07 an hour. But it must be stressed that such figures overlook the vast number of employees who receive less than $1 an hour. Table 1, appended, shows the data in various retail lines. It is clear from an inspection of the statistics that employees receiving $2 or more an hour are relatively few in number.

For regions comprising the Mountain and Pacific Coast States, the data show the highest earnings record of all the four major areas. Yet even here the situation in variety, certain general-merchandise and apparel shops, as well as drugstores, is none too good. In variety stores, 56.4 percent of female employees earn less than $1 an hour. In some general-merchandise stores this figure is 23.4 percent, in apparel shops 23.8 percent, and in drugstores 28.7 percent. On the whole, however, an inspection of the figures in table 2 indicates a somewhat better pattern than exists either for the country as a whole or in the other three regions. Also, the figures suggest that the gap between the earnings for men and women is not as wide as it is in other areas.

The north-central region covering the major part of the Great Plains area, includes sections generally considered to be the breadbasket of the Nation. Here too the variety shops and drugstores appear to have the lowest earnings scale for women. Seventy-five percent of women working in variety stores in this region earn less than $1 an hour and 61 percent of those working in drugstores earn less than $1 an hour. It might be noted that this low level applies to men working in such shops as well. More than half the women working in food stores other than grocery and supermarkets are seen to earn less than $1 an hour. The best situation appears to be in the "big ticket" item lines, as seems to be the situation in other regions as well.

The northeast region—New England and the States of New Jersey, New York, and Pennsylvania—comprise the major industrial section of the country. Here the same pattern holds, with variety stores, drugstores, and food stores other than supermarkets and groceries showing the lowest average hourly earnings for women engaged in these lines.

The data for the South show the lowest level of average hourly earnings for any of the areas of the United States. This applies to both men and women. For example, 61.5 percent of men engaged in variety stores in the southern region have earnings of less than $1 an hour. Almost half the men working in drugstores have earnings of less than $1 an hour. An inspection of the data will show that in all the lines the weighting is toward the low end of the scale. The proportion of those earning over $2 an hour in this region is almost negligible.

The data in the original Department of Labor study were also set up by metropolitan and nonmetropolitan county areas. This suggests a distinction between urban and rural areas. Tables 6–10 present the information for the various retail fields broken down by these metropolitan and nonmetropolitan areas.

Looking at the data for the United States as a whole, we note again that in many areas the weighting is toward the low end of the scale. This is even truer for the rural, or nonmetropolitan county areas, than it is for the metropolitan-county areas. Thus, both men and women employed in women's ready-to-wear stores are recipients of low straight-time average hourly earnings. In nonmetropolitan areas, 62 percent of the men employed in such shops receive less than $1 an hour while 55.4 percent of the women employed in such shops receive less than $1 an hour. Such high percentages apply also to women in nonmetropolitan areas employed in shoestores and other apparel and accessory shops. For variety stores the ratios are even higher.

There are some bright spots, however. In examining the more detailed information for grocery and other food stores, we find that 23.4 percent of the men working in grocery stores in metropolitan county areas are in the $1.50-to-$2 bracket, while 25.2 percent of the women in grocery stores are to be found in this bracket. The $1.50-to-$2.50 brackets show high percentages for men in other food stores in both metropolitan and nonmetropolitan county areas. However, this does not seem to be the case, insofar as the women are concerned. The picture for drugstores is as described above, with 75.5 percent of women in nonmetropolitan county areas receiving less than $1 an hour.

The regional breakdowns show further interesting patterns. Again, even in the western region, the average hourly earnings for employees in variety stores is low, with almost 74 percent of women working in such shops in the nonmetropolitan counties receiving less than $1 an hour. However, there appears to be considerable improvement in the picture in examining the data for general-merchandise and grocery and other food stores. One-third of the men working in general-merchandise stores in the metropolitan areas are indicated to be in the $1.50-to-$2 bracket, while in the grocery shops, 40 percent of the men in metropolitan county areas working in grocery stores are in the $2-to-$2.50 bracket. Similarly, a high ratio is obtained for this bracket in food stores. In nonmetropolitan county areas we find, surprisingly enough, that men employed in food shops other than grocery stores who receive $3 an hour and over represent 20.6 percent of the total so employed. In view of what is known of the wage pattern in other regions, it would be perfectly fair to say that this better picture is a result of stronger union organization.

Even in drugstores, generally considered to be a low-paying field, we find that in the West men in the metropolitan county areas receiving $3 an hour and over represent 25 percent of the total. In the nonmetropolitan county areas, those receiving over $2.50 an hour represent 37 percent of the total employed. However, the situation for women is not so good, with 83.7 percent of women in nonmetropolitan county areas working in drugstores receiving average hourly earnings of less than $1.25 an hour.

In the north-central region, the data show a pattern roughly similar to that indicated above. Exceptions are found in food stores other than groceries, where, on the average, straight-time hourly earnings range upward of $1.50. This is also true for general-merchandise stores and for furniture stores. Otherwise the pattern in this region is quite the same as previously described. In the major groups, as in drugstores, for example, both men and women in urban and rural areas are found to earn $1 an hour or less. This is also true for variety stores.

Examining the data for the northeastern region, we find that the poorest situations are in variety stores and drugstores. Regardless of the distribution as between urban and rural the majority of employees in both segments of retailing are in the low-wage categories. For women working in drugstores in metropolitan areas almost half are in the $1 an hour or less group. In the nonmetropolitan county areas more than two-thirds of the women working in drugstores earn less than $1 an hour. The situation is even worse insofar as the variety stores are concerned. Food stores and grocery stores exhibit a much improved pattern. For men in both metropolitan and nonmetropolitan county areas, the major groups are to be found in the $1.50-to-$2-an-hour category. In these lines, women earn less than what men do but their situation is not as bad as in the previously mentioned categories. Earnings in the apparel lines for men seem to be at higher levels than in other regions. This is also true in household appliances and radios.

Data showing the straight-time average hourly earnings for metropolitan and nonmetropolitan county areas in the southern region support the comments made above with respect to this area. Inspection of the figures for the various retail lines shows almost uniformly that employees in this area receive straight-time average hourly earnings of less than $1 an hour, with but few exceptions. These exceptions are men working in metropolitan county areas in motor-vehicle stores where the largest group falls into the $1.50-to-$2-an-hour category, and men working in food stores other than grocery stores as well as those engaged in household-appliances and radio-store operations.

What are the reasons for these low wages? Now, the argument frequently made is that wages in retailing are low because productivity is low. These assertions must be taken with the proverbial grain of salt, for no one knows what productivity really is in any sector of the economy, let alone retailing. The disputes over definitions, concepts, and computations go on without any prospect of resolution in the calculable future. Here is an area of economic investigation that genuinely cries out for careful study. The general materials that the staff of this committee has compiled on productivity are excellent as background, yet it all demonstrates the very knotty conceptual and

statistical problem with which we deal in this area. Most of what we know of productivity concerns industries with a measurable commodity. Virtually nothing is known about changes in output in the services and trades. Yet it is quite patent that these sectors of the economy are growing rapidly and absorbing an ever-increasing share of the labor force. Ought we not explore in more detail this terra incognita of our economic order? I submit that in the calculable future this will be an essential requirement and I must repeat my recent suggestion to the Bureau of Labor Statistics that a start be made on this very practical intellectual adventure.

Harold Barger's analysis of retail productivity in his study of distribution (Distribution's Place in the American Economy, Princeton, 1955) is an excellent beginning, but his measures would require, I believe, further study of the problem. He has estimated that output per man-hour multiplied 6 times in the commodity industries between 1869 and 1949 as compared to 2½ times in trade. But does retailing "produce" commodities in the same sense as manufacturing? To employ an ancient economic term, retailing provides time and place utility, and it would appear more helpful if a technique could be devised to measure that contribution to economic well-being. The difference in views was emphasized by a recent study made by the Supermarket Institute, which measured productivity in terms of sales per man-hour. This indicated that "productivity" in supermarkets jumped from $19.28 in 1954 to $20.37 in 1956, an increase of 2.8 percent per year. In terms of average-sales-per-customer transaction, a measure analogous to that employed by Professor McNair, there was an increase from $3.54 in 1951 to $4.25 in 1955, or a jump of 5 percent a year. Looked at in terms of sales per square foot of selling space, the increase went from $3.64 in 1954 to $3.95 in 1956, or 4.2 percent a year. Now, admittedly, these are crude calculations and for but one sector of the retail field. Yet, taken together with Professor McNair's admission of increased productivity (op. cit., p. 43), they suggest a better picture today than the 1 percent mean annual rate of change computed by Barger (who does concede that there are great difficulties in measuring productivity in the distribution field). Barger has acknowledged that the growth of self-service operations, refrigeration, superior facilities, better service at the point of sale, improved packaging, credit and charge account services, and the like are significant elements of improved distribution productivity, yet they "elude measurement." It is admitted that these and similar developments probably understate the rise in productivity in retailing and distribution (Barger, op. cit., p. 51).

Another view of productivity in a related area—material handling—was presented by Prof. Seymour Melman in his book, Dynamic Factors in Industrial Productivity (Oxford, 1956), in which it is argued that higher productivity is intimately related to labor cost. Professor Melman says it is wage pressure that impels management to seek out and install more effective methods. He also contends that the role of trade unions, at least in British experience, has been very significant in raising productivity. These divergent and suggestive analyses indicate the need for greater study of the problem. The point was again emphasized by the recent Washington Post report that the real wage in industry on the average increased but 44 percent in the 1948–58 decade as compared to a 55 percent in physical output per man-hour. But for years now we have been told by management that only wage pressure on output accounts for inflation.

If these reservations are valid, then it seems probable that the sharing of the fruits of greater productivity in retailing has not been an equitable one. Certainly it has not measured up to known trends in other industries. But the statement that low wages in retailing means low productivity falls by the wayside. Rather, it would seem, low wages are related to certain institutional factors which notoriously assert themselves whenever employees seek to improve their standards. These factors can be readily defined in terms of a deep-rooted archaic resistance to the thought of allowing retail employees to select their own collective-bargaining representatives. Yet economic stability cannot be assured when so large a bloc of the work force is denied adequate remuneration for services rendered.

TABLE 1.—*United States: Percentage distribution, nonsupervisory retail employees,[1] straight-time average hourly earnings [2]*

Straight-time average hourly earnings	Building-materials and farm-equipment dealers		Department stores		Variety stores		Other general merchandise		Grocery stores		Other food stores	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Under $1 an hour	10.4	26.3	10.3	32.3	44.2	78.0	26.7	48.6	25.4	31.4	8.9	44.0
$1 to under $1.25	21.2	30.6	19.2	38.9	24.0	16.0	19.8	25.2	20.0	27.6	14.2	34.4
$1.25 to under $1.50	20.6	23.5	16.5	16.9	15.6	3.9	16.6	14.4	14.4	16.8	12.6	13.1
$1.50 to under $2	26.1	15.5	27.6	9.6	12.7	1.8	24.4	10.8	20.8	18.7	25.8	6.4
$2 to under $2.50	14.7	3.4	14.6	1.7	2.9	.3	9.2	1.0	14.8	5.3	24.3	1.9
$2.50 to under $3	4.3	.4	6.2	.4	.3	(3)	2.1	(3)	3.9	.2	11.1	.2
$3 and over	2.7	.3	5.6	.2	.3	(3)	1.2	(3)	.7	(3)	3.1	(3)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	425,800	68,400	227,100	550,900	30,800	273,600	80,800	158,200	652,500	320,200	267,600	144,600
	Franchised motor vehicle dealers		Men's and boys' clothing stores		Women's ready-to-wear stores		Shoe stores		Other apparel and accessories		Furniture and home-furnishing stores	
Under $1 an hour	11.3	14.3	12.9	24.5	20.9	36.4	15.6	37.6	20.2	38.6	11.1	24.8
$1 to under $1.25	14.6	24.4	17.5	30.7	29.3	30.7	18.3	31.6	17.9	31.3	17.1	30.5
$1.25 to under $1.50	15.3	25.6	14.6	25.3	14.1	17.6	16.1	16.0	16.1	15.3	14.4	21.7
$1.50 to under $2	26.4	27.2	28.6	17.4	19.9	12.0	27.1	13.0	21.9	11.0	26.4	16.5
$2 to under $2.50	17.3	6.1	15.6	1.7	6.3	2.2	13.7	1.8	14.4	2.5	15.6	4.8
$2.50 to under $3	7.6	.9	5.7	.4	5.8	.6	6.8	(3)	4.3	.9	8.1	1.0
$3 and over	7.5	1.5	5.1	(3)	3.7	.5	2.4	(3)	5.2	.4	7.3	.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	508,600	58,600	61,100	24,100	19,100	176,600	58,400	38,600	34,700	122,400	145,400	58,900

See footnote at end of table.

	Household-appliance and radio stores		Drugstores and proprietary stores		Total [4]	
Under $1 an hour	8.5	19.4	32.4	60.7	16.6	41.1
$1 to under $1.25	14.7	42.5	17.4	22.5	20.1	30.0
$1.25 to under $1.50	17.7	21.6	9.7	8.2	16.6	14.8
$1.50 to under $2	27.9	14.4	14.0	6.7	23.9	11.1
$2 to under $2.50	18.5	.9	12.1	1.2	14.0	2.3
$2.50 to under $3	6.6	.3	9.1	.4	5.4	.4
$3 and over	6.1	.9	5.3	.3	3.4	.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	93,000	33,400	144,700	185,900	3,619,700	2,412,800

[1] Includes salespersons, shipping and receiving clerks, stock clerks, laborers, warehousemen, office clerks, drivers, installation and repairmen, alteration hands, elevator operators, janitors but not buyers, department heads and managers.

[2] Source: Bureau of Labor Statistics, Employee Earnings in Retail Trades in October 1956, Bulletin No. 1220.

[3] Less than ½ of 1 percent.

[4] Includes: Liquor stores, feed, farm garden supply, jewelry, book, stationery, sporting goods, florists, cigar stands, news dealers stands, and other miscellaneous stores not included elsewhere.

TABLE 2.—*Western regions: Percentage distribution, nonsupervisory retail employees,[1] straight-time average hourly earnings*

Straight-time average hourly earnings	Building-materials and farm-equipment dealers		Department stores		Variety stores		Other general merchandise		Grocery stores		Other food stores		Franchised motor vehicle dealers	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Under $1 an hour	2.9	12.9	2.0	9.8	26.8	56.4	14.2	23.4	8.5	13.1	7.8	20.9	3.8	4.0
$1 to under $1.25	8.3	23.8	10.5	43.4	36.6	34.2	16.1	33.9	8.8	15.7	9.6	40.7	7.3	18.8
$1.25 to under $1.50	12.1	28.7	16.3	28.4	17.1	6.5	18.8	21.3	16.2	14.2	3.2	23.8	11.0	26.7
$1.50 to under $2	26.6	26.7	37.2	15.5	17.1	2.6	25.0	19.3	20.0	21.7	17.7	10 4	21.8	39.6
$2 to under $2.50	30.8	6.9	19.5	2.2	2.4	.3	16.1	1.7	33.8	34.6	38.3	3.9	29.1	7.9
$2.50 to under $3	9.9	1.0	8.7	.5	(2)	(2)	6.2	.4	11.1	.5	19.5	.3	13.5	1.0
$3 and over	9.4	(2)	5.8	.2	(2)	(2)	3 6	(2)	1.6	.2	3.9	(2)	13.5	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	54, 500	10, 100	34, 400	75, 800	4, 100	30, 700	11, 200	23, 900	93, 500	38, 800	28, 200	30, 700	79, 300	10, 100
	Men's and boys' clothing stores		Women's ready-to-wear stores		Shoe stores		Other apparel and accessories		Furniture and home-furnishing stores		Household-appliance and radio stores		Drugstores and proprietary stores	
Under $1 an hour	2.8	(2)	(2)	7.6	4.9	13.3	12.5	23.8	2.0	7.6	2.7	3.8	10.0	28.7
$1 to under $1.25	6.9	17.9	4.0	37.6	13.4	26.7	16.7	28.0	9.0	24.0	8.8	42.3	13.7	27.2
$1.25 to under $1.50	15.3	50.0	1.0	32.1	13.4	26.7	18.8	25.2	13.9	29.8	17.7	34.6	9.5	18.1
$1.50 to under $2	40.3	25.0	3.0	18.1	42.7	31.1	33.3	18.1	28.4	27.9	25.9	17.3	17.4	24.2
$2 to under $2.50	23.6	7.1	1.0	2.2	12.2	2.2	12.5	4.2	19.9	7.7	26.5	(2)	12.1	1.5
$2.50 to under $3	8.3	(2)	(2)	.9	9.8	(2)	4.2	.7	16.4	2.0	10.9	(2)	16.3	(2)
$3 and over	2.8	(2)	1.0	1.5	3.6	(2)	2.0	(2)	10.4	1.0	7.5	2.0	21.0	.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	7, 200	2, 800	1, 000	22, 100	8, 200	4, 500	4, 800	14, 300	20, 100	10, 400	14, 700	5, 200	19, 000	26, 500

[1] Western regions include States of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

[2] Less than ½ of 1 percent.

TABLE 3.—*North-central region: Percentage distribution, nonsupervisory retail employees,[1] straight-time average hourly earnings*

Straight-time average hourly earnings	Building-materials and farm-equipment dealers		Department stores		Variety stores		Other general merchandise		Grocery stores		Other food stores		Franchised motor vehicle dealers	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Under $1 an hour	8.3	28.3	6.7	28.8	42.0	75.4	14.1	43.7	26.4	32.9	8.9	52.6	7.9	14.5
$1 to under $1.25	19.7	35.7	17.8	43.0	23.5	18.2	17.1	25.3	20.4	28.4	10.5	31.2	16.1	23.8
$1.25 to under $1.50	22.4	19.8	16.0	16.7	16.0	4.6	20.3	16.5	14.1	17.9	10.7	9.5	15.5	25.9
$1.50 to under $2	27.4	12.9	27.6	8.9	14.8	1.7	33.5	12.8	19.8	20.0	26.4	5.3	25.5	28.5
$2 to under $2.50	16.2	2.6	18.3	1.8	3.7	.1	11.5	1.7	14.4	.7	24.1	1.4	18.0	5.2
$2.50 to under $3	3.7	[2]	6.8	.5	[2]	[2]	3.1	[2]	4.1	.1	13.3	[2]	8.3	.5
$3 and over	2.3	.7	6.8	.3	[2]	[2]	.4	[2]	.8	[2]	6.1	[2]	8.7	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	167,700	27,200	74,800	193,700	8,100	81,200	22,700	58,800	197,300	125,500	85,200	54,900	160,900	19,300
	Men's and boys' clothing stores		Women's ready-to-wear stores		Shoe stores		Other apparel and accessories		Furniture and home-furnishing stores		Household-appliance and radio stores		Drugstores and proprietary stores	
Under $1 an hour	11.6	24.3	23.9	33.7	17.6	35.5	13.5	30.3	6.2	20.9	4.4	19.5	28.6	61.2
$1 to under $1.25	20.8	38.6	23.9	34.5	22.9	36.3	16.7	34.1	12.5	31.3	12.1	39.2	20.1	25.1
$1.25 to under $1.50	13.9	20.0	10.9	15.6	15.4	12.9	14.6	18.3	14.0	23.9	16.8	23.1	12.0	8.0
$1.50 to under $2	27.2	15.7	28.3	12.7	24.5	12.1	20.8	11.4	27.9	17.8	27.8	15.7	13.8	4.3
$2 to under $2.50	18.5	1.4	4.4	2.6	13.3	3.2	20.8	3.1	21.9	4.9	22.0	1.7	11.0	1.0
$2.50 to under $3	3.4	[2]	6.5	.5	4.2	[2]	6.3	1.9	8.5	.6	6.6	[2]	10.8	.4
$3 and over	4.6	[2]	2.1	.4	2.1	[2]	7.3	.9	9.0	.6	10.3	.8	3.7	[2]
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	17,300	7,000	4,600	50,500	18,800	12,400	9,600	31,700	40,100	16,300	27,300	11,200	39,900	67,000

[1] North-central region includes Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.
[2] Less than ½ of 1 percent.

TABLE 4.—*Northeastern region: Percentage distribution, nonsupervisory retail employees,[1] straight-time average hourly earnings*

Straight-time average hourly earnings	Building-materials and farm-equipment dealers		Department stores		Variety stores		Other general merchandise		Grocery stores		Other food stores		Franchised motor vehicle dealers	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Under $1 an hour	4.8	15.3	7.2	29.3	35.6	73.3	13.1	30.2	8.6	17.7	6.4	42.1	2.8	3.5
$1 to under $1.25	12.8	29.8	22.0	39.0	23.3	18.0	21.1	37.0	8.8	35.4	14.6	37.5	11.3	23.5
$1.25 to under $1.50	21.0	29.0	19.1	18.3	17.8	4.8	18.0	18.7	16.1	20.8	12.7	12.3	17.8	27.6
$1.50 to under $2	36.5	18.6	28.7	11.3	17.8	3.1	36.0	12.3	20.0	23.8	26.6	6.2	36.5	32.4
$2 to under $2.50	17.2	5.7	12.6	1.5	4.4	.7	10.0	1.8	33.8	2.1	28.1	1.7	18.0	9.7
$2.50 to under $3	5.6	1.6	5.1	.4	(2)	.1	1.2	(2)	11.1	.2	10.2	.2	7.6	2.0
$3 and over	2.1	(2)	5.3	.2	1.1	(2)	.6	(2)	1.6	(2)	1.4	(2)	6.0	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	82,700	12,400	60,900	139,800	9,000	78,700	16,100	21,900	177,800	79,700	104,000	41,600	117,700	14,500
	Men's and boys' clothing stores		Women's ready-to-wear stores		Shoe stores		Other apparel and accessories		Furniture and home-furnishing stores		Household-appliance and radio stores		Drugstores and proprietary stores	
Under $1 an hour	10.6	15.8	11.3	26.7	11.9	30.5	18.6	27.9	4.7	19.9	3.1	16.5	28.4	51.6
$1 to under $1.25	17.1	31.6	32.1	33.8	16.8	34.3	20.6	38.4	17.0	34.8	14.1	41.8	18.2	27.8
$1.25 to under $1.50	13.8	29.0	18.9	21.7	16.8	20.0	17.5	17.0	16.3	20.5	17.2	19.0	10.9	10.6
$1.50 to under $2	30.9	21.0	17.9	13.7	25.3	13.3	20.6	13.8	32.4	18.6	35.9	20.3	16.3	6.9
$2 to under $2.50	14.2	1.3	8.5	2.9	16.8	1.9	16.5	1.6	15.1	5.0	18.8	1.2	16.1	2.5
$2.50 to under $3	7.7	1.3	6.6	.7	9.4	(2)	2.1	1.0	8.1	1.2	6.2	1.2	7.8	.3
$3 and over	5.7	(2)	4.7	.5	3.0	(2)	4.1	.3	6.4	(2)	4.7	(2)	2.3	.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100 0	100.0
Number of employees	24,600	7,600	10,600	59,100	20,200	10,500	9,700	38,300	42,300	16,100	25,600	7,900	42,300	32,000

[1] Northeastern region includes the States of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

[2] Less than ½ of 1 percent.

TABLE 5.—*Southern region: Percentage distribution, nonsupervisory retail employees,[1] straight-time average hourly earnings*

Straight-time average hourly earnings	Building-materials and farm-equipment dealers		Department stores		Variety stores		Other general merchandise		Grocery stores		Other food stores		Franchised motor vehicle dealers	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Under $1 an hour	20.4	38.0	23.1	52.1	61.5	93.0	47.7	72.6	46.7	52.5	14.5	62.1	25.6	32.0
$1 to under $1.25	34.9	27.3	23.3	30.7	19.8	5.1	22.4	16.2	20.8	24.2	22.1	27.0	19.4	29.9
$1.25 to under $1.50	21.8	22.5	14.4	9.6	12.5	1.4	12.3	7.1	13.0	12.3	20.9	7.5	15.5	22.4
$1.50 to under $2	16.9	11.2	20.7	5.5	4.2	.4	11.4	4.1	14.0	9.7	28.1	3.4	21.8	11.6
$2 to under $2.50	3.6	1.0	8.8	1.5	1.0	.1	4.6	(2)	4.2	1.3	9.2	(2)	9.7	2.7
$2.50 to under $3	1.8	(2)	5.3	.4	1.0	(2)	.3	(2)	.9	(2)	4.0	(2)	3.6	(2)
$3 and over	.6	(2)	4.4	.2	(2)	(2)	1.3	(2)	.4	(2)	1.2	(2)	4.4	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	120,900	18,700	57,000	141,600	9,600	83,000	30,800	53,600	183,900	76,200	50,200	17,400	150,700	14,700
	Men's and boys' clothing stores		Women's ready-to-wear stores		Shoe stores		Other apparel and accessories		Furniture and home-furnishing stores		Household-appliance and radio stores		Drugstores and proprietary stores	
Under $1 an hour	25.8	44.8	58.7	66.4	26.8	56.3	31.1	61.7	26.3	44.7	21.7	30.8	49.7	79.1
$1 to under $1.25	20.0	26.9	24.2	19.0	17.0	25.9	17.0	23.1	25.2	29.8	21.7	47.2	15.6	14.7
$1.25 to under $1.50	16.7	16.4	3.4	7.1	17.9	11.6	15.1	7.4	13.3	15.5	19.3	14.3	6.7	2.8
$1.50 to under $2	19.2	11.9	10.3	5.8	23.2	6.2	18.9	5.3	18.2	5.6	20.9	6.6	10.6	1.7
$2 to under $2.50	9.2	(2)	(2)	1.1	9.8	(2)	7.6	2.3	8.2	2.5	9.8	(2)	9.2	.7
$2.50 to under $3	3.3	(2)	3.4	.4	4.4	(2)	4.7	(2)	3.7	.6	4.3	(2)	5.7	.5
$3 and over	5.8	(2)	(2)	.2	.9	(2)	5.6	.2	5.1	1.3	2.3	1.1	2.5	.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	12,000	6,700	2,900	44,900	11,200	11,200	10,600	38,100	42,900	16,100	25,400	9,100	43,500	60,400

[1] Southern region includes States of Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

[2] Less than ½ of 1 percent.

TABLE 6.—*United States: Percentage distribution, nonsupervisory retail employees, metropolitan and nonmetropolitan county areas, straight-time average hourly earnings*

	Building-materials and farm-equipment dealers				Department stores				Variety stores			
	Men		Women		Men		Women		Men		Women	
	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan
Under $1 an hour	4.5	15.4	14.0	38.8	8.7	15.8	27.9	51.8	37.3	58.4	71.3	89.4
$1 to under $1.25	14.8	27.4	32.2	28.8	19.8	16.8	40.7	31.1	24.5	22.8	20.8	9.0
$1.25 to under $1.50	16.0	24.9	24.6	22.2	16.7	16.2	18.3	10.7	17.3	14.8	5.4	1.3
$1.50 to under $2	30.3	22.5	21.9	9.6	27.2	29.8	10.5	5.1	16.8	4.0	2.6	.3
$2 to under $2.50	23.3	6.8	5.8	.3	14.9	12.3	1.8	1.0	3.1	(1)	.5	(1)
$2.50 to under $3	6.6	2.0	.9	(1)	6.4	5.6	.5	.3	.5	(1)	(1)	(1)
$3 and over	4.5	1.0	.6	.3	6.3	3.5	.3	(1)	.5	(1)	(1)	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	203,300	219,300	34,200	33,300	179,900	46,300	448,700	100,400	19,600	10,100	172,900	99,800
	Other general merchandise				Grocery stores				Other food stores			
Under $1 an hour	10.1	42.0	24.1	77.0	18.2	40.8	18.0	55.3	7.4	13.8	38.5	62.9
$1 to under $1.25	18.8	22.0	33.2	16.4	19.5	20.9	29.1	25.0	12.6	19.2	38.5	23.7
$1.25 to under $1.50	21.4	12.2	22.8	5.0	14.7	13.8	20.0	11.2	12.6	11.9	13.8	8.2
$1.50 to under $2	33.9	16.5	18.2	1.5	23.4	15.4	25.2	7.1	24.2	31.6	7.1	3.8
$2 to under $2.50	13.0	4.3	1.7	.1	18.3	7.1	7.6	1.3	28.4	11.5	2.0	1.1
$2.50 to under $3	1.5	1.9	(1)	(1)	5.0	1.6	.1	.1	12.3	7.0	.1	.3
$3 and over	1.3	(1)	(1)	(1)	.9	.4	(1)	(1)	2.5	5.0	(1)	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	38,400	41,900	83,400	73,700	445,800	206,700	204,300	114,800	202,500	64,500	108,300	34,200

[1] Less than ½ of 1 percent.

	Franchised motor vehicle dealers				Men's and boys' clothing stores				Women's ready-to-wear stores			
Under $1 an hour	6.2	17.5	4.6	28.8	10.2	19.6	20.4	44.5	15.6	62.0	31.0	55.4
$1 to under $1.25	10.9	18.9	21.6	30.1	15.3	26.4	31.5	27.8	29.4	19.0	31.1	30.1
$1.25 to under $1.50	12.1	19.1	27.3	22.7	13.1	17.6	27.2	19.4	16.3	(1)	19.6	10.9
$1.50 to under $2	27.3	25.3	35.7	14.6	31.7	21.6	18.3	8.3	21.3	14.2	14.2	3.6
$2 to under $2.50	21.5	12.3	8.0	3.0	16.8	12.8	2.1	(1)	7.5	(1)	2.8	(1)
$2.50 to under $3	11.1	3.3	1.4	(1)	6.9	1.3	.5	(1)	6.2	4.8	.7	(1)
$3 and over	10.9	3.6	1.4	.8	6.0	.7	(1)	(1)	3.7	(1)	.6	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	274,900	234,300	34,800	23,300	45,100	14,800	19,100	3,600	16,000	2,100	137,600	38,500

	Shoe stores				Other apparel and accessories				Furniture and home-furnishing stores			
Under $1 an hour	12.3	26.9	31.7	55.3	15.2	34.6	28.8	68.6	6.6	21.1	18.1	45.7
$1 to under $1.25	17.1	26.9	32.8	30.9	19.1	13.5	35.6	21.0	13.3	25.6	31.5	29.7
$1.25 to under $1.50	16.5	14.0	16.9	10.6	14.1	28.8	18.1	6.4	13.3	17.1	23.4	17.4
$1.50 to under $2	27.8	28.0	16.2	3.2	24.2	13.5	14.0	3.4	27.7	24.2	19.2	5.8
$2 to under $2.50	15.7	3.2	2.4	(1)	18.0	1.9	2.5	.6	19.5	6.9	5.8	.7
$2.50 to under $3	7.9	(1)	(1)	(1)	3.1	5.8	.8	(1)	9.9	3.3	1.3	(1)
$3 and over	2.7	1.0	(1)	(1)	6.3	1.9	.2	(1)	9.7	1.8	.7	.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	47,900	9,300	29,000	9,400	25,600	5,200	87,700	32,800	100,300	45,000	44,800	13,800

	Household-appliance and radio stores				Drugstores and proprietary stores			
Under $1 an hour	3.0	16.5	8.3	38.7	29.7	42.3	53.6	75.5
$1 to under $1.25	10.4	21.9	41.7	44.4	18.0	14.3	24.5	18.4
$1.25 to under $1.50	15.3	21.6	28.9	9.7	10.6	7.4	10.6	3.3
$1.50 to under $2	31.0	23.3	18.6	6.4	13.4	15.4	8.9	2.0
$2 to under $2.50	23.1	11.1	1.5	(1)	13.2	7.7	1.7	.3
$2.50 to under $3	8.3	3.7	.5	(1)	9.7	8.0	.4	.3
$3 and over	8.9	1.9	.5	.8	5.4	4.9	.3	.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	57,500	35,200	20,400	12,400	108,700	35,000	124,700	61,300

TABLE 7.—*Western region: Percentage distribution, nonsupervisory retail employees, metropolitan and nonmetropolitan county areas, straight-time average hourly earnings*

	Building-materials and farm equipment dealers				Department stores				Variety stores			
	Men		Women		Men		Women		Men		Women	
	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan
Under $1 an hour	1.9	4.2	3.3	28.2	0.8	4.3	8.7	14.9	4.5	61.5	42.7	73.7
$1 to under $1.25	4.6	15.3	29.5	15.4	11.0	9.8	42.0	50.4	40.9	30.8	43.2	22.5
$1.25 to under $1.50	8.6	16.3	27.9	25.6	15.8	17.4	29.4	24.8	22.7	7.7	10.1	2.3
$1.50 to under $2	21.3	34.7	27.9	30.8	36.8	37.0	16.5	9.2	27.3	(1)	3.4	1.5
$2 to under $2.50	39.2	18.5	9.8	(1)	19.8	18.5	2.6	.7	4.6	(1)	.6	(1)
$2.50 to under $3	13.3	3.7	1.6	(1)	9.5	7.6	.7	(1)	(1)	(1)	(1)	(1)
$3 and over	11.1	6.9	(1)	(1)	6.3	5.4	.1	(1)	(1)	(1)	(1)	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	32,400	21,600	6,100	3,900	25,300	9,200	61,200	14,100	2,200	1,300	17,800	12,900
	Other general merchandise				Grocery stores				Other food stores			
Under $1 an hour	2.3	23.9	5.8	40.9	3.4	18.4	3.3	30.1	4.0	35.3	13.9	50.0
$1 to under $1.25	16.7	14.9	34.7	36.4	5.0	15.9	10.4	25.2	8.0	26.5	44.3	25.9
$1.25 to under $1.50	23.8	16.4	28.1	15.5	17.1	14.6	10.0	21.0	3.2	2.9	24.7	19.0
$1.50 to under $2	33.3	23.9	30.6	6.3	18.3	23.5	25.7	14.7	18.7	8.8	13.5	(1)
$2 to under $2.50	14.3	11.9	.8	.9	40.5	21.0	50.6	8.4	43.0	(1)	3.6	3.4
$2.50 to under $3	4.8	7.5	(1)	(1)	13.6	6.0	(1)	.6	21.5	5.9	(1)	1.7
$3 and over	4.8	1.5	(1)	(1)	2.1	.6	(1)	(1)	1.6	20.6	(1)	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	4,200	6,700	12,100	11,000	61,900	31,500	24,100	14,300	25,100	3,400	25,100	5,800

	Franchised motor vehicle dealers				Men's and boys' clothing stores				Women's ready-to-wear stores			
Under $1 an hour	2.1	(2)	1.4	(2)	2.2	(2)	(1)	(2)	(1)	(2)	6.5	(2)
$1 to under $1.25	6.8	(2)	13.9	(2)	8.9	(2)	21.7	(2)	25.0	(2)	37.1	(2)
$1.25 to under $1.50	10.4	(2)	29.1	(2)	11.1	(2)	47.9	(2)	12.5	(2)	32.3	(2)
$1.50 to under $2	19.7	(2)	41.7	(2)	48.9	(2)	21.7	(2)	37.5	(2)	19.9	(2)
$2 to under $2.50	28.6	(2)	11.1	(2)	15.6	(2)	8.7	(2)	12.5	(2)	2.7	(2)
$2.50 to under $3	16.9	(2)	1.4	(2)	8.9	(2)	(1)	(2)	(1)	(2)	.5	(2)
$3 and over	15.5	(2)	1.4	(2)	4.4	(2)	(1)	(2)	12.5	(2)	1.0	(2)
Total	100.0	(2)	100.0	(2)	100.0	(2)	100.0	(2)	100.0	(2)	100.0	(2)
Number of employees	52,800	26,400	7,200	2,700	4,500	(2)	2,300	(2)	800	(2)	18,600	3,200

	Shoe stores				Other apparel and accessories				Furniture and home-furnishing stores			
Under $1 an hour	1.6	(2)	11.4	(2)	9.1	(2)	22.9	(2)	0.6	(1)	4.9	5.2
$1 to under $1.25	11.1	(2)	25.7	(2)	18.2	(2)	28.6	(2)	8.2	12.8	23.2	31.6
$1.25 to under $1.50	12.7	(2)	25.7	(2)	20.5	(2)	23.8	(2)	10.7	25.6	30.5	31.6
$1.50 to under $2	46.0	(2)	34.3	(2)	29.6	(2)	21.0	(2)	28.9	30.8	29.3	26.4
$2 to under $2.50	15.9	(2)	2.9	(2)	13.6	(2)	2.8	(2)	22.1	15.4	8.5	5.2
$2.50 to under $3	9.5	(2)	(1)	(2)	4.5	(2)	.9	(2)	17.6	10.3	2.4	(1)
$3 and over	3.2	(2)	(1)	(2)	4.5	(2)	(1)	(2)	11.9	5.1	1.2	(1)
Total	100.0	(2)	100.0	(2)	100.0	(2)	100.0	(2)	100.0	100.0	100.0	100.0
Number of employees	6,300	1,300	3,500	800	4,400	(2)	10,500	(2)	15,900	3,900	8,200	1,900

	Household-appliance and radio				Drugstores and proprietary stores			
Under $1 an hour	0.9	(2)	(1)	(2)	8.5	17.4	18.6	50.0
$1 to under $1.25	5.5	(2)	38.6	(2)	14.9	8.7	24.3	33.7
$1.25 to under $1.50	20.9	(2)	38.6	(2)	10.6	6.5	22.0	9.3
$1.50 to under $2	20.0	(2)	20.5	(2)	17.7	15.2	32.8	7.0
$2 to under $2.50	30.9	(2)	(1)	(2)	9.9	15.2	1.7	(1)
$2.50 to under $3	12.7	(2)	(1)	(2)	13.5	26.1	(1)	(1)
$3 and over	9.1	(2)	2.3	(2)	24.9	10.9	.6	(1)
Total	100.0	(2)	100.0	(2)	100.0	100.0	100.0	100.0
Number of employees	11,000	3,600	4,400	(2)	14,100	4,600	17,700	8,600

[1] Less than ½ of 1 percent. [2] Insufficient data.

TABLE 8.—*North-central region: Percentage distribution, nonsupervisory retail employees, metropolitan and nonmetropolitan county areas, straight-time average hourly earnings*

	Building-materials and farm-equipment dealers				Department stores				Variety stores			
	Men		Women		Men		Women		Men		Women	
	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan
Under $1 an hour	2.5	12.1	9.7	40.5	5.0	12.6	23.0	52.3	36.7	55.6	68.3	86.7
$1 to under $1.25	8.6	27.5	36.3	35.4	18.8	14.5	45.9	31.4	24.5	22.2	22.5	11.3
$1.25 to under $1.50	12.3	29.5	21.2	18.4	16.2	16.3	18.4	9.8	16.3	14.8	6.3	2.0
$1.50 to under $2	33.9	23.2	24.8	5.1	25.9	34.3	9.8	5.2	20.4	7.4	2.7	(1)
$2 to under $2.50	30.8	5.9	6.2	(1)	19.3	13.3	2.0	1.0	2.1	(1)	.2	(1)
$2.50 to under $3	6.7	1.5	(1)	(1)	7.1	5.4	.6	.3	(1)	(1)	(1)	(1)
$3 and over	5.2	.3	1.8	.6	7.7	3.6	.3	(1)	(1)	(1)	(1)	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	68,500	97,700	11,300	15,800	58,000	16,600	154,900	38,600	4,900	2,700	51,100	30,000
	Other general merchandise				Grocery stores				Other food stores			
Under $1 an hour	6.2	29.3	17.2	79.6	18.4	43.9	13.3	61.5	7.9	9.4	49.5	63.1
$1 to under $1.25	15.8	23.2	32.0	16.9	20.0	21.0	31.3	24.1	6.4	14.8	35.5	22.3
$1.25 to under $1.50	22.6	13.4	26.0	3.1	14.5	13.4	24.2	8.7	9.5	11.2	9.6	6.4
$1.50 to under $2	36.3	28.0	22.1	.4	22.3	14.4	30.0	5.5	19.9	34.9	3.9	7.0
$2 to under $2.50	16.4	3.7	2.7	(1)	18.2	6.1	.9	.2	33.6	13.3	1.5	1.2
$2.50 to under $3	2.0	2.4	(1)	(1)	5.5	.9	.3	(1)	16.6	10.2	(1)	(1)
$3 and over	.7	(1)	(1)	(1)	1.1	.3	(1)	(1)	6.1	6.2	(1)	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	14,600	8,200	33,100	25,400	135,600	62,100	74,300	50,700	45,300	38,400	38,600	15,700

	Franchised motor-vehicle dealers				Men's and boys' clothing stores				Women's ready-to-wear stores			
Under $1 an hour	3.3	12.6	3.5	29.1	9.0	14.5	20.8	35.0	10.7	53.3	31.6	38.4
$1 to under $1.25	10.2	21.9	16.1	35.3	16.2	30.7	37.5	40.0	25.0	20.0	31.0	42.7
$1.25 to under $1.50	9.1	21.9	27.7	23.5	11.7	19.3	20.8	20.0	14.3	(1)	16.8	12.8
$1.50 to under $2	26.0	24.9	41.1	11.8	28.0	22.6	18.8	5.0	35.8	20.0	15.6	6.1
$2 to under $2.50	24.2	12.0	8.0	(1)	23.4	12.9	2.1	(1)	7.1	(1)	3.5	(1)
$2.50 to under $3	13.0	3.5	.9	(1)	5.4	(1)	(1)	(1)	7.1	6.7	.9	(1)
$3 and over	14.2	3.2	2.7	(1)	6.3	(1)	(1)	(1)	(1)	(1)	.6	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	80,300	81,000	11,200	8,500	11,100	6,200	4,800	2,000	2,800	1,500	33,900	16,400
	Shoestores				Other apparel and accessories				Furniture and home-furnishing stores			
Under $1 an hour	15.0	21.0	29.2	50.0	7.5	42.8	23.8	70.6	3.5	11.9	15.6	42.9
$1 to under $1.25	20.4	34.2	37.1	36.1	17.5	14.3	35.8	25.5	8.0	24.6	31.2	34.3
$1.25 to under $1.50	15.6	15.8	12.4	11.1	11.2	28.6	20.4	3.9	11.6	18.6	25.0	20.0
$1.50 to under $2	25.9	21.1	16.9	2.8	26.3	14.3	14.2	(1)	26.0	33.1	21.1	2.8
$2 to under $2.50	15.0	7.9	4.4	(1)	25.0	(1)	3.8	(1)	27.4	8.5	5.5	(1)
$2.50 to under $3	5.4	(1)	(1)	(1)	5.0	(1)	1.2	(1)	10.9	2.5	.8	(1)
$3 and over	2.7	(1)	(1)	(1)	7.5	(1)	.8	(1)	12.6	.8	.8	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	14,700	3,800	8,900	3,600	8,000	700	26,000	5,100	28,500	11,800	12,800	3,500
					Household-appliance and radio				Drugstores and proprietary stores			
Under $1 an hour					1.7	8.3	8.7	38.4	28.3	31.1	54.4	77.3
$1 to under $1.25					8.0	21.9	37.7	46.2	19.2	21.8	27.8	19.3
$1.25 to under $1.50					11.4	26.0	31.9	7.7	12.7	10.4	10.1	2.4
$1.50 to under $2					29.1	26.0	18.8	7.7	12.1	18.4	5.8	.5
$2 to under $2.50					26.3	13.6	2.9	(1)	12.1	5.7	1.3	.5
$2.50 to under $3					8.6	2.1	(1)	(1)	12.1	8.0	.6	(1)
$3 and over					14.9	2.1	(1)	(1)	3.5	4.6	(1)	(1)
Total					100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees					17,500	9,600	6,900	3,900	30,700	8,700	46,400	20,700

[1] Less than ½ of 1 percent.

TABLE 9.—*Northeastern region: Percentage distribution, nonsupervisory retail employees, metropolitan and nonmetropolitan county areas, straight-time average hourly earnings*

	Building-materials and farm-equipment dealers				Department stores				Variety stores			
	Men		Women		Men		Women		Men		Women	
	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan
Under $1 an hour	5.0	4.0	11.2	23.5	6.4	13.8	25.9	63.2	33.4	50.0	70.7	87.8
$1 to under $1.25	9.7	20.6	30.4	23.5	21.9	22.4	40.8	24.0	20.5	25.0	19.8	9.9
$1.25 to under $1.50	19.3	25.9	24.7	47.1	19.2	19.0	19.2	8.8	19.2	16.7	5.2	2.3
$1.50 to under $2	38.6	31.3	23.6	5.9	28.8	29.4	12.0	4.0	20.5	8.3	3.4	(1)
$2 to under $2.50	18.9	12.9	7.9	(1)	12.8	10.3	1.5	(1)	5.1	(1)	.8	(1)
$2.50 to under $3	6.2	4.0	2.2	(1)	5.3	3.4	.4	(1)	(1)	(1)	.1	(1)
$3 and over	2.3	1.3	(1)	(1)	5.6	1.7	.2	(1)	1.3	(1)	(1)	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	59,700	22,400	8,900	3,400	54,800	5,800	126,400	12,500	7,800	1,200	65,100	13,100
	Other general merchandise				Grocery stores				Other food stores			
Under $1 an hour	11.1	17.6	23.1	56.0	10.3	14.6	15.5	24.8	5.8	10.2	34.4	68.1
$1 to under $1.25	17.6	29.4	37.3	34.0	24.2	27.7	34.3	40.4	13.0	26.3	42.9	23.7
$1.25 to under $1.50	15.7	25.5	21.9	10.0	14.6	17.3	21.1	19.3	12.3	13.9	13.0	7.2
$1.50 to under $2	40.8	25.5	15.4	(1)	29.9	28.0	26.3	14.3	25.9	30.7	7.1	1.0
$2 to under $2.50	13.0	2.0	2.3	(1)	17.3	9.8	2.5	1.2	30.3	15.3	2.3	(1)
$2.50 to under $3	.9	(1)	(1)	(1)	3.4	1.6	.3	(1)	11.3	2.9	.3	(1)
$3 and over	.9	(1)	(1)	(1)	.3	1.0	(1)	(1)	1.4	.7	(1)	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	10,800	5,100	16,900	5,000	147,000	30,700	63,600	16,100	90,000	13,700	30,800	9,700

	Franchised motor vehicle dealers				Men's and boys' clothing stores				Women's ready-to-wear stores			
Under $1 an hour	2.7	(2)	1.0	(2)	8.1	(2)	13.5	(2)	9.9	(2)	24.0	(2)
$1 to under $1.25	11.2	(2)	23.8	(2)	15.2	(2)	31.4	(2)	31.7	(2)	34.1	(2)
$1.25 to under $1.50	16.1	(2)	26.7	(2)	13.7	(2)	31.4	(2)	19.9	(2)	22.6	(2)
$1.50 to under $2	35.3	(2)	34.3	(2)	33.6	(2)	20.9	(2)	17.8	(2)	15.0	(2)
$2 to under $2.50	19.5	(2)	10.5	(2)	15.2	(2)	1.5	(2)	8.9	(2)	3.1	(2)
$2.50 to under $3	8.4	(2)	2.8	(2)	8.1	(2)	1.5	(2)	6.9	(2)	.7	(2)
$3 and over	6.8	(2)	1.0	(2)	6.1	(2)	(1)	(2)	4.9	(2)	.5	(2)
Total	100.0	(2)	100.0	(2)	100.0	(2)	100.0	(2)	100.0	(2)	100.0	(2)
Number of employees	84,800	33,000	10,500	3,500	21,100	3,500	6,700	(2)	10,100	(2)	54,100	4,800
	Shoe stores				Other apparel and accessories				Furniture and home-furnishing stores			
Under $1 an hour	9.5	38.5	24.8	66.7	12.7	(2)	23.2	(2)	3.9	(2)	19.6	(2)
$1 to under $1.25	16.4	23.1	37.1	26.7	19.7	(2)	39.8	(2)	15.8	(2)	34.3	(2)
$1.25 to under $1.50	16.9	7.6	21.3	6.6	14.1	(2)	19.3	(2)	16.9	(2)	20.3	(2)
$1.50 to under $2	26.5	30.8	14.6	(1)	22.5	(2)	15.0	(2)	31.7	(2)	18.9	(2)
$2 to under $2.50	17.5	(1)	2.2	(1)	24.0	(2)	1.8	(2)	16.4	(2)	5.6	(2)
$2.50 to under $3	10.1	(1)	(1)	(1)	2.8	(2)	.9	(2)	8.1	(2)	1.3	(2)
$3 and over	3.1	(1)	(1)	(1)	4.2	(2)	(1)	(2)	7.2	(2)	(1)	(2)
Total	100.0	100.0	100.0	100.0	100.0	(2)	100.0	(2)	100.0	(2)	100.0	(2)
Number of employees	18,900	1,300	8,900	1,500	7,100	(2)	33,200	(2)	36,000	6,500	14,300	1,800
					Household appliance and radio				Drugstores and proprietary stores			
Under $1 an hour					2.1	(2)	12.1	(2)	26.5	48.8	47.7	70.2
$1 to under $1.25					13.4	(2)	39.7	(2)	18.0	16.3	28.8	22.8
$1.25 to under $1.50					13.9	(2)	24.1	(2)	11.7	4.7	12.5	3.5
$1.50 to under $2					38.5	(2)	20.7	(2)	15.9	20.9	7.6	1.8
$2 to under $2.50					19.8	(2)	1.7	(2)	17.0	4.7	3.0	(1)
$2.50 to under $3					7.5	(2)	1.7	(2)	8.8	(1)	.4	(1)
$3 and over					4.8	(2)	(1)	(2)	2.1	4.6	(1)	1.7
Total					100.0	(2)	100.0	(2)	100.0	100.0	100.0	100.0
Number of employees					18,700	6,600	5,800	1,700	37,700	4,300	26,400	5,700

[1] Less than ½ of 1 percent. [2] Insufficient data.

TABLE 10.—*Southern region: Percentage distribution, nonsupervisory retail employees, metropolitan and nonmetropolitan county areas, straight-time average hourly earnings*

	Building-materials and farm-equipment dealers				Department stores				Variety stores			
	Men		Women		Men		Women		Men		Women	
	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan	Metropolitan	Nonmetropolitan
Under $1 an hour	9.4	26.1	31.6	45.1	21.8	27.2	48.8	61.9	59.6	61.3	89.2	96.4
$1 to under $1.25	39.6	32.6	30.4	25.5	23.9	21.8	32.3	25.6	23.4	20.4	7.5	3.2
$1.25 to under $1.50	22.9	21.0	26.6	18.6	14.6	14.3	10.5	6.5	12.8	16.3	2.3	.2
$1.50 to under $2	19.9	15.7	11.4	9.8	21.1	20.4	6.3	3.7	2.1	2.0	.8	.2
$2 to under $2.50	5.1	2.8	(1)	1.0	8.6	8.2	1.5	1.4	(1)	(1)	.2	(1)
$2.50 to under $3	1.9	1.7	(1)	(1)	5.0	5.4	.3	.9	2.1	(1)	(1)	(1)
$3 and over	1.2	.1	(1)	(1)	5.0	2.7	.3	(1)	(1)	(1)	(1)	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	42,700	77,600	7,900	10,200	41,800	14,700	106,200	35,200	4,700	4,900	38,900	43,800
	Other general merchandise				Grocery stores				Other food stores			
Under $1 an hour	19.3	58.0	46.0	90.4	38.6	56.7	38.1	70.9	12.1	30.0	61.6	70.0
$1 to under $1.25	26.2	21.9	31.0	6.5	21.0	20.4	28.4	19.0	21.1	24.4	26.9	26.7
$1.25 to under $1.50	25.0	7.3	15.5	2.2	13.4	12.6	16.5	7.1	22.3	15.6	7.2	(1)
$1.50 to under $2	21.6	7.8	7.5	.9	18.7	8.4	14.7	3.0	28.5	27.8	4.3	3.3
$2 to under $2.50	6.8	2.7	(1)	(1)	6.3	1.5	2.3	(1)	10.5	2.2	(1)	(1)
$2.50 to under $3	(1)	.5	(1)	(1)	1.5	.2	(1)	(1)	4.3	(1)	(1)	(1)
$3 and over	1.1	1.8	(1)	(1)	.5	.2	(1)	(1)	1.2	(1)	(1)	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	8,800	21,900	21,300	32,300	101,300	82,400	42,300	33,700	42,100	9,000	13,800	3,000

	Franchised motor vehicle dealers				Men's and boys' clothing stores				Women's ready-to-wear stores			
Under $1 an hour	19.3	29.6	16.9	41.9	21.4	33.3	37.7	80.0	52.2	100.0	57.1	87.3
$1 to under $1.25	15.3	21.9	37.3	26.7	17.9	33.4	30.2	10.0	26.1	(1)	22.6	10.6
$1.25 to under $1.50	11.9	17.6	25.5	19.8	14.3	16.7	18.7	10.0	4.3	(1)	9.7	2.1
$1.50 to under $2	24.0	20.5	20.3	5.8	22.6	13.3	13.2	(1)	13.1	(1)	8.1	(1)
$2 to under $2.50	14.2	7.0	(1)	3.5	13.1	(1)	(1)	(1)	(1)	(1)	1.6	(1)
$2.50 to under $3	7.2	1.2	(1)	(1)	4.7	(1)	(1)	(1)	4.3	(1)	.6	(1)
$3 and over	8.1	2.2	(1)	2.3	6.0	3.3	(1)	(1)	(1)	(1)	.3	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	57,000	93,900	5,900	8,600	8,400	3,000	5,300	1,000	2,300	300	31,000	14,100

	Shoe stores				Other apparel and accessories				Furniture and home-furnishing stores			
Under $1 an hour	22.5	34.5	51.9	68.6	32.8	35.5	49.4	75.3	20.6	32.0	30.5	63.7
$1 to under $1.25	17.5	20.7	26.0	22.9	21.3	12.9	31.7	16.2	20.1	28.9	34.7	24.2
$1.25 to under $1.50	20.0	13.8	13.0	8.5	13.1	25.8	9.4	4.5	11.1	15.4	20.0	10.6
$1.50 to under $2	20.0	31.0	9.1	(1)	19.7	12.9	7.8	3.5	22.1	15.4	8.4	(1)
$2 to under $2.50	12.5	(1)	(1)	(1)	4.9	3.2	1.7	.5	12.1	5.3	4.2	(1)
$2.50 to under $3	6.3	(1)	(1)	(1)	(1)	9.7	(1)	(1)	5.5	1.3	1.1	(1)
$3 and over	1.2	(1)	(1)	(1)	8.2	(1)	(1)	(1)	8.5	1.7	1.1	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	8,000	2,900	7,700	3,500	6,100	3,100	18,000	19,800	19,900	22,800	9,500	6,600

	Household-appliance and radio				Drugstores and proprietary stores			
Under $1 an hour	8.7	30.5	12.1	43.1	47.3	52.9	75.4	83.7
$1 to under $1.25	14.6	26.0	57.6	43.1	18.3	11.5	16.7	11.8
$1.25 to under $1.50	18.5	19.5	18.2	10.4	6.5	6.9	3.8	1.9
$1.50 to under $2	32.1	13.7	12.1	1.7	9.2	12.6	1.7	1.5
$2 to under $2.50	15.5	5.8	(1)	(1)	10.7	7.5	1.2	.3
$2.50 to under $3	4.8	4.5	(1)	(1)	6.1	5.2	.3	.8
$3 and over	5.8	(1)	(1)	1.7	1.9	3.4	.9	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	10,300	15,400	3,300	5,800	26,200	17,400	34,200	26,300

[1] Less than ½ of 1 percent.

III

PRIVATE PRICING POLICIES AND THE EFFECTS OF PUBLIC POLICIES

The participants in section III of these commentaries were asked to concentrate their comments on the analyses and issues raised by economists who contributed to panels VI and VII of the compendium of last March. We reproduce below the topics and questions which were posed to those contributors at the time they began work on their papers.

VI. Private pricing policies, their formulation and effects:

A. How are pricing decisions made in various types of business concerns—manufacturing, wholesaling, and retailing? In each type of establishment—
   1. Who makes the decisions?
   2. What type of information and data are used as a basis? (Illustrate with specific types of forms, etc., if possible.)
   3. To the extent that costs enter into price decisions, what are the relevant costs—past, present, or estimated (forecasted) future costs?
   4. Why are decisions made?
   5. What methods are used in such decisions—percentage markup, dollar margin, standard volume cost plus profits, etc.?
   6. To what extent are these policies geared to maximizing profits in the short run and the long run?

B. How do (*a*) market structure, (*b*) degree of industrial concentration, and (*c*) product characteristics affect pricing policy?

C. How do such factors as (*a*) customer goodwill (public relations), (*b*) labor-management relations, (*c*) marketing research, and (*d*) advertising budgets, enter into pricing policy decisions?

D. How are price policies and the responsiveness of prices to changes in demands and costs influenced by changes in economic organizations and methods which are employed to provide services of productive factors—e. g., development of collective bargaining, institutionalization of flow of financial resources, internal financing, etc.

E. How does control over costs as manifest through "administered" prices of labor services and the extent of monopoly among vendors of purchased materials and services enter into pricing policy decisions?

F. Under what conditions, if any, and within what range are firms able to establish pricing policies with only a secondary regard for demand considerations? How might the results of such policies be expected to differ from those under "competitive price" conditions with respect to output and prices? How pervasive are such "administered price" policies?

VI. Private pricing policies, their formulation and effects—Continued
  G. To what etxtent, and how, can business direct price policies so as to contribute to general economic stabilization and growth in a dynamic private enterprise economy?

VII. Relationships between public policies, private pricing policies, price changes and price relationships:
  A. How do Government policies, (*a*) tax structures, (*b*) spending programs, (*c*) antirust enforcement, (*d*) price maintenance, (*e*) types of monetary controls, and (*f*) direct Government support through developmental, insurance, or guaranty programs, enter into pricing policy decisions?
  B. Through what mechanism does public policy affect costs of productive resources and the proportions in which they are used?
  C. Through what mechanism does public policy affect individual demand choices?

THE LIMITS OF PRIVATE PRICE POLICY

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My comments on topics VI and VII of the compendium will be in two sections. The first uses information about a particular market to illustrate the need for caution in drawing conclusions about the effectiveness of competition in American industry. The second urges a better understanding of the limitations of published prices and price indexes, particularly when these are used as measures of competitive behavior.

In general, the contributors to this compendium conclude that any feasible change in private pricing policies cannot be expected to make an important contribution to greater economic stability and growth.[1] Nevertheless, it is significant that the question was raised and has been discussed so intensively. Obviously there is widespread belief that in large segments of our economy management has enough control over the prices charged so that private price policies could have a significant effect on the economy as a whole.

Of course, most business managements necessarily have price policies. The considerations involved can be exceedingly complex as Wroe Alderson has pointed out. But the various ideas as to what managements ought to do about prices presuppose that they can and should have any policy other than that of maximizing some combination of current profits and longer term profit opportunities, within the limits imposed by actual or potential competition.[2] One might infer from some of the discussion that our competitive market system is not working very well and that we must rely on the "industrial statesmanship" of corporate managements.

Indeed, this is more than inference. Certain of the contributors have stated it rather explicitly. For example, Joel B. Dirlam holds that—

> The practice of price leadership appears to be fairly widespread. It signifies merely that one of the members of an industry, usually the largest unit in the trade, will fix prices independently and other members of the industry more or less informally, but nonetheless rigorously, adhere to the prices or price schedules thus established.

He also finds that—

> product differentiation through the utilization of trademarks and trade names to distinguish products that are essentially identical has become so well recognized a business practice as by now to pass almost unnoticed. The significance

[1] See, for example, the concluding statements of Clarence H. Danhof, Richard Ruggles, John P. Lewis, and Alfred R. Oxenfeldt (The Relationship of Prices to Economic Stability and Growth, Compendium of Papers Submitted by Panelists Appearing Before the Joint Economic Committee, March 31, 1958 [hereafter referred to as compendium], pp. 141, 308, 395, 475) and Richard A. Musgrave's comment on p. 365 of the related hearings before this committee.

[2] Wroe Alderson's opening statement is that the term "business price policy" implies that price behavior is not completely determined by market forces (compendium, p. 399). This is true but can be misleading, particularly in the context of his subsequent references to "monopolistic competition." Firms must have price policies even in markets where competition is generally recognized to be quite effective.

of product differentiation is that it enables the producer of an allegedly unique article to charge a price that is relatively independent of—i. e., virtually exempt of the patronage pulling power of the lower—prices at which substitute articles can be purchased. * * * From the practical standpoint it may be a very effective way to divide up the market among the several producers, each with its own differentiated product being relatively freed of competition.[3]

Similarly, Robert F. Lanzilotti finds that—

While some large corporations appear to have little latitude in selecting a pricing policy in some markets and at certain times, the prominent corporations in a considerable percentage of manufacturing industries are to a large degree masters of their fates, and accordingly are able to adjust their price policies (and other policies) to the company's raison d'être.

He finds that the most prevalent pricing objective appears to be a long-term target rate of return on investment; that the most frequent explanation given by managements to explain or justify the particular profit target used as a guide in pricing decisions is a fair, just, or reasonable return; and that they have been able to achieve this target rate of return. In the example he uses—

This approach is influenced by the management's concept of the corporation as the industry leader vested with responsibilities similar to those of a public utility.

He concludes that—

As a generalization, it seems reasonably clear that the goals to which pricing is expected to conform in the large pattern-setting corporations in American industry are selected from among various alternative objectives, which in the final analysis come down to very specific profit objectives. The very ability of such companies to choose from among alternative policies reflects the degree of control over supply and price in the hands of corporate management.[4]

These views do not go unchallenged by some of the other contributors, notably Martin J. Bailey.[5] Nevertheless, it is worth reexamining whether American industry is really so noncompetitive and whether corporate managements really have so much discretion in the prices they charge.

Several influences have contributed to the widespread belief that markets are less competitive than is actually the case. One of these is the application of the textbook concept of an oligopolistic market, and the price behavior to be expected therein, without adequate knowledge or appreciation of all of the ways in which actual market structure differs from the textbook concept.

Another is the use of such economic jargon as "monopolistic competition." Even the trained economist may at times forget that markets can depart from the textbook concept of "pure" or "perfect" competition and yet be workably or effectively competitive. Those not familiar with the precise meanings economists have given to such terms are understandably confused and misled.

Another is the lack of data measuring actual transaction prices in markets where prices are administered, and the uncritical acceptance of the published price quotations of the leading sellers as though they measured realized prices. Finally, managements' explanations of price policies are frequently misleading or subject to misinterpretation. Bailey's comments on these last two points are worth repeating.

That such concessions, discounts, and so on are given in a great many industries in which quoted prices change infrequently is a matter of common knowl-

[3] Compendium, p. 517.
[4] Compendium, pp. 442–447, 456.
[5] Compendium, pp. 89–104.

edge, admitted by everyone except the large firms in those industries themselves. A casual reading of trade publications and business periodicals will convince one that this sort of behavior is extremely widepsread, although data on the subject are extremely hard to come by. The problem is simply that the one element of unquestionable truth in the theory of oligopoly is that large firms do not like to talk about sales at prices below the quoted price. If one were to read only the statements of big steel executives, one would be led to believe that no one in the steel industry would ever dream of cut-price sales, as such sales would obviously be detrimental to the profits of steel firms as a group. Certainly they leave no doubt that they wish no such sales were made.

This leads to the ironic situation that big firms in truly competitive industries bring floods of criticism and epithets of "monopoly" upon ther own heads by their stiff-necked secrecy about their pricing policies. They are so convinced that oligopoly theory ought to be true and applicable to their own situations, and they so wish they could price like oligopolists, that they talk like oligopolists while they price like competitors. This is regrettable as much for the public as for big business, because it distracts public attention from true monopolies, price-fixing arrangements, and misuse of resources. It also makes it difficult for the trained investigator, even if he knows just what he is looking for, to find where the monopolies and other abuses really are.[6]

But perhaps the basic difficulty is that economists rarely have either the time or the resources to acquire an adequate knowledge of the structure of particular markets and all of the aspects of competitive behavior in those markets. Acquiring an adequate understanding of even one market can be a major undertaking. Hence the reliance on superficial measures of market structure, such as the percentage of an industry in the hands of a group of large firms; on price series that do not actually measure price changes; and on management statements about price policy that do not jibe with competitive behavior.

It is not possible to avoid this difficulty entirely within the compass of the present discussion. It will help, however, if the question about the degree of management control over prices is limited to one type of market for one commodity. Thus some insight might be gained into the reasons why more exhaustive analysis can lead to quite different conclusions. The following comments have to do with "tank wagon" sales of gasoline to service stations.[7] The author has had much more than the usual opportunity to study this industry.[8]

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[6] Compendium, pp. 93–94.

[7] This term originated in the days when deliveries were made literally in tank wagons. In current parlance it is distinguished from the "tank car" price at which some large retailers, usually chains, are able to buy.

[8] Another instance in which careful analysis resulted in a major revision of the superficial appraisal of an industry will be found in Jesse W. Markham, Competition in the Rayon Industry. In the preface to that volume, Professor Markham comments as follows: "Since theoretical models of oligopolistic markets yield, according to the assumptions made, price and output solutions that range from those which would be expected under perfectly competitive conditions to those which would be expected under conditions of pure monopoly, empirical studies can help us single out those assumptions which seem to hold the highest degree of relevancy to the problem. The domestic rayon yarn industry, for reasons set forth in the introductory chapter, is a good candidate for a case study of an oligopolistic market.

"In this connection, the reader may be interested in the metamorphosis of the title to the study. The first chapter written was concerned with the relationship among firms with respect to price determination. After making an analysis of list-price behavior, I was prepared to call the study Monopolistic Aspects of the Rayon Market. As the study progressed, however, evidence of intertextile competition and of deviations from list prices during periods of depression appeared so strong that the original tentative title was dropped in favor of the present one. If only from a tactical point of view, the presence of competition is probably more difficult to establish with finality than the presence of monopoly. The discovery of a single monopoly restraint in an industry prevents it from being classified among the highly competitive ones, whereas the discovery of a large number of competitive forces does not prove the absence of monopoly. Nevertheless, I have selected the present title because I believe conditions in the rayon industry to have more nearly conformed with the precepts of competition than with those of monopoly. I therefore believe it to be more descriptive than one implicative of fairly strong monopoly forces."

TANK-WAGON MARKETS FOR GASOLINE

Tank-wagon markets for gasoline should be a useful subject for such examination because here the sellers are frequently assumed to have a substantial degree of monopoly power. For example, two of the firms listed by Professor Lanzillotti, as examples of firms that are able to price on the basis of a target rate of return on investment, are large oil companies. Petroleum refining is usually thought of as oligopolistic.

Furthermore, any noncompetitive behavior is more likely at the tank-wagon level than in the primary or bulk markets. The large refiner-marketers are partially insulated from price competition at the tank-wagon level because of brand preferences and because they have a degree of control over most of the retail outlets selling their brands. Prices are "administered" rather than the result of bargaining between buyer and seller on each transaction.

Another important advantage is that there is a readily available tank-wagon-gasoline-price series which comes somewhat closer to measuring actual realized prices than is true for many commodities in many markets. Indeed, it is a better measure than the published prices for gasoline in the primary or bulk markets.[9]

The procedure will be to describe some of the more important characteristics of market structure, and indicate how these can be expected to influence competitive behavior; to compare actual price movements with what could be expected if sellers had any significant degree of control over prices; and to examine the nature of price leadership in these markets.

Market structure

The economist's concept of an oligopoly is a market dominated by a handful of sellers with substantially similar attributes and interests. In such a market it can be expected that open price competition will be avoided because of "conjectural interdependence"—i. e., the recognition that any price reduction will have to be met promptly by rivals and therefore will hurt rather than help the price cutter.

One should consider rather carefully whether or to what extent a particular market fits this concept. The more numerous the sellers, and the larger the share of the market supplied by relatively small firms, the less likely that they will be able to agree (explicitly or implicitly) on a common course of action. The more diverse the characteristics and interests of the large sellers, the more likely that some of them will find it advantageous to use price as a competitive weapon. One must also consider the possibilities for price concessions other than overtly reducing the published price. Since such concessions are less likely to be matched promptly by competitors, they are less inhibited by conjectural interdependence.

The large integrated refiners.—Economists have generally recognized that the share of an industry in the hands of a few firms is not by itself a satisfactory indication of whether that industry is "monopolistic"—i. e., not workably or effectively competitive. Nevertheless the share supplied by the four largest firms, called the concentration ratio, has frequently been used as a first approximation to such a

[9] The limitations of the published primary market prices for petroleum products are discussed in the second section of this paper.

classification. An industry has usually been thought of as highly concentrated, and therefore possibly monopolistic, when more than 50 percent of the volume is in the hands of 4 firms.[10]

By this standard petroleum refining is not highly concentrated. It is true that it is necessarily big business, requiring enormous amounts of capital, and that the large refining companies are prominent among the industrial giants. But on a national basis the largest refiner accounted for less than 10 percent of the output in 1957. The 4 largest accounted for 32 percent of the total, and the 10 largest 57 percent. The 20 largest, all those which individually had as much as 1 percent, comprised 84 percent of the total. There were about 140 still smaller firms, but 50 of these supplied most of the other 16 percent.

Superficially the 20 largest refining companies have much in common. Each produces and transports a substantial part of its crude oil requirements. Each participates substantially in wholesaling and retailing, and markets much of its gasoline under its own brand. Most of them meet the same large competitors in several regional markets.

But more careful consideration discloses important dissimilarities which could be expected to affect their behavior. There are differences in the degree of integration into crude oil production, and therefore the need to pass on, through product prices, any increase in crude oil prices. There are differences in the use of low-cost imported crude, and therefore the willingness to cut product prices to make a market for this crude. There are differences in refinery location and other factors affecting the cost of reaching particular markets.

Since the most economical additions to refinery capacity can be in rather large increments, the growth in the individual firm's ability to supply particular markets may be uneven. At times it has more than the usual incentive to increase its market share in certain areas in order to utilize refining capacity supplying those areas.

There are differences among these large firms in the degree of consumer acceptance of their brands in particular areas, and therefore the need to make price concessions to sell these brands. There are differences in the degree of downstream integration; in the proportion of sales through refiner brand jobbers, who can use price concessions more effectively to increase market share; in sales to private brand, cut-price marketers.

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[10] Gardiner C. Means measured concentration in terms of the proportion of a census industry accounted for by the leading four producers (The Structure of the American Economy, National Resources Committee [1939]). Willard L. Thorp and Walter F. Crowder developed the same "concentration ratio" for census products (The Structure of Industry, TNEC Monograph 27 [1939]). In this instance the distinction between petroleum refining as an industry and gasoline as a product is not important since a group of large firms would have about the same share in either case. In his discussion of monopolized markets, Clair Wilcox pays particular attention to those instances in which the four leading firms account for over two-thirds of an industry or more than three-fourths of a product (Competition and Monopoly in American Industry, TNEC Monograph 21 [1939]). George Stigler finds "it easy to follow the classification of Clair Wilcox * * *" (Five Lectures in Economics [1950], p. 42). G. Warren Nutter adds to the Wilcox list industries with a concentration ratio of one-half or more unless judged to be competitive on other grounds (The Extent of Enterprise Monopoly in the United States [1951], p. 19). George W. Stocking and Myron W. Watkins speak of the highly concentrated industries as those in which the four largest firms account for half the output (Monopoly and Free Enterprise [1951], p. 47). J. S. Bain suggests that the lower limit of high concentration may be found where 70 percent of the output is supplied by eight firms (Monopoly and Competition and Their Regulation [1954], edited by E. H. Chamberlin, pp. 216, 217, 240).

Refiners that are large on a national basis have even larger shares in particular regional markets and comparatively small shares in other regions. They need have less concern about the effect of their actions on the price level in those markets where their share is small than where they are among the leading sellers. They are more willing to resort to direct or indirect price concessions in an attempt to increase their share.

The effect of these conflicting interests is greatly augmented by the availability of a variety of competitive tactics which, in contrast with open price cuts, are less likely to be matched promptly by rivals, but which amount to indirect means of lowering prices. The supplier may, for example, offer unpublicized price concessions in order to get and hold the better dealers. These may take the form of contributions to the maintenance or improvement of the station, or better than usual rental terms where the station is leased by the supplier to the operator. Instead of two grades of gasoline, a refiner may sell a single grade, better than competitors' regular and approaching premium quality, for the price of regular.

The smaller, less integrated refiners.—Furthermore, the conduct of the large integrated oil companies is greatly influenced by the need to meet the competition of the smaller refiners.

While there is no sharp demarcation between the 20 largest refiners and those somewhat smaller, the small refiners as a group differ markedly in their characteristics. Typically they are less integrated into crude oil production and transportation. Typically they have achieved less brand acceptance and therefore rely more on price to sell their output. They tend to sell through different channels, relying more on bulk sales to jobbers and large consumers, and less on their own wholesale distribution. Entirely aside from firm size, these differences greatly weaken the influence of conjectural interdependence.

The absolute size of the smaller refiners, down to about the 70th in size, is enough to make them reasonably efficient. They have demonstrated their ability to compete successfully with the giants in the industry.[11] At the same time their individual shares of the markets in which they sell are usually so small that they give relatively little consideration to the effect of their actions on the price level. In general, they can be expected to act as sellers are presumed to act in fully competitive markets. Their competitive influence is out of all proportion to their 15 percent share of total gasoline sales.

Inelasticity of supply.—Effective control over prices presumes a willingness to curtail output to what can be sold at the desired price. Even more so than in most industries the individual refiner finds it disadvantageous to curtail its output to preserve the general price level.

For both large and small firms the high fixed costs of refineries and the low cost of the incremental barrel of output are strong inducements to operate refineries near capacity even if the output must be sold at far below total cost. For the integrated firms this inducement is compounded by similar conditions in crude-oil production and in

[11] The 20 largest refiners in 1935 accounted for 85 percent of the total refinery throughput in that year. The same firms accounted to 83 percent of the total in 1957. The increase in the share of the smaller firms is in spite of the fact that several among them were absorbed during this period, as highly successful going concerns, by their larger competitors.

the pipeline transportation of both crude oil and refined products. The pressure is mitigated somewhat by State regulation of crude-oil production to market demand, and recently by the so-called voluntary limitation of imports, but typically these controls have not prevented a surplus of oil seeking a market.

The pressure on the individual firm to maintain its output even in the face of sharply lower prices is a major influence toward effective competition. It is true that this inelasticity of supply is also an inducement to some form of restrain on competition in order to avoid what may be considered to be ruinously low prices, but it tends to make ineffective any but the most powerful restraints on individual action.

The effectiveness of this pressure is enhanced because no one firm, or small group of refiners, controls enough of the capacity so that a moderate curtailment of its output can have much effect on price. In any period of market weakness the smaller refiners could and would increase their output to make up the difference. In the longer run they are quite capable of increasing their market share at the expense of those who attempt to maintain a noncompetitive price.

Jobbers and private brand marketers.—Less than two-thirds of the gasoline sold through retail service stations is supplied directly by refiners, both large and small. Approximately one-fifth is supplied by refiner brand jobbers and approximately one-sixth by private brand marketers. The proportions are higher than these in some sections of the country and lower in others.[12]

Refiner brand jobbers can and do use various direct and indirect price concessions more effectively to increase volume than can a large refiner doing its own wholesaling. This ability stems in part from the greater flexibility of a small organization; in part from their more intimate knowledge of a local market, in part from the greater freedom of a small firm to engage in price discrimination of various sorts, and in part from the fact that such jobbers frequently have a comparatively small share of the market, and therefore have less concern that any price concessions will be met promptly by their larger rivals.

This ability to use price concessions more effectively is one of the reasons why some refiners sell a large part of their output through jobbers, and why the jobber share of gasoline sales has been growing. Where the supplier desires to increase its market share it can offer the jobber special terms which permit the latter to do more than the usual amount of price cutting.

The private brand or cut-price marketers' share of gasoline sales has also been growing. A few of these marketers do some refining, but they buy most of their gasoline, from both large and small refiners, in the highly competitive bulk or primary market where prices

[12] About 60 percent of the gasoline is sold through retail service stations. About 27 percent is sold to consumers buying in wholesale or tank-wagon quantities, primarily farmers and truck operators. About 13 percent is sold by refiners direct to large consumers, including governments, buying in bulk quantities.

Only about 1 percent of the gasoline is sold through service stations operated by refiners. A larger proportion of the stations supplied by refiner brand jobbers, selling perhaps 3 percent of all gasoline, are operated by jobbers. Nearly all the stations supplied by the private brand marketers are operated by them, so they have no meaningful tank-wagon price.

are quite sensitive to small changes in supply and demand.[13] They are an important link in the sequence of reactions by which primary market price changes affect tank-wagon and retail prices.

These marketers differ greatly in their characteristics and policies, but in general they depend on some variation of the price appeal to achieve much larger volume per station than refiner brands.

They are quick to pass on any saving in gasoline cost in order to enhance their volume. In a typical case one of them will offer more than the usual premiums, do more than the usual amount of secret discounting, or perhaps cut its posted prices briefly over a weekend. Sometimes it can thereby attract additional patronage without causing other sellers to make similar concessions, but frequently one or more of the rival cut-price marketers will retaliate by lowering their prices. The reductions spread so that they are generally selling for more than the usual differential below the leading refiner brands. The refiner brands in turn adjust their tank-wagon and retail prices to prevent loss of market share.

This is a greatly simplified example. The successive steps can be quite varied and complex. The promptness of the reaction depends on the character and strength of the cut-price marketers in a locality. In general, however, it can be expected that any substantial weakness in primary markets will be reflected at the tank-wagon level in a short time.

Disorderly markets.—It is characteristic of gasoline as well as other petroleum markets that the channels of distribution not only overlap vertically but also differ markedly at each vertical step—i. e., the same class of buyer can frequently buy at two or more vertical steps, and, at each step, from outlets that differ widely in their characteristics as business enterprises and in the combination of product quality, convenience, service, and price which they offer. There is not the neat orderly market that is implicitly assumed in some discussions of how the number and size of sellers can be expected to influence their competitve conduct.

Retailers, for example, must not only compete with other retailers who have different sources of supply, products with differing degrees of public acceptance, different types of outlets, different methods of doing business, and therefore different costs and prices. They must also compete with jobbers where truckers and fleet owners have the alternative of buying in wholesale quantities. Jobbers in turn must reckon with the ability of still larger consumers to buy from refiners at the tank-car price. In some markets both retailers and jobbers must compete with cooperatives.

The same refiner may sell at primary or open-market prices to private brand jobbers and retailers, at somewhat less sensitive bulk or "tank car" prices to both refiner brand jobbers and large refiner brand retailers, at tank-wagon prices to refiner brand retailers, and at retail in company operated and consignee stations.

Refiners and jobbers are bypassing the wholesale bulk plant on a large and growing proportion of their tank-wagon sales, delivering direct to the larger service stations from refinery or terminal. The sav-

[13] The effectiveness of competition at this level is clearly indicated by the characteristics of both buyers and sellers and the nature of the relations between them. It is evident in the sensitivity of actual realized prices, as distinguished from the usual published quotation. Space does not permit developing the evidence on this point.

ings achieved make it possible to offer what amount to price concessions, in rental terms for example, to get more of this business.

Refiner brand jobbers compensate for this eroding of their wholesale functions by integrating into the actual operation of their retail outlets. To this extent they have become retailers able to buy at the tank-car rather than the tank-wagon price.

These and other cross currents of competition greatly weaken the influence of conjectural interdependence. Whenever supply and demand conditions warrant it, some seller usually finds it advantageous to lower its price at some point.

Competition among these various levels and channels of distribution also raises numerous questions of price discrimination.[14] It should be recognized, however, that price discrimination can be an important influence making competition more effective. A large seller may be reluctant to institute a general price cut to all customers because of the expectation that it will be matched promptly by rivals. It can, however, cut prices to particular customers with some hope that it will thereby gain or hold volume, and that this action may not lower the general price level. But if supply-and-demand conditions are such that other sellers resort to similar tactics, the concessions spread until the whole price level is reduced.

Conditions of entry.—Another restraint on noncompetitive conduct is the actual or potential entry of new firms. Space does not permit adequate discussion of the conditions of entry into the refining business. Briefly the entry of new firms is difficult but by no means impossible. Frequently the subsequent growth of the entrant is limited to a market niche in which it has some advantage over larger competitors. Nevertheless 16 of the 50 largest refining companies in 1957 had entered since 1935.

Even more important, however, is the actual or potential entry of refiners who are already large on a national basis but are not yet selling in certain areas. Outstanding examples since World War II are the large-scale entry of Standard of California into the east coast market and of Phillips into the Southeastern States. Such entries have had a major influence on price behavior. The possibilities for further entry of this sort are far from exhausted.

Price behavior

The tank-wagon prices posted by the leading marketer are available for a great many individual cities. Frequently, however, the prices quoted for particular cities are merely the "normal" or "established" prices that the larger sellers would like to get if competition would permit.

The average of tank-wagon prices to dealers in 55 cities, now compiled by Platt's Oilgram, appears to be more realistic.[15] Admittedly,

[14] In the famous Detroit case, for example, the Federal Trade Commission charged that selling at the jobber price to firms which also operated retail service stations selling the refiner's brand in competition with other service stations that bought at the tank-wagon price was discriminatory. The seller was not able to justify the price difference on the basis of the difference in the cost of selling to the two types of outlet. The Supreme Court held, however, that the lower price was justified because the seller was meeting competition in good faith.

[15] Until July 1, 1956, this was the 50-city average compiled by the Texas Co. On July 1, 1956, when Platt's Oilgram assumed responsibility for the compilation, 6 of the 50 cities were dropped and 10 new ones were added. This did not, however, affect the average materially. On May 1, 1957, the 55th city was added. These include the largest city in each State plus 7 other large cities.

it does not measure various indirect price concessions. Furthermore, it is limited to the leading refiner brands. In general, however, it appears to reflect actual rather than nominal posted prices. This average is compiled as of the first of each month. Prices are also available on the same basis for each of the 55 cities.

The movement of this average over a long period is quite impressive. The octane rating of gasoline today is 65 percent above 1925 and 19 percent above the 1936–40 average. This is only one of the ways in which the product has been improved. In spite of the much more complicated and expensive processes necessary to produce this added quality, the price of gasoline, excluding taxes, is only 5 percent higher than it was in 1925. In contrast, the index of all consumer prices is up over 60 percent. The gasoline price is 60 percent above 1936–40, whereas the Consumer Price Index has more than doubled.

But this record is not in itself conclusive evidence that prices are competitive. A better indication is the way they respond to short-run changes in supply and demand.

A test of competitive versus noncompetitive price behavior.—If the large refiners had any significant control over tank-wagon prices one would expect these prices to change only infrequently. Presumably such control would mean prices above those that would prevail under more competitive conditions. There would be no need to make frequent price changes and sellers would be anxious to avoid any action that might upset the favorable price level.

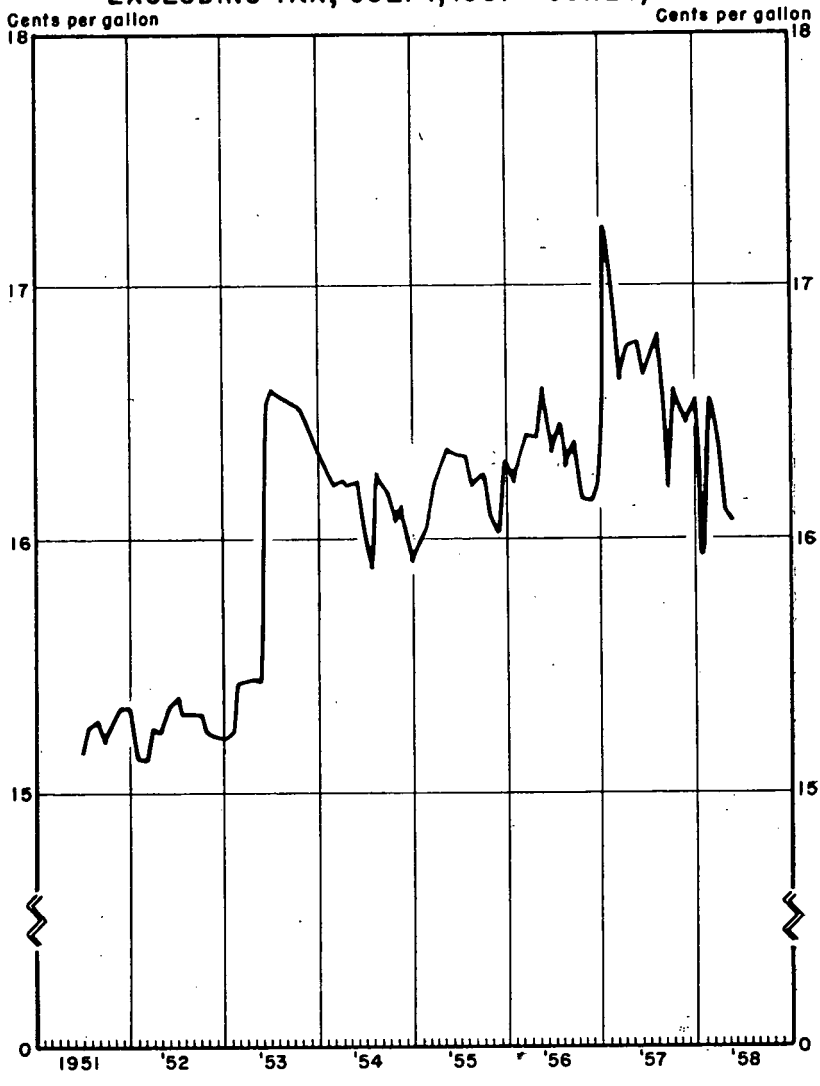
Any attempt to exact a still higher price would, in the absence of an enforceable agreement among competitors, incur the risk that in this particular instance one or more of them would not go along. They might prefer to capitalize on this opportunity to enhance their own volume.

There would be even less reason for reducing the price. Each seller could expect that other sellers would match its price cut promptly and thus it could not hope to increase its volume thereby. Furthermore, there would always be the risk that such action might set off a series of retaliatory price cuts.

So long as there was any doubt at all as to how competitors would react, the safest course of action for each large seller would be to leave the price unchanged for long periods. This would be particularly true of periods in which there were only minor changes in supply and demand conditions.

Chart I

AVERAGE OF TANK WAGON PRICES FOR GASOLINE EXCLUDING TAX, JULY 1, 1951 – JUNE 1, 1958



But if the sellers do not have any significant degree of control, if prices are governed by market conditions and even the so-called price leader is forced to adjust to these conditions, there will not be long periods of price stability. In periods of market weakness the leader will be forced to lower its price because it is losing volume to competitors, particularly the important "cut-price" marketers. In periods of market strength it will find it possible to raise its prices without serious loss of volume. The leader in each area has some discretion as to just how it will react to supply and demand conditions. In a very real sense, however, prices are determined by these market conditions.

If it is found that prices fluctuate even during periods when changes in supply and demand are minor, this emphasizes the seller's lack of control. This is particularly true of posted prices since the mere announcement of a price, which can only be changed by a subsequent announcement, tends to result in infrequent price changes. The test, however, is actual realizations, not nominal quoted prices.

If, barring an industrywide development such as an increase in the price of crude oil, these price changes tend to vary by regions, even by local market areas, this reinforces the conclusion that the leader is forced to adjust to market conditions. It is getting higher prices when and where conditions will permit and lowering its prices when and where necessary to prevent loss of volume.

Fluctuations in the average.—In the light of the preceding comments, the fluctuations in the reported average of tank-wagon prices to dealers, shown in chart 1, are quite illuminating. These fluctuations occurred during a period when there were only small changes in the demand for gasoline. Consumption did not vary by more than 2 percent for the growth trend. Nevertheless, the average price changed in almost every month of this 7-year period.

The month-to-month changes are frequently small, but it must be remembered that the tank-wagon price includes the cost of the crude oil and its transportation to the refinery, the cost of refining, the cost of transporting the gasoline to the terminal or bulk plant and delivering it to service stations, as well as all of the other marketing costs. The refiners gross margin is a small fraction of the tank-wagon price. When there has been no change in the cost of crude, and since regulated transportation rates are quite stable, a comparatively small change in the tank-wagon price can bulk large relative to the refiner's net profit.[16]

The tendency for the average to be somewhat higher during the summer months is also revealing. Demand is somewhat higher in the summer, but not markedly so. Thus the seasonal pattern of gasoline prices indicates how sensitive they are to supply and demand conditions.

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[16] The average gross margin of midcontinent refiners in the last decade, as calculated from published prices for crude oil and published primary market prices for products, has been less than 2 cents per gallon of all products. On balance, refiners have been able to do somewhat better than the published data would indicate. Nevertheless, the average net profit of those relatively nonintegrated refiners that publish financial statements has been a small fraction of a cent per gallon of products. Since these are relatively successful firms, whose return on investment compares favorably with that of the large integrated refiners, this is presumably a rough measure of what the latter are able to earn on their refining operations.

The average hides the fact that frequently there were both increases and decreases in different cities in the same month. Since these partially offset each other, the price movement was greater than shown by the average.

Between July 1 and August 1, 1955, for example, there were price decreases in 13 of the 50 cities then included, ranging from 0.3 to 0.9 cent per gallon. There were also price increases in 10 other cities ranging from 0.3 to 2.1 cents. The increases and decreases precisely offset each other so that the average remained unchanged.

Since the compilation is made as of the first of each month, it does not show those instances in which there were two price changes in a particular city in the month. Furthermore, as noted above, some changes in actual realizations are not reflected in the average.

The behavior of tank-wagon prices for gasoline following the crude-oil price increases in June 1953 and January 1957 is also quite revealing. On these two occasions refiners advanced their tank-wagon price for gasoline by the amount they considered necessary to cover the increases in the cost of crude at those times. This was not, of course, the amount that each thought it should get to cover its individual costs. It was the market leaders' judgment of prices at which competitors would have to sell because of the general increase in industry costs.

In retrospect this judgment proved to be incorrect. There were too many situations in which individual sellers found it advantageous to cut prices in order to achieve fuller utilization of their refining capacity.

If the large sellers had had any real control over prices, presumably the higher levels would have held. In both instances, however, competition forced a series of downward adjustments. By August 1954 over half of the June 1953 increase in the average had been wiped out. By October 1957 all of the January 1957 increase had been eliminated.

Prices in particular cities.—The 50 (recently 55) cities included in the average constitute a small fraction of the number of points at which tank-wagon prices might be quoted. For example, Indiana Standard (the parent company) posts prices at almost 4,000 bulk plants, whereas only 14 of the 55 cities are in its area.

With this qualification, and some of those previously noted, the number of price changes reported for these 55 cities is illuminating. In the 3½ years between July 1, 1953, and January 1, 1957, during which time there was no major change in crude oil prices, 96 increases and 120 decreases were reported. These are separate changes distinguished by differences in amount or timing. When the same cents-per-gallon change was reported for 2 or more cities in the same month, it is counted as only 1 price change even though the cities affected were widely separated and different refiners were the leading suppliers. The increases and decreases were well distributed over the period. That is, the increases were not predominantly at one time and decreases at another.

The prices reported are those for the sellers that are usually considered the price leaders in their territories. Usually, but not always, other large refiner brands were selling at the same prices in each city. These frequent price changes are not, however, the actions to be expected of a leader that has any significant control over prices.

Another revelation is the frequency of price changes reported at particular cities. The extreme example is Hartford, Conn. In 36 of the 54 months between July 1, 1953, and January 1, 1958, there was at least 1 change in this city. Repeatedly the leader attempted to restore the tank-wagon price to a more profitable level. Repeatedly it was forced to reduce that price drastically because it found that competitors were not going along.

Price leadership

Leadership of a sort does exist in tank-wagon prices for gasoline, but the important question is whether the resulting prices are significantly different than what they would have been without the leadership.

There is no leadership on the downside. The large refiners are usually followers of decreases initiated by others. The first move is typically by small refiners selling in primary markets. The larger sellers must meet these prices or forego their share of the bulk sales. Lower primary market prices mean lower costs for private-brand marketers, which are passed along in lower tank-wagon and retail prices. Frequently the reduction in the posted prices for large refiner brands merely formalizes concessions that have already been made in order to remain competitive.

There is leadership in price increases, although not in a very meaningful sense. Usually, but with numerous exceptions, the refiner-marketer with the largest market share in the area is the first to post an increase in tank-wagon prices. If it is no longer the largest seller it has inherited the leadership role from an era in which it was the predominant marketer. Furthermore, the other large refiner-marketers usually go along with whatever price increase is posted by the leader, although again there are numerous exceptions.

But the leader cannot successfully raise the price, even if other large sellers follow, unless market conditions are such that the smaller refiners and the private-brand marketers find it advantageous to go along. Unless supply and demand conditions in the clearly competitive primary markets force private-brand marketers to raise their prices, these marketers are likely to seize the opportunity to sell at more than the preexisting differential below the leader's price and thus increase their market share. When this happens the position of the leader and those who followed becomes untenable.

Furthermore, an unnecessarily high price invites even the larger sellers to increase their market share at the expense of the market leader. Usually they will not openly post a lower price, but they find other ways of offering concessions to get additional volume. This is particularly true of refiners that are large nationally but have a small share in the local market.

Because of its dependence on a correct appraisal of the market, this is often referred to as barometric price leadership.[17] The leader's success does not depend on the power to coerce other sellers, or on the

[17] The barometric price leader "commands adherence of rivals to his price only because, and to the extent that, his price reflects market conditions with reasonable promptness" (George J. Stigler, The Kinky Oligopoly Curve and Rigid Prices, Journal of Political Economy, October 1947, p. 446).

"For the most part, therefore, the barometric price leader, as defined by Professor Stigler and as visualized for purposes of this paper, appears to do little more than set prices that would eventually be set by competition" (Jesse W. Markham, The Nature and Significance of Price Leadership, American Economic Review, December 1951, p. 899).

tacit collusion of almost all suppliers, but on its ability to appraise market forces correctly.[18] Somewhat similar conditions in other industries have been described as "competitive barometric price leadership." [19] Thus qualified, however, the term loses much of its connotation. It is certainly a far cry from what is usually thought of as price leadership.

It is true that the leader has some discretion. It must decide precisely when market conditions make a price increase desirable from its viewpoint and precisely how much the advance should be. It may even make the mistake of holding its prices too high and thus suffer loss of market share. But this degree of discretion falls far short of any significant control over the price level.

If there were effective price leadership the other large sellers would have to follow almost without exception. But if the leadership is of the barometric sort, one would expect occasional exceptions. The other large sellers would not always accept the leader's judgment of market conditions.

There have been a number of such exceptions in gasoline-tank-wagon markets in recent years. A seller other than the usual leader, believing that a price increase is overdue, may itself initiate the increase. Then the leader becomes a follower, or, if it refuses to follow, the price increase may have to be rescinded. Under different circumstances, a seller may reduce prices to meet cut price competition without waiting for the usual leader.

PRICE SERIES THAT DO NOT MEASURE PRICE CHANGES

The adequacy of the price data in the particular market analyzed in the previous section is not a major problem. For many markets, including petroleum products at other levels, it is more serious.

Several of the contributors have commented on the inadequacies of price data. Nevertheless, this is a point that deserves further emphasis. I suspect that some of the conclusions about price behavior and its effect on stability and growth stem in considerable part from the fact that the readily available published prices do not represent actual transaction prices.

This should not be taken as a criticism of the price collecting agencies. The Bureau of Labor Statistics, for example, may be doing the best it can within the limits of its resources. It should be recognized that some of the problems it faces are almost insuperable. Neither am I arguing that most published price data are worthless. They can be quite useful provided one understands their limitations.

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[18] Compare this situation with the following definition of effective price leadership: "Where one or a few firms dominate a trade, price leadership is likely to obtain. If a single firm overtops its rivals, it may invariably take the initiative in raising or lowering the price. If 2 or more concerns are dominant, 1 may habitually serve as leader or more than 1 may lead, each in a different territory or each in turn. The smaller firms in such a field will follow the changes that are announced and sell at the prices that are set. They may be subjected to hidden pressure by the leader. They may fear annihilation in the warfare that would be invoked by an attempt to undercut him. They may seek to obtain larger profits by taking refuge under the price umbrella which he holds over the trade. They may merely find it convenient to follow his lead. *In any case, they abandon independence of judgment and adopt his prices as their own.*" [Emphasis added.] (Clair Wilcox, Competition and Monopoly in American Industry, TNEC Monograph 21 [1939], p. 121.)

[19] Markham, op. cit., p. 897.

Primary market prices for petroleum products

Let me draw again on the petroleum industry for an example. Professor Bailey indicates that he is quite aware of the danger of drawing conclusions from price series that do not measure price changes. Nevertheless, 1 of his 2 illustrations serves to emphasize the danger of using data without knowing precisely how they are compiled and without an intimate knowledge of the prices they are supposed to measure.

Unfortunately the average value of refined products which he used to test the BLS petroleum-products index suffers from essentially the same defects as the BLS index. His average is presumably based on the so-called group 3 prices for petroleum products—i. e., f. o. b. Oklahoma for northern shipment, possibly averaged with the gulf cargo prices. The BLS index is based on the same prices plus others of somewhat similar character. Hence when Professor Bailey was confronted with the revised BLS index he discovered that much of the disparity with his average had disappeared.

The main difficulty with the group 3 prices is not that they are quotations by a seller or sellers who then resort to various arrangements which alter the prices actually realized. The difficulty here is that what started out as a reporting of actual transaction prices has long since evolved into something quite different.

As late as the middle thirties a large volume of petroleum products was still being sold f. o. b. Mid-Continent refineries for shipment by rail to northern markets. Flexibility of rail transportation meant that such products could reach any market in the Upper Middle West. The group 3 freight rate to that market was the same from any Oklahoma refinery. Refineries in inland Texas had a higher than Group 3 freight rate and those in Kansas a lower rate. Thus prices in the different markets tended to equalize on a group 3 basis. Even when the sellers were located at some other point, such as Chicago, the flow of products from Mid-Continent refineries made Oklahoma a logical basing point.

The reported group 3 price range could be, and apparently was, a compilation of actual transaction prices or quotations at which sales would be made. It was quite sensitive to even small changes in supply-and-demand conditions. For example, there were 80 changes, 35 increases and 45 decreases, in the low of the range reported for regular grade gasoline in the 3 years 1937 through 1939.

This situation has changed radically. Long-distance rail shipment of the major petroleum products has largely disappeared. With the increase in both pipeline and water transportation, prices in northern markets have long since ceased to reflect the Oklahoma price plus rail freight. Furthermore, conditions do not favor continuation of the Oklahoma basing point by merely subsituting some other transportation cost.

There is no longer a major volume of products originating in the midcontinent area which can be shifted at will among any of the markets in the upper Middle West so as to equalize prices f. o. b. Oklahoma. The markets which can be supplied economically by a particular refinery tend to be limited to the vicinity of the plant plus the area reached by the products pipeline to which it is connected.

Conditions now favor quoting prices at destination rather than on a basing-point formula. The cost of reaching any particular market is no longer precisely the same for all Oklahoma refiners. It varies depending on the pipeline to which they are connected and the distance from the nearest pipeline terminal to the market.

The so-called group 3 prices that have evolved in response to these and other developments have lost much of their original significance. What has evolved is a price series, for each grade of each product, which purports to reflect an informed judgment of the market. Because it seeks to avoid minor short-term fluctuations, it is not unusual for the reported price to remain unchanged for months. The attempt to show only the more significant changes also means that the movement of the reported price is likely to lag somewhat behind the movement of actual transaction prices.

In 1947 and 1948, when supplies were tight, buyers paid substantial premiums above these published prices. Frequently in recent years they have been able to buy at substantially less than published prices. The market reports that quote these prices usually attempt to give some qualitative indication of both the extent and the degree of discounting from the published price.

It would be extremely difficult to translate these market reports into more realistic price series. It is possible, however, to compare the group 3 price with other price series that are at least somewhat more realistic. From January 17 to June 10, 1957, the low of the group 3 price range for regular grade, 89-octane gasoline, as reported in Platt's Oil Price Handbook, remained unchanged at 12.5 cents. Including the pipeline transportation rate would bring the laid-down cost to 14 cents at both Chicago and Minneapolis-St. Paul. During the same period the same source reported that the Chicago price declined from 13 cents to 12.5 cents and recovered to 12.75 cents. The price at the Twin Cities declined from 13.75 cents to 13 cents and recovered to 13.5 cents. While the group 3 price remained unchanged, there were 6 price changes at Chicago and 10 at the Twin Cities. At no time during this period did the reported price in either city cover the group 3 price plus transportation cost.

In addition to the group 3 prices, the Bureau of Labor Statistics also includes in its index the gulf cargo, New York Harbor, and Pacific coast prices for products. These have much the same faults as the group 3 prices, although for somewhat different reasons. Between June 27, 1950, and May 6, 1953, the reported gulf cargo price for regular grade, 86-octane gasoline did not change. There was no such stability in actual transaction prices.

Market reports which quote New York Harbor prices frequently refer to premiums or discounts actually paid. From January 16 to May 13, 1957, the New York Harbor price for No. 2 fuel remained unchanged at 11.65 cents. Platt's Oilgram reported, however, that buyers were willing to pay premiums of as much as 0.375 cent in late January, whereas in early May offerings at discounts of as much as 0.5 cent per gallon found no takers.

The prices usually quoted for crude oil are those posted by certain large buyers for a particular grade or grades of oil. When supplies are tight the smaller buyers find it advantageous to pay premiums above these posted prices. In 1947 and 1948 trade sources estimated

that somewhere around 10 percent of the net purchases were at premiums of typically around 5 but sometimes as much as 20 percent. Even the large buyers resorted to various means of augmenting their supplies which had the effect of increasing their cost, and increasing the amount realized by the producer without changing the posted price. When there is a surplus of crude this situation is reversed.

I am not as familiar with prices in other industries, but what I do know suggests that published prices are frequently much more sluggish than actual realized prices. This has an important bearing on one's conclusions about price behavior, and about the degree of managerial discretion on price policy.

Statistical treatment of price data

A somewhat different problem is illustrated by Lawrence E. Fouraker's paper. Economists are understandably anxious to make the most use of such statistics as are available. It is easy, however, to become so intrigued with elaborate manipulations that both the analyst and his audience forget to ask whether the original data warrant this treatment. Are they even reasonably accurate measures of what they are assumed to measure?

Professor Fouraker concludes that the price relationships described in his paper are probably trivial as causative forces contributing to fluctuations in general business activity. Nevertheless, it may be desirable to point out that the data are not adequate for the analysis he has undertaken.

The price series in Frederick C. Mills' analysis of Price-Quantity Interactions in Business Cycles are for only 56 commodities (counting steel billets, rails, sheets, and structurals as separate commodities, and counting condensed and evaporated milk as 2 commodities). Of necessity these are predominantly raw materials or in the early stages of manufacture. Even so, Professor Mills could not afford to be very critical of the representativeness of some of the historical data, or their reliability as measures of actual transaction prices. Otherwise the list would have been even shorter.

The 16 groups used by Professor Fouraker are merely various combinations of these 56 commodities, with the same item appearing in several groups. The titles of these groups can be quite misleading in the context of his analysis.

The durable goods group, for example, includes only one finished product: automobiles. The balance is made up of 14 prices for primary metals and their ores, plus asphalt, cement, plate glass, and Douglas-fir lumber. Thus it is not a measure of prices paid by ultimate consumers. The cost of the raw metal in most durable goods is a small fraction of the retail price.

Similarly, the capital equipment group includes no item of equipment except automobiles. It comprises the same items as the durable goods group plus rubber and linseed oil. In the consumers goods group the only items other than foods and fuels are men's shoes, lubricants, and automobiles.

Classifying each of the 16 groups as relatively competitive or monopolistic is hardly warranted. There is too much variation within each group as to the characteristics of the commodity and the

markets in which it is sold. Furthermore, there is too much overlap, with the same commodities appearing in groups that are labeled "competitive" and those labeled "monopolistic." For example, petroleum appears in 3 of the 8 groups that Fouraker lists as competitive and also in 3 of the 8 groups listed as monopolistic.

The doubtful value of any such classification is highlighted by a patent absurdity. All of the 56 commodities are in either the raw materials or the manufactured goods groups. Professor Fouraker puts both of these groups in the monopolistic column. Thus he classifies all 56 as relatively monopolistic.

There is the further difficulty that the observed differences in the behavior of these price series may be due to the peculiarities of the available data rather than the behavior of actual transaction prices. There is no convenient way of demonstrating whether on balance the price series classed as relatively monopolistic are less sensitive measures of prices actually realized, but a casual examination suggests that this may be so. There appear to be more instances in which the price series is merely the announced price of a large seller, without allowance for a variety of concessions from the published price, and fewer instances of reporting of actual transaction prices such as occur on an organized exchange.

SUMMARY

The attention given to private pricing policies in these hearings seems to stem from the belief that in large segments of our economy management has enough control over the prices charged so that it could have a significant effect on economic stability and growth. The appeals to "economic statesmanship" seem to imply that our competitive market economy is not working very well and that "we must rely on a greatly increased sense of responsibility on the part of business management so that policy may be exercised in the public interest." [20] I share the doubts of several of the contributors that such appeals are likely to be very effective, except in certain particular situations. Furthermore, I question whether most business is so noncompetitive.

Economists rarely have the time or the resources to acquire an adequate knowledge of the structure of particular markets, and all of the aspects of competitive behavior in those markets. Hence the reliance on superficial measures of market structure, on price series that do not measure price changes, and on management statements about price policy that do not jibe with competitive behavior.

A moderately detailed although far from complete description of one type of market for one commodity has been used here merely to illustrate that superficial appraisal of the effectiveness of competition can be quite misleading, and that adequate knowledge can lead to quite different conclusions. In this instance competition is obviously more effective, and the limits of private pricing policy more circumscribed, than is frequently assumed.

This does not mean that careful investigation would not disclose important industries or markets in which competition could and should be made more effective. I agree, however, with George Stigler's

[20] Compendium, p. 416.

observation that "more industries have been placed in monopoly than in competition on insufficient evidence." [21]

Published price series frequently fall short of measuring transaction prices. In varying degree they fail to reflect the fluctuations in actual realizations. Because these are the only readily available data, it is easy to draw unwarranted conclusions about the insensitivity of prices to changes in supply and demand. The analysis of published primary market prices for petroleum products is used here merely to illustrate this point.

[21] Five Lectures on Economics (1950), p. 50.

ADMINISTERED PRICES AND THE CONTROL OF INFLATION

WILLIAM W. TONGUE, ECONOMIST, JEWEL TEA CO., INC.

The chairman of this committee, in his remarks on May 12, 1958, opening the initial hearings on the relationship of prices to economic stability and growth, noted that from the beginning of its existence the committee has been concerned with the problems of stabilizing the general price level and preventing inflation. The work of the committee over the years has contributed to what I believe is a growing agreement among students of economic questions and the general public that a staple price level is a desirable goal of public policy. I certainly share this view. A stable general price level, which is expected to continue in the future, can contribute to the responsiveness of production and demand for an individual commodity to changes in the price of that commodity, thereby enhancing the efficiency of the price system in allocating resources. Stable price expectations can reduce speculative activities which can absorb resources and talent needlessly and can at times be destabilizing. A stable price level can give individuals a more certain foundation on which to erect long-term plans in their business and personal affairs. Finally, it can minimize the capricious windfall gains and losses which accompany changing price levels and violate accepted standards of justice.

Two basic questions were raised in the discussion of part III in the hearings, as I interpret this discussion. First, are private pricing practices compatible with preventing inflation through general monetary and fiscal restraints? Second, if private pricing practices are not so compatible, would any feasible public policy make them so? These basic questions narrowed down in the hearings to the area of "administered prices," particularly in what Representative Reuss revealingly calls "pace setting industries"—namely, steel and automobiles. Specifically, could pricing in these (two?) industries be made compatible with a stable general price level by requiring them to justify in advance any proposed price or wage increase before a public body that would "publicize" the "validity" of the proposal?

Much of the discussion of administered prices in the compendium appeared to be directed to an evaluation of how widespread administered prices are and what effect they have on the allocation of resources. This is a desirable inquiry, and I am inclined to share the view that most businesses do "set" prices within certain limits, but that generally speaking this does not have serious consequences for the economic allocation of resources. However, this subject is not directly relevant to the question of the effect of private pricing practices on the general price level. After all, from the standpoint of the general price level it does not matter too much what does happen to the price of General Motors automobiles or United States Steel sheets, as such.

They could go up and down within quite wide limits without having much effect on the general price level.

The problem—Pace setting

But we know that if the prices of General Motors automobiles or United States Steel sheets go up, this will not be the end of it. Prices of automobiles and steel produced by other manufacturers will also go up in all likelihood. And it doesn't stop there; for, as Representative Reuss so aptly noted, these are "pace-setting industries," and a price increase in either industry has a tendency to become generalized to other industries. Moreover, what is true of product prices is at least equally true of wage rates, where a wage settlement in one or the other of these industries quickly establishes a pattern which others strive to equal or exceed.

To the extent that price and wage conditions in a particular company or industry become generalized to the economy as a whole, the function of the free price system is subverted. For the price system does its work through a change in relative prices. A rise in the price of General Motors automobiles, for example, will tend to reduce the sales of such automobiles if prices of other commodities do not rise in proportion. But if other prices do rise in proportion, sales of General Motors automobiles may not go down at all. In effect, instead of General Motors adjusting to the rest of the economy, the rest of the economy adjusts to changes by General Motors.

I would not contend that the rest of the economy adjusts completely, or without lag, to price changes in the pattern-setting industries. Also, many may have trouble visualizing the conditions under which a change only in product prices in steel or automobiles, for example, might spread proportionately to the economy as a whole. But, in fact, price changes in the pattern-setting industries generally do not occur all by themselves. They are usually associated with wage settlements, and these do tend to become generalized. In effect, the wage settlement raises costs and incomes—first in the pattern-setting industry and later in the economy as a whole. The wage increases tend to push up prices and, with wages and salaries making up 70 percent of total personal income, they give consumers the wherewithal to pay the higher prices.

An outsider cannot, of course, know precisely what goes on in the minds of those who negotiate wage settlements or set prices in the auto or steel industries, but surely they must be aware of the pattern-setting nature of their actions. To the extent that they anticipate the spread to other industries of any action they take, this tends to weaken their resistance to upward changes in wages or prices, or the two in combination.

Thus, it is possible for the general price and wage level to rise arbitrarily within rather wide limits in accordance with price-wage changes in the pattern-setting industries. Moreover, it is difficult to see how general monetary and fiscal action, adequate to prevent the "demand-pull" type of inflation, can stop this "ratchet effect"—at least within limits of unemployment that are generally tolerable, or that we can afford considering the competition in production with communistic nations. We need some other way to prevent price and wage changes in the pattern-setting industries which would prove

unstabilizing for the general economy, or to keep price and wage changes in these industries from spreading to other industries.

Publicity boards?

The suggestion that the pattern-setting industries should justify in advance any proposed price or wage increase before a public body could conceivably help to do this, even though its powers would be limited to publicing the "validity" of the proposed change. But it should be noted that any requirement of this sort would do nothing to destroy or weaken the pattern-setting character of these industries; in fact, they would no doubt become pattern-setters to an even greater degree than at present, since the settlement would have the blessing of a Government agency.

Under such circumstances, the standard for determining price or wage changes that would be justifiable seems fairly clear. Wage increases, and related fringes, would need to be limited to an amount about equal to the estimated change in output per man-hour for the economy as a whole. Price changes would probably have to be prohibited, except for changes in the nature of the product, added services, etc.—the problems of adjusting "injustices" under price controls with which we have had some experiences in the past which are not too encouraging.

This, in effect, would almost completely prevent changes in prices and wages in the pattern-setting industries relative to other industries, and thus would destroy such benefits of the free price system as now exist between these two groups of industries. In effect adjustments in relative prices or wages would have to take place completely by having the rest of the economy adjust to the pattern-setting industries to an even greater degree than occurs at present. It seems to me that we need to move in the opposite direction, making it possible for these industries to adjust to the general economy to a greater degree than at present.

Moreover, to the extent that the above analysis is valid, it would appear that a general educational program by Government could clearly point out to the voting public the need to limit wage increases in general to the increase in productivity. Specifically, in the wage negotiations taking place in the auto industry as this is being written, some agency of Government—possibly this committee—might well have pointed out that a wage settlement greater than that offered by the employers would have inflationary consequences. The very suggestion of such a possibility points up clearly the political problems involved in this kind of proposal, irrespective of the agency that might be involved. It would be impractical without generally accepted standards for judging wage and price changes, and with such generally accepted standards the proposal would probably be unnecessary.

Could price changes alone become pattern setting?

As we seek other ways to prevent capricious wage and price changes in the pattern-setting industries, it is perhaps worth imagining whether a mere price change in a pattern-setting industry, without any corresponding change in wage rates, could easily become generalized to other industries and thus give the general price level a bootstrap jacking up. I suggested earlier that the reader might have difficulty visualizing the conditions that would make this possible—and frankly,

so do I, since there appears to be no automatic accompanying rise in income that would enable the higher prices to be absorbed without reduced volume. In this connection, it is probably more than happenstance that the "ratchet effect" was not a problem until the advent of the powerful industrial unions in the pattern-setting industries. Price and wage changes then came to be associated with each other, thus generating both price and income changes simultaneously.

Wages the strategic sector

To generalize, it seems to me inconceivable that we could have a continuous secular rise in the price level without having a rise in wage incomes which goes beyond the rise in productivity for the economy. Similarly, with public policies directed toward promoting full employment, control of inflation seems to me inconceivable unless we find some way of limiting the year-to-year rise in wage incomes to the rise in productivity for the country as a whole. As J. M. Keynes pointed out so clearly in his brilliant masterpiece, The General Theory:

> And the long-run stability or instability of prices will depend on the strength of the upward trend of the wage unit (or, more precisely, of the cost unit) compared with the rate of increase in the efficiency of the production system.[1]

The publicity board idea for the pattern-setting industries might contribute to holding down the rise in wage incomes to amounts consistent with the rise in productivity. However, it is so fraught with possibilities for interference with desirable actions of the free price system—with consequent danger to labor, business, and the general welfare—that I would prefer to seek some other alternative. As I suggested earlier, agreement among all concerned in the actual setting of wages and prices in the pattern-setting industries—labor, management, and the general public—on the need for holding wage increases in these industries approximately to increases in general productivity, would probably go far toward solving the problem.

Another theoretically possible method for holding wage increases in the pattern-setting industries to general productivity increases is to create and maintain indefinitely such a depressed level of general business activity and consumer buying that unions in these industries would not press for wage-rate and fringe-benefit increases beyond productivity gains or, if they did, the backs of management would be so stiffened that they would resist such demands at any cost. While the exact levels needed to accomplish this result are not too clear, this is a course of action that no one with a spark of feeling for humanity or for America's place in the world could possibly recommend.

In the final analysis, we come down to the need for restraint in the pattern-setting industries by management and the unions, but more particularly by unions. If this restraint is not voluntary—and if the public insists on a stable price level, as in the long run it almost certainly will—then the restraint will have to be imposed by law. This might well take the form of subjecting labor organizations to the antitrust statutes, the same as business firms. For while a worker is not a commodity, the labor he owns is a commodity in the same sense that capital owned by workers and other individuals is a commodity.

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[1] The General Theory of Employment, Interest, and Money (New York, Harcourt, Brace & Co., 1936, p. 309).

This is a conclusion I find very difficult to reach—but it is something we must all face. It is my fervent hope that the educational process and voluntary restraint will make private pricing practices in the pattern-setting industries compatible with full employment and a stable general price level.

I now turn to commenting on some of the specific points raised in the papers in topics VI and VII of the compendium. For simplicity, page references to the compendium are shown in parentheses in the text rather than in footnotes.

VI. PRIVATE PRICING POLICIES; THEIR FORMULATION AND EFFECTS

Business pricing policies and economic stability—Wroe Alderson

Short-term versus long-term profitability.—Mr. Alderson offers the intriguing theory that business management acts to maximize the value of a firm's assets. He feels that this objective minimizes the problems of reconciling the at-times-conflicting goals of maximizing profits in the short run as well as in the long run. Maximizing the company's assets will be affected by current profitability and also by growth in the company's volume. He feels that "* * * price policy also is generally determined by this basic objective" (p. 400).

I am not certain to what extent the notion of maximizing a company's assets solves the conflict between short-term and long-term profitability, but my own experience, limited to one company in the grocery chain field, Jewel Tea Co., Inc., leads me to believe that pricing policies have the object of making the organization profitable as a going concern, each year from now into the future. Generally speaking, I would say that management aims toward a growth in both volume and profits over a period stretching from the present to the indefinite future. Pricing and other business policies need to be looked at through bifocals, as one of our officers is fond of saying.

Retail pricing.—Mr. Alderson talks about the way retailers adjust their prices in the following fashion:

> Thus the food retailer usually increases his price on canned foods simply by calculating his conventional percentage markup on the new cost price to him. In retailing fresh beef, however, he cannot readily calculate an average margin for the various cuts which he takes out of a side of beef. The custom, therefore, is to make an adjustment in cents per pound on each cut corresponding to the increase in cents per pound on the side of beef (p. 404).

I would suggest that this description of retailer pricing practices gives a misleading impression of what actually takes place. The food retailer, dealing as he does with 5,000 or so items, must rely on "rules of thumb" for a large share of his day-to-day decisions. However, this does not mean that each item within a group will have the same percentage markup or that a percentage markup once established remains the same immutably through time. For example, the Progressive Grocer Super Valu Study shows that canned green beans have a gross margin on sales of 23 percent, canned salmon 17.4 percent, canned tomato soup 7.7 percent, canned orange juice 15.4 percent, and canned baby foods 13.7 percent.[2] Similarly there would be variations among items making up each of these groups.

[2] Super Valu Study (New York, the Progressive Grocer, 1958).

Also, markups do vary from time to time and from week to week. Prices on individual items will be set with an eye on the overall gross margin objective, with what competitors are doing on individual items and with an attempt to maintain what we call "natural prices." Natural prices are generally odd numbers, such as 5 cents, 27 cents, 29 cents, 3 for 25 cents, and 2 for 29 cents. Even numbers, such as 14 cents, 20 cents, 24 cents, 28 cents, or 30 cents would not be natural prices, though 10 cents would qualify as a natural price. Also, pricing is affected by whether it is easier for the customer to buy items 1 at a time, 2 at a time, 3 at a time, etc.

While percentage markups of individual items vary widely, there is a tendency for the markup in dollars and cents to be influenced by the cost of handling. For example, the markup on butter is 8.7 percent, while that on margerine is 11.1 percent in the Super Valu Study. This does not make for exactly equal gross profits per pound—the gross profit on butter is 6 cents per pound compared with 4.2 cents for margerine—but it does work in that direction. Fast-moving items also tend to have a lower gross profit than slow-moving items. For example, packaged household detergents carry a gross margin of 7 percent as against 26.8 percent for silver polish in the Super Valu Study. I might also add that the relationship among prices for the cuts of a side of beef vary from time to time, depending on fluctuations in consumer taste. After all, if the relative preferences of consumers change, as they do seasonally and also at other times, it is not practical to try to change the relative amounts of different cuts coming from a side of beef—the whole animal must be sold.

Stable versus flexible prices.—Mr. Alderson suggests that—

> * * * progress in the professional techniques of planning should be one of the long-run factors which may eliminate any tendency for business price policy to contribute to economic imbalance (p. 411).

This is because businessmen will be able to act with—

> * * * a more immediate and a more accurate knowledge of supply, demand, and competition (p. 411).

This raises the whole question of whether sluggish or flexible prices contribute most to economic stability. Although this point will be discussed later, at this point I am inclined to agree that stable rather than flexible prices are apt to be more conducive to economic stability for the reason advanced by Mr. Alderson:

> The attempt to recover volume through individual price concessions is likely to undermine the confidence of trade buyers in the integrity of their suppliers and thus contribute to the decline in general business confidence, which is one of the factors in prolonging recession (p. 412).

Prices and business cycles—Lawrence E. Fouraker

Mr. Fouraker advances the thesis that when the ratio of nondurable-goods prices to durable-goods prices falls, as happens near the end of a period of economic expansion, the propensity to consume declines, while the reverse happens on the upswing.

I accept Mr. Fouraker's conclusion that the ratio of prices of nondurables to the prices of durables leads the turning points in general business activity. However, as he suggests, one should be cautious about assuming that because nondurables tend on the average to have an inelastic demand with respect to price, and durable goods tend to have an elastic demand with respect to price, that the shift in relative

prices may cause a corresponding shift in the propensity to consume and hence in general business activity. In this connection it would be desirable to know whether in fact there has been any such shift in the propensity to consume.

This anaylsis ignores the possible impact of changes in the prices of services on the propensity to consume. The response of demand is probably even more insensitive to price changes in services than in food and other nondurable goods. Moreover, it may well be that prices of services, relative to prices of other commodities, tend to lag turning points in the business cycle, which would tend to offset the influence of relative price changes for nondurable goods.

Finally, in considering the propensity to consume all goods and services, one must extend the analysis beyond the simple effect of price changes on the commodity or group of commodities in question, for there is an income effect as well as a price effect to be considered here. For example, declining prices for food, particularly if the decline is expected to continue into the future, may cause consumers to feel that they can extend their commitments into the future. They may be induced to purchase houses or other durables on credit in an amount far larger than the current amount saved on food expenditure. Conversely, a rise in the price of food might cause consumers to feel that this is not a good time to buy, so that they reduce purchases of durable goods which involve extended future commitments. In fact, responses to the University of Michigan surveys of consumer attitudes and intentions suggest that this is the normal response of consumers. If so, i. e., if the income effect outweighs the price effect, the price movements described by Mr. Fouraker would tend to raise the propensity to consume at the upper turning point and reduce it at the lower turning point.

In any event, the evidence does not seem to me to be sufficiently clear to warrant basing any public policy regarding prices or taxes on this hypothesis.

Retail price policies—Stanley C. Hollander

Retail pricing again.—Many of the comments made previously about the pricing practices of retailers apply to the remarks by Professor Hollander on this subject. In addition, I would like to emphasize the importance of competition. For example, at the Jewel Tea Co., each of our buyers knows exactly the prices charged by his major competitors for each of the items he covers. In general, he dare not price his items very far away from the prices his competitors charge. In fact, using the items and weights making up the food-at-home component of the Consumer Price Index, we find that prices charged by the major food chains in Chicago seldom vary by more than 2 percent from the average for all the major chains for the all-item index. There will be larger variations in particular groups, such as meat, where differences in quality and trim may account for some of the variation, and there may be very wide variations in individual items.

It is true that each food retailer does enjoy some degree of pricing freedom because of his unique location. However, for food, the degree of pricing freedom is certainly materially less today than it was 10, 20, or 30 years ago. This is because of the spread of automobile ownership, the development of the supermarket, and the will-

ingness of consumers to drive relatively long distances to shop for large quantities at one time. Any operator can potentially attract customers for miles around and is not limited to the group within a few blocks of his store. Similarly, the combined transportation-distance factor does not give him the hold on the customers in his immediate vicinity that he may have had at one time.

However, the distance factor, and the elasticity of demand for specific products, which is related to the retailer's pricing freedom, may help to explain some of the variations in retail margins which are not completely clear from considerations of turnover and volume alone. For example, gross margins on milk, butter, coffee, cigarettes, flour, soaps, and sugar tend to be low. To some extent this may be because consumers are very sensitive to prices of these commodities which make up such a large part of their expenditure. Also, since these items are relatively standard among retailers, each retailer tries to keep his prices on these items as low as possible to avoid being substantially undercut by a competitor. The risk of loss of sales from such undercutting is much less from items that are incidental to the customer's food-shopping trip, such as clothespins, floor wax, window cleaners, infants' wear, cellophane tape, toothbrushes, matches, chocolate mints, lighter fluid, honey, ice-cream toppings, cake decorations, birdseed, and similar items which carry gross margins substantially above average. This would be consistent with the analysis by Holton & Holdren mentioned by Professor Hollander, though my own guess is that the major considerations are the relationship between gross margins and handling cost per unit. The latter tend to be lower for items which move rapidly in relation to the space occupied and those which are handled in relatively large volume.

Some characteristics and economic effects of pricing objectives in large corporations—Robert F. Lanzillotti

Administered prices.—Mr. Lanzillotti, after pointing out that many firms do practice "target rate of return" pricing, concludes that we just do not know enough about these practices to formulate appropriate public policies in the area of administered prices. He rightly criticizes suggestions for public hearings and discussion of proposed price increases in certain basic industries, giving them a quasi-public utility status, on the ground that they would serve merely to hold down price increases. This probably would establish prices which are not correct from the standpoint of promoting the most desirable allocation of resources and new investment, and might well have effects on resource allocation which are far worse than the present practices in setting administrated prices.

As I mentioned at the very beginning of my commentary, I feel these observations are valid, but I don't think they go to the heart of the problem of the relationship between the general price level and administered prices in the pattern-setting industries.

Cyclical implications of pricing policies—Alfred R. Oxenfeldt

Stable versus flexible prices.—Mr. Oxenfeldt points out that we are living in a new era of a substantially altered economic system, with which we have had little experience, and that experience with economic fluctuations in past periods may therefore have little relevance to the problem of reducing cyclical fluctuations in our present economy.

He points out that businessmen are loath to reduce prices during a recession because they know that their customers will ask their suppliers to make corresponding reductions. Cuts may occur, however, by a "weak link," and Mr. Oxenfeldt points out that this may be destabilizing by creating uncertainty over what will happen to prices in the immediate future.

Mr. Oxenfeldt makes a very good point in emphasizing that it is usually some time after a recession has started that it is recognized as such. I can recall talking to a number of Washington economists in the third week of October 1957, for example, and only a handful felt that we were in a genuine business recession—this, 3 months after the peak of the last business expansion. Consequently, price changes consciously designed to combat recession could only be expected after considerable delay and would certainly not come early enough to have any effect in preventing recession.

Mr. Oxenfeldt points out that price reductions will quickly be generalized and that they will cause a deferment of purchases because of the expectation that additional price reductions may be forthcoming. The latter reaction does seem typical and makes sense in light of the expectation of buyers that they will be notified before any price increases become effective. In my experience, this expectation is borne out in practice. Within such an environment, price reductions seem more apt to be destabilizing in their effects than stabilizing.

He also points out the problem of trying to decide what standards should be applied in determining just what prices would stimulate economic growth in a particular industry—whether it would be high prices that stimulated investment or whether it would be low prices to stimulate growth in volume. The lack of such clear standards does indicate—

> * * * that social objectives—whether they be economic stability or economic growth—cannot be pursued effectively through private pricing policies* * *. If those objectives are to be attained, a national policy will have to be devised in spheres outside the pricing area (p. 475).

VII. RELATIONSHIPS BETWEEN PUBLIC POLICIES, PRIVATE PRICING POLICIES, PRICE CHANGES, AND PRICE RELATIONSHIPS

Price effects of tax changes—George E. Lent

I would agree with Mr. Lent's conclusion that business-income taxes apparently have no measurable effect on the general price level. It is also my feeling that the corporate income tax is borne by stockholders and is not shifted forward to consumers in higher prices, except in the case of regulated public utilities.

On theoretical grounds, corporations can maximize their profits both before and after taxes by pricing without reference to the level of the corporate income tax. Also, such factual evidence as I have seen on the share of the profit element in income tends to support this theoretical conclusion. Among the best evidence is the data included in the Joint Economic Committee staff materials on Productivity, Prices, and Incomes, which show what has happened to relative shares over a period of time. The most extended series is that covering the years 1919 through 1956 for manufacturing, in which unit value added is compared with employee compensation per unit of output.

This series to me seems the most satisfactory one for computing changes in income shares over time, and it is also less subject to the vagaries caused by shifts in output categories. This series shows that over the period 1919 to 1956 there has been no measurable trend or break in the relationship between unit value added and compensation per unit of output. In fact, if one takes the beginning and ending years one finds that the increase in unit value added and unit employee compensation has been precisely the same, 60.7 percent.[3]

It follows that, if wage costs have paralleled the movement of value added, then the remaining elements of value added would also have shown a parallel movement in total. These include what makes up essentially the "profit" share, broadly defined, including depreciation, interest, and profits before income tax. Despite the wide changes which have occurred in corporation-income taxes over this 37-year period, there has been no apparent change in the ratio of the profit share to overall value added or to the wage share. This is consistent with the view that the corporate-income tax is not shifted and is in fact borne by the stockholders.

I would also vote with the school that argues that excise taxes do not tend to increase the general price level since they do not directly increase total incomes available to purchase the output of the economy but merely shift a part of this income from the private to the public sector. However, exceptions must be made here, as Mr. Lent points out, for "ratchet effects," such as when excise-tax increases affect the Consumer Price Index and hence generate general wage increases. Also, an increase in the price of one commodity may lead to a general expansion of incomes through credit expansion, for example, if it causes the increase in one price to be generalized over the whole economy. This is because, in practice, "other things" do not remain equal when a tax is changed, and also because our economy is not completely characterized by ideally "perfect" competition.

I would conclude that taxes, as such, are not a material cause of fluctuations in the general price level, and that such problems as do exist in this area would be immensely relieved if we could solve the general ratchet problem in the economy.

Monetary policy and the structure of markets—Warren L. Smith

Mr. Smith notes that—

> * * * it is quite generally agreed that monetary policy can serve more effectively to check inflation than to stimulate recovery from a recession or depression (p. 493).

This may be the general impression; but, without going into the question in detail here, I would offer the statement that there is no evidence to support this view. If anything, it is my impression that expansion in general business activity has followed monetary expansion with greater rapidity than has been true of the lag in general business contraction behind monetary contraction.

I would also disagree that the large amount of Government securities outstanding which serve as money substitutes make Federal Reserve policy significantly less effective. It is true that when money tightens, businesses and others economize on the use of cash because the

[3] Joint Economic Committee, Productivity, Prices, and Incomes (Washington, U. S. Government Printing Office, 1957), table 51, p. 144.

interest cost of carrying it is higher (either because of higher foregone earnings on short-term Government and other securities or a higher cost of borrowing). Possibly such offsetting changes in velocity would be less marked for any given change in Federal Reserve policy if the Federal debt were confined to long-term securities, but I suspect that private short-term instruments would be developed to take their place to a large extent, as they did prior to the 1930's. Thus, the major guides to Federal Reserve policy should be the general price level and the level of employment rather than any particular level or change in Federal Reserve credit or the money supply. This appears to be the way the Federal Reserve has in fact guided its operations and I see no evidence to indicate that they have been ineffective because of offsetting velocity changes or that the Federal Reserve has taken less action than was needed because of these changes.

I agree that the capricious changes in the availability of Government-guaranteed mortgage credit for residential housing have been unfortunate for the housing industry. But I also attribute these to the inflexible interest rates on such loans, and to Government decisions to buy or not to buy such mortgages, and not to the working of general monetary policy.

Mr. Smith cites the usual arguments about the insensitivity of investment expenditure to interest rate changes. This may be true to a certain extent, but I would point out that the general availability of funds, or lack of it, does have some influence on the willingness of business to expand. Also, it will have an influence on policy regarding the retention of funds for investment expenditures which might otherwise be distributed to the owners. Increasing savings in this way is just as anti-inflationary as reductions in investment.

This is not the place for an elaboration of the ways in which monetary policy can influence the general economy. However, such evidence as I have examined as an economist at the Federal Reserve Bank of Chicago some 15 years ago, and since then, suggests to me that monetary policy is a much stronger instrument and has a much greater influence on the level of economic activity than we are able to comprehend with our present knowledge of the workings of our economic system. Developments of the past several years reinforce this view and lead me to suspect that further experimentation with general credit control instruments will be richly rewarding in developing techniques for stabilizing demand conditions.

Government policy toward competition and private pricing—Myron W. Watkins and Joel B. Dirlam

This discussion gives a good summary of the effect of antitrust policy on business pricing practices and of the probably harmful tendency for the courts to get into detailed supervision of business operations via the consent decree route. However, I do not see that these are of exceptional significance to the problem of maintaining a stable price level.

The Effect of Government spending programs on private price formation—Murray L. Weidenbaum

Mr. Weidenbaum's paper emphasizes the large role of the Government in affecting the general price structure in ways ranging from agricultural price supports, through the stockpile acquisition of raw

materials to the contracting for goods and services which it purchases. I am not sufficiently informed in this area to be able to comment about whether Government actions in the past have had a significant influence on the prices of items purchased by the Government.

The Government has a right to interfere with the actions of a free market to subsidize or discourage various individual activities in ways generally agreed to be socially desirable. This activity does not seem to me to be incompatible with maintaining a stable price level, but as Mr. Weidenbaum concludes:

> If any single conclusion emerges, it is that the price effects of the Government's combined role as buyer, seller, and promoter need to be considered in formulating Government programs designed to promote economic growth and stability (p. 554).

The influence of antitrust laws and related Government policy on prices—Simon N. Whitney

I was intrigued with Mr. Whitney's citation of figures on the price effects of antitrust dissolutions and the conclusion that it is impossible to find any large effect on prices as a result of these dissolutions. From this one may conclude that monopoly power, to the extent that it existed, was not sufficiently great to have any seriously material effect on price which would interfere with progress in developing the standard of living of the American people. Nevertheless I think we can all agree that the antitrust laws are a favorable influence in promoting competition.

Mr. Whitney looks with disfavor on setting up an agency or using one now in existence to publicize proposed price changes before they take effect. He points out that there is little factual basis on which to determine what is a "just price" and that "cost" is not an acceptable criterion. Also, this moral influence would probably be used mostly to discourage price increases rather than price decreases and that this might well result in making many individual prices more rigid than they would be otherwise (p. 565 and 566). This might well defeat the purpose of the control, as has been noted.

As he points out, "If business is to be encouraged to cut prices at appropriate times, it must be allowed to increase them at the opposite times" (p. 566). I was impressed with the argument that if prices are to be made flexible, it will be necessary to make costs flexible, too, and in the final analysis this narrows down to making wages flexible. However, if both prices and wage rates vary proportionally it is hard to see how this can have a significant effect on the level of employment since wage rates constitute the bulk of the buying power of the country. In fact, prices which fluctuate in an uncertain fashion would disrupt forward planning and probably would have more harmful effects on growth in the standard of living than would be true with a generally stable price and wage cost level.

In general I get a very lukewarm feeling about the possibility of attempting to influence fluctuations in output by changes in the general price level. A more promising goal to my mind lies in creating expectations that the Government will act promptly to correct both inflation and deflation around a reasonably stable general price level.

COMMENTS ON THE COMPENDIUM OF PAPERS ON THE RELATIONSHIP OF PRICES TO ECONOMIC STABILITY AND GROWTH (SECS. VI AND VII)

James H. Wishart, Research Director, Amalgamated Meat Cutters and Butcher Workmen of North America, AFL–CIO [1]

Among contributors to section VI of the Joint Economic Committee's compendium of March 31, 1958,[2] there were few specific answers to question G, as proposed by the committee:

> To what extent, and how, can business direct price policies so as to contribute to general economic stabilization and growth in a dynamic private-enterprise economy?

Some panelists snubbed this question entirely. Others urged only "caution" or improved economic data for "better price administration" by business executives.

One contributor, Alfred R. Oxenfeldt, openly questioned the propriety of asking a businessman to consider the impact of his private pricing policies on the stability and economic growth of the Nation. "It is not clear," he declared, "that the Nation can legitimately expect him (the businessman) to add this concern to his others. * * * Social objectives—whether they be economic stability or economic growth—cannot be pursued effectively through private pricing policies."

Whatever differences may have existed among panelists on the feasibility or possibility of subordinating the pricemaking function of private business to social imperatives, all in fact assumed that a substantial number of the economy's prices are not set by the "impersonal market." Instead, it was assumed that often the personal decisions of business executives wield this power. It was assumed that such price administration or price rigidity accounted for the paradox of rising prices, even while sales and production both sharply declined through the first months of the 1957–58 recession.

The recent performance of the economy makes such assumptions inescapable.[3]

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[1] The views expressed are not necessarily those of the Amalgamated Meat Cutters and Butcher Workmen of North America.

[2] The panelists were Wroe Alderson, Lawrence E. Fouraker, Stanley C. Hollander, Robert K. Lanzillotti, and Alfred R. Oxenfeldt.

[3] This is denied by one contributor to the Compendium, Martin Bailey, who holds that administered prices are not "a subject worthy of the attention of Congress." He supports this by evidence showing occasional divergence between official steel industry prices and those actually charged some steel consumers between 1912 and 1939. His own data show only a minimal deviation from officially administered steel prices, except for the years 1914 to 1919, when steel executives had obviously overestimated what the traffic would bear in the war period. Bailey does not disclose whether or not any part of the price deviations shown represent special concessions by the steel industry to such economically potent customers as major automobile corporations. For him no price is "administered" if price setters give any weight whatsoever to market relations, and no corporation has power to influence price if that power is not an absolute monopoly power. Bailey has the courage to face the logical but absurd conclusion of his thesis with the assertion that the 1955–57 price rise was "a demand inflation generated from the active investment and Government sectors." Even his ingenuity cannot explain why prices continued to rise in 1958 when "demand" was all too palpably sagging.

Through the first months of 1958, with sales, production levels, and employment sinking steadily, prices of key industrial products continued either at or above their 1957 levels.

Price Rigidity

As of August 1958 the BLS Index of Wholesale Prices showed an index level for all commodities except farm products, more than 1 percent above the 1957 average. This was in spite of a drop in total industrial production which, by April, had come to more than 12 percent. Too obviously, the Nation's price mechanism does not play its presumed role as equalizer between demand and supply. Production fell and millions of workers suffered unemployment, but price levels all through the months of recession continued slowly to rise.

Price stability in some industries, price increases in others, have more than offset the minor declines shown by industries more sensitive to the vicssitudes of the market. Obviously, the preponderance of American industry is today operating under prices which are determined in substantial measure not by the objective forces of the market, but by the subjective intent of corporation executives.

The prevalence of administered prices can be demonstrated even in those industries whose raw materials costs are subject to unrestrained market fluctuations. In such industries, changes in final sales prices do occur—adjustments which have tended to pass on higher raw-material costs promptly, but to hold back and minimize price reductions following cutbacks in raw-material costs. In such industries it is not wholesale or consumer prices which are administered but gross margins. Differentials between prices paid for materials and prices at which they are sold, are subject to the same elements of deliberate control which mark the operation of openly price-administered industries. Such controls of gross profit margins have been effective in the sectors of those industries where strategic economic power has given leeway for the price decisions of business executives.

The tendency in such industries has been to drive prices up to the maximum point at which they can be held without (1) drawing new entrants into the industry; (2) providing any strategic advantage to smaller and less efficient competitors; (3) tempting major competitors to push for a larger share of the market by price cutting.

Capital requirements for successful operation are rising in many of these industries. Technological change has given major operators an ever widening competitive edge over smaller rivals. Major producers share ever stronger coincidental prejudices against old-fashioned price competition. The consequence of this can be seen in the tendency of gross profit or operating margins to widen year after year, and in steadily rising profit returns on expanding corporate net worth.

The Food Industry's Price Structure

As of August of this year, food prices, as reported by the Consumer Price Index, were 2.2 percent above levels of August 1957, in spite of a

1.1-percent decline between July and August of 1958. The Wholesale Price Index over the same months showed a 4.2-percent advance in prices of processed foods and a 0.2-percent increase in farm products. During earlier months of the year, food prices had in fact led the way for the entire advance shown by the Consumer Price Index.

It is important, therefore, to know what forces have been at work in relation to prices which currently absorb about 25 percent of the Nation's disposable income. A change of 1 percent in food prices brings with it an adjustment in consumer buying power ranging from less than 0.2 percent among families in the higher income brackets to more than 0.3 percent among those of lower incomes.

Total food sales in 1957, as estimated by industry sources,[4] rose to an all-time record of $51.3 billion. Current levels of food sales and prices suggest an even higher volume for 1958.

Food, moreover, is a staple item traditionally more subject to price competition than other items which have been given strong consumer acceptance either through widely promoted brand names or unique real characteristics.

And food prices are based on farm prices, which both in classic tradition and currently reality are open market prices subject to violent fluctuations following minor increases or decreases in supply.

Such fluctuations have taken place in the last 2 years in livestock and meat prices. Meat prices in August (CPI) were 73.3 cents a pound on the average as compared with 64.1 cents in 1957, and 57.6 cents in 1956. This is a 14-percent rise since 1957 and a 27-percent rise since 1956. And prices paid by packers for livestock in August were 38.4 percent above their postwar low of 1956.

Factors behind this rapid rise in meat prices have been clearly indicated by Congressman Victor L. Anfuso, chairman of the Consumers Study Subcommittee of the House.[5] Rejecting the tendency to blame farmers for this increase, Anfuso pointed out the course of farm livestock, wholesale meat and retail meat prices in the years since 1951. By April of 1958, retail meat prices had risen 2 percent above the all-time peak of 1951. But wholesale meat prices were 8 percent under that record high. And prices received by farmers for livestock, despite sharp recent advances, remained 17 percent *below* their levels of 1951. (See chart 1 and table 1 showing the continuation of these trends through August.)

TABLE 1.—*Livestock, wholesale and retail meat prices, 1939–57*

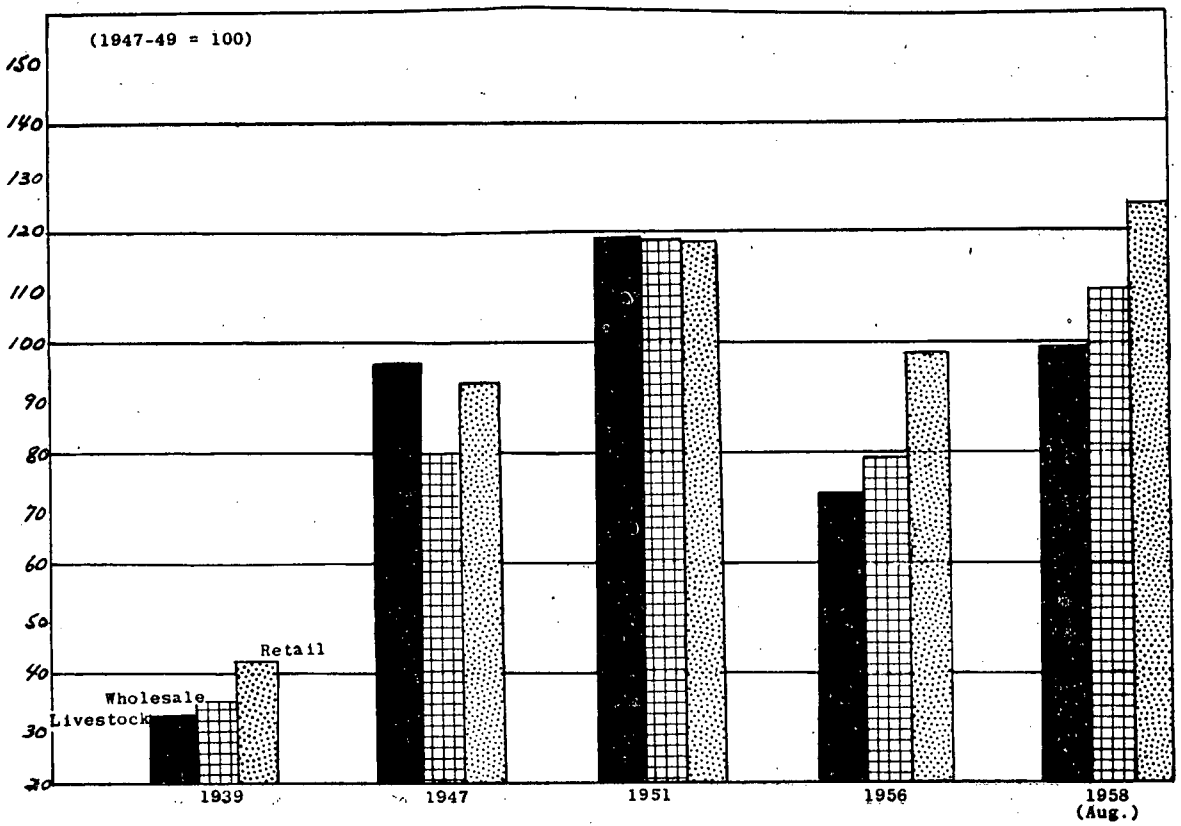
[1939–49=100]

Year	Livestock	Wholesale meats	Retail meats
1939	32.2	34.5	42.1
1947	97.6	94.2	93.6
1951	119.9	119.1	119.5
1956	72.1	79.1	97.9
1958 (August)	99.7	109.9	124.3

Source: BLS wholesale price indexes and meat price component of BLS Consumer Price Index.

[4] Progressive Grocer, April 1958, p. F–17.
[5] Congressional Record, August 8, 1958.

CHART I.—MEAT PRICE TRENDS, 1939–58



Anfuso declared also that livestock prices paid to farmers in 1956 had dropped below 1951 levels by 40 percent.

Anfuso's suggestion that widening margins on meat have contributed substantially to high meat prices is easily confirmed. Table 2, below, shows this relation in rough outline:

TABLE 2.—*Estimated receipts by retailers, packers, and farmers per pound of retail meat*

[In cents]

Year	Retailers	Packers	Farmers
1957	64.1	46.8	34.5
1956	57.6	42.2	30.0
1955	59.4	44.0	32.1
1954	64.1	49.8	37.8
1953	63.8	50.4	38.3
1952	68.0	54.1	42.2
1951	69.1	58.2	46.3
1950	62.4	51.7	40.6
1949	59.4	50.9	38.0
1948	65.6	54.0	43.9
1947	58.4	50.0	40.3

Source: Derived from Bureau of Labor Statistics, Agricultural Marketing Service and American Meat Institute data.

In 1951, as the above table indicates, the retailer received 69 cents per pound on the average for meat. The farmer received 46 cents on the average for the fraction over 2 pounds liveweight which produced 1 pound of retail meat. The difference between the retail price and the farm price was almost 23 cents.

By 1957, the retail price of meat was lower, but the farmer's receipt had fallen even more sharply. Consequently, the margin between the livestock price received by the farmer and the retail price had widened from roughly 23 cents to a little less than 30 cents.

Table 3, below, shows the growth of that margin year by year since 1947.

TABLE 3.—*Retailer, packer, and total farm-retail margins on 1 pound of meat*

[In cents]

Year	Retailer	Packer	Total margin
1957	17.3	12.3	29.6
1956	15.4	12.2	27.6
1955	15.4	11.9	27.3
1954	14.3	12.0	26.3
1953	13.4	12.1	25.5
1952	13.9	11.9	25.8
1951	10.9	11.9	22.8
1950	10.7	11.1	21.8
1949	8.5	12.9	21.4
1948	11.6	10.1	21.7
1947	8.4	9.7	14.1

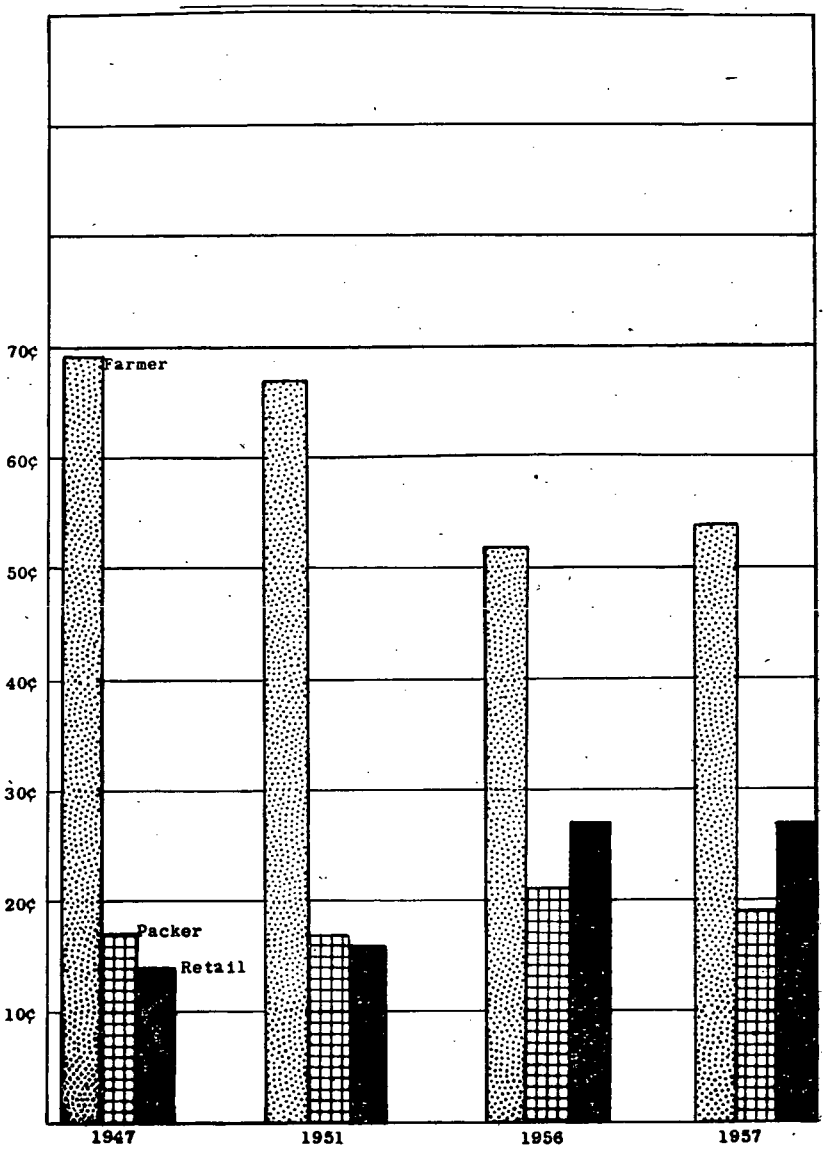
Table 4 accompanying chart 2 carries the record back to 1947 computed as retail-wholesale, packer and farm shares of $1 paid for meat at the cash register of the average retail store.

TABLE 4.—*Retailer, packer, and farmer share of retail meat dollar*

[In cents]

	Retailer-wholesaler share	Packer share	Farmer share
1957	27	19	54
1956	27	21	52
1955	26	20	54
1954	22	19	59
1953	21	19	60
1952	21	17	62
1951	16	17	67
1950	17	18	65
1949	14	22	64
1948	18	15	67
1947	14	17	69

CHART II.—RETAIL-WHOLESALE, PACKER AND FARMER SHARES OF CONSUMER MEAT DOLLAR, 1947–57



General conclusions to be drawn from all this are fairly obvious:

(1) Retail meat prices rose somewhat more rapidly than farm livestock prices on the upswings of the meat price cycle. (A rise of 8.3 cents in livestock prices between 1949 and 1951 brought a 9.7-cent increase on 1 pound of meat at retail and a 4.5-cent increase in farm prices between 1956 and 1957 correlates with a 6.5-cent retail rise.)

(2) On the downswing retail meat prices have lagged far behind farm prices. (A 16.3-cent drop at the farm level between 1951 and 1956 brought a decline of only 10.4 cents in retail meat prices.)

(3) Both dollar and percentage margins have widened. The major share of gains from such increasing price spreads seems to have gone to retail and wholesale sectors of the industry. (Between 1951 and 1957, the packers' margin rose only 0.4 cent per retail pound. The margin taken by meat retailers and wholesalers rose 6.4 cents a pound over the same years.)

(4) Farm income on livestock has tended to fall both absolutely and in relation to income of packers, distributors, and retailers of meat. Only in periods of relative scarcity, such as that which came in the first half of 1958, have livestock prices shown any considerable increase. In periods of "surplus" as in 1956—American meat production, then at 166 pounds per capita, was below averages of 4 other nations—farm prices have suffered disastrous collapse.

RETAIL VERSUS PACKING MARGINS

The data above suggest that economic returns for the retail food industry have been at higher levels than for the meatpacking industry. This is confirmed by current profit figures for both industries. The Monthly Letter of the National City Bank for April 1958 provides the following comparison:

Reported net income after taxes

	Total		As percent of net assets		As percent of sales	
	1956	1957	1956	1957	1956	1957
14 packers	$64,100,000	$37,700,000	7.6	4.3	0.9	0.5
34 food chains	201,000,000	206,000,000	15.4	15.8	1.4	1.4

Higher returns to food retailers reflect the economic power of the food chains and independent supermarket operators who have grouped together for cooperative buying. The power of major units in food retailing has grown substantially in recent years.

In 1957, for example, 28,800 supermarkets constituting less than 10 percent of the Nation's 298,800 retail grocery stores sold 67 percent of its groceries. This compares with 25 percent in 1952.

Supermarkets, 50 percent of them less than 5 years old, have brought striking gains to the marketing of food products. Part of this is straight technical efficiency—the result of new equipment, improved layout, and modern management methods. Part of this, too, repre-

sents gains achieved through the mass purchasing and streamlined methods of distribution. Hence, supermarkets have been operating on gross margins of about 20 percent compared with margins of 30 percent usual for most retail business.

This progress has given supermarket operators substantial economic power. Competition or price cutting by smaller independents is no problem. In relation to suppliers, too, major retail food operators can bring considerable economic leverage to bear.

Major retailers have the power of allocating strategic shelf space in their stores to the products or brands of their choice. The food processor whose brands are kept off shelf space is cut off from customers. This can be a life-or-death power over processors in times when apparent oversupplies of food products are competing for consumer acceptance. Food processors nationally have been spending hundreds of millions of dollars in advertising and promotion to create consumer demand sufficient to force their private brands on retailers.

Major retailers, moving toward vertical integration, have many of them developed either their own brand labels or their own sources of supply. Packing plants, dairies, canneries, and other basic processing plants are operated by many of the larger chains. This is looked to for additional economic advantage.

Meatpackers complain over the economic pressure brought to bear by the food dealers. Typically, there is little brand identification on basic meat cuts. Packers insist that they have been forced into competing for food chain orders on a basis of pure and simple price competition with the weakest links in the packing industry setting price levels for the industry. They protest that their sales prices are administered in reverse by the buyer for retail outlets.

Major packers no longer hold the strategic economic position which 30 and 40 years ago brought them both substantial profits and denunciations as the "Beef Trust." Control over the railroad movement of meats has been shaken by the growth of the trucking industry and antitrust action. Much of the value of the packer's branch distribution networks through branch houses and sales units has been dissipated. Major retail chains now take care of their own distribution.

Some packers complain that they are becoming simple subcontractors for food retailers—that their future lot may be foreshadowed in the present plight of the poultry industry. (Broiler and fryer prices in August 1958 were almost 50 percent under 1947–49 averages.) In addition, capital requirements for entering into meatpacking—on a local basis, at least—are relatively light, and competition among packers is no legal fiction.

Such complaints from packers tend to multiply in periods of relative overproduction and falling prices. However, in the first months of 1958 meat supplies have been less than abundant, and consequent price increases have unquestionably brought more comfortable profit margins to packers.

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PRICE SETTING IN THE RETAIL FOOD INDUSTRY

Basic pricing principles operating in the retail food industry are fairly well known. Administrative goals in the industry center on a rate of net profit after taxes amounting to about 1 percent on sales. Because of the very high dollar sales rate in relation to investment this means a rate of return on net worth ranging on the average well above 10 percent a year.

Although price setters for retail outlets boast of price "flexibility" and do in fact make unnumbered decisions for price changes on specific commodities, there is no flexibility on overall store or chain margins. A price concession or loss leader on one item must be and always is offset by an upward adjustment somewhere else.

With the exception of one major chain, which has traditionally operated on slightly narrowed margins, margins from store to store, from chain to chain, and from area to area tend to move in close and apparently coincidental uniformity.

Industry publications provide frequent and detailed breakdowns, department by department, and item by item of margin currently applied in representative samples of well-managed stores. This is provided together with formulas for applying price markups.

Reports from leaders of the Amalgamated Meat Cutters and Butcher Workmen, directly familiar with retail food operations in key areas through the country, indicate that actual price cutting is only rarely resorted to as a weapon of competitive struggle. Under few conceivable circumstances will established margins and goals be sacrificed for any desired gain in sales.

Competition does exist. It works in terms of the ingenuity and velocity of promotions, in competition for more desirable supermarket sites, in drives for greater store operating efficiency and consumer appeal, and in efforts to win more favorable terms from suppliers. The customer pays for the costs of winning his patronage from competitors. Currently more than 2 cents on each sales dollar are spent for advertising and promotions. None of this is allowed to compromise gross margins which must cover promotional costs, requirements for new capital investment, substantial rewards to competent management, generously calculated depreciation, all other expenses of operation—and the traditional 1 cent plus on every dollar rung up at the checkout counters.

There is no evidence to determine how much of the supermarket's gains through increased efficiency may be reflected in lower profit margins or how much has been allocated to dividends and earned surplus accounts.

LABOR COSTS

Those who find in the wage levels of workers an explanation for price increases will find little to support their case in the retail food or meatpacking industries.

Workers in packinghouses and retail stores have won wage increases. But substantial gains in man-hour productivity have served to keep such increases from carrying over into actual unit labor costs.

By the first half of 1958 man-hour productivity in packing was more than 8 percent above its 1956 level. As a result, actual labor

costs per pound of red meat produced by packers in the period of very substantial wage gains since 1956 were as follows:

Packing labor cost per pound

	Cents
1956	3.4
1957	3.6
1958	3.5

Price gains per pound of meat at retail since 1956 amount to about 16 cents.

In retail food the gain in labor productivity has been even more striking. Data prepared by the Supermarket Institute indicate that among supermarket employees productivity has been rising at a rate of more than 5 percent a year since 1951. This has more than equaled the rate of wage gains secured by such workers over that 6-year period.

It should be pointed out further that for the food industries as a whole the Department of Agriculture has estimated current hourly wages of $1.56.[6] This is obviously inadequate for any standard of healthy and comfortable living.

Conclusion

Current high levels of common stock prices and partially restored levels of industrial production have temporarily mitigated some public concern over recession which existed at the time of the Compendium.

A basic problem continues to face the economy. This is the continuing disparity between the Nation's productive power, now expanding at a substantial 4 percent a year, and its power to consume, which appears since 1956 actually to have contracted. Current fiscal measures, renewed incentives to capital investment, or exhortations to "have confidence in the economy" will not and cannot by themselves solve this problem.

As the Joint Economic Committee reported on June 6:

> * * * total manufacturing output is now at least 30 percent below capacity compared to only 8 percent of capacity idle in December 1955. For the economy as a whole, capacity has probably been increasing by at least 3 percent a year or more, although total demand rose only 1 percent a year from the end of 1955 until the third quarter of 1957 and has declined 5 percent since then.

There is not the slightest reason to believe that the private pricing policies of business will, within the foreseeable future, operate to redress this imbalance. As more than one panelist expressed it in the Compendium, short of brink of bankruptcy the businessman will not give price cuts. In this time when price administration dominates even in such volatile sectors of the economy as the food industry, to count on price cuts as stimulants to purchasing power is sheer economic fantasy.

The consequence of this reasoning as applied to Government policy is clear cut. What is needed is policy at all levels of government directed toward advancing and shoring up the major sector of buying power in the Nation's economy—the buying power of the average American family.

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[6] The Marketing and Transportation Situation, Agricultural Marketing Service, U. S. Department of Agriculture, July 1958, p. 14.

Though price controls are obviously not now feasible for the restraint of excessive industry profits, other measures must and should be undertaken to bring the flow of earned income into balance with the flow of property income in all of its forms.

For this purpose my own endorsement goes to the program proposed by Stanley Ruttenberg, AFL–CIO, research director, who has submitted his comments on earlier sections of this compendium.

Finally, the current tendency toward a raising of interest rates seems to me one likely to promote, the inflationary dangers against which it purports to shield.

Higher interest rates mean either higher costs for smaller sectors of business or a drying up of capital resources. They mean also a cutting off of the credit urgently needed if a national housing program is to be carried forward and consumer spending advanced.

Price administration is now in firm control of the economy's key sectors. It will not be eliminated by moral exhortation or even the real enforcement of antitrust laws.

What is needed is multiphased government, consumer, and trade union action to limit excessive profits.

What is needed is clearly the emergence of countervailing economic programs sufficient to restore buying power and with it the viability of our entire economy.

IV

FORMULATING PUBLIC POLICIES FOR ECONOMIC STABILITY AND GROWTH

The participants in section IV of these commentaries were asked to concentrate their comments on the analyses and issues raised by economists who contributed to panel VIII of the Compendium. We reproduce below the topics and questions which were posed to those contributors at the time they began work on their papers.

VIII. Formulating public policies for economic stability and growth:
- A. What are the merits and limitations of the alternative policies for promoting economic stability and growth?
  1. Monetary and debt-management policies with their various subclassifications?
  2. Fiscal policy, including taxes and expenditures?
  3. Direct controls giving consideration to their peacetime acceptance and selectivity?
- B. What criteria can be used to determine the optimum combination of the various types of policies?

ECONOMICS FOR COLD WAR

Richard V. Gilbert, Consulting Economist, Westport, Conn.

In the great debate on full employment, growth, and inflation that is now going forward, there is an air of urbanity and of dispassion that has its charm, but not much survival value. There has been little mention of the harsh realities of our situation, of the great struggle for survival in which we are engaged, a struggle which may be won or lost on the economic front. A kind Providence, it is said, looks after fools and children. Does He also look after nations that will not look after themselves?

The issue is not whether necessary rates of growth are consistent with an acceptable degree of price stability. We know from wartime experience that they are. The issue is whether these twin objectives can be attained by the use of the instruments of policy, fiscal and monetary, to which we have restricted ourselves in the past decade. The answer to this question is "No." In the period since the abandonment of direct controls in 1946, our rate of growth has been little better than it was for the 75 years between the Civil War and World War II. Judged by the standard of the dismal performance in the thirties, we have done quite well. Judged, however, by the requirements of the cold war, which by a curious coincidence began at the very time we were abandoning wartime controls, our performance falls short of what is clearly required for survival. On the inflation front, over the same period, we have had an increase of prices of between 60 and 70 percent, depending on the indexes of our choice. There are few who would deny that this degree of inflation, if continued, would have the most serious consequences.

If the rate of expansion of our economic power is not what we needed or wished, it is because we have not planned to get more. And if the degree of inflation is unacceptable, it is because we have been unwilling to use the powerful and direct controls which could have held the inflationary forces in check. And these two propositions are not unrelated. Indirect controls, fiscal and monetary, can contain inflationary forces only by restricting the rate of growth. They cannot be used to promote expansion, without at the same time intensifying inflationary pressures. If we confine ourselves to the use of indirect controls, we are compelled to sacrifice one necessary objective to the other. All this is well known to a generation of economists which played an important role in the operation of wartime controls and which knows, from experience, not only the seamy side of these controls, but how powerful and effective they can be.

It is, therefore, the more extraordinary that in this 12th year of the cold war, and especially in view of the dramatic events of the past year, most of those who appeared before this committee made no reference, or only incidental reference, to the cold war and to

direct controls; and so distinguished an economist as Gardner Ackley[1] could say "wage and price controls of the wartime variety would be completely out of place." The prevailing view is summed up by Albert E. Rees:[2] "Americans also generally agree that these goals are to be sought in a free economy—that either some inflation or some avoidable unemployment is preferable to the kind of central economic planning that regiments the economic life of individuals, firms, and organizations." If this is true, it is only because our economists and our policymakers have not made clear to the American public what the basic issues are. On the one hand, they have not outlined the grim alternatives. On the other, they have not provided a sober and objective analysis and discussion of all the alternative instruments of policy. We have made a totem pole of freedom of enterprise and erected taboos which make the very words "planning" and "direct controls" unmentionable in polite society and, indeed, almost subversive.

I propose in this paper to discuss the harsh realities of our situation and the harsh choices that situation compels.

The Economics of Cold War

The daily press and the airwaves are full of the purple prose of belligerency. One crisis crowds upon the heels of another. But one would look in vain for a clear and systematic statement of the economic requirements of cold war. At the topmost levels of our Government, to borrow the language Senator Fulbright used in another connection, our leadership and our policies, "when not weak and desultory, tend to be impetuous and arbitrary." In other than governmental quarters the situation is little better. Brave voices, it is true, are occasionally raised. For the most part, they cry out in the wilderness.

One such voice was that of Allen Dulles, who in a powerful statement reported in the New York Times, April 29, 1958, sought to rouse his countrymen. Khrushchev, he made clear, recognized the first principle of the economics of cold war in setting for Russia the goal of "catching up and surpassing the United States in per capita production in the shortest possible historical period of time." And Dulles set forth in striking terms the menace of Russia's actual economic performance, as well as her intentions.

Russia's gross national product was about 33 percent of ours in 1950. By 1956 it was about 40 percent. In 1962 it will be 50 percent. Their economic growth is proceeding at a rate of 6 or 7 percent per annum, their industrial production at a rate of 10 or 12 percent per annum. These rates are double our own.

What is more important, they are allocating much larger percentages of their total output to expansion of their industrial base, the metallurgical industries, the producers' goods industries, and electric power. In these critical areas Russia's annual real investment was 80 percent of ours in 1956 and will be greater than ours this year. The entire industrial base, if it is not equal to ours, is rapidly approaching it, and

[1] Joint Economic Committee, Compendium on the Relationship of Prices to Economic Stability and Growth, p. 634.
[2] Op. cit., p. 651.

in many areas they have surpassed us. Their production of machine tools is about double ours.

In the first quarter of 1958 their industrial production was 11 percent higher than in 1957; ours was 11 percent below. Without regard to the current recession, the Russians, with 40 percent of our gross national product, are putting into defense, and into defense-supporting industry, manpower and materials approximately equal to our own. The percentage of their national output devoted to these purposes is 2½ times ours.

Events have underscored the sobering words of Mr. Allen Dulles. In the year since Sputnik I, we have learned that Russian education is both more massive and more productive than our own. They are graduating twice the number of scientists, technicians, and engineers that we are. And except, perhaps, at the highest levels, their education is more thorough and effective than ours.

The Russians are outspending us in basic research, in scientific development, and in scientific and technological equipment in all the areas that have a warmaking potential. We have the word of the highest scientific authorities that they have achieved a commanding lead over us in many, if not most, of these directions.

It has frequently been said that the cold war will be with us for a long time and we need, not a burst of intensive effort, but a long, steady pull. We need, it is said, to pace ourselves. The proposition is self-evident, but the corollary is frequently lost sight of. The difference between cumulative rates of growth of 3 and 5 percent per year produces a spread of almost 25 percent in annual productive capacity in a decade, and more than 60 percent in capacity in a quarter of a century. If the 3-percent rate of growth of the past decade remains our pace, we are pacing ourselves into oblivion.

We can draw small comfort from the view, so often expressed, that we cannot expect to match the Russian rates of growth since they get such high percentages only because they start with such low numbers. Whatever truth this may have had 20 years ago, it is not true today. Their total base will shortly be half our own, and in the critical areas upon which warmaking power depends, their base is equal to, if it does not surpass, ours. Comparison of rates of growth in these areas is the heart of the arithmetic of cold war. If we do not at least match the Russians in these areas, we will not survive.

What is true of ourselves and the Russians is equally true of our allies as compared to the Russian satellites. The performance of Great Britain, our strongest ally, is worse than our own. And the free world as a whole has shown a rate of growth of real output less than half that of the Iron Curtain countries. Anyone having any doubts on this score will find the United Nations World Economic Survey [3] illuminating. The lesson of the disparity in the rates of growth between East and West is well understood by the uncommitted nations, even if we fail to read it. These nations hear the sound of the hobnailed boots pounding up the stairs as the silken slippers come down.

[3] United Nations, World Economic Survey, 1957, New York, 1958.

The Problem of Inflation

There is a consensus of opinion that inflation is dangerous. Apart from considerations of equity, which are important, inflation, if continued for long and if sufficient in amount, dissolves social and political bonds and undermines the basis of the social and political structure. Inflation even in small doses may, and in larger doses must, interfere with the production process itself. If unrestrained, it will almost certainly impair, if it does not frustrate, a mobilization effort. It is also generally agreed that even relatively small rates of increase, if expected to continue indefinitely, rapidly gather momentum. An inflation which creeps may create expectations which produce a trot or even a gallop. In a word, there is agreement that price stabilization must be a primary objective of national policy. The question is what should we do about it, what instruments should we use, and under what conditions? Here, unfortunately, the consensus ends, even though our experience over the past 20 years tells a clear story.

The rapid rise of prices in 1937 demonstrated that strong inflationary forces and unacceptable rates of price increase could occur in the face of massive unemployment and underutilization of resources. This experience itself gave rise to a great debate and a voluminous literature. Again in 1940 and 1941, the defense program produced inflation in spite of operations far below capacity. In the course of those years, economists hammered out the analysis and policies which were to serve us so well during the war years. In my opinion, almost everything that needs to be said about the relative effectiveness of the various instruments of control, direct and indirect, was said during those years.

It is sometimes suggested that our present troubles with inflation rise from a school of thought which holds that inflationary developments can occur only at levels at, or approaching, full employment. And that, therefore, expansionist fiscal and monetary policies can be used without risk of inflation as long as there are idle resources. No such school of thought has ever existed. The name of no economist comes readily to mind in connection with it, certainly not Keynes'. Keynes spent a good part of the summer of 1941 trying to persuade our Government of the dangers of inflation and advocating restrictive fiscal policies. The view that, fortunately, prevailed was not that inflation was not imminent and dangerous, in spite of vast unemployment, but that strong expansionary fiscal and monetary policies were essential to rapid mobilization and full use of our capacities. And that the inflation should be contained by direct controls.

At the end of the war, the Employment Act of 1946 made full employment, in some sense, a basic objective of national policy. In the light of our experience from 1937 on, there was certainly a serious question whether, in the absence of direct controls, this objective was consistent with the objective of price stabilization. The issue, however, was taken out of the hands of economists. In the revulsion of feeling against controls and austerity, whipped up for political advantage, the wartime stabilization machinery was scrapped. It is not that we did not know that the result would be strong inflation; we didn't care. In any event, there was a major runup of prices. Over half of the inflation of the postwar period occurred in the 3 years, 1946–48. It is interesting to note that the real gross national product,

after dropping 12.5 percent in 1946 from wartime levels, rose hardly at all in the 3 years that followed, in spite of the return of millions of men to the civilian labor force and the almost limitless needs of that period. It is difficult to see how one can be proud of our reconversion performance.

The outbreak of the Korean war in 1950 produced another inflationary binge. This accounted for one-sixth of the total inflation of the postwar period. We accepted direct controls, but only after the damage had been done. Together, these two episodes, taking direct controls off too soon and imposing them too late, account for three quarters of the postwar inflation, about which there has been so much concern and debate. Yet it is interesting that, in spite of this experience, and in spite of the ever-present threat of a new brush-fire war, no standby powers exist in the law, and the demand for such powers is notable by its absence.

The inflationary episodes referred to up to this point had their origin on the demand side. This is not to say that the push of costs played no part. On the contrary, the interrelationships between the demand pull and the cost push are precisely what has always been meant by the price-cost spiral. It remained, however, for the experience of the last few years to demonstrate that inflationary developments could occur not only in the presence of underutilization of capacity, but in the absence of an excess of demand (1956–57), and even in the presence of an actual decline of demand (1957–58). Experience has thus shown us that inflationary pressures can have their origin in what has come to be called the cost push.

Some have tried to put the monkey on labor's back; others, on the back of management. We have heard a great deal about excessive wage demands and the monopolistic power of labor unions, on the one hand, and administered prices and the growing concentration of economic power and monopoly, on the other. Many of these charges and countercharges have been insincere. It is an interesting commentary on human nature that so many of those who are most wedded to the virtues of our enterprise system are so quick to see base motives in the other fellow's seeking to improve his position and abuse of power in his organization.

This is not to say that the results of the natural play of the kind of market we have had for a very long time are not, under certain conditions, dangerous. Quite the reverse. The lesson to be learned from the recent experience is that the cost-push type of inflation is not susceptible of control by monetary and fiscal means. During the past few years, a savagely restrictive monetary policy in the face of growing excess capacity slowed down the growth of demand and contributed to the severity of, if it did not precipitate, the current recession. Had we added a restrictive fiscal policy to the restrictive monetary policy, there can be little doubt that the recession would have started sooner and would have been even more serious than it is. The recession has already knocked us out of $50 billion of gross national product. How much greater a drop in production and employment would have been required to prevent the rise of prices of the last 2 years? There is, undoubtedly, some level of production and unemployment at which the price level would give. Surely, we do not need to find that level

in order to learn that fiscal and monetary controls are crude, clumsy, and incredibly costly means of dealing with a cost-push inflation.

On the other hand, it should be equally clear that had we followed the expansionist fiscal and monetary policy which is required by our position vis-a-vis the Soviet bloc, the demand pull, added to the cost push, would have produced a rise of prices far more serious than it has. Which brings us back to the central theme of this paper, that direct controls are required if we are to meet the twin and basic requirements of national policy: Massive expansion of economic power and stabilization of our price-cost structure.

The Issues of Policy

Recent policy statements and policy choices reflect not so much bad thinking, as no thinking at all. To quote the late Teddy Roosevelt, the choices came from the hips, not the head. We have been worshiping idols, and cowering under taboos of our own creation.

Consider the position on the defense budget. The Committee for Economic Development,[4] in its study of national security, points out that our total security expenditures, including foreign military aid and defense support, the development of atomic energy and stockpiling, as well as expenditures for direct military functions, were reduced from $52 billion in 1953 to $42 billion in each of the fiscal years 1954, 1955, and 1956. And that since the low point in these expenditures was reached in the first half of calendar 1956, the trend of defense spending has twice been reversed, and that a third reversal is now underway. And all this in the face of certain knowledge of the giant strides being made by the Russians.

This whole sorry performance was based on foggy budgetary considerations, and even foggier notions about the physiology of our economic system. It is not unfair to say that those who made the policy decisions do not know what the budget means. They have not looked to the simple arithmetic of our national production and capacity. They have been prisoners of the accounting conventions by which we keep our books. It would be ironic if our bookkeeping proves the ultimate occasion of our downfall, and we go down with flying colors, all our entries neatly made.

The developments of the past year are worth more than passing mention. In the face of deepening recession, there was extended debate on the relative merits of increased public spending and public works as against a tax cut. The latter course of action, it was felt, could have immediate stimulating effects upon production and employment, but would be difficult to reverse once recovery was underway. The former course of action, since public works are less popular than tax reductions, could readily be reversed as required but, unfortunately, could not be brought to bear quickly. The upshot was that, in a situation that plainly called for the vigorous and early use of both techniques, we made no use of the one and minimal use of the other, with the result that the recovery now underway is expected by most informed observers not to bring us back to the real gross product high of 1957 till the end of this year or the beginning of 1959 and to

[4] Committee for Economic Development, The Problem of National Security, July 1958.

leave us, at that time, with 6 or 7 percent of our labor force unemployed.

How did our defense budget fare in all this confusion? The position is even more startling. In the first half of 1957 defense spending moved up to an annual rate of $46 billion, and existing programs entailed a further rise. In the summer of that year, for budgetary (the debt ceiling) and perhaps anti-inflationary reasons, the Department of Defense made savage curtailments in its programs, which played a part in the recession already underway. These cuts, however, also produced major turmoil within the Defense Establishment. As a matter of public record, one high officer was almost cashiered out of the service, and another has since resigned with a blast. One would naturally suppose that after it was clear to all that the recession was serious, and when everyone was searching for just the right means to stimulate the economy, these military programs that were cut back in 1957 would have been reinstated. No such thing occurred. As the Committee for Economic Development [5] sharply states:

> Of the proposed increase of $1.4 billion for the current year, half is required for pay adjustments in the Department of Defense, leaving an increase of $0.7 billion (including the unallocated $0.5 billion), or 1.6 percent, for other purposes, including the necessity of offsetting the rise of prices.

Now it may be that the advances of military technology have made conventional armament obsolete at a time when we are still measurably distant from the production of the hardware that is now on the drawing boards, and that we now are in the uncomfortable position of not wanting what we can have, and not able to have what we want. We know that the latter half of this proposition is true. But we must doubt the former, after the reports of the Gaither [6] and Rockefeller [7] study groups.

As I write this paragraph, I have before me the September 12, 1958, issue of the New York Times, in which, by an interesting coincidence, the headline "President Says Nation Must Fight If Necessary To Bar Quemoy Fall" appears alongside the head "U. S. To Hold Back Extra Arms Fund and Trim Forces," and the subhead "Will Not Spend $1.1 Billion Voted by Congress Above White House Request." And by another coincidence, the very next column is headed "Recession Blamed for Major Share of Record Deficit." Here, within the span of one front page, we have the story of the dilemma of our national policy. It is a dilemma which arises because we will not recognize the simple arithmetic of the problem, and because we have taken an oath of abstinence not to use the instruments of direct control. We know we have to produce to survive. We know that we have the resources and the skills to produce. We know that we can marshal our economic forces without incurring destructive inflation only if we are willing to use direct controls. Is our will to survive strong enough to overcome our superstitions?

There is no doubt that direct controls involve an interference with the personal liberties we prize, and that, if we take the course I advocate, the choices which are today made by men and groups and organizations, will in some degree be made by government. And we must recognize that, as Heywood Broun once said, no man ever found power

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[5] Ibid., p. 18.
[6] Secret but discussed in some detail in the press.
[7] Rockefeller Bros. Fund, International Security, Doubleday & Co., New York, 1958.

lying ready to his hand, who did not abuse it. But the realities of our world do not offer us any good or easy choices. We must make the hard choice, and do what we can to throw up every safeguard against abuse that the ingenuity and experience of our generation can provide.

I reach this conclusion only after careful consideration of alternatives. There are those who suggest that the way out of our dilemma is to break up the concentration of power, both on the labor and the business side, to atomize our economic structure and return to that never-never land where competition flourishes, pure and free. This cannot be a practical course. Two generations of experience with the antitrust approach have left us with imperceptible progress along these lines. What is more important, these concentrations of economic power, a triumph of our organizational genius, are the very basis of our economic strength. It is no accident that in time of war, government turns automatically to the largest of our economic units to secure the effort and performance it requires. Under conditions of mobilization, if we did not already have them, we would have to create these great administrative structures. Mobilization would be simply unthinkable on any other basis. We need, not to destroy the elements of our strength, we need to guide them onto paths along which they can best serve both their own and the national interest.

There is another view which holds that, if they are not too severe and prolonged, periodic recessions and the disciplines of the market place which they impose, provide a means of curbing inflationary tendencies while at the same time they are consistent with acceptable rates of growth. Under some circumstances this may be true. But this alternative cannot be accepted so long as the cold war continues. Allen Dulles, in the speech to which reference was made, underscored the proposition that we cannot afford the luxury of a recession; we cannot afford to allow $50 billions of output per annum to go down the drain, we cannot afford the slowing down of our economic growth, we cannot afford to give the Russians the propaganda advantage they know so well how to exploit with the uncommitted nations of the world.

In this connection, we should not lose sight of the effects of our policies upon the economies and the lives of the uncommitted countries. Our hard money policy, whatever the merits of its use at home, slowed down the expansion of these countries, choked off the supply of capital to them, drove down the prices of their principal exports (which prices, we must not forget, are sensitive) and worsened their terms of trade. The unpleasant reception of our Vice President in Latin America was no accident. It was the result of the policies we adopted without consideration of their effects upon others.

The Iron Curtain countries, by their very nature, are insulated from the rest of the world and, by the same token, the rest of the world is insulated from them. The economic policies they pursue at home have no direct effects abroad and can produce no animosities based on direct injury. Our economic policies, on the other hand, have an immediate effect for good or ill throughout the free and uncommitted world. As it happens, at the same time that, by our hard money policy, we were putting the screws on the world's economies, the Russians were offering an attractive package, consisting of 12-year-term loans at 2.5 percent interest, with repayment in surplus commodities, and with negotiabil-

ity on prices. It is not surprising that they have won friends and influenced people. The interesting point in the contrast between our own performance and theirs is that they are making such effective use of the incentives of trade and the desire of all people to make their own decisions, while we, who have always held these principles dear, clumsily step on friends and neutrals alike without realizing the mischief we work.

Targets and Machinery

We need to throw our economy into high gear and keep it there. We need to allocate to defense and defense supporting industries, to research and development, to industrial expansion, to education, to foreign aid, whatever is required by the harsh arithmetic of cold war, to which we have been paying so little attention. All this means work, sacrifice, and discipline. And all this means planning, programing, and machinery. These are unpopular words, but they are words to which the Nation must give heed, if we are to survive.

1. We need a National Economic Council, a counterpart to the National Security Council, along the lines suggested by the Rockefeller Fund report.[8] The Council of Economic Advisers could serve as its staff.

2. The Council should be charged with the responsibility to draw up a 5- or 10-year economic blueprint, setting the targets for production, employment, investment, consumption, and rates of growth required by the necessities of the cold war. The target should be kept flexible by annual modifications as circumstances warrant. The Economic Council, in drawing up these targets, should coordinate the economic aspects of all the programs of the executive branch of the Government and should formulate a balanced program of fiscal, monetary, and direct measures.

3. The annual budget should flow from and be determined by the basic long-term blueprint.

4. The long-term blueprint and the annual budget should be submitted to the Joint Economic Committee of the Congress for legislative approval. If we are to have a coherent program, the blueprint and the budget, when accepted by the Joint Committee, should govern the actions of other committees of the Congress whose functions have an economic aspect. The importance of coordination between the Joint Committee and the other committees of the Congress cannot be overstated.

5. The Congress should create price, wage, and allocation authorities. These powers should not be on a standby basis, but should be powers in being and ready for use as required. While the full apparatus of controls is probably required only under conditions of war, substantial use of these powers on an everyday basis is essential. The agencies to exercise these powers should be responsible to the National Economic Council or to a director responsible to it. We need a proliferation of advisory groups so that most of what needs to be done is done by persuasion and with consent. On the other hand, all of us need to know we are being governed in the interest of national survival.

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[8] Rockefeller Bros. Fund, Challenge to America, Doubleday & Co., New York, 1958.

CONCLUSION

Judged by the harsh realities of the cold war, our policies and performance over the past 12 years are indefensible. It is a commonplace that the Russians are prisoners not only of a Marxist orthodoxy, but of a Marxist mythology. This may be true in their foreign policy, but it is not true of their economics. In this field they have known how to put first things first. They have allocated their resources with devilish purpose and effect, and they have understood the role of incentives and applied them with spectacular success.

It may be unpleasant for us to be reminded of it, but we are the prisoners of a mythology of our own, in which the things we must do for our survival have been presented to us as demons and goblins, all wearing the evil face of the enemy we loathe.

It is the proud boast of the Russians that the inexorable tides of history run in their favor and that capitalism bears within itself the seeds of its own destruction. However true the latter half of this proposition may have been of the innocent and ruthless capitalism of an earlier day, it is not true of the sophisticated welfare capitalism of our generation. It must be our own proud boast that free men and free institutions can meet the challenge of dictatorship and enslavement. We know that we can do the job. It's time to prove it.

SOME COMMENTS ON PUBLIC POLICIES FOR ECONOMIC STABILITY AND GROWTH

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These comments on public policies for economic stability and growth pertain to the subject matter discussed in papers recently submitted to the Joint Economic Committee.[1] The questions outlined by the committee have been used as a basis for discussion. No attempt has been made to present a comprehensive view of the problem of growth-with-stability, nor have all the alternative solutions been considered. The discussion is limited to those points which appear most significant or controversial.

Goals and Policies

For the most part, these comments deal with economic issues as an economist traditionally views them. The same is true of the discussions to be found in the papers submitted to the Joint Committee. This immediately raises a troublesome issue. The questions posed by the committee as to the "merits and limitations of the alternative policies for promoting economic stability and growth," and the criteria by which to appraise various types of policies, cannot be satisfactorily answered except in terms of stated national objectives. Such objectives are by no means well defined. We know that we want both "stability" and "growth," but we want other things, too, which may affect both. Moreover, the precise meanings of "stability" and "growth"—precise enough to serve as criteria for policy—are far from clear. The papers under discussion and many other recent statements express—and more often imply—varying opinions as to where we should be headed. Concerning "stability," there is certainly a difference of opinion on the relative importance of price and employment stability and on the permissible limits of economic fluctuations. Concerning "growth," there is no agreement as to the appropriate rate, whether it is to be one with which everybody is somehow "satisfied" or whether it is to be governed by certain absolute needs and standards, either military or cultural. Indeed, there is only a limited understanding of the way in which "growth" takes place and how it may be appraised. (Certainly we are interested in more than quantitative measures of output.) Under certain circumstances, actions necessary for growth may themselves be unstabilizing; and one must therefore be in position to choose between policies conducive to maximum (or optimum) growth and policies conducive to stability.

Beyond this, there are important goals which impinge on economic

[1] All references in this paper, unless otherwise stated, are to papers appearing in The Relationship of Prices to Economic Stability and Growth, printed for the Joint Economic Committee, March 31, 1958, by the U. S. Government Printing Office.

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affairs, which are outside the purview of the economist, narrowly conceived. Political and social objectives may be of overriding significance; and, at the very least, policies designed to gain economic objectives cannot be inconsistent with them. For instance, such goals may include job security for the individual, regardless of the desirability of labor mobility in the abstract. They may include equalitarian ideals or certain fixed consumption levels. These preferences may change somewhat under the impact of particular events, and their importance may grow or wane from time to time.

The economist cannot avoid making choices and judgments in these matters. But the fact is that the main apparatus of economic analysis is neutral with respect to social goals. Hence, it is not strange that in discussions of public policy there is not always a clear distinction between what ought to be and what has to be. There is some tendency to recommend policies which fit an assumed set of unchanging objectives. This is confusing and unrealistic. Not everyone's goals are the same; and the consensus with respect to intermediate objectives of policy, in addition to being poorly defined, probably does not remain fixed.

Another source of difficulty—and one of which practitioners are keenly aware—is that between economic theory and analysis and the formulation of adequate economic policies there are several very long steps. Economics can only partially and imperfectly describe the real world in which government policies must be effective. This is understood. It follows from this that economic policy formation must recognize limitations of many kinds, including the necessity to provide for changes when unforeseen events demand them.

Automaticity; Illusions and Strengths

This introduction is by way of explanation of my preference for an eclectic approach to public economic policy and my distrust for a system which promises automaticity as a complete substitute for discretion in the management of economic affairs. Thus, O. H. Brownlee's implication that the adoption of a "stabilizing budget" would make an independent monetary policy redundant (pp. 575–576), strikes me as a vain and misleading hope. In a complex economic and social system, the search for automatic mechanisms and signals with which to replace fallible human judgments is likely to be frustrating. Where objectives and motives are not always clear, and may, in fact, change from time to time, and in a congeries of dynamic forces in which many relationships are not completely understood, any automatic "self-adjusting" system of economic checks and balances will very soon come to grief.[2] It is significant that some of those who advocate the use of automatic stabilization devices on grounds of imperfect foresight and lags in adjustment to changes in "man-made" policy, nevertheless appear to expect some very complex adjustments—for instance, in the rate of capital accumulation—to take place instantaneously if

[2] The Full Employment Act of 1945 which was rejected by the Congress in favor of the act now in effect, contained an "automatic" remedy for unemployment based on a very simple model of the economy. It provided for government spending to fill a "deflationary gap." This particular procedure has not been seriously proposed for some time, but it bears a much closer kinship to some current proposals than economists of the "automaticity" school would care to admit.

only there is no "tinkering." There is room for much discussion of the desirability of flexibility, mobility, and adjustability in our economy; but there is no use complaining about the fact that the economy does not behave like an analytical model. It does not and will not.

This is not to say that the plans and proposals for a "stabilizing budget" are worthless. On the contrary, they sharpen several important concepts. One of these is "built-in flexibility" and the bundle of fiscal policies associated with it. The "stabilizing budget" calls for the establishment of a schedule of government payments and receipts which will create a deficit at less than full employment and a surplus when money demand exceeds output. As indicated above, the extreme difficulty of creating a pattern of taxation and of government payments which will call forth a nice balance at exactly the full employment level, somehow predicted in a shifting framework of institutions and desires, limits the possible extent of automatic adjustment. To set this balance requires a type of forecasting ability which we do not have. However, "built-in" compensating factors can play an important role in helping to maintain stability, and the "stabilizing budget" illumines their role.

Another concept associated with the "stabilizing budget," though not necessarily a concomitant of it, is that of the Government as investor. "Let each Government project stand on its own feet. If it yields benefits that are smaller than private industry could gain with the same money, forego it. Let private interests have the funds." This is what the protagonists of the plan seem to say. It is well-nigh impossible to formulate an operational criterion from the principle that government investment should yield the same marginal rate of return as that of private investment. Methods for ascertaining the rate of return are far from precise. It would be difficult to agree, too, on methods for evaluating the return on educational and recreational facilities compared with less intangible goods and services. In principle, however, this is most reasonable and "economic"; and the related rule that government spending should remain constant except as variation is dictated by a change in the interest rate has interesting policy implications. As a practical matter, it would be very hard to tell a basic change in the propensity to invest from a transitory bobble in expectations. It does not seem right that a cyclical decline in interest rates should be allowed to influence the amount of government investment, as suggested by Brownlee (p. 579), in view of the lags associated with large government projects (which Brownlee recognizes on p. 576). However, if the rule is appropriately discounted and it is recognized that the demonstration of "automaticity" here as elsewhere is not to be translated literally into a pattern for action, then the derived suggestions are helpful as guides to policy.

Perhaps the greatest virtue of automaticity is its intention that freedom of individual choice in economic affairs be at a maximum. In a system in which administrative discretion is small, once the boundaries of individual action are set there need be little further interference. Resources are allocated in accordance with free decisions made in free markets. This, to me, is a most desirable objective. In the final analysis, it is the atmosphere of economic freedom that has been most responsible for such gains as we have made. And in any case, even if rapid economic growth can be attained under various

conditions, this is the atmosphere which gives us the kind of life we wish to have. However, many, many actions have been taken—some for good reason, some not—and many institutions have developed, which have modified and impeded the functions of free markets. We are stuck with many of these things—and we could not do without some of them. The "stabilizing budget" proposal may help to put them in proper focus vis-a-vis free market ideals.

Fiscal and Monetary Policy Combined

Richard A. Musgrave, in his paper on the optimal mix of stabilization policies, leans on the "automaticity" analysis, at least in part. He accepts some basic principles but he would reenforce their effect, especially by timely countercyclical changes in the level of taxation. This is necessary, in his view, because the built-in stabilizers are not likely to act quickly enough and because they may be entirely inadequate under some circumstances. By Musgrave's standards of economic performance, there is a very narrow margin between full employment and some other tolerable state of affairs. Hence, he is unwilling to forego the use of discretionary action to meet particular situations in spite of the possibility that this may create a whole series of new distortions. He would go much further than the application of fiscal remedies, moreover, and make active use of the orthodox monetary tools to supplement the effect of tax and expenditure policy. This approach is consistent with my own basic outlook.

Mr. Musgrave, however, has some doubts about the effectiveness and the impact of monetary policy. He is tentative and temperate in his judgment of central bank action, and I do not take issue with his position; but he voices the criticisms of many others on grounds of "discriminatory effects." These are serious criticisms which threaten the effective use of the powers of the Federal Reserve System much more than the unsophisticated and perennial complaints expressed heretofore concerning the restrictive effects of "tight money." The implication of the more recent criticism is that the tools of orthodox credit control work in an uneven fashion, particularly when they are used to restrict total demand; that they "discriminate"—that is, that they restrict some more than others—that this "discrimination" is undesirable when measured against some (usually vague) standard, be it equity in income distribution, a certain (unspecified) rate of economic growth, or a neutral state of things-as-they-might-otherwise-have-been.

It is true that general monetary controls are not "neutral," except in the sense that their administrators are not attempting to influence specific insitutions and specific markets. They cannot help but be "discriminatory" if they are to be effective at all. How the word came to have an invidious connotation, I do not know. In a world in which everybody cannot have everything, it is the function of an economic system—with or without the benefit of the Federal Reserve—to discriminate. How this is done is crucial, to be sure. And, in the narrower context, the impact of monetary policy on particular markets is of great significance for effective action. But discrimination *per se* is not to be feared; it may be used to good advantage. Nor should the impact of discrimination be viewed as inherent in policy.

It arises, rather, out of the interplay of policy decisions and the response or adaptation of the institutions concerned. This response is conditioned by the nature of the institution as well as by the outlook of individuals. In this connection, for instance, it is revealing to observe the rising indignation of the real estate fraternity over what it calls "controls" as rising interest rates make FHA and VA mortgages unattractive to investors. No special controls are necessarily imposed at such times. Rather, the industry feels the effect of peculiar institutional characteristics created by a patchwork of past favors.[3]

Much more should be known about the impact of monetary controls and the reaction of markets and institutions affected by them in order that they may be most effectively used in combination with other stabilization devices. But let us suppose, without conceding the point, that credit restraint does bear heavily on small and marginal business, on competitive as opposed to "administered price" industries, on housing and municipal investment.[4] When then? Do we forego the anti-inflationary punch which restrictive general Federal Reserve action can administer? Obviously, this is a question of balancing good things and bad. To the writer the effectiveness and importance of the anti-inflationary impact of such action is so great and many alternative direct control measures are so unattractive that the argument against its abandonment or its substantial modification is very strong. Besides this, although the difficulties of certain segments of the economy may be magnified by tight credit conditions, the basic causes of their trouble usually lie elsewhere; and effective remedies require structural changes. Recent efforts to make equity money more readily available to small business is a step in this direction. Private attempts to diversify the sources of funds for housing are another. The pressures created by conflicting interests—by the desire of particular economic units to expand and the need to prevent inflation—do indeed require compromises and improvisations; but not all of the "give" need be on the side of stabilization policy.

A related criticism of credit restriction as an anti-inflation policy has been made on the grounds that since high interest rates inhibit investment, they therefore reduce the rate of economic growth in favor of a higher rate of current consumption.[5] The assumption at the bottom of this criticism appears to be that the only rate of capital formation which is to be encouraged is a higher one. This cannot be correct under any and all circumstances. Granted that the exigencies of the cold war require rapid progress and, therefore,

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[3] For an excellent discussion of the effect of credit restraint on housing and of the uneven impact of monetary policy in general, see Karl R. Bopp's Supplemental Comments in the Finance Committee's print of Joint and Supplemental Comments of the Presidents of the Federal Reserve Banks in connection with the Investigation of the Financial Condition of the United States in 1958, ch. I, pp. 76–84.

[4] The argument is stated in terms of restraint because this is the direction in which monetary controls are said to be most effective. I believe that the argument could be made the other way as well, that there are a number of markets which are sensitive to a lowering of interest rates and greater availability of funds. Mr. Musgrave repeats the old simile which likens monetary ease during depressions to "pushing on a string." This was appropriate at one time but probably overstates the case now in view of the relative mildness of recessions of the post-war period and the broadened and aggressive use of credit in many markets.

[5] For a general statement of this view, see K. E. Boulding, Principles of Economic Policy, 1958, p. 227 ff. Musgrave alludes to this in his paper on p. 603 and p. 607.

some special encouragement of investment,[6] it is nevertheless essential that a balance with consumption-demand be maintained in the short run, lest we reach an "overcapacity" situation which requires a painful correction. Stabilization policy should not be inhibited unduly by long-run growth considerations. It is easier to maintain stability of employment in an expanding economy; but growth alone, obviously, does not guarantee stability and is not self-perpetuating. The nature of the monetary environment is important for sustained growth, and it is to this that monetary policy should address itself.

The desire for more rapid growth can be best fulfilled by attention to long-range factors and to the revision of programs which slow the pace of economic advance. Among the factors which should be encouraged and improved are education and scientific research. (These are themselves a form of investment, of course.) At present levels of achievement, technological changes made possible by research may be more important than sheer quantity of capital. The programs which should be reexamined and revised are those which divert resources from their most profitable use. Farm price-support programs fall into this category. So do many tariffs. Transportation and tax policy combined have had the effect of providing large amounts of capital for certain forms of transport without regard to relative costs—to the detriment of transportation efficiency. Many "subsidy" programs have similar effects. This is an area in which the objective of economic growth comes into conflict with other, more specialized, objectives. One cannot expect the subtle workings of fiscal and monetary policy to be very effective here. Their other functions should not be impaired for lack of constructive effort from other directions.

In some contrast to the contention that monetary measures bear heavily on certain segments of the economy, it has been suggested that recent financial developments "have tended to reduce the effectiveness of monetary restraints."[7] This argument concedes that the central bank has the power to restrict credit; however, it is contended that the growing importance of nonbank intermediaries, the holding of large amounts of Treasury securities by financial institutions, and other factors make the degree of restriction that is required so great that it is politically intolerable. This might mean only that the monetary authorities must work cautiously and in conjunction with the fiscal managers. So used, monetary measures might be even more useful than before in highly developed and sensitive money markets. The real concern, I think, is not that there will be complaints, but that the aggressive use of the tools of monetary and fiscal policy will, under present conditions, create unemployment.

Beyond General Fiscal and Monetary Controls

The greatest limitation on the effectiveness of general monetary and fiscal controls on inflation is the so-called wage-price push. There is

[6] This sounds much better than its converse, "discouragement of consumption", but it amounts to the same thing in an economy running near capacity. The economist, the government administrator, cannot establish one rate of growth as best. This is a matter of choice, to be decided by consumers and by business in the light of their needs and their judgment as to the value of future possibilities. How to transmit this choice is a puzzle. It can be done partly by economic pressures, partly by political means.

[7] Arthur F. Burns, Prosperity Without Inflation, Fordham University Press, 1957, p. 53.

some difficulty in differentiating this from "demand-pull" effects and in telling where one stops and the other begins. However, there can be no doubt that institutional changes have intensified the resistance of wages and prices to reductions forced by credit contraction and/or budget surpluses. And if this is the case, the imposition of general restraints in the face of an inflationary situation which involves wage increases may be incompatible with the objective of maximum employment.

As Musgrave suggests, one way out is to establish greater flexibility in the market and to reduce the price- and wage-fixing powers of business and labor. Musgrave walks away from this as hopeless. I do not agree. I believe that competitive forces can be reenforced and that some dent can be made in the monopolistic practices of unions without destroying them. This is difficult and slow, but progress can be made with effort.

Most of this effort should be directed to problems of "market structure"—to pricing practices and to union organizations themselves. But part of the effort must be in the form of financial pressure, despite certain risks. It is not the same as saying "A recession is a healthy and inevitable event," to say, as Arthur Smithies does, that an acceptable price policy requires "some degree of uncertainty concerning the course of employment and economic growth" (p. 613). As I read this, it simply means that the twin objectives of price and employment stability cannot be absolute. If worst comes to worst, some price increase can be tolerated. So can some unemployment. This much experience tells us. Moderate price increases, though troublesome, do not inevitably lead to runaway inflation. Moderate unemployment, though wasteful, need not be self-perpetuating or reenforcing, provided adequate remedial steps are taken. At this time (October 1958) perhaps the strongest inflationary influence stems from the expectation of rising prices and of government action to perpetuate them rather than from substantive forces. A clear demonstration that government policy can be restrictive is apparently necessary despite the danger (not the certainty) that this may slow the business recovery somewhat. Conversely, the fear of inflation should not prevent strong and prompt action to head off a recession.

This is a ticklish business. If we wish to come close to capacity output all the time, we should expect it to be so. This leads some to believe, however, that general monetary and fiscal tools, including appropriate debt management policies, are not sufficiently flexible to cope with the problem. They advocate the use of selective credit controls in the fields of real estate and consumer credit as well as in its present use, stock market credit. It is not enough to rule out such controls by saying, "If these kinds of credit should be controlled, why not others?" Why not, indeed? It is because the more highly selective such controls are, the more difficult it is for government to formulate adequate criteria for their use and the less scope there is for market forces to be effective. In the end, a multiplicity of credit controls would require rather detailed planning and integration with other types of controls. But if one or two broad areas could be blocked out—like consumer and real estate credit—why not use controls there to supplement general monetary and fiscal measures? If we are given assurances that this is as far as selective controls are to go, there are

two further objections. First, is not the control of one field and not others likely to create undesirable distortions? Demand is not so segmented that it cannot spill over from one area to another. Second, and more definite, if some areas are to be controlled and not others, it must be chiefly on the grounds of administrative feasibility. Here stock market margin control gets a fairly high score; real estate credit runs a poor second; and consumer credit is far behind. The use of additional selective controls under peacetime conditions is a poor crutch which may weaken the vital core of stabilization policy.

Many now appear to argue that there can be no leeway for maximum employment and that, faced with the immovable objects of inflexible wages and prices, general measures of restraint cannot afford to exercise their irresistible force. A few advocate direct controls of prices and wages or something very close to them. This, as most recognize, amounts to throwing out the baby with the bath water. It might cure the problem of creeping inflation, but it would also destroy the central features of our economic system. It would create new problems of an entirely different order.

A related proposal, that described by Musgrave (p. 606) for the creation of "advisory boards," is difficult to categorize. This is not intended to be a method of direct control over prices, wages, and profits. Yet, if the "advice" given to labor, management, and the general public is to be definitive, such boards cannot avoid the necessity for formulating price-wage-profit criteria as though they were managers of a controlled economy. Without power to enforce their decisions, it is doubtful that such an exercise can do more than discredit the boards and the criteria, as their recommendations are ignored. If the "advice" to be given is in the nature of counsel and conciliation, then the boards may have some value as agencies of education and communication; but the value of exhortation to do good is limited in a system which runs best under the spur of self-interest. Labor and management can be led to adopt policies which are conducive to stability and growth. But the economic environment must be such that these policies are also in their own interest. Otherwise there is only confusion and frustration and, in the end, failure. The policy tools best calculated to create such an environment are now in hand. They must be better coordinated. And they must be used.

FORMULATING PUBLIC POLICIES FOR ECONOMIC STABILITY AND GROWTH

Stanley H. Ruttenberg, Director, Department of Research, AFL–CIO, and Nat Goldfinger, Assistant Director, Department of Research, AFL–CIO [1]

National economic policy should be designed to promote balanced economic growth. Such growth is consistent with and essential for relative price stability. Effective measures to achieve both of these objectives must be based upon an understanding of their interrelation as well as the composition and interplay of sectors within the price structure.

This prerequisite understanding has been increasingly hampered by a dearth of adequate analysis. Platitudes, slogans, and prejudice have been substituted for research and thought. National policies have been initiated on the basis of outworn theories, and remedies have been suggested without proper diagnosis of the problems. Yet adequate diagnosis has been almost impossible, because extensive analysis of the effects of various economic and social developments, or, in fact, the direction and interplay of these developments has not been available.

Our experience in recent years underscores this lack of analysis and its dangerous results.

After World War II price rises came in three waves, covering somewhat less than one-half of the postwar period. The causes of the first two could be explained, for the most part, in relation to "demand pull" following World War II and the Korean war. But that explanation proved inadequate for the price rises from 1955 on, when lagging demand in many parts of the economy could not have raised the price level.

Recognizing that the "demand pull" theory could not explain these upward movements in prices, economists merely substituted a "cost push" concept in explanation of developments after the middle of 1955.

Unfortunately, insufficient attention was given to the problem of what costs "pushed," what the relationships within the price structure actually were, or in fact, the connection between the price structure and new aspects of economic growth resulting from technological and demand changes. Instead, generalities about wage costs emanated from business, Government, and even academic economists, who translated the "cost push" into "wage inflation."

Government policies to achieve price stability in recent years have ignored the economic and social changes, the inaccuracy of the "demand pull" explanation and the utter inadequacy of the "wage inflation" concept.

[1] The views expressed are not necessarily those of the AFL–CIO.

As a result, the Government initiated outworn monetary policies designed to restrain total demand. Such policies were rather successful in restraining demand from weaker segments of the economy—the consumer, the family farmer, smaller business, State and local governments. The large corporations, however, generally escaped the effects of the curbs. The price level was not stabilized and the rate of economic growth slowed down considerably. These developments created an economic imbalance and helped to bring on the 1957–58 recession.

Right before the recession took hold, the President enunciated another policy based on "demand pull" as he asked the American consumer to use restraint lest he "fan the fires of inflation" in 1957—at a time when demand was lagging.

Despite the disastrous results of the economic imbalance and the recession, even now, in September 1958, the Vice President has adopted the "wage inflation" theory and asked that labor unions use "self-discipline" at the bargaining table lest higher wages add to price pressures—as if wage pressures were the major cost-push on prices.

It seems clear to us, however, that continuing improvements in real wages, salaries, fringe benefits and in working hours are required in a growing economy—to help provide a balance between investment and consumption, as well as incentive for further economic growth. Had money wages, salaries, and fringe benefits since World War II risen merely in relation to consumer prices, there would have been no gain in the individual employee's purchasing power. Consumer markets would have been too weak to sustain generally prosperous conditions. If money wages, salaries, and fringe benefits, without adjustments for price rises, had increased merely in relation to productivity, employee purchasing power and consumer markets would likewise have been inadequate, in the face of increasing prices and a rising capacity to produce goods and services.

Despite gains in real earnings since World War II, it is also clear that they have not surpassed the productivity increases of the postwar period. Real hourly compensation (including fringe benefits) of all nonfarm employees has lagged behind the productivity advances of the total private sector of the national economy. The Bureau of Labor Statistics has indicated that between 1947 and 1957, average real hourly compensation of all nonfarm employees (including clerical, professional, and managerial) increased 35.2 percent while productivity of the national economy's total private sector rose 37 percent. This lag indicates that incomes of wage and salary earners have not been advancing at the expense of other groups in the population.

Since Government policies for growth should not impede wage gains, therefore, and since wage costs cannot satisfactorily explain recent price pressures, it is necessary to take a look at other costs and pressures within the price structure to suggest policies which can lead to solutions that will encourage relative price stability and economic growth.

This paper, therefore, will mainly attempt to present a fresh view of some of the major pressures within the price structure in recent years and demonstrate the complexity of their relationships. Obviously it cannot consider all of the factors implicit in such price developments. It will, however, show the need for more detailed knowledge of some of the more important factors and suggest ways to obtain this

knowledge by proposing more careful investigation of some of the price sectors, their composition and their relationships to the rest of the economy. Steps designed to accomplish this end can lead to adequate policy measures to achieve balanced economic growth and relative price stability.

The complexities of these pressures in the past several years must be considered within the framework of accelerating rates of economic and social changes. In addition, since there are several price structures, rather than just one, overall analysis of the price structure must include analysis of its sectors.

(*a*) Industrial cost pressures have undoubtedly been influenced by rapidly rising depreciation charges, interest payments, research and development costs, advertising outlays, salaries and fringe benefits of executives—in a period of slowly rising output. Yet not enough attention has been paid to these factors, and adequate detail has not been developed.

These pressures have come in a time of rapid technological changes, which, after decades of rapidly improving efficiency, are shifting the labor force in the direction of nonproduction types of employment—research and development, trade, services, Government, and nonprofit institutions, for which hardly any economic information is available.

These technological changes have been raising the proportion of production costs that are fixed overhead and are increasing the tendency for changes in reported national productivity to reflect changes in output levels. Increases in reported national productivity are inevitably small in an economy that is growing at a slow pace, while employment shifts to nonproduction types of jobs and demand shifts to private and public services. A relatively stable price level, under such conditions, requires an economic environment in which the rate of national economic growth is considerably greater than it has been in the past few years.

(*b*) Many key industrial markets have sheltered themselves from price competition. Policies should be developed to deal with the problem of price setting by executives of dominant corporations in key industries, where prices are determined by formulas imposed on the economy.

The food sector, which influences the overall price structure, is quite different from the industrial sector, and cannot be treated in the same way as the sheltered industrial markets. The service sector is still different—its components not even explored—and requires other policy solutions.

(*c*) The varied area described as the services includes such diverse public and private pursuits as medical care, education, recreation, entertainment, travel, scientific and social research—an area that represents almost a void in economic knowledge. Efforts must be made to fill this absence of knowledge before adequate explanations of price pressures can be found.

Economic growth is a basic prerequisite for price stability. This is particularly true in a period of vast social and economic changes. The rate of economic growth between 1955 and 1957, for example, was much too slow in relation to a growing population, the business-investment boom, rapidly rising outlays for research and development, depreciation and interest payments, and shifts in demand toward the services and in employment toward nonproduction types of jobs.

Major Postwar Price Movements

The post-World War II years have seen 3 periods of price increases and 2 periods of relative price stability. There was, however, no period of a sharp downward spiral in demand, employment, and the price level, such as 1921 or 1929–32, after World War I.

From January 1946 to June 1958, wholesale prices rose 71 percent, and consumer prices 59 percent. Almost all of these price rises occurred in three waves that covered less than half of the period. There was relative price stability during somewhat more than half of the postwar years. (See table I, p. 256.)

In the first 2 of these waves of price increases—1946–47 and the year that followed the outbreak of the Korean war—the major factor was war-related, overall demand. More than half of the entire postwar rise in the price level occurred from January 1946 to January 1948, after the end of World War II and wartime controls; wages and salaries chased after sharply rising prices. There was relative price stability in the following 2½ years, and real wages and salaries increased. The Korean war, that started in June 1950, set off a new wave of inflationary price pressures, and prices rose sharply for about a year, with wages and salaries chasing the rising price level.

Relative Price Stability, June 1951–June 1955

There was a relatively stable price level in the 4 years that followed the spring of 1951. Wholesale prices declined somewhat from the post-Korean peaks. Prices of food and farm products moved down, while there were price rises for some key industrial goods—such as steel, machinery, autos, and flat glass—and for services. Consumer prices continued upward for several months, and leveled off; in June 1955, they were 3.3 percent above June 1951.

Wages and salaries increased during these 4 years. The gain in average hourly earnings of factory workers was 17.6 percent. The economy grew, except for the small decline, during the 1954 recession. It was not an ideal period, but there were wage and salary increases, there was economic growth, and the price level remained relatively stable.

Relative price stability was achieved in this period by declines in some prices that offset increases of other prices. This achievement, however, was at the expense of the farmers, whose prices and incomes fell. The experience from mid-1951 to mid-1955 points not only to the possibility of relative price stability while wages and salaries increase, but also to the need for adequate and equitable public policies to deal with food and industrial prices.

Relative price stability need not be achieved at the expense of farmers, if public policies are adopted to grant fair treatment to farmers and to encourage consumption of farm products. In addition, some public policies are required to deal with the price pressures from key industries, whose markets are dominated by huge corporations.

CREEPING PRICE RISES, JUNE 1955–JUNE 1958

During the 3 years between June 1955 and June 1958, consumer prices crept upward 8.1 percent—a yearly rise of about 2½ percent—and wholesale prices moved up 8 percent. The causes of these creeping price rises are considerably more complex than the causes of the two previous postwar waves of price increases.

Wages and salaries increased in these 3 years, but much of that rise merely offset price increases that had already occurred. From June 1955 to June 1958, average hourly earnings of factory workers increased 13.4 percent. Wages and salaries chased after prices, in part, during these 3 years, and only about one-half of their rise represented gains in their buying power.

The economic environment during most of these 3 years was dominated by a boom in business investment that became evident about the middle of 1955, while home building was declining and several months before consumer purchases of durable goods began to fall. This one-sector business-investment boom was stimulated and partially subsidized by the Government through the following actions:

1. The 1954 change in the tax law permitted an acceleration of depreciation charges. This measure increased corporate depreciation charges and reduced reported corporate profits in the years that followed.

2. In late 1955 and early 1956, the Government sharply stepped up the issuance of 5-year depreciation certificates for facilities that were certified to be defense related. This action added to the increase in corporate depreciation charges and further reduced reported corporate profits.

3. The 1954 change in the tax law permitted business research and development expenditures to be listed as current costs, instead of capitalizing part of such outlays, as had been the previous practice. This measure increased currently reported research and development costs.

The one-sector boom was accompanied by a slowdown in total industrial production and overall economic growth. Unemployment was 4.4 percent of the labor force in 1955, 4.2 percent in 1956, and 4.3 percent in 1957. There were no prolonged shortages of goods or productive capacity. On the contrary, the percentage of idle productive capacity began to rise in early 1956 and continued to increase into the spring of 1958. Yet this one-sector boom provided an economic environment for increases of industrial prices. Several key industries raised prices a number of times in this period, regardless of demand and the absence of any prolonged shortages. Wholesale industrial prices advanced over 5 percent from mid-1955 to mid-1956, and increased an additional 3 percent in the following year.

These price rises and changes in the Federal tax laws produced rising returns to corporations and provided internal funds for the financing of new investment. After-tax profits plus depreciation charges of nonfinancial corporations rose about 27 percent between 1953 and 1955. In the following 2 years, between 1955 and 1957, these returns to corporations increased further, by approximately 7 percent. During the peak year of the one-sector boom, in 1956, net new-stock issues of manufacturing and mining corporations amounted to merely a little over 1 percent of their outlays for new plant and equipment.

Internal financing of new investment, which provided the major and growing share of financing for most industries during the postwar period, was intensified in 1955–57.

The major price pressures on industrial goods came from strategically placed industries that have sheltered themselves from price competition and can impose their price-and-profit formulas on the economy. Part of these price increases was absorbed out of improved efficiency and reduced profit margins by many fabricators, small businesses, and retailers in more competitive parts of the economy before the finished goods reached the consumer.

In addition to these price pressures on manufactured goods, food prices, which had dropped from their Korean war peaks, began to increase in early 1956. Price of services, which had increased all through the postwar period, continued to rise. These increases in food and service prices added considerably to rising living costs, when combined with price increases for manufactured goods.

The recession that started in the summer of 1957 brought a leveling off in the wholesale industrial price level, but prices of some key products, such as steel, continued upward. The prices of services continued to rise, and food prices increased into the spring of 1958. The Consumer Price Index crept upward from March 1956 through June 1958.

THE COST PUSH—WHICH COSTS PUSHED?

The creeping price increases since mid-1955 do not lend themselves to easy interpretation. Rising overall demand and shortages of goods and productive capacity, which were major factors in the two previous waves of price increases, could not explain the price developments that followed the middle of 1955. This difficulty in attempting to explain these price rises produced the cost-push notion that has been widely accepted. With little research or analysis, the cost-push view easily became the "wage inflation" myth, that has been used by many economists and political leaders, as well as business spokesmen, to explain most, if not all of the recent price rises.

This view distorted the realities of the price structure, by focusing almost sole attention on the industrial part of the economy. Even worse, it cloaked the realities of the industrial sector itself with anti-labor generalizations.

Before one can rationally adopt the cost-push view, it is necessary to examine the various costs. The "wage inflation" myth could stand the light of day only if an analysis of the facts were to reveal an overwhelming cost push from wages.

Examination of industrial costs reveals very little cost push from wages. To examine the various elements of industrial costs that may have risen in 1955–57, it is necessary to see in proper perspective, how these costs were moving in the preceding year or two, as well as their movements after 1955. Such an examination of industrial costs after 1953 does indicate a significant cost push, that became evident after mid-1955—but not from wages. In fact, 1955 wage costs per unit were below the 1953 level, while nonwage costs were rising steadily. (See table II, p. 257.)

Payroll costs of production and maintenance workers in manufacturing industries rose slowly between 1953 and 1957 in rather close relation to the slow rise in output. In 1957, total unit costs of factory

production and maintenance workers, including fringe benefits, were about 2 percent above 1953 in contrast to a 10 percent rise in wholesale industrial prices. While these wage-and-fringe-benefit costs per unit of output dropped about 2 percent in the first half of 1958, wholesale industrial prices remained stable. Major pressures on industrial costs and prices, therefore, must have arisen from other factors.

Nonwage costs per unit of output did build up after 1953 and applied an accelerated cost push in 1955–57. A sharp rise in research and development and rapid technological changes, between 1953 and 1957, produced a shift in the industrial work force toward nonproduction types of jobs. The number of production and maintenance workers in manufacturing industries declined 922,000, or more than 6 percent while nonproduction employees increased 466,000, or almost 14 percent. Much of this rise in nonproduction jobs was among scientists, engineers, technicians, and their assistants. Largely as a result of these shifts in the work force, the increase in total salaries in manufacturing was almost twice the increase in total manufacturing wage payments. With output rising slowly, these changes helped to produce a sharp rise in salary costs per unit of output, while the increase in unit costs of production and maintenance workers was very small.

Further examination reveals that industrial nonwage costs rose substantially in this period, while the increase in output slowed down considerably. Among these rapidly rising industrial costs were research and development, interest payments, depreciation, advertising, and salaries, fringe benefits and expense accounts of executive, managerial, and supervisory personnel. Interest payments, for example, rose about 45 percent between 1953 and 1957, while output increased 7 to 10 percent. These substantial cost increases, at a time when output was rising slowly, meant upward pressures on costs per unit of output. In part, some of these cost increases were more apparent than real, since they arose from the 1954 changes in the Federal tax laws that permitted corporations to increase their reported costs and to reduce their reported profits.

On top of these increases in unit costs that flowed from management and Government decisions, business tried to maintain or increase profit margins. Key industries, in which prices are administered by dominant corporations, were usually successful in raising prices to maintain or increase profit margins and to reduce break-even points.

The major pressures on industrial unit costs and prices, therefore, were not from the wages and fringe benefits of production and maintenance workers. The major pressures were from a wide variety of other costs, plus the pricing policies of strategic industries, whose markets are sheltered from price competition.

UNIT WAGE COSTS

Wages and salaries chased after rising prices during much of the postwar period, particularly when price pressures were strongest. Had wage and salary earners and their unions failed to make this effort, there would have been several years of declining real earnings for the majority of the Nation's employees. As a result of this chase of wages and salaries after rising prices, total employee costs rose somewhat. The June 1, 1957, issue of Business Week reported its interpretation of a Bureau of Labor Statistics comparison of total

private nonfarm unit employee costs, including fringe benefits, with nonfarm prices:

> One obvious way of trying to determine which caused which would be to measure whether labor costs or prices moved up first. Subjected to this test, unit labor costs seem to have followed prices uphill through most of the postwar years—and particularly in those years when the inflationary heat was most intense.

As for factory production and maintenance workers, their unit payroll costs declined between 1953 and 1955 and increased in the following 2 years. In 1957, they were only slightly higher than in 1953. Even if the unit costs of pension, health and welfare, and supplementary unemployment benefit plans are added to payroll costs per unit of output, the total unit costs of factory production and maintenance workers, in 1957, were only about 2 percent greater than in 1953. In the first half of 1958, total unit costs of factory production and maintenance workers fell and were close to their 1953 level. These are the facts concerning unit costs for factory production and maintenance workers, who are rather strongly represented by unions.

[1947–49=100]

	Unit payroll costs in manufacturing	Wholesale industrial prices
1953	111.3	114.0
1955	109.2	117.0
1957	112.2	125.6
1958 (1st half)	109.7	125.6

Source: Bureau of Labor Statistics and Federal Reserve Board.

Between 1953 and 1957, however, wholesale industrial prices rose over 10 percent—approximately 5 times the increase in total unit costs of factory production and maintenance workers. While these unit costs declined in the first half of 1958, wholesale industrial prices remained stable.

Clearly then, it was not cost pressures from factory production and maintenance workers that created major pressures on industrial prices in the past few years. Other industrial costs did rise in those years, but those cost increases were based on management and Government actions—not on trade union wage policies or collective bargaining. It is a sad commentary on the economics profession that these cost pressures have not been fully documented and analyzed.

OTHER UNIT COSTS

The rate of economic growth slowed down between 1953 and 1957. In those 4 years, real national product rose merely 10.3 percent, or an annual rate of about 2½ percent. Industrial production increased only 6.7 percent, or a yearly rate of less than 1.7 percent. There was a decline in output in 1954, a sharp rise during the recovery in 1955, and a very slow rate of increase in 1956 and 1957.

During this period of a slowdown in the rate of economic growth, there were sharp increases in nonwage costs that obviously pushed up industrial costs per unit of output. These cost pressures that became

evident after mid-1955 were actually building up in 1954 and early 1955. Among these increases in industrial costs were the following:

1. Research and development expenditures by private industry rose some 200 percent between 1953 and 1957, according to the Defense Department, while real national product increased 10.3 percent and industrial production 6.7 percent. Much of this rise occurred from 1955 to 1957. There probably was a similar relationship between the increases in research and development outlays and in output for manufacturing firms alone. Since these expenditures rose about 20 times faster than output, in those years there was a sharp increase in research and development outlays per unit of output. This rise in unit costs resulted from decisions of business management and, in part, from changes in Government tax policy.

A part of this increase in research and development costs was more apparent than real. Before the 1954 changes in the Federal tax law, part of research and development outlays was capitalized over a period of years. The Harvard Business Review of January–February 1958 states that "the tax revision of 1954 added a new incentive (to business) by making research outlays deductible as current expenses." As a result, part of what was reported as profits in 1953 was reported as research and development costs after 1954.

Since a significant part of the rise in research and development expenditures was for the hiring of scientists, engineers, technicians, and assistants, part of the rapid increase in research and development outlays shows up as a sharp rise in salary costs per unit of output.

Between 1953 and 1957, the employment of nonproduction employees in manufacturing rose close to 14 percent, with most of this increase in 1955–57. In a paper on occupational shifts in manufacturing employment, Murray Wernick, the Federal Reserve Board's manpower economist, states:

> Expansion in employment among nonproduction workers in recent years has been largely accounted for by the extremely rapid rate of hiring of professional, technical, and kindred workers. The number of professional workers increased approximately 45 percent from 1952 to 1957 and by 27 percent from 1955 to 1957.

The rate of increased hiring of professional and related personnel, therefore, was accelerating in those years. There was also a rise in the employment of supporting staffs. Much of this increase in the employment of professional and related personnel in manufacturing was connected with the increase in research and development.

Largely as a result of this sharp rise in the hiring of professional and related personnel, total salary payments in manufacturing rose $7 billion between 1953 and 1957, much greater than total manufacturing wage payments, which increased only $3.8 billion in that period. This sharp increase in total salary payments, when output rose slowly, produced a sharp increase in salary costs per unit of output.

In addition, the rapid rise in the employment of personnel who are not connected with current production helped to depress reported national productivity advances, particularly in 1956 and 1957, when the increase in output slowed down considerably. Much of the rise in professional and related personnel in manufacturing was for employees who are engaged in the development of future production techniques and future products. The increase in such employment in recent years will probably help to raise productivity advances in the

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future, but in the period under consideration, it partially offset the increasing output per man-hour of production and maintenance workers. Reported increases in output per man-hour tended to be depressed, because output increased slowly, while there was a sharp rise in the man-hours of professional and related personnel, who are not employed in current production.

2. Depreciation charges of nonfinancial corporations rose 52.5 percent between 1953 and 1957. The rise for manufacturing corporations, alone, was undoubtedly about the same magnitude. An increase in depreciation charges of about 52.5 percent, when output increased approximately 7 to 10 percent, pushed up depreciation charges per unit of output.

This rise in depreciation per unit of output was, in part, the result of rapidly rising outlays for new plant and equipment. In part, it was, also, more of an apparent than real increase in costs. According to the October 1957 issue of the Survey of Current Business, "by 1956, corporate depreciation charges were three or four billion dollars higher than they would have been" had the 5-year writeoffs and the accelerated depreciation, under the 1954 tax changes, not applied. According to this Commerce Department estimate, therefore, about 15 to 20 percent of corporate depreciation charges, in 1956, resulted from recent changes in the tax laws and in Government policy. It is a fair assumption that there was a similar proportion in 1957. Part of what was reported as profits in 1953 was reported as depreciation costs after 1954.

Decisions by corporate management and Government produced the increase in depreciation charges per unit of output between 1953 and 1957.

3. Total interest payments of nonfinancial corporations rose about 45 percent between 1953 and 1957; most of this increase occurred in 1955–57. The percentage increase for manufacturing firms, alone, was probably in that same range. A 45-percent increase in interest payments, at a time when output rose 7 to 10 percent, meant a substantial increase in interest payments per unit of output.

This increase in interest payments resulted largely from the decisions of corporate management to finance the overwhelming proportion of new investment from internal and borrowed funds, rather than from new stock flotations. These decisions led to a sharp rise in corporate debt and interest payments, while output increased at merely a low rate. Another factor that raised interest payments was the rise in interest rates, that are strongly influenced by Government policy.

Interest payments per unit of output could have remained much more stable, had corporate management decided to finance a significantly large share of new investment by extending ownership of the corporations through new stock flotations. It was the decision, however, of corporate management to increase corporate debt and interest payments in a period when output was rising slowly—thereby pushing up interest payments per unit of output.

4. There were rapid increases in salaries, fringe benefits, and expense accounts of executives and management personnel, and in advertising and public-relations outlays. Total advertising expenditures, for example, increased 33 percent between 1953 and 1957. To the extent that these and similar increases in outlays were more rapid than rises

in production, they helped to produce increases in unit costs. These increases in costs flowed from management decisions.

This brief examination of industrial costs indicates that there was a significant cost push in 1955–57. This cost push was building up in 1954 and early 1955, and it continued in 1956 and 1957. It became evident after the middle of 1955, when the industrial price level began a continuing rise.

This cost push was not from wage costs. Total unit costs of factory production and maintenance workers fell from 1953 to 1955 and rose in the next 2 years to a level that was merely about 2 percent above 1953. These unit costs declined in the first half of 1958. There was very little push from the unit costs of the wages and fringe benefits of factory production and maintenance workers.

The industrial cost push that actually existed in 1955–57 arose from such nonwage costs as research and development, depreciation charges and interest payments, and from the considerable slow-down in economic growth. The actual and significant industrial cost push in this period, therefore, arose from management and Government decisions.

ADMINISTERED PRICES IN KEY INDUSTRIES

On top of these increases in unit costs, companies attempted to maintain or enlarge profit margins. In several key industries, where there is little if any price competition, prices were raised successfully to increase profit margins and reduce break-even points. In the basic steel industry, for example, successive price increases reduced the industry's break-even point to below 50 percent of full capacity operations, as indicated by the industry's profits in the first half of 1958.

There is little, if any, effective price competition in such industries as steel, auto, aluminum, oil refining, and tires. These industries are dominated by large, multiplant corporations. Entry of new firms into such industries is extremely difficult because of the need for very large investments in plant and equipment, the requirement of great raw material resources, and in the case of autos, the need for a nationwide sales organization and good trade-in value.

As a result, decisions that set the prices for many strategic manufactured goods are made by the executives of dominant corporations in each industry. These price decisions affect the entire national economy. This process is not new, but the mechanisms for price setting are more refined than in the 1920's and the effects on the price level are different.

In the 1920's, before the organization of effective trade unions in these industries, their large profit margins were maintained or increased mostly by keeping wages low in relation to productivity and prices, and only in part by applying pressure on the price level. Since World War II, unions in these industries have been able to raise real wages, more in line with advances in productive efficiency. In their recent attempts to maintain or increase profit margins, the dominant corporations in these industries have applied their pressures on the price level, since their attempts to maintain low wages are largely blocked.

The pricing formulas of the dominant corporations aim at large rates of return and low break-even points. Administered price structures make it possible for the dominant corporations to impose their

formulas and prices on customers. These price structures, furthermore, make it possible for these industries to raise prices, even when demand and output are declining. Recent experience indicates that it would take a sharp drop in demand and overall activity to produce a significant decline in these prices. The only important deterrents to these price pressures, at present, seem to be the threat of competition from other products and public opinion. The effect of these pricing policies, as successfully administered, is to produce unbalanced relationships between productive capacity and sales.

The price level in 1955–57, therefore, was subjected to pressures from several key industries, as well as a cost push. These combined pressures directly pushed up the level of industrial prices and had some indirect effects on the prices of nonindustrial goods and services.

Prices of Services and Food

An examination of the Consumer Price Index in the period of June 1955-June 1958 indicates that nonindustrial items account for a significant part of the rise in the price level. It indicates, too, that there were other factors involved in the recent rise of the price level, as well as the industrial cost push and the price formulas of dominant corporations in key industries. (See table III, p. 257.)

The Consumer Price Index rose 8.1 percent between June 1955 and June 1958. The most important part of the index is food and related products. These prices increased 9 percent, in the period under consideration, and pushed up the level of consumer prices by 3 percent.

The second most important part of the index is consumer services—such as medical care, laundry, amusements, and shoe repairs. These prices rose 12.7 percent and pushed up the Consumer Price Index by 1.8 percent.

More than half of the rise in consumer prices came from food and services. These two sectors account for 4.8 percent of the 8.1 percent increase in the Consumer Price Index.

Price increases for various manufactured consumer goods pushed up the Consumer Price Index by 2 percent. This sector of consumer prices includes such items as hard goods, apparel, fuel, drugs, furniture, and textiles.

The price of housing increased, in the period under consideration, and pushed up the consumer price level by seven-tenths of 1 percent. Increases in the prices of public utilities pushed up the Consumer Price Index by four-tenths of 1 percent.

FOOD PRICES

Food prices are strongly influenced by supply and demand and by weather conditions. This is particularly true of fresh fruits and vegetables. Free, competitive pricing, however, does not exist for several major crops that are supported by the Government's price-support program.

Food prices are indirectly affected, to some extent, by the prices of basic manufactured goods and by interest rates on borrowed funds, since they are elements in the producers' costs. Prices of canned, frozen, and processed foods are more directly affected by the manufacturing sector. Nevertheless, supply and demand are important fac-

tors in food prices and these prices move downward, as well as upward.

For the consumer, changes in the cost of food purchases also reflect shifts in buying habits and tastes. The increased use of canned, frozen, processed, precooked, and packaged foods is an obvious element in the increased cost of food for the average family.

Labor costs are not a major factor in most food prices. To the extent that labor costs are an important element in food prices, they largely reflect the wages of agricultural labor and workers in food handling, processing, and packaging—a group that includes some of the lowest paid and most exploited wage earners in the nation. Trade union organization is very weak in most of these food and related activities, and there is little effective bargaining, aside from meatpacking and breweries.

PRICES OF SERVICES

Among the sharpest price increases in the past few years have been the costs of such consumer services as hospital care, finance, and insurance. Doctors' fees have been increasing at least since World War II.

The large area of the services includes such widely varied activities as health and education, laundry and home maintenance and repairs, recreation and amusement, libraries and auto servicing, museums and domestic service. It is a consistently growing area of local-market activities, in which demand, employment, and prices have been rising throughout the postwar period.

The major cause of the persistent rise in service prices is demand. Despite price increases, service demand, and employment, through all the postwar years, has not dipped, even during recessions. The continuing rise in demand and employment has been as persistent as the rise in prices. Our entire society seems to be undergoing a shift in emphasis toward the services.

Labor costs are an important, direct factor in some of the services. Despite improvements in earnings of service employees in recent years, many of them—such as laundry workers, hospital orderlies, and nurses—are still poorly paid. Effective trade-union organization and collective bargaining are absent from many of the services and the small extent of collective bargaining is usually localized, rather than widespread.

There can be little doubt that the rise of service prices reflects a rapidly growing population and great social changes, that are related to improved living conditions. The extent to which this is true—and it may well be the dominant factor—is not known. The area of the services represents almost a void in terms of economic data, information, and analysis. Its continuing growth seems, thus far, to have failed to produce a sufficient challenge to Government and academic economists.

The rapid rise in the birthrate since 1939—accompanied by increasing life expectancy—has meant a great increase in the demand for medical and dental care and hospitalization. In turn, this has meant a rising demand for doctors, dentists, medical technicians, hospital personnel, and hospitals. Vast strides in biology and medical technology have made possible great advances in the treatment of illnesses, while rising purchasing power and collective bargaining medical

plans have made it possible for an increasing number of families to pay closer attention to their health. All of these factors have contributed to raise the demand for health services.

The rapid rise in the birthrate since 1939 inevitably meant an increased demand for schools, teachers, and education personnel. This demand has been magnified by the movement out of the cities into the suburbs. It has been magnified further by improved real family earnings, the GI bill and the needs of modern technology. As a result, there has been a rapidly rising demand for college education, as well as for elementary and high schools. The financial resources of State and local governments have been pressed and the burden of State and local taxes has been rising.

The rise in homeownership and suburban living has raised the demand for a wide range of maintenance and repair services. The general increase in family purchasing power, paid vacations, and paid holidays has increased the demands for all types of services.

In addition, most services do not lend themselves to easy mechanization and the rate of productivity increases in most of the services is slow. There is also some small, indirect effect on service prices from the prices of basic manufactured goods that are used in service activities.

The persistent rise in the prices of services may possibly continue in the period ahead, until such a time as the economy adjusts to these social changes. Detailed information and analysis of this area is needed, however, before firm views and policies can be adopted.

Policy Suggestions

The foregoing, brief examination of the price level indicates that the attempt to maintain stable prices is, in effect, a number of individual problems. Not only are there different, broad price structures, but there are also differences within the major sectors. The price level is affected by the rate of economic growth and by demand. It is also affected by the pricing policies of major corporations in key industries and by changes in types of employment and shifts in demand. It is likewise affected by the state of international conditions.

For these reasons, no one generality is sufficient to explain the price rises of recent years. Furthermore, no one remedy, alone, can possibly be adequate to deal with the problem.

A general economic environment that is conducive to relative price stability is required. On the basis of the experience of recent years, it appears rather clear that economic growth is essential—a rate of increasing output that is considerably greater than in recent years. Economic growth should not be distorted, as the slow rate of expansion was distorted in 1955–57. Government monetary and fiscal policies, and private policies, should aim at balanced growth and should not encourage business investment alone. A reduction of pressures on the price level, also, requires a shift in corporate policy from financing the overwhelming portion of new investment from internal and borrowed funds toward greater reliance on the flotation of new stock issues.

Such an economic environment could establish a basis for relative price stability. Additional policies, however, would be required.

As we have seen, however, there is insufficient analysis and knowledge about the price structure to propose firm policies.

The following are a number of suggestions of possible ways to approach solutions to the problems involved in achieving a relatively stable price level. They are offered mainly as suggestions of methods for finding policy solutions, rather than recommendations.

1. A national commission, established by the Government, to finance and stimulate the study and analysis of the price structure could probably be of great help in developing the information needed for sound economic policy decisions.

Such a commission, composed of leading representatives of the major economic and social groups, might provide financial grants to Government agencies and scholars to develop the needed data, information, and analysis. Studies and reports possibly could be published, after discussion by the commission, with the right of individual commission members to include their comments or dissents. Before the termination of the commission, perhaps it could issue a final report that would include, if necessary, major differences of viewpoint.

The prime requirement is detailed information and analysis of the overall price structure and its major sectors. For too many years, there has been a flood of generalities and prejudices on this subject with little regard for the economic realities that can be brought to light only by a considerable amount of research and thought. It is time that the facts are examined.

How are prices actually set, for example, in the economy's major markets? What are the considerations and mechanics for setting prices in those markets? How do postwar price movements in the major markets differ from past experience, and what detailed reasons are there for specific differences? If unit costs have risen, which specific costs are they and what have been the factors in their rise? How have shifts in tax policies and accounting methods changed the reports of business costs and returns? What have been the effects on prices of shifts in demand to the services and in employment to nonproduction types of jobs? To what extent has an upgrading of consumer purchases contributed to increased living costs and been confused with rising prices?

How are wages, salaries, and fringe benefits determined in the major markets? What have been the differential movements of wages, salaries, and fringe benefits of hourly paid employees, of the various white-collar groups, of executives and management personnel? What are the facts concerning the broad area of expense accounts and extras for management officials that are frequently included in labor costs? Is a national wage and salary policy, such as suggested by some political leaders, consistent with the business and trade-union structures of a society that takes pride in pluralism and in a multitude of decisionmaking centers?

Answers to these and many similar questions are long overdue.

2. A comprehensive standby economic stabilization program is needed—one that includes limitations on bank credit and speculation in the commodity exchanges, as well as price and wage controls. The President should be granted authority to place such a stabilization program into effect, in the event of a national emergency, such as the Korean war.

A substantial portion of the increase in consumer and wholesale prices, after the end of the first postwar wave of price increases, occurred in the year that followed the outbreak of the Korean war. Except for part of the rise in the prices of food and farm products, the increase in the price level between June 1950 and June 1951 seems to have been built into the economy.

World conditions, at present, cannot preclude the possibility of further conflicts of the Korean war type. Another Korea, somewhere in the world, is certainly possible. Yet, the Government does not now have standby economic stabilization authority.

It took several long months, after the Korean outbreak, before Congress adopted stabilization measures. There was an additional delay, when administrative machinery was being set up. Seven months passed before a stabilization effort was put into effect.

Government policy should attempt to prevent a repetition of the delays in establishing a stabilization program, that followed the outbreak of the Korean war. The Government should also attempt an international effort to stabilize prices of basic raw material metals that fluctuate widely in response to international conditions.

3. Some measures must be developed to deal with the price level for manufactured goods.

One possible approach, among others that should be examined, may be to establish a Government price supervision agency, with investigatory and subpena power. Such Government agency could possibly have the authority to compel all major corporations in a selected number of industries—such as corporations with assets of $100 million and over—to present notices of intent to raise prices, several weeks or a few months before the new prices become effective. This Government agency could hold hearings and study the factors involved in a corporation's request, and could publish its findings. If its findings are negative, the Government agency could possibly have the authority to prohibit the price increase for another period of several weeks, and the agency could be legally required to publish detailed financial information on the corporation, to justify rejection of the price-increase request.

Such a possible procedure would not set up a system of price controls. It would tend, however, to delay price increases for key products. Its major aim would be to attempt to focus public attention on the facts, involved in the pricing policies of the dominant corporations, in several strategic industries. Public attention and the Government agency's authority to obtain detailed financial information may possibly provide sufficient curbs to the price-raising ability of key industries.

In addition, the Government could possibly do much to aid in the development of new products, to provide product competition for some of the basic output of key, administered-price industries. Aluminum already competes with steel for some purposes. Government research, for example, could possibly speed up the development of new materials—such as plastics—that could possibly compete with some current uses of both aluminum and steel.

The Government should make a continuing effort to encourage smaller businesses. This can be done, in part, through the vast procurement operations of the Government—to attempt to make certain that small firms get a significant portion of the work on Government

contracts. A major difficulty, faced by smaller businesses, however, is their frequent lack of sufficient resources for expansion. The Government should provide, on a continuing basis, a source of long-term, low-interest loans for smaller businesses—to improve their opportunities for survival and growth in an economy of nationwide corporations, with large internal funds, alternative financial resources and the bulk of Government contracts.

4. There is need for a reexamination of the Government's agricultural programs and their goals. Such a reexamination may produce new programs that could aim to maintain the family farm as a valuable national asset and to provide consumers with a lower level of food prices.

A possible approach that would be worth careful study might be a Government program of income support for farmers, rather than price supports, and limitations on the amount of subsidy that any farm enterprise could receive.

The feasibility of some such program, as well as alternative suggestions, should be studied, as part of a needed reexamination of the Government's agricultural policies.

5. The area of the services should be examined for possible avenues toward more stable prices. Such a study and analysis may point the way to efficiencies in the services. In addition, there may be several possible methods of reducing or stabilizing the prices of some services. Among such possibilities that should be examined are prepaid cooperative medical care groups, some type of Government health insurance and prepaid cooperative groups for services other than medical care.

6. An attempt should be made to stabilize the costs of housing and of construction, generally.

One possibility in this direction may be a national conference on housing and construction costs, called by the Government, and attended by construction firms, the building trades unions, and consumers. The purpose of such a conference should possibly include an examination of costs and building codes and of developing efficiencies. Since the construction industry is composed of hundreds of local markets, the aim of the conference could be primarily educational—to indicate to the industry and to the public means by which economies may be achieved.

Perhaps a division should be established within the Government's housing agency, that could study and develop, with the assistance of business and unions, means of achieving efficiencies in construction. Such a division could keep the industry, State, and local governments informed of its findings.

A major cost factor in housing is interest payments. Interest rates, generally, are strongly influenced by Government policies, which should aim at low interest rates to encourage economic growth.

A primary requirement is the development of a comprehensive housing program by Government—to include a substantial public-housing program for low-income families, a large-scale urban redevelopment program to renew decaying urban centers, long-term, low-interest mortgages for middle income private home buyers and cooperative apartment developments.

7. The distribution system in this country may be among the most efficient in the world, considering its geographic and economic size.

It is likely, however, that there are numerous inefficiencies, such as traffic bottlenecks, that can be corrected without great difficulty.

A national conference of business and unions in distribution, as well as consumers and Government, may be helpful. The entire distribution system, including advertising, should be examined for the purpose of developing efficiencies.

8. The Government might also establish a consumer economics agency, possibly within the Department of Labor.

The function of a consumer economics agency could probably be largely educational. It could provide studies and popular educational materials to assist consumers in reducing or stabilizing family costs. Public information is frequently lacking on some of the most elementary factors of living costs in our society—such as the interest costs to consumers of installment buying and personal loans. A program of consumer research and education by Government could assist the consuming public. It may have additional effects, as well, such as tightening State usury laws, which usually permit very high, effective interest costs to consumers.

TABLE I.—*Major price movements and factory wages since the end of World War II*

[Indexes: 1947–49=100]

	Consumer prices	Wholesale prices		Average hourly earnings in manufacturing
		All commodities	Industrial commodities	
1. Postwar inflation:				
January 1946	77.8	69.6	72.1	$1.003
January 1948	101.3	104.5	102.0	$1.302
Percent change	+30.2	+50.2	+41.5	+29.9
2. Relative stability:				
January 1948	101.3	104.5	102.0	$1.302
June 1950	101.8	100.2	102.2	$1.453
Percent change	+0.5	−4.1	+0.2	+11.6
3. Korean inflation:				
June 1950	101.8	100.2	102.2	$1.453
June 1951	110.8	115.1	116.2	$1.599
Percent change	+8.8	+14.9	+13.7	+10.0
4. Relative stability:				
June 1951	110.8	115.1	116.2	$1.59
June 1955	114.4	110.3	115.6	$1.87
Percent change	+3.3	−4.2	−0.5	+17.6
5. Creeping price rises:				
June 1955	114.4	110.3	115.6	$1.87
June 1958	123.7	119.1	125.3	$2.12
Percent change	+8.1	+8.0	+8.4	+13.4

Source: Bureau of Labor Statistics.

TABLE II.—*Which industrial costs pushed, 1953, 1955, 1957?*

	Output		Payrolls of factory production and maintenance workers	Several industrial costs [1]		
	Real national product	Industrial production		Research and development outlays, private industry	Depreciation charges, nonfinancial corporations	Interest payments, nonfinancial corporations
1953	100.0	100.0	100.0	100.0	100.0	100.0
1955	106.4	103.7	101.0	185.7	128.8	117.5
1957	110.3	106.7	107.5	307.1	152.5	145.0

[1] Other industrial costs increased substantially in this period, including advertising, public relations, and salaries, fringe benefits, expense accounts and extras of executive, managerial, and supervisory personnel.

NOTE.—Industrial payrolls, which rose partly in response to increased living costs, did not apply significant pressures on industrial unit costs. Other costs, such as suggested above, did push up unit costs substantially. The rise in private research and development expenditures, for example, was some 20 times greater than output; it applied substantial pressures on unit costs, including salary costs per unit, since much of the increase in these outlays was for the hiring of salaried scientists, engineers, technicians, and supporting staffs.

Source: Department of Commerce, Federal Reserve Board, Department of Labor, and Department of Defense.

TABLE III.—*Changes in Consumer Price Index*

[Listed in order of importance in the index, June 1955-June 1958]

Industry classification	Relative importance in price index [1]	Percent price increase June 1955-June 1958	Contribution to rise in total index
	Percent		*Percent*
Total, Consumer Price Index	100.0	8.1	8.1
Food, liquor, tobacco Perishable foods, nonperishable foods, food away from home, liquor, tobacco, coffee, tea, cola.	33.0	9.0	3.0
Services Laundry, shoe repair, etc.; doctors' fees; finance and insurance; movies; hospital care.	14.4	12.7	1.8
Housing Home purchase, rent, home repairs.	12.7	5.9	.7
Hard goods and miscellaneous New and used cars; electrical equipment, refrigerators, etc.; sinks, heaters, etc.; toys and sporting goods.	10.9	5.7	.6
Apparel Clothing, shoes.	8.8	3.4	.3
Fuel, drugs, etc Gasoline, oil, and coal; drugs, toilet goods, etc.; tires; dinnerware.	7.5	8.7	.7
Public utilities Water, gas, electricity; transit and railroad fares; telephone.	5.0	7.1	.4
Furniture, lumber, paper	2.3	3.0	.1
Government Real-estate taxes, auto registration, postage.	1.7	10.7	.2
Textiles Housefurnishings, rugs, miscellaneous.	1.4	5.7	.1
Newspapers	1.1	17.5	.2
Total weights	98.8		
Weights not included (price indexes not available)	1.2		

[1] Relative importance in Consumer Price Index as of December 1957.

Source: Computed from detailed indexes of consumer prices, U. S. Department of Labor, Bureau of Labor Statistics.

PRICES AND STEADY ECONOMIC GROWTH: AN ISSUE IN PUBLIC POLICY FORMULATION

Lazare Teper, Director of Research, International Ladies' Garment Workers' Union [1]

This paper seeks to examine some of the issues bearing on the formulation of public policies under the Employment Act of 1946 in relation to prices. In a period of slightly over 12 years, from the time price controls have been abolished at the conclusion of the Second World War to the spring of 1958, the index of wholesale prices moved up by nearly 63 percent, while the index of consumer prices advanced by approximately 55 percent. It is only natural, therefore, that all strata of our population (including labor organizations, their officials, staffs, and members) are concerned with the problem created by rising prices, and that the subjects of price behavior and price determination have become a proper subject for a legislative scrutiny.

No definite answer can be given on the cause of the price rise over the past 12 years. This is evident, for example, from the perusal of the papers prepared for the Joint Economic Committee and the record of its subsequent hearings in May 1958.[2] On the whole, there seems to be least disagreement about the years 1946–48 and 1950–51.

Prices began to move rapidly after the abolition of price controls in 1946 despite the assurances made by business spokesmen that the opposite will occur should price controls be abolished.[3] It is now argued that the advance in the general price level during the 1946–48 period was brought about by the existence of pent-up demand created during the war years and by the unusual degree of financial liquidity which existed at that time. Under these conditions, irrespective of other factors, business could command higher prices. Thus, between June 1946, when price controls were lifted, and August 1948, when the price advance seemed to have been arrested, the Bureau of Labor Statistics index of wholesale prices advanced 44.9 percent and its index of consumer prices by 31.3 percent.

The general price level, as measured by the wholesale and consumer price indexes, began to ease off with the development of the first postwar recession. Thus, between August 1948, the peak of the first postwar price movement, through October 1949, described by the National

[1] The views expressed in this paper are those of the author in his individual capacity. They do not necessarily reflect the opinions of the International Ladies' Garment Workers' Union.

[2] Joint Economic Committee, Compendium of Papers Submitted by Panelists Appearing Before the Joint Economic Committee, March 31, 1958 (hereafter cited as "Compendium"), and its Hearings on the Relationship of Prices to Economic Stability and Growth (hereafter cited as "Hearings").

[3] Robert R. Wason, president of the National Association of Manufacturers, argued before the Congress that price control abolition would not bring about a general price rise: "How much the overall adjustment of prices will be in order to take care of increased wages and other costs of production cannot be determined now. Some prices unquestionably will drop. Others will advance. The average adjustment will be relatively insignificant." (1946.)

Bureau of Economic Research as the trough of the recession,[4] wholesale prices declined by 7.8 percent and consumer prices by 3.1 percent. Thereafter, until the developments in Korea, consumer prices showed little change, while wholesale prices, under the impetus of improved demand which came with business recovery, gained 2.3 percent.

The subsequent price increases which continued through the end of 1951 seem directly related to specific circumstances generated by the Korean conflict. Both businessmen and the general public remembered the price hikes and shortages during the years of the Second World War. Scare buying which resulted placed business in a strategic position to raise prices. The delays in imposing price controls in the absence of appropriate legislation and inadequacies of subsequent congressional enactments helped to set the stage for price rises during this period.[5] Thus between June 1950 and November 1951, wholesale prices rose by 13.4 percent and consumer prices by 10.8 percent.

The two periods, the one following the end of the Second World War and the other related to the Korean developments, account for the greatest share of the postwar price increases. Their abnormality does not provide us with much material for the evaluation of public policies during a period of normal growth of our economy unaffected by military conflicts. The subsequent period does offer, however, more food for thought.

In the 20 months beginning with November 1951, the wholesale price index began to decline and in June 1953 was 3.6 percent lower. Consumer prices, on the other hand, did not show any pronounced development, fluctuated up and down slightly, and ended by gaining 1.5 percent. This span of nearly 2 years occurred during a period of business expansion—the National Bureau of Economic Research places the peak of the particular business cycle in July 1953.[6] The interest in this period is in the demonstration that it provides that our economy can expand without a signficant rise in the level of prices. While a single example does not make a rule, it does demonstrate that rising prices are not an unavoidable feature of American society under present institutional arrangements.

The next 2½ years, between the middle of 1953 and the end of 1955, also witnessed a comparative stability of price level, though admittedly both the wholesale and the consumer price index showed a slight upward bias by fluctuating above the levels previously attained in June 1953—the wholesale price index within a range of 2 percent and the consumer price index within a span of 1 percent. This was a period of business recession, dated by the National Bureau from July 1953 through August 1954, and the subsequent recovery.

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[4] Duration of business cycles is measured by the National Bureau of Economic Research from business cycle peak and trough dates. For the most recent dates see Geoffrey H. Moore, Measuring Recessions (National Bureau of Economic Research, 1958), p. 260; for earlier dates see Arthur F. Burns and Wesley C. Mitchell, Measuring Business Cycles (National Bureau of Economic Research, 1946), p. 78.

[5] President Truman underlined the defects of post-Korea price-control legislation at the time of the signing of the new Defense Production Act on July 31, 1951: "The inflation-control provisions of the act are greatly deficient. If these had been the only provisions of the act, I would have vetoed it. We will not be able to hold down rising prices with this act. * * *"

[6] The preceding trough of this business cycle occurred in October 1949, according to the National Bureau.

It was not until 1956 that both wholesale and consumer prices began to advance at a comparatively rapid pace. From the beginning of that year through July 1957, the peak of the business cycle as recorded by the National Bureau of Economic Research, wholesale prices rose 5.7 percent and consumer prices by 5.4 percent. In the subsequent recessionary period, from July 1957 through April 1958 when the Federal Reserve index of industrial production reached its low point, wholesale prices barely edged ahead, gaining but 0.9 percent, while consumer prices advanced by 2.1 percent. The upward movement of prices thus began while the economy was still expanding and while the levels of existing demand enabled prices to be increased. The advance actually began about a year after the Federal Reserve authorities embarked on their program of cutting down on the supply of money and credit and while the Federal Government was doing its best to publicize the inflationary threat. The continuation of price rises, however modest in the case of the wholesale series and more notorious in the case of the consumer price index, attracted special attention.

In an attempt to justify price rises during the recession, arguments were advanced that this was a novel development brought about partly as a result of the Federal commitment to maximize employment, output, and purchasing power under the Employment Act and as a result of a different type of an inflationary development created by the rise in the sellers' costs. The more extreme advocates of this view argued that sellers had to raise prices as a result of wage increases gained by labor organizations for their members. The less extreme proponents of this view urged that higher prices could be brought about also as a result of managerial decisions to raise profit margins and markups.

There was, of course, nothing novel about an upward movment of prices or relative price stability during recessions. An analysis of the several available price indexes for a century beginning with 1836, shown in table 1 below, suggests that in approximately 1 recession out of every 3, the general price level may not decline.[7] Individual indexes do exhibit at times a somewhat different behavior during an identical period of time. This is to be expected in view of the comparative frailty of the earlier data and the different methodological approaches used in their compilation. In any event, historical evidence does demonstrate that a lack of price decline during a recession is not a phenomenon peculiar to our times. It existed at a time when labor organizations were still a shadow of their future selves and when large scale industrial enterprise did not play a major role in the Nation's output of goods.

[7] Cf. with Prof. Clarence H. Danhoff's observations and data in Compendium, pp. 135, 142.

TABLE 1.—*Direction of price movements during recessions, 1836–1938*

[+ stands for an upward movement of prices; − stands for a downward movement of prices; 0 is used when prices show no change; * stands for a price rise followed by a decline; absence of notations indicates unavailability of data]

Period of recession	Snyder-Tucker (general price index)	Wholesale price indexes		Consumer price indexes					
		Warren and Pearson	Bureau of Labor Statistics	Federal Reserve Bank of New York	Hansen	Burgess	Douglas	National Industrial Conference Board	Bureau of Labor Statistics
1836–38	−	*	−	*	*				
1839–43	−	−	−	−	−				
1845–46	+	0	+	+	+	+			
1847–48	−	−	−	−	−	−			
1853–55	+	+	+	+	+	+			
1856–58	*	*	−	*	*	*			
1860–61	−	−	+	+	−	−			
1864–67	−	−	*	*	*	*			
1869–70	−	−	−	−	*	−			
1873–78	−	−	−	−	−	−			
1882–85	−	−	−	−	−	−			
1887–88	+	+	+	+	+	+			
1890–91	−	0	−	−	−	+			
1892–94	−	*	*	−	*	*	−		
1895–96	−	−	−	+	−	−	+		
1899–1900	+	+	+	+	+	+	+		
1903–4	0	0	+	−	0	+	−		
1907–8	−	−	−	−	−	+	−		
1910–11	−	−	−	0	−	−	+		
1913–14	0	−	−		+	+	+		+
1918–19	+	+	+		+	+	+		+
1920–21	−	−	−		−		−	−	−
1923–24	+	−	−				0	+	+
1926–27	0	−	−					−	−
1929–32	−	−	−					−	−
1937–38	−		−					−	−

Source: Bureau of the Census, Historical Statistics of the United States, 1789–1945: A Supplement to the Statistical Abstract of the United States (1949), pp. 231–236.

It is, of course, more customary among economists to expect that prices may rise at the time of business expansion. Here, too, this need not necessarily happen (as even the experience of the November 1951–July 1953 period has shown). While not all price quotations were moving up, this was to be expected. Even during periods of price stability and price declines, some prices move up, others remain either unchanged or fall. Changes in the relative position of different prices are actually deemed to be a desirable feature of our society by most economists, one which presumably assists in the allocation of resources throughout the economy.

One need not spend too much time on the discussion of the claims made on behalf of the proponents of the theory of a sellers' or a cost-push inflation. As noted by Harold Stein [8]—

> it is probably the oldest, most primitive, and most naive explanation. The fact is that most sellers, whether of food or of labor, would always like to raise their prices (or wage rates). But it is also a fact that they do not always raise them, and never raise them without limit.

The upper limit for a price is obviously one which the market can accept in the light of the existing demand. The distinction between buyers' and sellers' inflation thus does not materially help analysis. For that matter, as noted by Prof. Gardner Ackley, it is generally impossible to differentiate between the two alleged types of inflation. "The fact is," he writes,[9] "that most prices are not set by impersonal

[8] Harold Stein in ibid., p. 666.
[9] Gardner Ackley in ibid., p. 625.

supply and demand forces * * * but instead in response to some person's decision, applying some rule or formula or using his informed judgment as to the best way to behave in the current situation." The fact that in actual practice millions of such decisions are made, makes the specific determination of the cause of price rise nigh impossible. The very concept of supply and demand, though "clear enough in the economics textbook," is almost impossible of determination in most markets.

There is very little empirical data, to demonstrate the existence of the kind of inflation that is postulated by the proponents of cost-push or sellers' inflation theories. Prof. Neil Jacoby, for example, relies on the following documentation to support his opinions: [10]

> Over the postwar period 1946–57 a 90 percent increase in hourly wage rates exceeded the sum of a 37 percent increase in output per man-hour and a 44 percent increase in the consumers price index. This points to two conclusions. First, an excessive increase in wage costs was the dominant factor in the postwar inflation of the cost of living. Secondly, some part of rising wage incomes has been accompanied by a shrinkage of business profit margins as well as by a rising cost of living.

Unfortunately, the basic proposition set forth by Professor Jacoby cannot stand up under analysis. In the first instance, percentage changes in consumer price index and in the output per man-hour are not commensurate and cannot be added together inasmuch as the 2 percentages are related to 2 different magnitudes (just like one cannot add 25 percent of a watermelon with 50 percent of an apple). Secondly, if Dr. Jacoby proposes to demonstrate the changing price of output per man-hour, this figure can be derived from his data;[11] the resultant increase of 97 percent in the price of output per man-hour contrasts with the "90 percent increase in hourly wage rate." [12] Thus the conclusions set forth by Dr. Jacoby fall for the lack of support by underlying data.[13]

The behavior of the wholesale price index in the course of the latest recession does not seem to suggest that a long-term inflationary pull

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[10] Neil Jacoby in ibid., p. 164: the same view is expressed in Hearings, p. 397. It may be noted that a considerable body of academic opinion seems to be at variance with Dr. Jacoby's view of a wage-push inflation. Richard A. Musgrave notes that he "is not so certain to which degree the inflationary problem of the last decade should be explained" in terms of cost and profit-push inflation (Hearings, p. 367); Albert E. Rees points out that "There is no firm evidence that unions are a cause of inflation, and there is a good deal of evidence that in rapid inflations wages set by collective bargaining lag behind other wages" (ibid., p. 401); Frederick Weston finds that "The views that the price rises in recent years are to be attributed to administered pricing by large firms or wage inflation rest upon selected bits of evidence without a full consideration of the major economic forces in operation" (ibid., p. 138); Robert F. Lanzillotti accents that "we do not really know much about the cost-price relationships in individual firms" (ibid., p. 296); Carl F. Christ underlines that "the evidence does not support the wage-price spiral hypothesis in the United States before 1956, and the evidence since then is mixed" (ibid., p. 248).

[11] To make the necessary computations, 1957 data must be expressed as ratios of 1946 data. The product of the ratios of output per man-hour and the consumer price index will give the ratio of 1957 price of output per man-hour to that of 1946, and thus provide the needed information for the derivation of the percentage of increase. The necessary arithmetic could be expressed as follows:

$$(1.37 \times 1.44) - 1 = 1.97 - 1 = .97 \text{ or } 97 \text{ percent.}$$

[12] Professor Jacoby must have reference to average hourly earnings because no data on wage rate changes is available from any source.

[13] The Bureau of Labor Statistics properly cautions the users of wage and price statistics from seeking to derive causal relationships of changes in either wages, unit labor costs, or prices. (See, for example, its Productivity, Earnings, Costs, and Prices in the Private Nonagricultural Sector of the Economy, 1947–56 (revised), May 29, 1957, pp. 2 f.). On this ground Dr. Jacoby's approach is also wanting. The comparison is also vitiated by the basic differences in the weighting diagrams of the wholesale price index and of average hourly earnings (the wholesale price index is constructed by using base period weights while average hourly earnings are using current weights and as such are affected both by shifts of employment as between industries and by changes in hours of work); it is impossible, however, to measure the effect of the different approaches used in the development of these two sets of data.

is plaguing our economy. The main factor which accounted for the upward bias of the wholesale price index during this period came in the main as a result of price increases of farm products spurred on by the effects of inclement weather on farm production, a decidedly temporary factor. The wholesale price indexes for farm products and for processed food increased 5.3 and 4.0 percent between July 1957 and April 1958, while the index for all other items declined 0.2 percent. There were, of course, a number of upward price changes in the latter group but no major subclassification of the price index registered an advance as large as in the food and farm sectors.[14] The character of price movements does not suggest that a long-term upward price pull is exhibited by these data.

Similar observations can be made with regard to the Consumer Price Index during the recessionary development. Because of the time lag between the movement of wholesale and retail prices, in part the behavior of the Consumer Price Index was influenced by the price changes which occurred in the wholesale markets before the advent of the recession. The major upward pull on the index was exerted, however, by the rise in the food prices, thus paralleling the same development at wholesale, and by the rise in the prices of services. The behavior of the index thus also does not suggest that it was affected by a long-term upward inflationary developments.

The several months which have elapsed since April 1958, after the low point was reached by the index of industrial production as previously noted, are probably too short a period for the purpose of developing final judgments. Nonetheless it is important to note that despite the apparent movement toward a recovery no extreme price developments came into view. The Consumer Price Index for all practical purposes stabilized itself, with upward pressure, to the extent that any was noticeable, exerted solely by its food component, and then at a much-reduced pace. The wholesale price index as a whole also showed stability, with slight softening in the prices of farm products counteracted by a slight firming in the industrial sector.

The history of post-World War II price movements, sketchily discussed in the preceding pages, permits a number of observations which have a direct bearing on the issue of policy formulation with regard to prices and steady economic growth.[15] It is obvious that the great part of price increase during the last 12 years took place while the Nation was undergoing a readjustment period after V–J Day and as a result of the Korean conflict. Aside from these two clearly abnormal periods, the Nation witnessed periods of general price declines, price stability and price advances (as measured by the two respective indexes of the Bureau of Labor Statistics for wholesale and consumer prices) both during periods of economic expansion and economic contraction. Thus, it would appear that given a condition of

[14] The major advances during this period were as follows: fertilizer materials, 3.8 percent; agricultural machinery and equipment, 4.7 percent; construction machinery and equipment, 4.7 percent; motor vehicles, 3.2 percent; and gypsum products, 4.7 percent. Interestingly enough, prices of metals and metal products and their major subclassifications showed a decline.

[15] The present writer is in full agreement with the point made by Betty G. and Leo Fishman (Compendium, pp. 61 ff. and Hearings, pp. 20 ff.) that the use of the term "stability and growth" in describing the objectives under the Employment Act leads to difficulty of interpretation. The term "steady economic growth" would seem to obviate the complications as a statement of long-term objectives under the act implicit in the obligation "to promote maximum employment, production, and purchasing power."

comparative peace the implementation of policies under the Employment Act does not of itself create a condition for an uninterrupted inflationary pressure.

It is true that during this period we have not witnessed any sharp downswings in the general level of prices such as have sometimes occurred in the past, mostly in the wake of serious depressions. The desirability of such developments must be seriously questioned. Even the more extreme advocates of price-level stability do not seem to seek a "correction" in the existing price level in order to bring it into line with the figures for some past period, say 1939 or 1929.[16] The likelihood is that should extreme downswings in prices occur in the future, they would be concomitant to a major depression.[17] The lack of extreme recessionary developments in the last 12 years, a condition to which the existence of the Employment Act as well as the presence of a number of in-built stabilizers in our economy have unquestionably contributed, may therefore be deemed, at least in part, a contributory force to the fact that prices as a whole have edged upward. While unquestionably this has contributed to the erosion of monetary incomes of the American people, we cannot ignore the other facet of the problem. Were the Nation to have undergone more severe contractions in economic activity than those it has witnessed in the last decade, the erosion of incomes of the American people would have been unquestionably even greater and the consequences of business and employment declines even more severe, both domestically and internationally. As testified to by Prof. Richard Ruggles: [18]

> Specifically, one may well ask how a 2- or 3-percent annual price rise would compare in importance with unemployment 2 or 3 percent over the frictional level. The inequities that are introduced by a price rise relate to that fraction of the population which holds assets in the form of money and/or depends upon a fixed income. In this category there are, of course, banks, pension holders, and college professors. * * * It is probably true that it is the most articulate portion of the population that is affected most by price rises and least by unemployment, and that this influences the amount of attention devoted to the two problems. There can be no doubt that secular price rises produce real inequities. But a very mild degree of unemployment—2 or 3 percent above the frictional level—may produce far more hardship. In the first place, such unemployment must by definition hit specific individuals more heavily than others. Those who have job security—like bankers and college professors—are not harmed at all. Other people, however—and they are people whose incomes were lower to begin with—may be totally unemployed for many weeks or even months. In contrast, the worst hit group in a moderate secular price rise will suffer a reduction in real income of only 2 or 3 percent. It may be argued that unemployment tends to hit different people at different times, but this is not necessarily true. The marginal workers in industries highly sensitive to changes in output will continually be laid off in times of soft demand. Furthermore, even in the case of a secular price rise, many of the so-called fixed incomes are not absolutely fixed. College professors eventually do get increases in pay, and social-security benefits do rise.

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[16] During the period of August 1929 through March 1933, the "great depression," the wholesale price index declined 27.4 percent and consumer price index 37.5 percent.

[17] "In magnitude of relative movement, the net effect of business expansion is to raise quantities more than prices; the net effect of business contraction is to reduce prices more than quantities. * * * Various measures of the degree to which these two factors respond to cyclical forces indicate that quantities are more sensitive to pressures of expansion, prices to those of contraction. The brakes of expansion seem to be stronger for prices than for quantities; the brakes to contraction seem to be stronger for quantities than for prices" (Frederick C. Mills, Price-Quantity Interactions in Business Cycles, National Bureau of Economic Research, 1946, p. 106).

[18] Richard Ruggles in Hearings, pp. 134 f. Cf. also Abba P. Lerner in ibid., p. 143. Albert E. Rees also notes that "The income losses to the unemployed in recessions must surely be sharper than the losses imposed on fixed-income receivers by historical peacetime inflations" (Compendium, p. 653).

It is, of course, frequently recognized by the proponents of price stability that it could be attained only at a cost of unemployment. There seems to be no general consensus among them as to what is the "needed" amount of unemployment. Prof. Joseph Aschheim is one of the few who comes up with a figure. "Price level stability appears unlikely to require unemployment in excess of 5 percent of the civilian labor force," he writes, noting, however, that a 5-percent unemployment margin is apt to entail a significant sacrifice in terms of net private domestic investment and to a lesser degree of the gross national product.[19] Thus he is faced with a dilemma. On the one hand he advocates that price objective be made a part of the amended goals under the Employment Act. On the other hand he forewarns [20] that—

> In an international context in which we should hardly want to compromise our economy's growth potential, acceptance of a 5-percent unemployment margin for the sake of price-level stability is, to say the least, a questionable approach.

This brings us to a crux of the problem involving public policy. Should the Nation strive for an overall stability of prices if this means a conscious attempt to seek a defined or an undefined level of unemployment? Should the Nation seek the overall stability of prices so long as it does not interfere with a steady growth of the economy and the maximization of the levels of employment, production, and purchasing power?

Price-level stability cannot be treated as a public issue divorced from other objectives of national economy policy. This is recognized by the Employment Act as presently written when it refers to maximization of purchasing power. The latter term, by definition, is a composite of a flow of money incomes and the level of prices. It is thus integrally tied up with the policy objectives under the act—maximum employment and maximum production. The implementation of policies with regard to prices is thus placed in a proper framework which enables those charged with public policy implementation to seek the best means of improving the welfare of the Nation and of its inhabitants. Any other construction of the act will defeat its objectives and would merely provide remedies which may be worse than the disease.[21]

Parenthetically, we should note that there is no universal agreement as to what shall constitute evidence of price stability. The historical evidence suggests that different indexes of prices will not necessarily exhibit identical behavior in any particular period. Furthermore, apparently even the advocates of price stability do not necessarily expect that the price level will necessarily be kept stable at all times. Thus, for example, the Committee for Economic Development [22] proposes that it would not—

> regard a moderate *fluctuation* of prices, such as price rises that normally occur when business is expanding as evidence of long-term inflation, so long as the economy is sufficiently elastic to allow any general upward fluctuation to be balanced by subsequent downward fluctuation of prices. We are concerned about the possibility that prices will show a strong upward *trend*. This can occur if prices increase more during expansion than they decline during contrac-

[19] Joseph Aschheim, in Compendium, p. 30.
[20] Ibid., p. 27.
[21] As pointed out by Dr. Edwin G. Nourse, the addition of a price stability goal to the act would "add more words of vague meaning and controversial interpretation without giving further practical guidance to policymakers" (Hearings, p. 9).
[22] Committee for Economic Development, Defense Against Inflation: A Statement on National Policy, July 1958, p. 17.

tions; or if prices move up sometimes but never move down. [Their italics.—L. T.]

This proposition suggests that the committee, in the words of William Benton, "seems to elevate stability of prices over the national objectives of high employment and rapid economic growth." [23] For in effect, the statement calls for recessionary developments in the economy, with its consequent and obviously undesirable consequences, to provide the "stabilizing" mechanism.

However judged, the last 12 years of our history have witnessed, despite the fact that the country has passed through 3 recessions, a significant improvement in the national welfare and economy. Even if one were to accept the view that the price behavior was, as argued by Bert G. Hickman,[24] a "byproduct of properties of the postwar economy which most persons would agree were desirable ones," we must also accept his warning that—

This fact should be kept in mind when judging the performance of the economy during these past years, and it should come to the forefront whenever the benefits of alternative goals and the risk of alternative policies are to be weighed.

This is not to suggest that efforts in the direction of minimizing or avoiding price increases should not be pursued as an object of public policy. But on the other hand, when the issue of choice is presented between orderly, continued economic growth and economic instability in order to achieve price stability, the choice is clear—growth ought to be fostered and unemployment ought to be fought.

There are, of course, some who fear that the mere effect of public commitment to a policy of uninterrupted growth is prone to induce price increases. Such fear is voiced, for example, by Professor Smithies who suggests that were the Government to guarantee that "in all circumstances unemployment will be held to very low levels" and that "every year the national product will be greater than that of the preceding year" prices would be prone to rise because "there would be little incentive for trade unions to be moderate in their wage demands" and "for employers to resist those demands." Professor Smithies, therefore, feels that as a matter of policy, the Government should create "some uncertainty concerning whether full employment and growth will continue in this very smooth way." [25]

These fears are clearly unfounded. In the first instance, even if the governmental policy were directed toward the maintenance of a steady economic growth, in the present state of economic knowledge this objective cannot always be achieved. Minor fluctuations are prone to occur just the same.[26] Secondly, even if economic growth were uninterrupted by recessions, there still would be no assurance of prosperity to the particular sections of the economy and no certainty that the specific increases in prices would not generate competition

[23] Ibid., p. 16.

[24] Bert G. Hickman in Compendium, p. 209. Prof. Arthur Smithies also notes: "It is difficult to see how the price increases of the postwar period have in any way interfered with the effective economic operation of the United States. While a theorist may be able to argue that inflation has produced less than perfect allocation of resources, the practical evidence does not indicate where such distortions, if any, have occurred. Rather the expectation of rising prices, while it was allowed to continue, seems to have contributed to the general spirit of optimism that characterized most of the postwar period" (ibid., pp. 612 f.).

[25] Arthur Smithies in Compendium, p. 613, and Hearings, p. 369.

[26] It must be noted that Dr. Smithies visualizes only minor recessions (such as in 1949 and 1953) as a possible corrective. Recessions of the 1957 kind he deems much too severe, and suggests that they be "avoided by the use of suitable policy measures" (Compendium, p. 613).

from other sources—either from abroad or from substitute goods and materials—or that they would not be countered by slackened consumption. In the final analysis—

> the commitment to high employment is not, even on paper, a commitment about employment of particular persons in particular occupations or particular industries. It does not, for the individuals or organizations that make wage decisions, eliminate the possibility that they may price themselves out of the market.[27]

Admittedly, the use of monetary policy to restrain price advances did not prove its effectiveness. The Federal Reserve is criticized at times by its supporters for improper timing of its actions.[28] Others argue that monetary policy does not provide a sufficiently powerful tool to maintain the health of economy.[29] The most serious critique comes from Prof. Milton Friedman who points out that actions designed to affect monetary supply may not be reflected in prices or economic activity, on the average, for anywhere from 12 to 16 months and that the timing varied considerably from one business cycle to another. Thus, since 1907, the shortest time span by which the money peak preceded the business cycle peak varied from 13 to 24 months, while the corresponding range measured in relation to the trough of the cycle was from 5 to 21 months. He therefore concludes [30] that—

> From the point of view of scientific analysis directed at establishing economic regularities on the basis of the historical record * * * this is highly consistent behavior * * * But from the point of view of policy directed at controlling a particular movement * * * the timing differences are disturbingly large * * *.

It is thus possible that the actions taken by the Federal Reserve Board in an attempt to stem inflationary pressures, because of the delayed impact on the economy, have actually contributed to generating the 1957 recession.[31]

Furthermore, the impact of the Federal Reserve policies on the different sectors of the economy clearly demonstrated that apparently its actions and mechanisms did not seem to measure up to the task. Its effects, as noted by Prof. Warren L. Smith,[32] did little more than—

> touch the fringes of the private investment boom of 1955–57. Its effects appear to have been heavily concentrated on residential housing construction, particularly that part financed by Government-supported mortgages, with perhaps some further significant effects on State and local government construction expenditures and capital outlays by smaller business concerns.

To a considerable degree, large scale business was able to escape the effect of monetary restraints because of increased ability to finance operations by the use of internal funds and because of its preferential standing with the banks. Available empirical data also seem to support the conclusion that the operations of large scale enterprises, both with regard to investment policies as well as with regard to prices, are little affected by monetary policies. Nor does it seem that the activities of the Federal Reserve have much psychological effect on

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[27] Harold Stein, ibid., p. 668.
[28] See, for example, the views of Neil H. Jacoby, in Hearings, p. 397 f.
[29] See, for example, the views of Richard Ruggles in Compendium, p. 308.
[30] Milton Friedman, ibid., p. 250.
[31] Ibid., p. 255.
[32] Warren L. Smith, ibid., p. 507.

large corporations. Professor Smith, for example, reached a tentative conclusion that—

> the psychological effects are rather more likely to be destabilizing than stabilizing under most circumstances. Strong Federal Reserve action to combat inflation is likely to be taken as one more indication that inflation is in fact a probability and is, therefore, likely to reinforce an inflation psychology with respect to expenditures.[33]

Restrictive monetary policies were supposed to bring about price stability. In practice, they did not. The areas where price pressures were most in evidence seemed to have been basically insulated from their effects. The major byproduct of tight money and high interest rates promoted in the 1955–57 period was the subsequent recession. To its development, it would appear, the Federal Reserve Board proved to be highly insensitive. Busy as it was combating the windmills of inflation, the Board continued to restrict credit and help boost interest rates for several months after the existence of a recessionary development was acknowledged even by the administration.

The likelihood is that were the activities of the Federal Reserve Board more closely integrated with other top level agencies of the Federal Government operating out of the office of the President that some of the mistakes in perception would not have been as great. While the Board prides itself in its independence, it functions in an atmosphere of isolation from most but the banking influences.[34] A greater correlation of the Board's activities with that of the Chief Executive may possibly correct this deficiency.

The creation of greater interdependence among Federal agencies is a step in the right direction, but of itself it is not going to solve the problem of greater price stability. The experience of the recent past suggests that the upward movements of prices were centered in specific areas of the economy. The ability to act with regard to key problem areas in our economy seems essential in the kit of anti-inflationary tools. The precise range of these instruments need not be fully spelled out—much additional study is needed to determine their precise content. Broadly speaking, however, they may encompass measures designed to spur on development of investment in the areas where the existing production facilities are insufficient to provide the wanted supplies of goods and materials; may provide greater coordination between the Federal credit agencies as well as between those concerned with monetary and fiscal management; may provide differential rates on loans for different classes of borrowers in the light of the needs of the economy; may have the power to regulate consumer credit as well as set controls on charges made for these services as well as for other types of small loans.

Federal Government and the Congress also must look into another facet of the price problem—the price-setting mechanisms in our economy. Very little is actually known about how prices are really set. Much that is available is essentially speculative in character and as such falls short of empirical information needed for policy-formulation purposes. But even the scant data that are available indicate

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[33] Ibid., p. 505. Professor Smith also notes that the rising velocity of money helped to counteract some of the effects of restrictive monetary policies.

[34] "On those few occasions where I have heard members of the executive branch of the Government address themselves to the broad economic policy questions, I have had the feeling that they have not explicitly taken account of economic growth. I think especially of the Federal Reserve System" (Otto Eckstein in hearings, p. 262).

that some of the causes of high prices may lie in the ways in which prices are determined. Professor Lanzillotti, for example, points out in his paper that a number of large corporations set their prices in accordance with specific long-term objectives. Thus when prices are set on the basis of a target profit rate, in the companies Professor Lanzillotti studied, he found that it ranged from 10 to 20 percent after taxes and approximately 20 to 40 percent before taxes. The actual return for these companies over a 9-year period averaged "slightly more to substantially more than the profit objective (with only one exception * * *)." [35]

Much more needs to be learned about price policies of large corporations, their influence on general price levels, and their effect on the economy. This type of information is needed for public policy development bearing on prices and economic growth. The creation of a proper public research body to study price setting in the economy would be a step in the right direction.[36]

This proposal differs from those which suggest the creation of a public commission which would either determine price changes (or price and wage changes) or which would investigate price changes. In the absence of any acceptable criteria for such an agency, the proposal seems to be much too premature.[37] The mere existence of such an agency does not, of course, guarantee that increases in price level may not necessarily occur—the experience of Scandinavian countries, discussed by Professor Gruchy, reveals that despite their stabilizing policies based on the use of planned and coordinated approach, they were not able to keep their price level "as stable as they would like to have done." [38]

Fiscal instruments also require further development for better implementation of public policies. While pay-as-you-go taxation is deemed to provide one of the needed stabilizers, the principle could be further extended to incomes derived from dividends. Furthermore, the consideration of possible flexible rates related to the overall levels of economic activity is worth study to create even greater sensitivity in this instrument. Similarly, reconsideration of the present method of financing unemployment insurance as well as of the standards of benefits and eligibility is called for both on its own merit as well as in the interest of the stabilization policies. At the present time, unemployment insurance taxes are prone to be higher in a period of a longer recession or recovery than at the peak of business activity as a result of the in-built systems of experience rating. This form of taxation is prone to aggravate fluctuations rather than act, as it could in a different formulation, as a countercyclical force. On the other hand, there is a need to bolster the unemployment insurance benefits by providing benefits more in line with current levels of weekly compensation, provision of uniform duration for the payment of benefits and extension of coverage to workers not presently covered by the system.

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[35] Robert F. Lanzillotti in Compendium, pp. 444 f.
[36] Cf. ibid., pp. 456 ff.
[37] Prof. Abba P. Lerner does suggest criteria for a regulatory body (Compendium, p. 267), but they are manifestly impractical if not unsound (cf., for example, Gardner Ackley, ibid., p. 635).
[38] Allan G. Gruchy in Hearings, p. 371.

Another important key to steady economic growth and price stability lies in the incentives that may be given to raising the rate of productivity development. It has been argued that the reason prices have increased in 1957, for example, was because the tempo of growth in industrial productivity was exceeded by that of wages.[39] There is no question that over the years fluctuations in the rate of change in productivity did not always coincide with the rate of change in the wages. At best one can expect when relating wage changes to productivity changes to use the long-term rate of development as a basis for calculations. The latest press reports seem to indicate that in 1958, the addition of new equipment is boosting output per man-hour at the "dramatic pace of 12 percent a year with the result that gains in output per man-hour are outstripping wage boosts." [40] The temporary slowdown in the rate of productivity advance thus apparently has been overcome.

The advance in the rate of productivity increase offers one of the greatest hopes to the maintainance of a stable price level under the conditions of a steady economic growth. As experience of the past demonstrates, advances in productivity are prone to be greater under conditions approaching full utilization of resources rather than at a time when idle capacity abounds. All efforts—both public and private—must be directed to this end.[41]

No attempt has been made in this paper to cover all possible ramifications of the price problem in relation to the Employment Act. This was manifestly impossible. A number of issues were therefore deliberately left untouched and other issues were treated much more sketchily than the matter deserved. Thus, for example, the current economic situation was left for all practical purposes untouched. Similarly the discussion of different governmental policies which directly affect the level of specific prices, such as those of some farm products and minerals, have similarly been omitted despite their obvious importance. It is to be hoped that some of the other panelists will deal with these and similar questions.

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[39] "The most unsatisfactory segment of the postwar record of price and output changes occurred during 1957 when a gain of less than 1 percent in real output was accompanied by an increase of more than 3 percent in prices. And this suggests to me that true 'creeping' inflation is a phenomenon of quite recent origin." (Neil H. Jacoby, ibid., p. 397.)

[40] Joseph R. Slevin, Government Aids Have High Hopes for Holding Inflation to Minimum, in New York Herald Tribune, October 8, 1958.

[41] An interesting view of the factors that bring about a rise in industrial productivity—increases in labor costs spur on mechanization of operations with gains in output per man-hour offset in part by increased size of nonproduction employees—is offered by Seymour Melman, Dynamic Factors in Industrial Productivity, John Wiley & Sons, 1956.

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