107

POLICY FOR COMMERCIAL AGRICULTURE

ITS RELATION TO ECONOMIC GROWTH AND STABILITY

HEARINGS

BEFORE THE

SUBCOMMITTEE ON AGRICULTURAL POLICY

OF THE

JOINT ECONOMIC COMMITTEE

CONGRESS OF THE UNITED STATES

EIGHTY-FIFTH CONGRESS

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POLICY FOR COMMERCIAL AGRICULTURE

ITS RELATION TO ECONOMIC GROWTH AND STABILITY

MONDAY, DECEMBER 16, 1957

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON AGRICULTURAL POLICY
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D. C.

The subcommittee met at 10 a. m., pursuant to notice in the Old Supreme Court Chamber of the Capitol, Senator John Sparkman (chairman of the subcommittee) presiding.

Present: Senator John Sparkman, Alabama; Representative Wilbur D. Mills, Arkansas; Representative Henry O. Talle, Iowa; and Representative Thomas B. Curtis, Missouri.

Also present: John W. Lehman, acting executive director; George E. Brandow, economist; and Reed L. Frischknecht, legislative assistant to Senator Arthur V. Watkins.

Senator SPARKMAN. The subcommittee will come to order.

Today the Subcommittee on Agricultural Policy of the Joint Economic Committee begins public hearings as part of its study of policy for commercial agriculture. The study was undertaken pursuant to instructions contained in the report of the Joint Economic Committee on the January 1957 Economic Report of the President.

The subcommittee was asked to concentrate its attention upon commercial agriculture, the farmers who produce the great bulk of all farm products marketed. Most of the farms in commercial agriculture in this sense of the term are family farms; we are not using the term to suggest large-scale units in agriculture. Two earlier studies by the subcommittee on low-income families have given much attention to the problems of very small farms which produce little for the market.

Our present study looks toward an understanding of the basic problems of commercial agriculture, the economic facts and principles that will bear upon solutions, and the strengths and limitations of alternative means of dealing with the problems. In our study of these questions, we wish to have particular regard for their relation to growth and stability of the total economy, an area in which the Joint Economic Committee is given special responsibilities by the Employment Act of 1946.

While the study is focused upon commercial agriculture, we have found such overlapping and merging of problems of farms that the study touches upon all types.

The subcommittee has prepared an outline of its study and has enlisted the cooperation of 60 experts from the universities, Government, farm organizations, and elsewhere in examining the numerous points involved.

Participants have been asked to prepare papers on assigned topics and to appear at the hearings now beginning to discuss them further. The papers, which I think are as fine a collection as has ever been assembled on this subject, were published in a compendium issued as a committee print on November 22.

The study has 10 sections, each of which will be the subject of one half-day session of these hearings.

This morning we deal with the first main subject, the farm problem and its relation to economic growth and development. We wish to examine the extent to which farm problems are an outgrowth of the development of the American economy, and whether and how instability in agriculture affects general economic stability.

We want, too, to see to what extent problems of commercial and other farmers are distinguishable, for our study concentrates on the commercial sector. Further, we are aware that farms are generally very small economic units as compared with the large firms and labor organizations in much of industry; we would like to consider the extent to which the stability and level of farm income are affected by this fact.

Gentlemen, we obviously have a full morning ahead of us. On behalf of myself and the other members of the subcommittee, I want to express our thanks for your appearance here today and to congratulate you on the excellent papers you have prepared for this discussion. I wish we could take a full session to talk about each one. But if we get out of the trenches by Christmas, we must use a more expeditious procedure. We will ask each participant to give a 5-minute summary of his paper, taking participants in the order in which their papers appear in the compendium.

We will proceed from one participant to the next until the six papers have been summarized. Then members of the subcommittee, in turn, will question the participants on the general subject scheduled for discussion this morning. I hope that each of you will enter in the discussion and express yourself upon points raised in other papers as well as your own.

I would like to remind everyone that the subjects of the separate panels necessarily overlap a great deal, and we will use our time to best advantage if detailed discussion of points scheduled for later panels is left until then.

I should like to insert at this point in the record a copy of the July 31, 1957, press release announcing these hearings, with the revised list of participants.

(The document is as follows:)

[For release: Wednesday a. m., July 31, 1957]

CONGRESS OF THE UNITED STATES

JOINT ECONOMIC COMMITTEE

SUBCOMMITTEE ON AGRICULTURAL POLICY

HEARINGS ON POLICY FOR COMMERCIAL AGRICULTURE: ITS RELATION TO ECONOMIC GROWTH AND STABILITY

Senator John Sparkman (Democrat, Alabama), chairman of the Subcommittee on Agricultural Policy of the Joint Economic Committee, today issued the completed list of participants invited to take part in the subcommittee's public hearings, December 16–20, on policy for commercial agriculture.

Chairman Sparkman said that the subcommittee's study will explore the causes of the farm problem and the implications of alternative means of dealing with it. The inquiry will deal mainly with problems of family farmers whose living depends chiefly on production for the market and is importantly affected by farm prices and costs.

Chairman Sparkman emphasized that the subcommittee is directing its efforts toward a better understanding of the farm problem and its relation to economic growth and stability rather than toward specific legislative proposals. The Joint Economic Committee, under the Employment Act of 1946, has a continuing responsibility to follow economic developments and to advise the Congress on adjustments in public policies that may be needed for steady economic growth.

Experts from universities, Government, farm organizations, and elsewhere have been invited by the subcommittee to prepare papers on selected topics for discussion at the December hearings. These papers will be released in the form of a printed compendium prior to the hearings.

The schedule of the hearings and of participants is attached. All members of the Joint Economic Committee are invited to participate.

Members of the Subcommittee on Agricultural Policy are:

John Sparkman, Senator from Alabama, chairman

House of Representatives	Senate
Wright Patman, Texas	Paul H. Douglas, Illinois
Wilbur D. Mills, Arkansas	Arthur V. Watkins, Utah
Henry O. Talle, Iowa	
Thomas B. Curtis, Missouri	

Staff economist for the subcommittee, G. E. Brandow

SCHEDULE OF HEARINGS

December 16–20, 1957

Panel A: The farm problem and its relation to economic growth and development, Monday, December 16, 10 a. m.

Panel B: The current and prospective market position of agriculture, Monday, December 16, 2:30 p. m.

Panel C: Adjustment problems faced by commercial farmers in major geographic areas, Tuesday, December 17, 10 a. m.

Panel D: Changing marketing costs and structure; marketing agreements and orders, Tuesday, December 17, 2:30 p. m.

Panel E: Assistance to farmers in making farm and personal adjustments, Wednesday, December 18, 10 a. m.

Panel F: Adjusting aglricuture through the price mechanism, Wednesday, December 18, 2:30 p. m.

Panel G: Price and income standards for farm programs, Thursday, December 19, 10 a. m.

Panel H: Programs to expand domestic demand or to utilize foreign outlets for farm products, Thursday, December 19, 2:30 p. m.

Panel I: Direct payments to producers; comprehensive versus commodity-by-commodity programs, Friday, December 20, 10 a. m.

Panel J: Adjusting production through administrative controls, Friday, December 20, 2:30 p. m.

Monday, December 16, 1957, 10 a. m.

Panel A: The farm problem and its relation to economic growth and development

Why do rising productivity and higher levels of living create a farm problem under United States conditions?

What has been argiculture's contribution to rising productivity, and what factors have been responsible for increased efficiency in the use of agricultural resources?

Why has the distinction between the commercial and low-income farmer become increasingly sharp, and what are the major income problems of each?

In what ways does agriculture have distinctive problems in adjusting to economic growth and development?

Does the prevalence of small units in farming and large ones in business and labor effect agriculture's relative earnings or its ability to adjust to economic change?

To what extent does the stability of the general economy affect agriculture, and how does agricultural stability affect the general economy?

T. W. Schultz, department of economics, University of Chicago.

Glen T. Barton, Agricultural Research Service, United States Department of Agriculture.

C. B. Ratchford, assistant director of agricultural extension, North Carolina State College.

George H. Aull, department of agricultural economics, Clemson Agricultural College.

Kenneth E. Boulding, department of economics, University of Michigan.

Dale E. Hathaway, department of agricultural economics, Michigan State University.

Monday, December 16, 1957, 2:30 p. m.

Panel B: The current and prospective market position of agriculture

What is the current income position of commercial farmers?

What imbalances between supplies of and demand for farm products currently exist?

What is expected to be the impact of growing population, rising real income and other factors on the domestic demand for farm products in the next 10–15 years?

What is the long-range outlook for foreign demand for United States farm products?

What is likely to be agriculture's ability to expand production over the years?

What problems of adjusting the composition of farm production to meet the needs of markets seem to lie ahead, and what are the prospective requirements for labor, land and capital in agriculture?

Nathen M. Koffsky, Agricultural Marketing Service, United States Department of Agriculture.

Murray R. Benedict, Giannini Foundation, University of California.

Rex F. Daly, Agricultural Marketing Service, United States Department of Agriculture.

Raymond A. Ioanes, Foreign Agricultural Service, United States Department of Agriculture.

Glenn L. Johnson, department of agricultural economics, Michigan State University.

James T. Bonnen, department of agricultural economics, Michigan State University.

Carl P. Heisig, Agricultural Research Service, United States Departmen of Agriculture.

Tuesday, December 17, 1957, 10 a. m.

Panel C: Adjustment problems faced by commercial farmers in major geographic areas

What adjustments are needed in types of farming?

What changes in size of farm are needed for efficient operation with modern production methods?

Is the family farm being replaced by large-scale units or by units integrated with farm supply or marketing firms?

What changes in numbers of farms, in the farm-labor force, and in kinds and amounts of capital used in farming seem to be required?

What adjustments are particularly difficult for farmers to make with their own resources?

Are there characteristics of the region's farms, resources or farm people that create distinctive adjustment problems?

Northeast: L. C. Cunningham, department of agricultural economics, Cornell University.

Midwest: Earl O. Heady, department of economics and sociology, Iowa State College.

Southeast: J. H. Blackstone, department of agricultural economics, Alabama Polytechnic Institute.

Southwest: T. R. Timm, department of agricultural economics and sociology, Texas A. and M. College.

Great Plains: George Montgomery, department of economics and sociology, Kansas State College.

Mountain States: George T. Blanch, department of agricultural economics and marketing, Utah State Agricultural College.

West Coast: Chester O. McCorkle, department of agricultural economics, University of California (Davis).

Tuesday, December 17, 1957, 2:30 p. m.

Panel D: Changing marketing costs and structure; marketing agreements and orders

What is the relation of marketing costs to the level and stability of farm prices? To what extent is the farmer's share of the consumer's dollar a criterion of marketing efficiency?

What is the cost of marketing the major farm products? How have absolute and relative marketing margins changed over the years, and why?

What are the benefits of greater marketing efficiency? To what extent can improved efficiency solve the farm problem?

How are buyers' requirements for volume, quality, and uniformity changing, and what are the implications for producers?

What are the possibilities of vertical integration of production and marketing functions?

What is the potential contribution of marketing agreements and orders to the stability and level of farm income? To what commodities and situation are they suited?

Kenneth E. Ogren, Agricultural Marketing Service, United States Department of Agriculture.

D. B. DeLoach, Agricultural Marketing Service, United States Department of Agriculture.

Herman M. Southworth, department of agricultural economics and rural sociology, Pennsylvania State University

George L. Mehren, Giannini Foundation, University of California.

John H. Davis, Graduate School of Business Administration, Harvard University.

Sidney Hoos, Giannini Foundation, University of California.

Wednesday, December 18, 1957, 10 a. m.

Panel E: Assistance to farmers in making farm and personal adjustments

How might the services of the Extension Service, the Soil Conservation Service, and the like be utilized to aid farmers in adjusting their farm businesses?

What contribution can farm-credit policy make to meeting farmers' needs for capital to finance needed adjustments and to transfer ownership of farms?

What can be done through crop insurance, changes in tax laws, or special programs to reduce risks and instability resulting from weather and similar causes?

What are the health, housing, educational, and related needs of families in commercial agriculture, and how might these be met?

What contributions can social security for farmers and the rural development program make to commercial agriculture?

How can opportunities for off-farm employment, where desired, be more fully developed and realized?

L. F. Miller, department of agricultural economics, Oklahoma A. and M. College.

Ernest T. Baughman, assistant vice president, Federal Reserve Bank of Chicago.

Roy E. Huffman, department of agricultural economics and sociology, Montana State College.

Howard W. Beers, department of rural sociology, University of Kentucky.

V. W. Ruttan, department of agricultural economics, Purdue University.

Harold G. Halcrow, department of agricultural economics, University of Illinois.

Wednesday, December 18, 1957, 2:30 p. m.

Panel F: Adjusting agriculture through the price mechanism

How responsive are production and sales of farm products to changes in prices? What distinctions are important for this question? What do results of research show about responses to prices?

How effective are prices and incomes in bringing about adjustments within agriculture?

How effective are prices and incomes in bringing about adjustments between agriculture and the rest of the economy? Especially, how is the transfer of labor from agriculture to industry affected by comparative earnings and opportunities for employment?

Do any characteristics of farm prices impede efficient use of farm resources or impair farm income, and how might such deficiencies be corrected?

To what extent should farm policy rely on free market prices?

Karl A. Fox, department of economics and sociology, Iowa State College.

E. J. Working, department of agricultural economics, State College of Washington.

C. E. Bishop, department of agricultural economics, North Carolina State College.

D. Gale Johnson, department of economics, University of Chicago.

John Baker, coordinator of legislative services, National Farmers Union.

Warren E. Collins, assistant director, commodity division, American Farm Bureau Federation.

Everette B. Harris, president, Chicago Mercantile Exchange.

Thursday, December 19, 1957, 10 a. m.

Panel G: Price and income standards for farm programs

What are the purposes of parity prices and income computations, and how well can they serve these purposes?

What have been the principal definitions of parity prices and incomes so far used or proposed, and how have actual prices and incomes compared historically with these standards?

What would be the results of using other concepts and formulas for parity?

Donald R. Kaldor, department of economics and sociology, Iowa State College.

Oris V. Wells, Agricultural Marketing Service, United States Department of Agriculture.

G. S. Shepherd, department of economics and sociology, Iowa State College.

Thursday, December 19, 1957, 2:30 p. m.

Panel H: Programs to expand domestic demand or to utilize foreign outlets for farm products

What changes in amounts and kinds of food consumed might result from subsidies to low-income families? What would be the contribution of food subsidies to nutrition of consumers and to demand for major classes of farm products?

What are the opportunities for disposing of commodities abroad as a means of improving farm income? To what products are multiple-price plans applicable, and what limitations does this approach have? How might present agricultural trade relations be improved?

What are the possibilities of new crops and new industrial uses for farm products, and how might these be developed?

What are the possibilities of expanding demand by promotion and advertising? Can promotion and advertising enable farmers to market more livestock products without price sacrifices, thus providing an outlet for more farm resources?

V. L. Sorenson, department of agricultural economics, Michigan State University.

Joseph Parker, legislative consultant, National Grange.

Helen C. Farnsworth, Food Research Institute, Stanford University.

Lawrence W. Witt, department of agricultural economics, Michigan State University.

Kenneth Hood, director of commodity division, American Farm Bureau Federation.

Wheeler McMillen, vice president, Farm Journal, Inc.

H. F. DeGraff, School of Nutrition, Cornell University.

Friday, December 20, 1957, 10 a. m.

Panel I. Direct payments to producers: comprehensive versus commodity-by-commodity programs

Direct payments.—What strengths and limitations do direct payments have in comparison with alternative programs? What different forms of direct payments have been proposed or used? Would production controls also be necessary?

How feasible are direct payments for various commodities? What special administrative problems are involved? What might be the costs to the Treasury, the effects on retail prices, and the sharing of the total cost by the general public? Do farmers find direct payments an acceptable form of income support?

Comprehensive versus commodity-by-commodity programs.—Should programs be developed commodity by commodity or should broad programs be developed for agriculture as a whole? Are markets for and uses of resources by individual products sufficiently independent to make a commodity-by-commodity approach economically feasible and generally equitable? Can comprehensive programs recognize special problems and opportunities for individual commodities?

Lauren Soth, editorial staff, Des Moines Register and Tribune.

George K. Brinegar, department of agricultural economics and farm management, University of Connecticut.

Gordon Zimmerman, research director, National Grange.

John D. Black, professor emeritus, Harvard University.

W. E. Hamilton, director of research, American Farm Bureau Federation.

Friday, December 20, 1957, 2:30 p. m.

Panel J: Adjusting production through administrative controls

What has been our experience with acreage allotments and marketing quotas; where have they succeeded and where failed, and for what reasons?

What are the possibilities of retiring land from production or diverting it to more extensive uses through Government payments? What does experience with the soil bank show to date?

Is it feasible to adjust production by compulsory controls not involving Government payments? What steps must be taken if this approach is to be fully effective?

Will farmers accept stringent production controls? What impediments to efficient production may controls create? Might export subsidies be needed? What protection can be offered to consumers?

O. C. Stine, Shepherdstown, W. Va.

J. Carroll Bottum, department of agricultural economics, Purdue University.

W. W. Cochrane, department of agricultural economics, University of Minnesota.

L. H. Simerl, department of agricultural economics, University of Illinois.

Robert K. Buck, farmer, Waukee, Iowa.

Glenn J. Talbott, president, North Dakota Farmers Union.

Senator SPARKMAN. We will begin the summaries of the papers with our first panelist, Prof. Theodore W. Schultz of the University of Chicago. Mr. Schultz, you are recognized for 5 minutes. We are delighted to have you with us.

STATEMENT OF THEODORE W. SCHULTZ, PROFESSOR OF ECONOMICS, UNIVERSITY OF CHICAGO

Mr. SCHULTZ. Thank you, Mr. Chairman.

Let me, Senator Sparkman, start by saying that it is indeed appropriate for this subcommittee, on behalf of the Joint Economic Committee of the Congress, to take a hand in thinking through, and I would hope laying a new foundation for agricultural policy.

In my paper, I do argue that in a fundamental sense our agricultural policy has gone to pieces.

But, I am not going to talk policy. I do not in my paper. I shall hold myself as I do in the paper to an attempt to analyze and bring to the surface what are really the basic issues to take into account as you make farm policy.

If I am right, the farm problem is not the result of too much cropland, or too few exports of United States farm products. Nor is it, in the main, that the earnings on funds that farmers are investing in farm machinery, equipment, fertilizer, insecticides, and in farm real estate are running below par. Farmers are earning on these investments what businessmen and other entrepreneurs earn in other sectors of the economy on investments with similar risks.

We are blinded by the large stocks of the Commodity Credit Corporation, and we are not able to see beyond these. These stocks are entirely a matter of pricing, but they hide what we fail to see, and what I think is very serious: We talk and act as if we do not want to see that we have in fact a large surplus of human effort committed to farming.

This particular surplus has come about because of our kind of economic growth.

There is presently a serious economic squeeze on people in agriculture, but not on farmland. There is no squeeze on equipment or on machinery. The squeeze is on the earnings of human effort. This has come about basically as a result of three characteristics of the economy.

One is the slow growth of the demand for farm products as gross national product has grown. The second is the nature of the improvements in the quality of the inputs that have given us the economic growth. The third is the changing price between human effort and so-called capital producer goods and the substitution this brings about.

The income effects upon demand as we get richer, as a people, are now well known. We all have a feel for them in our bones. Between 1940 and 1956, the total consumer demand in the United States increased about 90 percent. Had the demand for farm products increased only half this much during this period, we surely would not have had a farm problem of the sort that we have on our hands. From 1940 to 1956, the per capita disposal income grew 53 percent, and yet the per capita increase in the consumption of food was only 8 percent.

Economists talk about the low income elasticity of farm products putting it at 0.15. This is simply to say that at the farm gate when the farmer sells, a 10 percent increase in per capita income adds only 1½ percent to the demand.

Now to the second: We have in the United States an economy where much of our economic growth is coming from the improvement in the quality of inputs. Sometimes we call this technology, or improvements in techniques, and sometimes we see that people are better educated and have more skills and are able to act more effectively as entrepreneurs and as workers. All this is remarkably true in agriculture.

If we had had no improvements in the quality of inputs in agriculture, and if the combination of inputs had stayed the same, it would have taken 464 million acres of crops instead of 339 as it did in 1940 to produce what we needed in 1956, even with the slow growth in demand. It would have taken 15 million workers instead of 11 million, which we had in 1940.

Now we are down to 8 million workers.

We have had a tremendous improvement in the quality of the inputs. I shall cite only one figure, which really comes from the work of Mr. Barton to my right here, and which you have already had placed before you in other hearings. Since 1940, we have had a 35-percent increase in farm output, produced with only 4 percent more inputs. The differences I am ascribing to improvement in the quality of inputs, and this is back of our growth, our rising standards of living, but it is also causing a very important part of our farm problem. In some real sense this means the effective supply of the resources is being enlarged as this improvement in quality of inputs takes place.

Lastly, I want to call attention to the fact that our economy as we move through time and grow, creates a situation in which the value of labor, human effort, rises relative to the price of producer goods. This sets into motion substitution of capital for labor, at many points, throughout the economy. This has been happening rapidly, and importantly throughout agriculture.

In closing, then, let me put it thus: The hard core of the United States farm problem is the surplus of human effort committed to farming. In our kind of economic growth, the demand for farm products increases slowly. The improvements in the quality of inputs continue to be important and are increasing production. The substitution of capital for labor is large and impressive in adjusting to the rise in the earnings for human effort relative to the price of producer goods.

Now it is the combination of these three developments that in large measure, in my judgment, account for the nature and the severity of the United States farm problem. This is where policy, it seems to me, must begin. The foundation on which we build farm policy must in this sense be in line with the economic growth requirements of the United States economy. Virtually none of our present farm policy is in line with these requirements. It is for this reason that our farm policy is going to pieces.

Thank you very much.

Senator SPARKMAN. Thank you Mr. Schultz.

Next we have Mr. Glen T. Barton, agricultural economist, Farm Economics Research Division, Agricultural Research Service of the United States Department of Agriculture. Mr. Barton, we are glad to have you with us, and we are pleased to hear from you now.

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STATEMENT OF GLEN T. BARTON, AGRICULTURAL ECONOMIST FARM ECONOMICS RESEARCH DIVISION, DEPARTMENT OF AGRICULTURE

Mr. BARTON. Thank you, Senator. The subject of my paper was Trends in Agricultural Productivity. We tried to bring together some of the more significant longtime changes that have been occurring in agriculture.

Farm production per unit of resources has increased substantially, especially during the last quarter century. Over the longer run, greater efficiency of farm production has provided us with relatively cheap sources of food and raw materials. Also, it has released manpower needed for expansion of industry. Increases in productivity in both agriculture and the nonfarm segments of the economy have meant a rise in our level of living.

In the long run, farm output has trended upward relative to the use of farmworkers, cropland, and horses and mules—three important production resources furnished directly by agriculture. Annual farm output is now nearly five times as great as in 1870.

But farm employment, which rose and then declined during the period, is now about the same as in 1870. There now are less than half as many horses and mules on farms. Acreage of cropland tripled from 1870 to 1920, but, in total, it has changed little since.

Output per man-hour of farm labor has about doubled since 1940, an increase in farm output of more than a third being obtained with 30 percent fewer man-hours. Average production of crops per acre in 1957 may be a record thus far and a fourth larger than in 1940. Livestock production per breeding unit—milk per cow, eggs per hen, and so on—rose even more than crop production per acre during this period.

Advances in technology have been the chief basis for the increase in productivity of farm labor, cropland, and animals. This has been associated with an increasing dependence of agriculture on nonfarm goods and services.

Progress in mechanization has dominated the increase in output per man-hour of farm labor. Mechanization reduced farm-labor requirements. Also, as tractors and other mechanical power replaced work animals, farmers bought their power instead of raising it. Thus, millions of acres of cropland and other resources were released for output of farm products for human use.

Greater use of fertilizer is the chief reason for the increase in crop production per acre in the last 15 years. Fertilizer use now is 3½ times as great as in 1940. Hybrid corn seed and improved varieties of other crops have added to crop yields.

Improvements in livestock and poultry, and heavier feeding of better balanced rations have meant more livestock production per breeding unit. Higher yields of both crops and livestock have combined with increased mechanization to raise output per man-hour of farm labor.

Despite the greater use of nonfarm goods in agriculture, farm output per unit of total resources rose from 1940 to 1955 by perhaps as much as 25 percent. Compared with 1920, we may be getting 40 to 50 percent more farm output per unit of total resources. The increasingly greater quantities of machinery, fertilizer, and other non-

farm goods used in farm production were largely offset by the decline in both farm labor and resources used to produce and maintain work animals. Thus, a marked shift in resources used on farms has accompanied the rise in productivity of total resources.

Increases in farm output in the World War II and postwar periods have tended to outrun the current growth in demand for farm products. The increased output per unit of resources accounted largely for the increased farm output.

To balance farm output with market demand, it would appear desirable currently to encourage a general reduction in the quantity of all resources used in agriculture. In the long run, the rate of increase in farm output needs to be adjusted to the rate of growth in market demand.

Here, also, adjustments in quantity of resources used in agriculture would appear to be more economically desirable than a dampening of the rise in output per unit of resources.

Agriculture has been transferring resources, especially labor, to other sectors of the economy. From 1940 to 1956, farm employment was reduced by 3 million, or nearly 30 percent. Farm people thus have a major stake in the economic stability of the nonfarm economy and the availability of job opportunities outside agriculture.

The past record of rapid substitution of nonfarm inputs for farm labor and for farmland is relevant to the problem of production adjustment. The production-decreasing effects of a moderate reduction in quantity of any single agricultural resource such as cropland can be offset quickly by increases in yields. Higher yields can be obtained through greater use of fertilizer and other improved practices, most of which mean the use of large quantities of nonfarm production goods.

Senator SPARKMAN. Thank you, Mr. Barton.

Next we will have Prof. George H. Aull, department of agricultural economics and rural sociology, the Clemson Agricultural College.

Mr. Aull, we are glad to have you with us.

STATEMENT OF GEORGE H. AULL, DEPARTMENT OF AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY, THE CLEMSON AGRICULTURAL COLLEGE

Mr. AULL. Thank you Senator Sparkman and members of the committee.

I would like to add, to what Dr. Schultz has said, my commendation of the committee in arranging for this sort of program. I think the committee has taken the proper course, and I hope that it will be fruitful.

My topic is Distinctive Problems of Agriculture in making the adjustments which may be required. This assignment is relatively simple, and it is not one of the things that leads us into any great controversy, and my greatest problem is that I will probably leave out many of the problems which agriculture faces and which ought to be mentioned.

Essentially, there are three broad conflicts which I think face us and which are involved in this adjustment. There is, of course, as you know, a conflict between the individual farmer and agriculture

as a group. When it is advantageous for agriculture to reduce, it would be advantageous for the individual farmer to have more. There is also a conflict between agriculture and society as a whole.

For instance, the Nation, for its own protection, needs certain stockpiles which may have a harmful effect on agricultural prices. Furthermore, in the depression, when people do not have the money and they do not buy as much of other things, they require about as much of agricultural produce as at any other time, and it is to the advantage of the Nation that they have it.

The third conflict, which I need not dwell upon, but which is important, is the conflict which an individual farmer has between what is the human things to do and what is the economic thing to do. Farmers, by nature, are sentimental and they do not always respond to economic motives.

Now, there are 4 things, or 4 courses, which farmers might take. These are: First, to continue about as we are, with our current programs. Secondly, a farmer may decide to get out of agriculture, and many of them are doing that. Thirdly, they may supplement farm income with some nonfarm income, and, finally, there is the problem of how to adjust on the part of those who choose to remain in agriculture or who may not be able to do anything else.

Each of these courses has its own distinctive problem, and, in fact, many problems. The present programs are in difficulty, and I think we are not here at the moment to talk about how we may resolve those difficulties. But, for those who want to get out, for those who may feel that they should get out, there is an exceedingly strong attachment of people to the land. Many of them just do not know how to make the change. Furthermore, and we have to face this, there are a great many people in agriculture who are in the lowest income bracket, who probably are better off there than they would be anywhere else. Even for those who desire to quit, however, there are distinctive problems.

For instance, a farmer who changes his job most likely also has to change his home and his place of residence. In the second place, there are a great many problems of skill. Even the most skilled agriculturalist may find himself extremely handicapped in even the simplest job in industry. There are handicaps, also, as to the size of family.

Farm families are larger than urban families, and a man who is doing fairly well in the country, who otherwise might better himself in town, would simply be handicapped by the size of his family.

For those in this third group, who can do so, one way out is to stay where they are and supplement farm income with nonfarm income. For those who attempt to make the adjustment by remaining in full-time farming, there are also some distinctive problems. As an agricultural economist, I believe that our biggest farm problem in the country today is the lack of adequately skilled farm managers. Certainly, that is true in an important segment of the country. This is not a reflection on those who are good farm managers, but, by and large, the overall agricultural problem is greatly aggravated by the lack of skilled management for many of our operating units.

Secondly, there is a large fixity of investment in agriculture, and the farmer who has prepared to do one thing simply cannot change to another without a tremendous loss in his capital investments.

Land is not always suited for a variety of purposes. Buildings are not suited and equipment is different, so that we have this large investment for a particular type of farming, and it is difficult for a farmer to change when to do so means sacrificing these investments.

In the third place, farmers suffer from all of the hazards of weather and of nature. In the very nature of agriculture, a farmer cannot make rapid adjustments. There is a long time between the time he starts something and the time he can finish it. That time has to run its course. Furthermore, a farmer cannot slow down and speed up as we can in other enterprises or other economic activities. He cannot fire his labor because, even in our highly commercialized agriculture today, a large part of the labor is performed by members of the family. There is no advantage to be derived in discharging the working force.

Finally, and this I think is very important, farmers, in general, do not understand world politics and world economics, and they haven't had a sufficiently loud voice in making known what are their best interests in matters of international trade and international relations.

Finally, Senator, even in a depression, when a good many farmers might be a little bit better off relative to other groups (although, certainly, not actually better off), but, even in a depression, all of the people who left the farm in prosperity come back home and sort of divide up the receipts that farmers might otherwise have had, so that their hard times are made even worse.

Thank you very much.

Senator SPARKMAN. Thank you.

We are pleased that Mr. Ratchford has come in. This is Dr. C. Brice Ratchford, assistant director of the North Carolina Agricultural Extension Service.

STATEMENT OF C. BRICE RATCHFORD ASSISTANT DIRECTOR, NORTH CAROLINA AGRICULTURAL EXTENSION SERVICE

Mr. RATCHFORD. I was asked to identify the different types of farmers, and the income problems, and particularly identify the impact of price policy on each of these. We can identify rather easily four types of farms: The large-scale farm, the family-type farm, the smaller than family-type farm, and the farms that are part-time or residential units.

It is interesting to note that while we hear a lot about the large-scale farmer, only 2.8 percent of all the farms are in the large-scale category. Forty-one percent are in the family-type farm, and 25.4 percent are in the smaller than family-type farms—which we often call the low-income farmer class—and 31.6 percent of the farmers are in the part-time and residential category.

It is certain that the problems of these farmers are different. We might summarize the income problems of these people as follows: First, the commercial farmers. Perhaps their main problem today is the so-called cost-price squeeze. Price instability, increasing capital requirements, and a changing and increasingly complex marketing system are also problems of the commercial farmer.

The basic problem of the low-income farmer is insufficient resources. It is almost impossible for these farmers to save and acquire additional resources, and preference patterns keep liberal credit from being

the universal answer. The scale of business and limited managerial ability limit the use of new technology with existing resources to improve income.

Many part-time and residential farmers have a satisfactory level of income. Their position is complicated, however, by having both farm problems and problems connected with nonfarm employment. Special farm problems include coordinating farm activities with nonfarm activities, and keeping the farming operation profitable. In the broad category of part-time and residential farmers there is a group of people who make very low incomes from all sources. These families often have some disability. Their income problems must be solved through a welfare program.

The major impact of price policy has been on commercial farmers. The effects have varied, partially because the programs have varied. Those farmers producing commodities which have had no price supports have received no benefits. They may have been harmed to the extent that allotments on some crops have encouraged other farmers to produce this particular commodity. The effects have also been different where allotments have accompanied price supports and where there have been no allotments.

Effects have been different where there has been a continuous program, as in tobacco, and where there has been only temporary help, as in the case of hogs. In spite of these differences, it appears that the commercial farmers have received some benefits from price programs. Incomes have been raised, and less instability of prices and lower risks have increased production efficiency.

On the other hand, the higher prices have tended to curtail the market, particularly for those commodities which have industrial substitutes, such as cotton, and for those commodities which depend a great deal on exports, such as wheat and tobacco. Allotments have contributed to inefficiency in several ways. It is likely that, up to this time, the gains have been greater than the losses. There is some evidence that this will not hold true for the future.

Price programs have been of quite limited help to low-income farmers. True, prices have been raised for them as for commercial farmers. But the low-income farmers have had less to sell. Further, except where the benefits of price supports have been automatically available, as in the case of tobacco, many small farmers have not taken advantage of price-support programs. Pricing programs have kept some farmers in the low-income category because sufficient income has been made available to prevent requiring them either to become larger or to get out of agriculture. Allotments have made it harder for small farms to become larger, as usually the first and best means of expanding scale of business is to increase an existing enterprise. It would not be surprising, if all facts were available, that they would show that price programs had actually worked to the disadvantage of low-income farmers. Certainly, this has been the case for residential and subsistence farmers.

Price programs have probably been of even less help to part-time farmers than they have to low-income farmers. Many of the part-time farmers are even smaller than the low-income farmers, and even fewer have chosen to take advantage of the aid available. On the other hand, the undesirable effects of the pricing programs have had less impact on the part-time farmers than on low-income farmers,

largely because part-time farmers have not sought to expand operations. The higher land values occurring from allotments and higher prices may have caused some people to remain as part-time farmers instead of getting completely out of agriculture. Whether this is good or bad is debatable.

It is largely beyond the scope of this paper to suggest policy alternatives. A few brief generalizations concerning policy needs are offered, however, primarily to substantiate the introductory remark that problems of the several groups of farmers are different and that different types of programs are needed to solve them.

I believe there is evidence to support the contention that it is not in the interest of either commercial farmers or society as a whole to completely eliminate farm price programs, certainly as long as agriculture is tending consistently to overproduce. The ideal price program would be far different from present programs. The ideal price program would eliminate unreasonable price instability and yet would not consistently stimulate excess production. Allotments would be eliminated and a storage program instituted to help stabilize prices. Such an ideal program would promote efficiency, would not interfere with reallocation of resources either within agriculture or between agriculture and other segments of the economy, and would give our agricultural products a chance of competing with industrial production and foreign competition.

If this ideal pricing program does not give commercial farmers an income level which is termed desirable by the Congress, then some direct means of transferring income to farmers should be devised.

Price and income programs alone are insufficient to enable commercial farmers to continue to compete successfully with the nonagricultural economy. Agriculture must continue to be served by a Government-sponsored research and education program comparable to that conducted by industry. Likewise, the Government may have to conduct or at least underwrite a credit program designed for commercial farmers, particularly in connection with the transfer of farms from one generation to another.

Two types of programs are needed to help solve the problem of low-income farmers. Some low-income farmers can be advanced to the commercial-farming category. They should have an opportunity to do so.

For this opportunity to be realized, there must be a price and research program similar to that suggested for commercial farmers; even more educational assistance will be needed; and some sort of Government conducted and underwritten credit program will almost certainly be needed to help these people acquire additional resources.

Some of the low income farmers will need to move into nonfarm employment on either a full-time or part-time basis. Several steps are needed to bring this about. As a minimum, these people need information on nonfarm employment opportunities and training in nonfarm employment. Studies show that most farmers will not move from their home community to accept their first nonfarm employment.

This suggests a policy of encouraging the development of nonfarm employment opportunities in areas of high concentration of low income farmers. Another alternative, which could be used in combination with the above, is an assistance program for moving low-income farmers to nonfarm employment. This could include paying moving

expenses, providing housing, and guaranteeing certain employment for a stated period.

Part of the low-income farmers will be incapable or not desirous of becoming either commercial farmers or accepting nonfarm employment. If it is determined that this group is entitled to aid, assistance beyond that available to commercial farmers should be through some sort of welfare program.

Much more must be known about the characteristics of part-time and residential farmers, particularly about their nonfarm employment, before assistance programs for this category are developed. It is clear that this group needs assistance in connection with nonfarm employment problems as well as their farm employment and that these must be related.

In addition to the price programs suggested for commercial farmers, several special aids are needed. These people need educational help in exploring alternatives available in agriculture, in nonfarm employment, and the various alternatives for combining the two. Many of these farmers are far below their optimum income, and there is evidence that many cannot continue to operate as they now are over a period of years.

Many of the part-time farmers do not want to actively participate in farming yet they do not want to sell the farm because of the security it provides. This category needs advice on possibilities of land uses such as pasture and trees which require little labor and yet conserve the soil.

As in the case of low-income farmers, some families in this category are essentially welfare cases; and if assistance to this group is desirable, it should come through some sort of welfare program.

As indicated earlier, some of the part-time farmers have solved their income problems. Many others can move into this category with further guidance and training in nonfarm employment concurrent with guidance in use of their agricultural resources.

Mr. Chairman, in summary, perhaps if there is anything that I have said in this, it is that there is a group which might be called smaller-than-family farms, we might call them low-income farms. The policy we have had has not really helped them much, and some special programs need to be directed to them to really help them.

Senator SPARKMAN. Thank you very much, Mr. Ratchford.

Prof. K. E. Boulding, of the department of economics, of the University of Michigan.

We are glad to have you with us and we will be pleased to hear from you now.

STATEMENT OF K. E. BOULDING, DEPARTMENT OF ECONOMICS, UNIVERSITY OF MICHIGAN

Mr. BOULDING. Thank you, Senator Sparkman.

I am glad to be here. My paper is entitled, "Does the Absence of Monopoly Power in Agriculture Influence the Stability and Level of Farm Income?" Agriculture is the last great area of small business, producing fairly standardized commodities. In fact, if one asks the question, "Where is monopoly in Agriculture," the answer is a "lemon". As far as I know lemons are about the only example of it.

There is certainly more monopoly power outside agriculture than within it.

The consequences of this uneven distribution of monopoly power are twofold. We have first the short-run problem of the contrasting experiences of agriculture and industry in boom and depression. In a major depression money income shrinks in all sectors. In agriculture, however, output stays up, prices fall; in industry, prices stay up or fall little, output and employment decline. This means the farmer pays out about the same in farm products for a smaller volume of industrial goods: his terms of trade (as measured for instance by the parity ratio) worsen in depression. Nevertheless the farmer does have full employment during a depression, and the fact that in a severe depression there is a slight drift of people back to the farm indicates that in terms of welfare the farmer is better off than the urban unemployed. The monopoly position of industry does not protect it from loss of profits during a depression; indeed, profits suffer more than any other class of income in a severe depression, and in 1932 and 1933 were sharply negative. Thus while the farmer is on the disadvantaged side during a depression by comparison with the interest receiver and even the employed worker, he is not at the bottom of the list, and in some ways it can be argued that his competitive market actually protects him from the worst effects of depression.

The second problem is that of the long-run effects of the distribution of monopoly power. This is a much more difficult question to answer. In a rapidly progressing society no monopoly is secure in the long run. The disadvantage of agriculture seems to arise not out of its market situation as out of its being a relatively declining industry in a technically progressive society.

What I mean by a declining industry is one in which the proportion of labor and other resources relative to the rest of society continually declines. Thus, in the United States, the proportion of the labor force engaged in agriculture has fallen from about 90 percent in colonial times to about 15 percent today, mainly because of the technical improvement in agriculture itself, combined with the income inelasticity for agricultural products. In order to move resources out of a declining industry there must be some income-disadvantage; how much depends on how mobile are the resources.

It is not something which is arbitrary, but it is something which is really built into the system of a progressive economy. If the resources are highly mobile, a very slight income disadvantage is enough to move them. If resources are not mobile, large income disadvantages may persist.

If agriculture has a serious income disadvantage then it is because resources are not transferred to industry fast enough.

As Professor Schultz has indicated, this is especially true of the labor force. We inquire, therefore, if the immobility is due to the difficulty of exit from agriculture. This has been declining as the rural population has been integrated into the general culture of the society, with the spread of easy transport and communication.

I think this has been an important problem in times past. In the case of commercial agriculture, it isn't so important today because one of the major achievements of our society has been the elimination of rural culture, as a peculiar culture differentiated from urban culture.

If you go into any farmhouse in the Middle West, you do not see very much difference from any home in the city.

There may be real problems about entrance into industry at the level of size of enterprise which the commercial farm represents. There is great need for study of those who have left agriculture—here may be the key to agricultural prosperity.

It is not anybody's business particularly to study this.

There is some possibility of monopoly exploitation of farmers by their suppliers or customers; this has diminished due to the rise of farm cooperatives and certain aspects of the antitrust law, and it is probably not a serious problem for commercial agriculture. The landowner is the worst monopolist in agriculture, especially where land values are artificially raised by marketing quotas. On the whole, programs designed to help agriculture are bound to produce serious inequities, as agriculture is so heterogeneous. Agricultural policy constantly tends to degenerate into a charity racket in which, in order to help the few farmers who need it, we scatter largesse over the many who do not.

In conclusion, I would say that if we could direct our attention to searching out the roots of poverty wherever it is, this would be a much more helpful approach than trying to help agriculture as such.

Senator SPARKMAN. Thank you, Mr. Boulding.

Next is Prof. Dale E. Hathaway, department of agricultural economics of Michigan State University.

We are pleased to hear from you now.

STATEMENT OF DALE E. HATHAWAY, DEPARTMENT OF AGRICULTURAL ECONOMICS, MICHIGAN STATE UNIVERSITY

Mr. HATHAWAY. Thank you, Senator Sparkman. The subject of my paper was Agriculture and the Business Cycle.

Vigorous expansions or contractions in business activity have a direct impact upon the well-being of commercial agriculture in the United States. During periods of business contraction farmers' prices, incomes, and the value of their assets decline drastically.

In periods of moderate expansion or decline in general business activity the measures of farmers' welfare tend to move in the same direction. However, during such periods other factors may override the effects of the moderate changes in the demand for farm products. These include changes in export demand, marketing costs, and production costs of farmers.

Before World War II farmers benefited from every period of business expansion. Prices received by farmers rose more rapidly than did the prices of things farmers bought. Gross income rose at a more rapid rate than production expenses. Since World War II the inverse has been true during every business expansion. Prices paid by farmers have risen more rapidly than have the prices they received. Farm costs have gone up at a more rapid rate than gross farm income. However, income per worker in agriculture has continued to increase as business expansion has provided nonfarm employment for those workers who sought employment elsewhere.

One caution should be observed regarding the interpretation of these average figures. These hearings are concerned primarily with commercial agriculture—those farms which produce the bulk of our

food and fiber. The incomes of the operators of these commercial farms are helped little, if any, by a reduction in the number of farm-workers if this reduction is largely among the group that shared little in farm income. Thus, full employment which provides for a flow of underemployed persons from agriculture to nonfarm jobs is highly desirable for the economy; but if, at the same time, farm costs are inflated more rapidly than the demand for farm products, the welfare of the operators of commercial farms may not be significantly improved.

Do not misunderstand me. I do not mean to imply that commercial farmers would benefit by a depression or even a minor recession. Quite the contrary would be true. All I am saying is that farmers' expenses are increasingly for steel, chemical, and petroleum products, the prices of which are largely determined without regard to the demand by farmers. If periods of full employment are accompanied by inflation, the prices of these products are likely to rise more than the prices of products farmers sell.

Many persons claim that farmers increase output as farm incomes decline. There is increasing evidence that such statements are incorrect. During the 10 periods of business contraction since 1910, farm output remained the same or fell 7 times and rose only 3 times. But farm output never fell during the 10 periods of business expansion since 1910. During periods of increased demand for farm products the flow of resources to agriculture in order to increase output occurs rapidly and easily, whereas during periods of reduced demand the reduction of productive inputs comes more slowly and usually only as a result of severe economic hardship to farmers.

One of the reasons that farm output varies over the business cycle is that farmers vary their expenditures on inputs purchased from the nonfarm economy. Farmers even reduce their purchases of feed, fertilizer, lime, and motor fuel during periods when farm income is drastically reduced. Their purchases of tractors, other farm machinery, trucks, and buildings are usually reduced when the income from farming declines and increased when it rises.

Farmers' expenditures for family consumption also vary with changes in farm income. Purchases of consumer durables, autos, and the index of rural retail sales seem to be associated with changes in farm income.

The expenditures by farmers for motor fuels, fertilizer, tractors, farm machinery, buildings, and for consumption items are large enough to be of concern to the nonfarm economy. Sharp reductions in these expenditures certainly affect adversely those sectors of the nonfarm economy that depend largely upon this market. Competent business cycle analysts should examine whether the magnitude and timing of these changes in farmers' expenditures have contributed to the general business cycle.

In the 1920's and 1930's the rapid deflation of the value of agricultural assets created severe strains upon the financial institutions serving agriculture. Reoccurrence of this situation seems unlikely at the present time. Farmers' equity in their assets is high; commercial banks hold smaller portions of agricultural debt; and there are now governmental institutions in existence which could, if necessary, be expanded. However, as always, a substantial deflation of the value of farmers' assets would seriously impair the position of those farmers

whose equity is low, which applies to younger farmers, and generally reduce the ability of farmers to secure additional credit.

My investigation of agriculture and the business cycle reemphasizes the high degree of interdependence within our complex economy. The welfare of commercial agriculture depends heavily upon continued prosperity in the nonfarm economy, and it is clear that commercial agriculture increasingly is squeezed by cost inflation that may occur if we accept mild inflation to achieve full employment. Commercial agriculture is purchasing greater amounts from the nonfarm economy over the years. These expenditures appear to depend in part upon the level of farm income. Thus, at least those many sections of the nonfarm economy largely dependent upon this market have a direct interest in the maintenance of a stable, prosperous, commercial agriculture.

Senator SPARKMAN. Thank you.

That concludes the presentation of the summaries by members of the panel. Now, we shall turn to questioning.

Mr. Talle, I will ask you to submit such questions as you care to do.

Representative TALLE. First of all, I want to express my appreciation to all members of the panel for the work you have done and the work you are doing now.

Professor Schultz, you are undoubtedly well acquainted with Mr. Lauren Soth of my State?

Mr. SCHULTZ. Yes, indeed.

Representative TALLE. His book entitled "Farm Trouble" published this year is rather thought provoking. Is it fair to ask you if you pretty well agree with him?

Mr. SCHULTZ. Well, I am biased because Mr. Soth and I were on the same faculty at Iowa State College for some years and thus have had an interplay in ideas, and I have been stimulated by him and perhaps vice versa.

I think it is an excellent book. It is first rate, all through the economics from my point of view.

Representative TALLE. I am glad to hear you say that, Professor Schultz, because it strengthens my confidence in my personal judgment. I like the book very much, too. I might say the first course I took in agricultural economics, was at the University of Chicago.

Mr. SCHULTZ. We are honored.

Representative TALLE. What do you think of Mr. Soth's idea of reversing the principle of the Homestead Act in the present situation?

Mr. SCHULTZ. I have to simply say I applaud it and perhaps reveal how this concept got established. About 2 years ago, we had a whole-day session in agricultural committee of the National Planning Association, of which Mr. Soth is chairman. I wasn't happy the way things were going.

On the way home I wrote 3 or 4 pages and called it Homesteads in Reverse, and sent it to Soth. I said, "This is going to get us on the right track." He published it in full, and the idea has been discussed a good deal since then. You have asked the wrong person.

We must start thinking in policy and programs which in some sensible way in our kind of democratic institutions, will help those farm people who want to leave agriculture, so that the stress and strain is not so hard on them. This is what I would like to say.

Representative TALLE. This is probably a little unfair, because it turns the clock back, but the last time you were before the Banking and Currency Committee of the House, Professor Schultz, I asked a question which you had no time to answer fully, because you had to hurry off to a plane. You were able to give a partial answer, but we had no opportunity to pursue it. We were discussing what to do in the way of a practical thing so that the farmers could plan ahead and adjust their production to prices. If I recollect, I believe you said that the Department of Agriculture might announce a year in advance what it would be willing to support. Am I right in that?

Mr. SCHULTZ. Yes; that is right. I am amazed at the long, good memory of our good Congressman. It reminds me that in a hearing some years ago I made an offhand comment that Senator Flanders remembered all too long. Only recently he asked me to give the answer. You are not as hard on me, because if I said what you say I did, it is what I would say today. Let me put it in this way, Congressman Talle: We may fail because of the great difficulties we are presently having with price supports to see that farmers need something that some of us like to call forward pricing, which is a price announced at least one production period ahead. I would hope very much that the many misuses of farm price supports will not cause us to lose sight of this principle. It doesn't mean announcing a forward price above what will be above the normal market value. I should argue it should be a bit below what would become the price as production clears the markets. But I would say today as I said then, that having a price announced ahead on which farmers can depend, and on which they can base their production decisions, is very important indeed in agriculture.

Representative TALLE. Thank you very much, Professor Schultz. I am very much encouraged by the fact that so many specialists in the field of economics are paying attention to this vital problem. I am encouraged further by the fact that competent people in other organizations like the Committee on Economic Development, and the chamber of commerce and so on, are paying attention to this vital problem. I have one more question, Mr. Chairman.

This is for Mr. Barton, on page 3 in the middle of the page, Mr. Barton, you refer to what happened from 1940 to 1956. You say that farm employment was reduced by 3 million or nearly 30 percent. That was in some degree a forced reduction because of the war, was it not?

Mr. BARTON. Part of it was, and part of it was the existence of nonfarm job opportunities and more attractive employment in nonagricultural sectors.

Representative TALLE. Isn't what happened this—that young people were drafted into the Army and hired workers on farms took jobs in war plants? Was not this pretty much a war situation?

Mr. BARTON. No; I would like personally to put it in this way: During the war, we did have drafts to the military service, but we also had a rapidly growing economy and a need for workers in defense industry, and so on. This accelerated a longer time trend of workers away from the farms. It speeded up the trend, so to speak.

Representative TALLE. That was the precise period during which technology changed rapidly in farming, was it not?

Mr. BARTON. That is right. There was a reduction in the need for workers on farms.

Representative TALLE. More machinery was used instead?

Mr. BARTON. Yes; there was an acceleration in mechanization. There was the existence of good nonfarm job opportunities at the same time.

Representative TALLE. In other words, the application of science and invention stepped in to fill a gap that was caused by the fact that people were drafted into the services and people were encouraged to go into war plants?

Mr. BARTON. Both forces were working at the same time, that is right.

Senator SPARKMAN. Congressman Mills?

Representative MILLS. I would like first of all to get the panel's opinion of a very basic question, one that I have had in my mind for a long time and about which I have made many statements. Maybe I have been wrong in the past in the statements I have made.

Are depressions, generally speaking, farm-led and farm-fed?

Mr. SCHULTZ. You had better start on that end of the table, because it was Mr. Hathaway who talked about business cycles.

Representative MILLS. I have often said that depression in agriculture naturally leads to depression throughout the entire economy, and the problems of agriculture, if the problems are not corrected in time, may become the problems of the entire economy. That is the reason I asked the question, to find out whether I have been wrong in the past in making that statement.

Mr. HATHAWAY. To speak to your question, in my investigation I do not claim to be a business cycle analyst as such. This is why I suggest that the timing of the rather sharp declines in agricultural expenditures that have taken place at certain times need further investigation. There have been sharp reductions in expenditures, particularly on capital equipment, and it is entirely possible that if these came at a certain time in the cycle, they could have depressing effects. On the other hand, if as in recent years, they were offset by very large capital expenditures by other portions of the economy, it does not seem to me it is inevitable that these lead to a general downturn in the economy.

I personally will not go on record as to the causal relationships here. I would say a decline of $1 billion in capital expenditures in agriculture is going to be felt by someone, particularly the people whose market is largely agricultural, but this does not necessarily mean that this will always be a turning point in the cycle. I think this particular point needs further investigation, as to whether it has had an effect upon the various turning points.

Representative MILLS. Another side of it, not only investment in capital goods but the consumption of goods, disturbs me as I view the matter of whether agriculture does lead and feed depressions. Declining net income means declining ability on the part of farmers to consume goods; doesn't it?

Mr. HATHAWAY. Yes, and I think there is a fairly clear relationship between net farm income and what evidence we do have regarding farmers' consumption of consumer hard goods, and such things as the index of rural and retail sales. I think, though, it should be recognized in this connection that the agricultural population is

declining as a portion of the total population, and even in very good times the per capita income level probably does not approach that of the average per capita level of the nonfarm economy.

So I would say that the impact of changes in consumption of farmers is likely to be declining as a destabilizing influence, merely because they are becoming a smaller portion of the total consumption expenditures in the economy.

I would see no reason for changes of consumption expenditures of this group to have any different impact than for any other similar group of a given size and income distribution.

Representative MILLS. Does any other member of the panel desire to comment on this question?

Mr. Chairman, I have one other question at this point. As I read the compendium which we have before us, and as I read statements made by those interested and concerned about agriculture, usually one point is more or less brought to the fore. That is the need that perhaps exists in agriculture to better adjust its labor force. I am concerned, though, as I hear these statements made, as to whether this in and of itself is sufficient farm policy today.

Mr. SCHULTZ. Well, farm policy covers an extraordinary array of programs and if I had to give only a "yes" or "no" answer, I would say "No." It is not sufficient by itself. What I said on the question that Congressman Talle put to me, is that forward prices have a positive role to play and can make a major contribution and, thus, belong in agricultural policy. Nevertheless, we cannot resolve our farm problem by the old standbys, for example, more acreage allotments and the soil bank, or by forcing more farm products into export.

The one factor in agriculture that is earning income that is far below par, is the human factor. This maladjustment ultimately does go back to the fact that farm people are in an economic squeeze and for reasons which Professor Boulding mentioned, they find it difficult to move out fast enough. That is what it boils down to. This maladjustment is on us despite the fact that we have had tremendous numbers of people leaving agriculture. The farm population dropped almost 2 million last year, it we can trust our census data. Congressman Mills, my own philosophy is that if we would ask the question, how can one help people who want to leave agriculture to do it easier, then we will begin to get at programs and policies that will make a solid contribution. We don't get at them if we try to find more export markets, or by trying to put more land into a soil bank. Land is not that important in agricultural production.

I would say, then, that in this country we must make a very sharp turn in our farm policy, and begin to look at farm people and what they earn.

I wonder, Mr. Congressman, if you will ask Professor Boulding to elaborate one very important sentence in his testimony right in this context, which is on page 2, Professor Boulding, where you say:

> There may be real problems about entrance into industry at the level of size of enterprise which the commercial farmer represents.

In his main paper, this is to me an important and in a sense a new idea, which says that entrepreneurs which most farmers are, cannot find jobs in other parts of the economy where they can still use some

of their entrepreneurship, but I want Professor Boulding to go into that. Is that appropriate?

Senator SPARKMAN. We would like to have the panel quite flexible, and if any member disagrees with what another one says, we would like to have the question raised. Go right ahead.

Mr. BOULDING. I made this as a suggestion, and merely as a suggestion for needed research, because I think this is an area where we don't know very much.

As I suggested, it is really nobody's business to study the people who leave agriculture, although Mr. Hathaway whispered to me that he has a research project proposed in this area now, but on the whole the agricultural colleges will have nothing to do with this because these people have left agriculture. Yet it is these people who are the key perhaps to what is happening.

Now, what I suggested here was, as I said, just a suggestion. It strikes me that as you look over the structure of small and middle-sized enterprises in this country, there is of course a very heavy concentration of these in agriculture. Perhaps there is a gap between these and the next level of concentration. For instance, if you look at the figures of the size of enterprise by large areas, which I have here, I think, if I can find them, the next one above agriculture is retailing. I have a footnote here on page 42. In the 1950 census, the income per enterprise is about $2,500 in agriculture, and $7,800 in retail trade, and $8,400 in the service industries.

Now, this of course covers up a tremendous variation in all of these areas, but it at least suggests that there may be something of a gap here. For the farmer with a little capital, and a spirit of enterprise, and a certain desire to be his own boss, and not wanting to go into a large organization or into a corporation, there may not be adequate niches in the industrial structure.

Mr. SCHULTZ. It is very important.

Mr. BOULDING. I merely single it out as a possible field of study. I don't think we know this but it is a real possibility.

Senator SPARKMAN. I would like to throw out this question at that point, if I may, before I call on Congressman Curtis. I noted that statement of yours, the difficulty of the farmer entering into new business. There is another point you make, that farming is just about one of the last remaining strongholds of small business. I am wondering, if you are trying to get the farmer to leave the farm to enter into a small-business undertaking, what chance of success he is going to have, particularly in many parts of the country today when small business is having one of the roughest times of any segment of our economy?

Mr. BOULDING. This emphasizes the point.

Senator SPARKMAN. What does he see out ahead of him? This September we had more small-business failures than in any September since 1933. How much hope is there for the farmer leaving the farm to go into a small-business undertaking?

Mr. BOULDING. A lot of them have left and we don't really know what has happened to them. If we did, it would help us, I think.

Senator SPARKMAN. We do know that small business generally is encountering pretty rough waters.

Mr. BOULDING. Yes, sir.

Senator SPARKMAN. I would like to hear some comment on that.

Mr. HATHAWAY. I think one point might be pertinent to this. If one examines the migration statistics from farm to nonfarm economy, much of this migration takes place between the ages of 19 and 24 and a very major portion of it between the ages of 19 to 29. I do not think that these people have accumulated a great stock of capital and would expect to enter the area of small business. I think they become a part of the labor force. I think there are important questions as to what portion of the labor force they are entering. I believe this is a very pertinent question for inquiry, because it may well be that they are entering that portion of the labor force that also faces adjustment problems due to technological changes, much the same as those faced by farm people.

They may be entering industries which may face similar problems in future years.

Mr. AULL. I agree with the necessity for doing all we can to make it attractive for people to leave agriculture, but as Professor Schultz has pointed out, we lost 10 percent of our farm population within the last year. At that rate we won't have anybody farming in a few years. I think the emphasis has been placed entirely too much on the side of production. I would say that I think Professor Schultz minimizes the importance of improving the outlet for agricultural products, even if it results in a little bit of disadvantage to our other industries.

The economic differences between our industry and our agriculture are, I think, attractive enough to bring farmers into industry, but they are still not best for the country. I don't think it would necessarily follow that our industry would be disadvantaged, but I think we have a great deal to hope for in the matter of improving our international trade in such a way that we can sell more farm products, and import more nonagricultural commodities.

Senator SPARKMAN. Mr. Aull, I saw some figures in the paper the other day that came from the Department of Agriculture, as I recall, which said that the Southeastern States had lost 1 million in farm population each year for the last 5 years. Now, in my State, it looks like we are going to lose a Congressman next time.

I believe that Congressman Mills' State did the last time.

Representative MILLS. That is right.

Senator SPARKMAN. And it is true throughout the rural United States.

Representative CURTIS. We lost two in Missouri.

Senator SPARKMAN. Yes, and personally, I think this thing of encouraging surplus farm population to shift to other areas may be good theoretically, but it has some very bad points about it, too.

One of the worst was pointed out by one of the panelists. People move away, but let a time of depression come and they move back to the farm. Somehow or another, they have a feeling when times get hard that there is greater security in the farm. I have long held to the theory that if the farmer makes a living for his family on the farm, he is better off than he is standing in the soup line in some city.

Mr. AULL. There is nothing to indicate that our agricultural production would be materially reduced by the continued movement of people out of agriculture. In fact, there is some evidence that it would probably increase.

Senator SPARKMAN. I won't take any more of the time.

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I ask Congressman Curtis to proceed. I do have some questions to submit before we are through.

Representative CURTIS. I was going to say, Mr. Chairman, when I am embarking on a line of questioning, I don't know how much time it will take, so I hope that you will close me off so that the others can ask questions and then I can come back later.

Senator SPARKMAN. Let me say, we want each member to feel free to ask whatever questions he wants, and we have no time limitations.

Representative CURTIS. I want to impose something on myself, so that I can come back later.

First, I want to join in the remarks of the chairman, and other members of the committee, in complimenting the gentlemen here as well as those others who have contributed papers to this compendium.

Unless I miss my guess, we are going to have another best seller as we did in the studies on the economic effects of our tax structure. If that is achieved, I think one of the committee's main purposes has been achieved. I am going to make some comments in order to expose them to the comments of the panel.

First, I wonder if there is a general agreement on a statement like this, that the objective of our farm policy is to feed and clothe the United States population as adequately and cheaply as possible. I think almost everyone could agree that that is certainly a basic objective of any farm policy. Or is there disagreement there?

I will go on with this comment, that of course to do that we have to have for the long pull, a sound and profitable farm enterprise. Of course, that is what we are getting into.

Now, Professor Hathaway in his introductory remarks, made a statement that bothers me about the Employment Act. It gets into the fundamental philosophy of Government. His statement was to the effect that the passage of the Employment Act of 1946 gave official recognition to the responsibility of the Federal Government for the maintenance of economic stability.

Now, I don't know that we disagree, Professor Hathaway, but my comment is this: It seems to me that basically, economic stability is going to come from the private sector of the economy and about all the Federal Government or any Government can do is to contribute to that. But the way this is worded, and indeed a great basic disagreement on the Employment Act, itself, is whether the Federal Government is to assume the basic responsibility, or is the Federal Government to be in an ancillary position? It is a fundamental point. It may be that we do disagree, that you feel that the Federal Government's function here is to assume the responsibility.

Mr. HATHAWAY. This certainly is not an issue that I wish to debate with you, Mr. Congressman. I have engaged in a number of discussions on interpretations of this, and I think it is subject to varying interpretations depending in part upon one's philosophy. But I do think we would probably agree that the passage of the act itself did indicate recognition of the responsibility of the Federal Government in its normal activities to take account of their effects upon stability.

Representative CURTIS. We do agree, and I didn't raise the question for debate, but rather for clarification as to two different basic approaches toward the Employment Act.

Now one thing that seems very clear to me is this: I noticed the subject of this panel is the Farm Problem and Its Relation to Economic Growth. In a sense, it looks like, and this may be a quibble, that we are really talking about the rural problem in its relation to growth and stability although we have our emphasis on commercial agriculture. Commercial agriculture is such a basic part of the rural problem that we sometimes use the words interchangeably. But I think the papers in the compendium, all bring out the fact that there are some very distinct things involved. One is agricultural policies, and the other is what we could refer to as rural problems that are deeply affected by agricultural policy. Would the panel agree with that fine distinction or the distinction I am trying to make? I gathered that there is agreement from reading the papers.

Now, the next question I would raise is this: It seems to me one of the first things that ought to be done in approaching the problem is to answer the question, How well is commercial agriculture doing? One of the figures or set of statistics that impressed me, and one of the papers deals with it, was the percentage increase of per capita income in farm families going back to 1934 which unfortunately is the first year for which we have the figures, in comparison to per capita income increases of nonfarm families. I wish I had that table here, but as I recall it, the increase percentage which is in per capita farm income from 1934 to the present was greater even with the dip in the past 3 or 4 years than that in the nonagricultural sector, or the nonfarm sector. It would seem to me that that is a very important statistic. I don't know what it means particularly, but anyone who would comment on that, I would be glad to hear you.

Senator SPARKMAN. May I suggest, before you answer, that the very first paper in this afternoon's discussion will deal with that subject.

Representative CURTIS. Not with it in relation to this, Mr. Chairman. You see, the point I am trying to get here, and I prefaced it by saying one of the first questions in trying to figure out the problems in agriculture is to find out how well farming is doing.

Senator SPARKMAN. The relative position, you mean.

Representative CURTIS. Yes.

Mr. AULL. I would answer Congressman Curtis' question by saying that when you start from nothing, you can increase a whole lot and still not be very high. That explains the high percentage increase in farm income since 1934.

Representative CURTIS. I think perhaps the fact it starts from 1934 is maybe misleading. We will have to figure what the balance of agriculture was in relation to the rest of the economy in 1934. But in response incidentally to the chairman's comment about small business having it rough, I have questions in my own mind about how rough it really is.

You can pick out, I think, any group in our economy, and they will all claim that they have got problems. The railroads say they have, and the chemical and textile industries say they have, and so forth.

It becomes important to figure out just how much of an economic bind there is, particularly in relation to other segments of the economy.

Now, it is true that the papers this afternoon, and some subsequent papers, throw light on this question of how is agriculture doing.

But one thing I would like to suggest that needs to be thrown into the analysis is how does agriculture gain its profits. Is it in what we consider in our tax laws normal income, or is it, as one of the papers has suggested, or several papers, through capital gain?

It was suggested in some of the compendium papers here that the farmer-owner, or the landlord has gained through the effect of inflation. That is whether that purchasing power from the non-agricultural sector of the economy has been passed to the agriculture section through ownership of land—it looks like there is considerable purchasing power passed from the nonagricultural sector to the agricultural sector.

But I merely say that in my own mind, at any rate, it is hard to go on to discuss the problems of the farm without a more thorough analysis of how well agriculture is really doing. Then break it down, as some of the papers have, into these various types of farms, that is larger than family size, and the family size, and so on.

Now the next factor, and that is the details that these papers seem to have gone into most. They posed several of the problems that face agriculture today as a result of change. I think the panel papers all seem to agree that what might solve the farm problems of the twenties, certainly is not going to solve the farm problems of the fifties, because we have so many different and new factors that have entered in.

But before going to that, I would like to pose a very basic question that seems to me, if it is an observation that is accurate, underlies our farm and rural problems and will always do so unless human nature changes.

That is this: The studies seem to indicate that the large families, or the size of families is larger in rural areas than it is in urban. If that is so, we are always going to have the origin of the labor force coming right in the rural areas. We must, in considering the economics of it, recognize that we have a source of labor right there in the rural areas, and, as Professor Schultz and others have pointed out, labor surplus is one of the problems, and if that is true we are going to continue to have that as long as this sociological factor, if that is what it is, of larger families coming in where rural areas exist.

First of all, I would like to ask the question of the panelists if this is recognized as being a fact generally: that human beings not just in the United States, but it looks like other societies in history as I have read it, as well as in other contemporary societies, for some reason have larger families when they live in the rural areas than they do when they come into the urban areas?

Mr. SCHULTZ. I might comment briefly on the last point, and then on the one that preceded it.

On the demography of the farm population, you are, of course, right; historically the natural increase in agriculture has been large, meaning births over deaths. This will continue for some years at least, and particularly in the areas that face the largest surpluses in farm people committed to farming.

Nevertheless, we are turning, and it looks like the farm population characteristics are in process of becoming similar to those elsewhere in society. Through the Corn Belt, and the New England States and elsewhere the farm population is becoming more like the rest of the population in its demographic characteristics.

Your point, nevertheless, is relevant because the natural increase has been large over the years, and will continue to be so for some time.

The other point I can comment on better because it gets closer to economics. It raises a subtle set of issues. I shall try to simplify my answer. Wherever a farm family has substantial equity in the land and in the other farm assets there have been appreciable capital gains in many parts of agriculture in recent years, and, in fact, even in the last 3 or 4 years.

These capital gains you were holding in the spotlight in your comments. Now, it is true and should be stressed and should be thought through more clearly, because there have been large capital gains in some parts of agriculture.

Then, too, the labor market for hired labor has worked somewhat better than has the market for the labor of the farmer's own effort and that of his family.

This leaves the farm family members who are not hired, and who may not have equity in the farm assets in a weak position.

For example, in the heart of the Corn Belt there is many a young farmer who is, say, 35, who is a very good farmer who, however, has very little equity in the farm business. He is operating on borrowed funds, farming say 180 or 240 acres, but he may be in a serious economic squeeze. The hired labor market has not helped him, nor has he enjoyed capital gains. Ten years from now he would probably be one of our very best farmers. But can he survive? All he has is what he can earn himself, with his management and his particular labor and that of his family.

Representative CURTIS. Does anyone else on the panel desire to comment on that?

Mr. AULL. I think the decreasing value of the dollar has sort of fooled us a little bit in what capital gains may have amounted to, even to some of those who have some equity in land. I dare say that if these people sold out and attempted to buy back, they would not have much more in real wealth than they had before these so-called capital gains appeared.

Now, on this population thing, which, of course, is with us to a very high degree, and you can dramatize that by pointing out that even if we maintain in the Southeastern States our present farmworkers, which we probably ought not to do for the best interests of the country as a whole, to do that would require only about 1 out of every 3 boys and girls who reach maturity on our farms every year.

Representative CURTIS. Are there any further comments from the panel?

Mr. Chairman, I will relinquish now, and come back later, if I may.

Senator SPARKMAN. I had some questions prepared, and they have in part been answered, but I think there are some parts that are pending.

I want to go back to the very first point made by Professor Schultz and carry forward as suggested by some of the others and discussed in part.

That is about the necessity of transferring people from farming to other occupations as productivity throughout the economy rises.

Do all of you agree that there must be such a transfer? Is the panel in agreement on that question? It seems to me to be one of the important points made here this morning.

Mr. AULL. I do not like the word "transfer," too much, and I do not think that we are going to transfer them by law or fiat. I think we ought to encourage it all we can.

Senator SPARKMAN. In what way to encourage it?

Mr. AULL. Well, in giving them the kind of training that will make it possible for them to move, and in facilitating their entrance into these other opportunities as they become available. They are now handicapped both by regulations of one kind and another, and by lack of skill. By all possible means I think we ought to make the movement as easy as possible.

Mr. BOULDING. I think how much we have to reduce the labor force in agriculture, in order to give agriculture the kind of income which does not produce acute political pressures, depends to some extent on how self-contained we regard the American economy as being.

On the whole, there has been a certain assumption here, I think, that we want to solve our agricultural problem within the framework of the American economy. This may be realistic.

On the other hand, the other possibility should not be ignored. There is, of course, another panel which will be coming to this.

The extent to which the transfer has to be made from agriculture is going to depend on the extent to which American agricultural products are going to be exported and imported. This depends on our whole international and foreign trade policy.

If we develop large-scale programs of economic development, based on export of American agricultural products, obviously we ought to raise agricultural prices here and encourage people to go in for agriculture.

There is a nice pipedream in which we develop an extensive agricultural export to Russia. Agriculture is the weakest part of the Russian system. I must say, I can't think of anything better for the future of world peace than to develop a system of specialized Russian industry which is based on imports of American agricultural surpluses.

This same situation contributed remarkably to the doves fluttering over Britain and the United States, and in spite of the fact that it sounds astounding at the moment, the nature of the situation is such that if it weren't for certain ideological obstacles, this might very well be achieved.

In this case, we would have to reverse our agricultural policy completely, and actually encourage people to go into agriculture.

But this underlies the difficulty that so much of what it is sensible to do in agriculture depends on what we do in other areas, in that our whole economic policy and our political policy is so highly integrated.

Senator SPARKMAN. Mr. Hathaway, do you have a comment?

Mr. HATHAWAY. Senator, if I might in line with your question, I would like to ask Professor Schultz this question:

By and large the reduction in the number of farms has been from noncommercial farms which shared little in income; and I think the statistics to which you referred earlier, in the first paper of the afternoon session, illustrate rather dramatically the fact that this reduction has done little to improve the per capita and per farm income of commercial farmers, which have declined little in numbers.

Do you, Professor Schultz, argue that a continued outmovement of these noncommercial farmers will be of value to commercial agriculture? Secondly, if you are talking about an outmovement of people

from commercial farms, what will prevent a continuation of the substitution of capital for labor at the rate which we have had in recent years, thus maintaining agricultural output at a level in excess of the rate of increase in demand?

Mr. SCHULTZ. There is a lot of barb in those two questions. On the first one we need to keep before us the welfare of all agriculture, commercial and otherwise. The question is, will people moving out of what is now called our noncommercial farms in considerable volume actually contribute to solving what Mr. Hathaway looks at as the problem of the commercial farmer. I think the answer is implied in the question—it will not.

I should think it would add a little to the production of agriculture. It would make the lot of the farm people who left, and the farm people who stayed in these poor areas, who recombine resources, as Mr. Aull stated, much better off. But I don't think it would solve the problem of farmers who represent the commercial sector. So much on the first question.

Now, the second question is, if another 1 million people left commercial agriculture and this outmovement were to cut down the farm labor supply, meaning family workers and entrepreneurs and so on, by 10 percent, would this reduce production?

We don't know, but my guess is before you got that far, that other things would happen, plus substitution of fertilizer for other inputs, and the ease with which this could be done, it may not turn out that agricultural production would fall. But, it is my belief that we should not be looking at total agricultural production.

Total agricultural production may not be out of line if the economy would provide higher earnings for the farm people who are in squeezes, which includes some commercial farmers. One should not start by asking the question, how can the United States reduce total agricultural production. It is rather how can we bring up the incomes of people who are trying to earn a living in agriculture. They are two very different things.

Mr. AULL. I think that there is this to be said, that this might bring about, and I believe you agree, a lower cost of production if it is done by more efficient farmers, and therefore, there might in that way develop a larger opportunity to sell even this increased production.

Mr. SCHULTZ. In many sections, yes.

Mr. HATHAWAY. Are you sure, Professor Schultz, that the current state of technology in American agriculture is such that there is underemployment on commercial farms? I think this must be implied in your conclusions or otherwise there is a possibility that even if some people moved out, it might not appreciably increase the marginal value product of their labor input.

Mr. SCHULTZ. Here we get rather technical. One can certainly find some circumstances that raise this possibility in the short run. If I may, I would simply say that if the supply of human effort, available to agriculture is reduced, it will necessarily bring about a total set of adjustments which will bring up the earnings of human effort in farming.

If this reduction went far enough, the substitution and whatever technology is adopted, there will come a point where the earnings of farm labor will rise. This should be the objective of policy.

I want to come back to something that Senator Sparkman and Congressman Mills said on the economic stability problem and on the small-business problem.

A recession in business seems to hit farm people very hard in terms of the jobs that are open to the farm people who want to leave farming. All of our data show that farm people who want to leave farming are very sensitive to these "trade cycles." They are the first not to get jobs.

The state of business activity is relevant and important to many farm people who are making decisions to leave or not to leave farming. One can predict that there will be a big drop in the number of farm people who can find jobs outside agriculture, as we go through the end of 1957 into 1958. This is pretty rough on these farm people. It was so in 1953 and 1954, and in 1948–49. This is a consequence of our economic instability. Some say that it isn't much economic instability. But once unemployment starts to rise, it seems to hit farm people wanting to leave, very hard.

Senator SPARKMAN. Gentlemen, your discussion has pretty well—if not in every sense of the word, certainly by implication—answered the next question I was going to put to you. That is this: There seems general agreement that reducing the labor force is a necessary adjustment in agriculture. I must say I was impressed by an earlier statement Mr. Aull made, that such reduction in the labor force might not and probably would not actually reduce the output.

I think that you are probably agreed that reducing the output may not be the major purpose. The real purpose is to raise the income of those who are engaged in agriculture.

Now I know from observation, that reducing the number of farms is a slow and painful process. If we depend on it alone, I wonder if there won't be long stretches of years when farmers will be in serious trouble. Won't other kinds of programs be necessary to prevent that?

I know, too, that Professor Boulding's paper suggests that, if big business and big labor put farmers at a disadvantage, the reduction in the number of farmers will correct the situation. I wonder if this doesn't place a very heavy burden on the adjustment process, slow as it is already. So my question boils down to this: There seems to be general agreement that adjustment is necessary. Now, I ask, is adjustment enough?

Professor Boulding, would you answer first?

Mr. BOULDING. The question is enough to do what? I would certainly say that the faster we get people out of agriculture, the higher incomes in agriculture tend to be, on the whole. There is one qualification, which I think one has to make about this. That is that when we talk about getting people out of agriculture, it matters who goes.

One of the problems of a declining industry is that very often the best people tend to go. One of the difficulties of agriculture through the years is that the man who is bright enough to be a farmer is also bright enough not to be one.

It is often the energetic and the good managers who find these opportunities elsewhere. This isn't always the case, and on the whole I don't think it has been the case, but in some areas there is this problem of qualitative decline in an industry as it declines quantitatively.

Now, I do think that this relative decline in agriculture is the result of the success of agriculture itself. It isn't the result of big labor, or big business or anything like that, but if in 200 years we have reduced the proportion of people in agriculture from 90 percent to 15 percent, and I think this going down to 5 percent, within our lifetimes perhaps or within the lifetime of those who are still alive, this is simply because 200 years ago farmers were so inefficient that it took 90 of them to feed 100 people. Today, 15 percent of the population can feed all of this and have some to spare. In another 25 years, perhaps 5 percent of the population will do it.

This has very little to do with either the cultural or the market situation of agriculture. To this extent, the panel, I think, is simply recognizing something which is a necessary consequence of technological improvement in agriculture.

Now, if you say, is it simply enough to get people out, then I say, no, because it is a question of who goes. There is a question of the maintenance of a vigorous and strong rural culture, which is an important question, and one that we are all concerned about.

On the other hand, perhaps the most important thing that is happening in American agriculture today, or I will say in rural life today, is a certain divorce of rural life from agriculture. There is the rise of part-time agriculture. This is something we haven't given enough attention to. But it is an extraordinarily important phenomenon. This is the gift of Mr. Ford to our society. If it hadn't been for the automobile, we wouldn't have this. But now it is perfectly possible for people to commute to work 40 or 50 miles.

Many of them do. I would say almost anywhere west of the Missouri River, it is hard to find an agricultural area that now isn't within commuting distance of some industrial community. This is an enormous change. What we may see happen is that lots of people will continue in rural life, but increasingly the income of rural people will not be derived from agriculture. I am sure I haven't answered all of the question.

Senator SPARKMAN. Does anyone want to add to that?

Mr. AULL. I am afraid I am talking too much, Senator, but I was thinking about the large number of very small producers who have been led to believe that their very existence depends on not 90 percent, but 100 percent of parity. I think that they have been misled. I think that we do an injustice to try to let them go on believing that parity is their salvation.

I am not attempting to suggest what it might be, but I was interested in this man in California who was able to pay 18 cents a pound penalty in order to grow some extra cotton. I know an awful lot of southeastern farmers who would have been glad to sell him their right to grow some at half that price. It seems to me that maybe one approach to this thing would be to permit some of these small growers, high-cost producers, to sell not their acreage, but their expected volume to somebody else.

Now that may not cut down on the amount, but certainly it would get the production in the hand of those who can grow it at less cost per unit.

Mr. SCHULTZ. Senator Sparkman, you asked a very broad question, "Is adjustment enough?" This is perhaps too late an hour to suggest that it is true that we have found a way of contributing immensely to

the welfare of consumers through the way we can improve the technology and the efficiency of American agriculture—through the remarkable institutional system that we have developed in our agricultural experiment stations and extension services, and land-grant colleges, which are being copied all over the world as they should be.

It is increasingly clear that these contributions to useful knowledge come to me as a consumer, and come to all of us as consumers, and the real issue is, should the farmer bear the burden while he goes through the adjustments that these advances in techniques make necessary? In short, we have hit on a set of institutions that is most important. Mr. Boulding has alluded to the success of our agriculture. I could argue, because the data are now really quite convincing, that this development redounds rapidly to the advantage to consumers. Actually, these better production techniques give rise to the kind of a farm problem we have as they are adopted and change the production system. The burden is borne unduly by farm people in the way the pricing system absorbs all of these new techniques.

The time has come that we ought to think through, and I don't know where it comes out, this welfare implication. Consumers gain and yet somehow there is an unnecessarily heavy burden falling on farm people in the process of absorbing and adopting and taking on these advances in new techniques.

Senator SPARKMAN. There are a great many questions that I would like to ask, and more are suggested as we go along. I am not going to ask this as a question, but throw out this thought: It seems to me a little strange that we can think of cutting the farm labor force down by two-thirds. Mr. Boulding suggested farmers are now 15 percent of the population and the figure could be reduced to as little as 5 percent and maintain the same production. It is strange that we could shift that 10 percent over into industrial production and still expect a healthy condition in the production of consumer goods.

If the use of industrial goods can step up to such an extent as to make that a healthy situation, why can't we devise some way of stepping up the use of agricultural goods?

I don't want to go into that, because I am taking too much time. Dr. Talle, do you have a question?

Representative TALLE. Thank you, Mr. Chairman. I believe the answer to the chairman's last question lies in the fact that the demand for farm products is inelastic, wouldn't you say, Mr. Schultz?

Mr. SCHULTZ. Very inelastic; yes.

Representative TALLE. That is one great difficulty. I remember from reading Adam Smith's book, he said in one place, "Human beings are, of all baggage, the most difficult to transport." And when he used the word "baggage," he didn't use it in a nasty way.

Even in 1776 the father of economics was aware of the fact that it is difficult to move people from one place to another, although that has become far easier with improvement in transportation and good roads, and so on.

I was sitting here thinking about an area that I am very much familiar with, and what you said, Professor Schultz, is eminently true. People will come in from 40 or 50 miles away to work in industrial plants.

Mr. SCHULTZ. Yes; that is Mr. Boulding's point.

Representative TALLE. I am sorry, Professor Boulding. The problem then is in a degree solving itself without any push from the Congress. The question that I was wondering about is this: In the event that something were done to encourage commercial farmers to enter other occupations, what effect would that have on Government policy as far as agriculture is concerned?

Haven't we in the past kept in mind certain things we wanted to do for people who were not commercial farmers? Is not that an aspect that should be taken into account?

Mr. SCHULTZ. I give way to my colleagues here.

Mr. BOULDING. I don't mind sticking my neck out on this: I think the only really serious problem in American agriculture is that of the subsistence farmer, in noncommercial agriculture. On the whole, commercial farmers do a little better than college professors, if I may say so. There are some exceptions, and there are always exceptions to this.

Well, if we worked ourselves into a position where we can't just drop it, we have a hot potato that we have to hold for some years. I think if we get out from under most of our price supports policies for commercial agriculture, I don't think the world will come to an end, either for agriculture or for anybody else.

On the other hand, the problem of the hard core of subsistence farmers is a very difficult one, and in fact I don't know the answer to that one. But I think it is becoming increasingly hard to single out agriculture as an industry that deserves special attention. In a way, we have been sold agricultural policy on the proposition that we ought to help the poor, which I am sure we will agree with, and that farmers are poor, and therefore we ought to help farmers. This is a fallacy. Some farmers are poor, and some farmers are filthy rich.

If we help farmers, we almost always involve ourselves in helping the rich farmers more than the poor ones. This is why I would say that we really should not have an agricultural policy at all, we should have a poverty policy. But this would be very different from agricultural policy, and if you are going to do something about the poverty of the poor farmers, you should also do something about the poverty of the poor people in the cities, or even the poor graduate students.

Our agricultural policy has been described as a charity racket, and I don't think this is unfair. There are charities in which the expenses of the charity involve about 90 percent of the take. I think that is roughly descriptive of our present agricultural policy.

Mr. AULL. I hate to take issue with my colleague here, but I think maybe he makes it a little hard on agriculture, although I may have occasionally entertained similar thoughts.

In the first place, agriculture is not by any means the only industry that is getting special attention. I think that the quicker we can disabuse the country of that idea, the better off we will be.

I also think for the reasons that Professor Schultz has brought out very clearly, that agriculture in doing a good job, a job which the country demands to be done, will inevitably run into some difficulty. There is a national responsibility to agriculture which perhaps exceeds the responsibility to the bootblack, and I am not deprecating either one.

I don't think that there is quite the same comparison, nor anything like the same problem. The bootblack can move his stand in the city, and take up another place where there are more shoes to be shined. He can shift his equipment for little or nothing and go into something else that doesn't require much more skill. That is not true of agriculture.

Mr. RATCHFORD. I can't quite let Mr. Boulding's remark pass without a comment. Commercial agriculture does have a problem here. I am not familiar with the Corn Belt, Mr. Schultz, but we have been looking at our State, North Carolina, and looking at the other Southern States. If there is one group of farmers there who are really commercial farmers, it is dairy farmers. Yet their age is getting awfully high, and there are few new ones coming in. So I am looking to the future, and I am not so sure that there is not a problem.

Commercial agriculture, more than other industries, is bothered by price instability. I think this is a very real problem, and it is a social problem as well as one for agriculture.

I think it is fine that we are breaking farmers down by categories, because the problem of the subsistence or low-income farmer is certainly different from that of the commercial farmer. They both have problems, but they are different problems. Your comment, Mr. Boulding, is that there isn't much difference. I think we ought to be concerned with low income wherever it is. I think there is ample indication that if we paid special attention to this low-income group in agriculture, we could substantially improve their situation, and help the country at the same time.

Some of them we can get into commercial farming, and many of them we can get into industry, and then there are a lot of them, and I don't know how many there are, who are essentially welfare problems and should be handled as welfare problems instead of as part of the agriculture problem.

Mr. HATHAWAY. I would like to speak to one point, and that is the general assumption that seems to have been made that off-farm employment solves the problems of commercial agriculture. I know a number of well adjusted commercial farms, and I find relatively few of these people have time to take an 8-hour-a-day-job off the farm.

Coming from Michigan, where part-time farmers are a very high proportion of our people classified as farmers, this does solve a type of income problem; but a man who has 50 or 60 dairy cows is not helped much by the proximity of off-farm employment because he is pretty busy. Some of these people, and we have some detailed records as to their earnings, and they are not exorbitantly high considering the amount of investment they have.

There is just one further point. I think we should recognize as long as we have business cycles, and particularly large expansions in demand for farm products at certain times, World War II, and Korea, this is bound to bring in very large capital investments in agriculture.

It is profitable to make this investment. This investment is not easily transferrable out of agriculture and I think it is inevitable for a period of years that a mere adjustment of labor will not solve the earnings of commercial farmers in this kind of a context.

If we could even out all of the business cycles, so that demand moves smoothly the outmovement of labor from agriculture might provide a complete solution. I think Professor Schultz would agree with this

because he had a very excellent book published at the end of World War II on Agriculture in an Unstable Economy. I think these large changes in the demand for farm products are even more important because of the effect they have on drawing in large capital investments in agriculture, which then must more or less be depreciated from agriculture.

Representative TALLE. Would you not say that in a depressed business cycle situation, when you get to the bottom of the cycle, those who produce raw materials are hurt badly. Isn't it true that in a depression the prices of raw materials fall first, and fall farthest?

Mr. HATHAWAY. It is my impression this has generally been true. I think many industries, however, are more able to transfer the burden of these cycles, perhaps, to the labor force than is the case in family-operated farms. Certainly the investment in agricultural production facilities are extremely difficult to transfer to other sectors of the economy. They are specialized production items by and large.

Representative TALLE. That is certainly correct, and the farmer produces raw materials. He is in that category.

Now, Mr. Chairman, if I am going outside of what we should talk about, please stop me. However, Mr. Soth, to whom I referred, Professor Schultz, and who did a good job in writing the book I mentioned, has one chapter devoted to what he calls the shibboleths. One of the shibboleths is the family farm. I have heard that used so much. I was born on one, and I grew up on one, and I am familiar with conditions as they then were on the family farm. I know conditions are different now. More acres per farm for instance.

Shouldn't we take a look at what is called the family farm today in relation to what the family farm was 25 years ago?

Mr. SCHULTZ. Mr. Soth's point, and the point Congressman Talle is making, is a very important one because we frequently get into these discussions as if these adaptations and adjustments that are a part of the American economy and agriculture in it, has in some sense impaired or is disintegrating something called a family-type farm operation.

One discovers, however, as one looks closely at agriculture, that in the main stream of agriculture, the family farm has had a strong survival and adaptation capacity. While I don't know how large a decline there has been in the numbers of farms in Iowa in the last three decades, it must have been considerable. But the hard core of farming continues to be the family farm as it was 30 years ago; the family farm may be in a much stronger position whether measured in terms of consumption or education of farm children, and hiring less labor, and doing actually more of it, than it was one or more decades ago. The family farm has shown real strength, and it may be gaining in that strength.

Representative TALLE. My memory tells me that in the middle twenties the average-sized farm in the State of Iowa was 148 acres. Of course, that was strongly affected by the Homestead Act, under which land was parceled out in areas of 160 acres in 1862. The more recent figures from my State is a good deal higher. The average is roughly 172 acres per farm now. The new technology requires more acres per farm for economical operation.

Mr. RATCHFORD. I think you have raised a very important point. There is considerable evidence that the family farm, if we define it as

a real working unit, is becoming relatively more important. That is, the number of real family farms as a proportion of the total. The squeeze has come on what I would call the smaller-than-family farm. If we could get across an idea that there is such a thing as a smaller-than-family-size farm, I think it would do a great deal to clarify the policy problem.

Representative TALLE. I can name specific cases in my own district; for instance, one in Clinton County. It is a family farm in the fullest sense of the term—and it is over 300 acres.

Mr. SCHULTZ. There are lots of them.

Representative TALLE. Indeed, there are. I could name many more from firsthand knowledge.

Mr. RATCHFORD. There is a tendency to classify any farm that a family lives on as a family farm, and I think this has confused the issue considerably.

Representative TALLE. In addition, there is a nostalgic connotation in that term, because all of us recognize that continuity of ownership is a fine thing in an estate. There are many facets in the term, "the family farm." Therefore, I think it is a good thing to analyze it in the present situation.

Representative MILLS. Mr. Chairman, I might ask one question. I want to be certain that I understand the thinking of the panel. As the panel members know, we have a great number of farm programs that are aimed at, or at least, are endeavoring to solve, the farm problem. I would admit, with the members of the panel—and I think this is what you have been saying to us in the papers today—that these present farm programs have not satisfactorily solved our farm problems. If they had, we wouldn't be here discussing the farm problem.

You have emphasized this matter of adjustment. I want to know your thinking, so that I won't be uncertain. Are you saying that the crux of the farm problem is not so much in the programs that we have, inadequacy of programs or whatever you might want to say about them, but that agriculture itself has not, during the operation of these programs, made those adjustments that you gentlemen feel should have been made by agriculture during that period of time?

Is it the adjustment that is the important thing for the future, or is it a different type of farm program? Or is it a different type of farm policy?

Mr. SCHULTZ. Let me break this up a bit, Congressman Mills. One of my colleagues who will testify later, Prof. D. Gale Johnson, will introduce in his testimony data that indicate that, since 1940, the farm programs may not have had measurable adverse effects on the movement of farm people out of agriculture.

My second comment, however, is that farm programs have not helped farm people leave farming, unless one argues that they have held farm income up somewhat, and this additional income may have helped some farm people leave.

Thirdly, if the farm programs haven't helped, it points to the need for thinking through policies that will come to grips with this basic problem of surplus human effort committed to farming. Lastly, it needs to be pointed out that there has been a large exodus out of agriculture on its own, without help. But, despite the size of this outmovement, it has not been enough.

Representative MILLS. I am trying to get down to the facts of the situation. What disturbs me about this is that my own farmers whom I represent feel that existing programs are bringing about these adjustments apparently because, as I go through my district, I find more and more idle farms. The adjustment has come because, so they tell me, they have been reduced in what they can produce to the point of a farm becoming an uneconomic unit. They haven't been able to derive enough net income to justify their continuing on the farm, and they have gone into something else.

They say that existing programs have done that. These existing programs have brought about the adjustments, so far as they are concerned, from the farm to something else. They also feel, many of them that I have talked to, that, if we continue existing programs in an effort to solve these problems, we will bring about further adjustment by requiring more and more people under these programs to leave the farms because their operations will become uneconomical. Are we headed in that direction, with respect to existing programs? Are they going to require agriculture, in other words, to make these adjustments which the panel says agriculture, in its opinion, must make? If we just continue existing programs, will we accomplish the objective that you gentlemen have in mind as being needed for agriculture?

I am just telling you what my own farmers tell me. They raise cotton, and they raise rice. The amount of cotton or rice that they can raise is reduced, and they find that they have been cut down to the point that even another Government agency, the Farmers' Home Administration, won't make them a loan because they become an uneconomical farm unit.

Mr. AULL. Do they feel that is a good way to bring about the adjustment?

Representative MILLS. They are not feeling it is a good thing at all, but I am asking you if a continuation over the next 5 or 10 years of existing farm programs—and it is not a political matter, because I voted for almost all of them, if not all of them—but, if we do continue them, will we force upon agriculture the very adjustments that you gentlemen say agriculture should make? It is through sweat and tears, I will say that.

Mr. AULL. This is certainly one phase of it. I think that a good many of the people who ought to be in agriculture and who would make efficient producers have given up, not because they weren't doing better than somebody else, but because their opportunity to use their resources has been so restricted that they just decided they would give up that fight and do something else. They probably are the ones that ought to have stayed in. At the same time, I do believe that the program of price supports, resulting in smaller and smaller allotments say, of rice and cotton, has kept a good many other people in farming who might otherwise have gone somewhere else, and it would have been to their advantage and to the advantage of the country had they gone somewhere else. It is hard to starve a person out of agriculture, and many of those who leave are probably leaving because they just feel like they have a better opportunity somewhere else, and not because they are being starved to death on the farms.

Representative MILLS. Now, Mr. Aull, let me disagree with you, because I can give you a number of instances where the very thing that I am talking about has occurred. They left, and told me the reason they were leaving was because it was impossible for them, under existing programs, to be able to make enough to remain on the farm. I, as their Congressman, they said, should try to bring about a redirection or else they were all going to leave.

Mr. AULL. I think there is no disagreement. They could make a better living somewhere else, too, and they are the kind of people who insisted on a better living. I think in agriculture, it is the fellow who is efficient and who has energy and ambition who frequently gives up the fight quicker, because he sees the opportunity elsewhere.

Representative MILLS. I didn't think at the time that I was voting for these programs—and there was a time, I voted for them for 19 years—that I was purposely creating a situation where I was bringing about a liquidation of my own constituents. I had no such thought in mind. It turns out, now, that many of them have been liquidated.

I thought actually what we were trying to do was to support income, in order to keep people in farming. It turns out that by these farmers accepting support prices, they have given up acreage and, of course, they have had their costs rise to the point where they now find they can't make a living on the farm. So that even though we have supported prices, which has been helpful I am sure, it hasn't been enough.

Now the reason I raised the question was this: If we continue with our existing programs, may we not accomplish the very thing in time that you gentlemen says needs to be done.

Representative CURTIS. I would like to be sure of one thing. I think that I understand it, but we are talking about a declining industry, but not a sick industry? Is that agreed? Maybe some people think it is sick. It strikes me that we are talking about a declining industry.

Incidentally, I might say that I would even wonder about the term "declining." It is declining in relation to percentage of national income, but from an absolute standpoint it is increasing, is it not?

That is the production?

Mr. SCHULTZ. The labor force is declining.

Representative CURTIS. I am now talking about the income that comes in to agriculture. That is not declining absolutely, it is declining percentagewise, is it not?

Mr. SCHULTZ. That is correct, since 1955.

Representative CURTIS. Now, the second thing is that we are not talking about a sick industry to the extent that this Nation is ever going to go out of agriculture; or that there is not an essential stability in one industry and ability of those in the agricultural field to remain healthy? It has been suggested that people are going out of the industry but I think there is a distinction, or at least I am trying to get it across, between this and a sick industry that is going to disappear. We have had those, the buggy industry, for instance, that not only was declining but it was a sick industry, a disappearing one. We have had that happen in our economy. But we aren't talking here about a sick industry? Do some of the panelists think we are talking about a sick industry?

Mr. AULL. I think certain segments of it are sick, when you want to include all of the various segments of agriculture.

Representative CURTIS. I might go along with that, but not taking the picture as a whole. Let me illustrate it another way, if I may. I was just jotting down here for the panel this afternoon, but it has application, major markets the farmers have lost.

One, production of horsepower, even for himself.

Two is raw materials and fibers to synthetics. Three, through vertical integration, which to me is one of the most interesting developments, where the farmers really have lost a lot of operations in raising poultry to industry, and in raising cellulose; there is even talk of going into pig production through this vertical integration. Four, there are the various processings that now go on off the farm, even feed mixing, aside from a lot of the processing the farmer used to do.

Five, the war markets—I have been a little disturbed that not enough has been said about the loss of war markets.

On the other hand, the farmers have increased their markets in these items, and this is just my own notations: one, increasing population; two, increase from the per capita income increase, which is bound to occur. Three, we have had some of the reverse on the loss to synthetics, soybeans and some others going into plastics. Maybe there are some other things of that nature, like yeasts, and so on. But the essential balance seems to be that we have an industry that is increasing absolute figures as far as its needs for production is concerned, although its relation to national income percentagewise is declining. But it is certainly performing its function, and we have many people who are making good livings in farming.

As all of you have suggested, there are segments that are sick and they are going out. Is my analysis of that thing correct? Is there any disagreement from the panel?

You were about to comment, Professor Boulding.

Mr. BOULDING. We won't know whether agriculture has any future until 100 years from now, but of course it is possible that agriculture as a large form of human activity is on its way out, if we get synthetics and we eat algae, I don't look forward to that, because I prefer steaks. But there is a possibility.

Representative CURTIS. I now want to raise a very delicate matter, but in the suggestion of the panel there was something said that we ought to look into why people have left the farm. This is quite a delicate thing. There is a question of what kind of people have left the farm. Have the more intelligent people, as it were, left the farm, or is there no guide there?

Obviously, it is a very delicate situation for anyone in politics to even suggest that we ought to appraise that. But I think it is something from the standpoint of economics that we ought to know.

Mr. AULL. We have some rather old studies that show that they are leaving at both ends.

Senator SPARKMAN. That is a perfectly safe answer.

Representative CURTIS. I am glad to have that information.

Mr. AULL. I am sorry that Representative Mills left, but I think a good many of the good farmers are leaving not because they have been starved out, but because they are unwilling to accept this low level of productivity which we have forced upon them. That is the group we might deplore losing.

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Mr. RATCHFORD. I would agree with Dr. Aull that they are leaving at both ends. Yet if you look just a little further into that, you will find within any particular category, it is the better trained—I am not saying inherently smarter—but the better trained and the more aggressive within the group that are leaving.

Representative CURTIS. Take, for example, in a family farm, does the bright boy who might go to college and take science, or so forth, leave or does the brighter boy tend to study agriculture? There would be an indication, or is there no pattern?

Mr. SCHULTZ. There are quite a number of studies, several have been mentioned here. Dr. Dorothy Thomas of Pennsylvania University has brought together quite recently, all of the studies and there are really many studies that throw some light on this question.

The generalization that emerges is that the total effect is neutral. There are particular circumstances, where distribution of talent is changed one way or the other, but if you had to make a generalization you would say these migrations have not altered the basic distribution of talent.

Now, in certain communities, it does start running one way, and it may run the other way in another community, but the one hypothesis supported by the data generally is that it is neutral in altering the distribution of people according to I. Q.'s.

Senator SPARKMAN. Mr. Brandow is our staff economist. Would you care to ask any questions?

Mr. BRANDOW. No, thank you.

Senator SPARKMAN. We could carry on this discussion for a long, long time. It has been most helpful, and we are all grateful to you for it.

The subcommittee will stand in recess until 2:30.

(Whereupon, at 12:50 p. m., the subcommittee was recessed, to reconvene at 2:30 p. m. the same day.)

AFTERNOON SESSION

Senator SPARKMAN. The subcommittee will come to order, please.

This afternoon we resume hearings of the Subcommittee on Agricultural Policy by taking up the second major subject of our study, the current and prospective market position of agriculture.

Here we propose to examine the current income position of commercial farming, the current imbalances in markets for farm products, and the prospects for supply and demand of farm products in the future. Policy should be made for the future. It, therefore, is particularly important that we consider the domestic and foreign demand for farm products in the years ahead, the capacity of agriculture to meet the demands upon it, and the apparent needs for labor and other resources.

As I remarked this morning, I wish we had time to devote a full section of these hearings to each subject with which the papers deal. It will be impossible to do that. However, I do wish to say that the papers prepared for this panel contain a great deal of valuable information and raise some very challenging questions.

On behalf of myself and the other members of the subcommittee, I want to thank you gentlemen of the panel for your work in preparing these papers and for being with us today.

We will open by having a 5-minute summary of each of the papers in the order in which they appear in the compendium. We will hear these summaries without interruption. When they have been completed, each member of the subcommittee, in turn, will question the participants in this panel.

I hope that our discussion can proceed informally, and that each participant will feel free to express his views on the subjects discussed in the other papers, as well as his own.

We will begin the summary of papers with Mr. Koffsky, of the Agricultural Marketing Service of the United States Department of Agriculture.

Let me say that I regret the necessity of asking that you hold your summaries to the 5-minute limit, but, if we are to have a discussion in the limited time that we have, it is absolutely necessary that we do that. Mr. Nathan M. Koffsky and Mr. Ernest W. Grove are from the Agricultural Economics Division, Agricultural Marketing Service, United States Department of Agriculture.

Mr. Koffsky, we recognize you for 5 minutes.

STATEMENT OF NATHAN M. KOFFSKY AND ERNEST W. GROVE, AGRICULTURAL ECONOMICS DIVISION, AGRICULTURAL MARKETING SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE

Mr. KOFFSKY. Mr. Chairman and members of the committee, on my left is Mr. Grove, the coauthor of this paper.

We have posted a chart, from which most of our conclusions flow, showing the trends in income on high-production or commercial farms, and on low-production farms. As a background for interpreting this chart, let me summarize the income situation for all farms.

1. Total net farm income has stabilized in recent years, and it is expected to show some improvement this year. But the aggregate level is some 25 percent below the average for 1947–49. During this period, the number of farms has been reduced about 15 percent. Thus, on a per farm basis, the decline in net farm income has amounted to 12 percent. These income figures represent the totals and the averages for all farms in the United States—almost 5 million farms.

2. Generally, the changes for commercial farms have reflected the changes in the aggregate for all farms. Commercial farms, as defined by the staff of the subcommittee, include those farms with a value of sales of $2,500 or more. Such farms number slightly over 2 million, or some 40 percent of the total. They produce over 90 percent of the farm products that move to market, and, consequently, receive most of the aggregate farm income. The number of high-production or commercial farms has continued fairly stable since 1947–49. The decline of about 1 million farms over the past 8 or 9 years has been concentrated in low-production farms. Thus, the decline in net farm income per farm for commercial farms has averaged nearly 20 percent since 1947–49, in contrast to a decline of some 12 percent per farm for all farms in the United States.

3. Off-farm income has become increasingly important in maintaining incomes of commercial farm families. The decline in total net family income, including income from off the farm, between

1947–49 and 1956 was 6 percent. In 1947–49, off-farm income represented some 13 percent of total family income of commercial farms. By 1956, the percentage had increased to 26 percent.

4. For low-production farms, the increase in off-farm income has more than offset the decline in income from farming. Average total family income of this group increased 22 percent between 1947–49 and 1956. In the earlier period, roughly one-half of the family income was received from off-farm sources. In 1956, almost three-fourths was from off-farm sources.

5. In comparison with incomes of nonfarm families, incomes of commercial farm families generally were higher from 1947 through 1952. From 1953 to 1956, they ran substantially lower. Thus, in 1956, the average income of commercial farm families was about $5,400, while that of nonfarm families averaged $6,900. In 1947–49, the commercial farm family had an income of about $5,750 whereas that of the nonfarm family was $4,900. These figures do not make allowances for differences in the cost of living that may exist as between farm and nonfarm, or for return on capital investment. Such investment is generally much larger for the commercial farm family than for the average nonfarm family. If allowance is made for return on investment at prevailing rates of interest the average net income from farming for commercial farms in 1956 would be lowered to perhaps $2,200 for farm labor and management compared to a return of about $4,000 for farm labor, management, and capital investment.

6. While this is the average situation for commercial farms, it should be emphasized that there is considerable variation as between types of farms and between areas. For example, income data for typical commercial family-operated dairy farms indicate that those in the central northeast area have increased their average net farm income almost 10 percent between 1947–49 and 1956, while those in eastern Wisconsin have had a reduction in income of almost a fourth. Similarly, the typical hog-beef fattening farm in the Corn Belt has had a decline in net farm income of 35 percent since 1947–49, while cash grain farms in the same area have had a small increase. For the selected cotton farms the smaller sized farms have mostly had reductions in income, particularly reflecting drought in Texas. However, the large cotton farms, notably in irrigated areas of Texas and in the Delta, show increased net income relative to 1947–49. Other data also suggest, but by no means conclusively, that large commercial farms have maintained farm income somewhat better since 1947–49 than the smaller commercial family-size operations.

Senator SPARKMAN. Thank you, Mr. Koffsky.

Our next panelist is Prof. M. R. Benedict, of the Giannini Foundation of Agricultural Economics of the University of California.

We are glad to have you with us. You may proceed.

STATEMENT OF M. R. BENEDICT, GIANNINI FOUNDATION OF AGRICULTURAL ECONOMICS, UNIVERSITY OF CALIFORNIA

Mr. BENEDICT. Thank you, Mr. Chairman and members of the committee.

I am going to brief the summary that I have provided. The topic assigned to me is the extent of the imbalance existing at the present time. This breaks into about three phases. There is the stock

surplus which is now on hand; there is the question of balance as between production and use currently, and then—probably most important—there is the problem of what things look like ahead. That is to be discussed by other members of the panel.

I would like to speak mainly about the current stock situation, and the current production-use balance.

There was a comment made this morning that was significant; namely, that the size of the current stocks tends to blind us to some of the essential elements of the problem. They are certainly important, but much more important is how much are we producing now, and how are we disposing of it.

The situation is I think somewhat more nearly in balance than most people assume. If we could bring the current situation into balance, this problem of excess stocks could I think be isolated and dealt with gradually over a period of time. But if we continue to produce more than we can dispose of then we have a growing problem rather than one that is easing down.

The principal problem of excess stocks is in wheat, cotton, corn, rice, and some of the manufactured dairy products. The really big holdings are of wheat, cotton, and corn. We have roughly a billion bushels of wheat as a carryover. That raises a question as to how big our carryover should be. The position I have taken is that it should not be as small as what the trade would carry. I think we would be unwise, under present circumstances, to cut much below 400 million or 500 million bushels of wheat as a safety reserve. That means that we have possibly 500 million or 600 million bushels that need to be liquidated in one way or another. Currently, the wheat situation has moved quite a way toward a better balance, but not into full balance. Last year's crop was a little over 900 million bushels. Quite a large part of the big carryover we have came from the billion and a quarter bushel crops of 1952 and 1953.

So there has been quite a substantial adjustment in wheat production.

To be in balance now, we would have to export or get rid of in some other way, something in the order of 300 million to 350 million bushels. That is, leaving aside the liquidation of present stocks. That would require or will require if we try to do it, continuation of abnormal methods of export to get that much out.

In the case of cotton, we are now down this last year to something in the order of 13 million bales. Domestic use is about 9 million bales. This implies for current balance exports of something in the order of 4 million bales a year. That is not in my opinion an unrealistic goal to look to, but not an easy one to achieve. But the cotton situation is more nearly in balance than are some of the others.

The other major problem is that of feed supplies and livestock numbers. Part of the unbalance there is due to the fact that we had a peak period in the cycles of cattle and hog production coming at about the same time, along about 1954–56. This has given us an abnormally high production of meats. We had roughly 22 billion pounds of meats in the late 1940's. Recently we have had about 28 billion pounds. That in some measure accounts for the very low prices, for example, in hogs in 1955 and 1956.

In corn, we have something like 1,450 million bushels carryover this year. The general feeling is, I think, that we should have a

larger carryover than we used to consider desirable or normal. Well informed opinion suggests a need for something in the order of 600 million to 800 million bushels as a desirable feed reserve. If that is accepted, we have around 600 million bushels in excess of the amount needed for a feed reserve of reasonable size.

The other major aspect of balance is the one that was under discussion this morning; that is, the excess of total production resources in agriculture. One of the things I will mention in supplementing what was said this morning is that we have here an industry in which the employment requirement is shrinking and that we have a lag in the adustment to that. This lag is not extremely large, but it is persistent, as it always is in a declining industry; that is, in an industry that is declining in the sense of total number of employees required. The surplus may not be more than 4 or 5 percent, but it is very difficult to make the adjustment fast enough to bring about a good balance. This sort of thing is ordinarily taken care of in other types of industry by the fact that, if an industry is declining in its requirement for labor, the excess labor is dismissed. That can't be done in agriculture. Excess labor tends to stay in the industry and the result is that we have a rather sticky situation.

My time is up and so I will stop there and add other comments later.

Senator SPARKMAN. Thank you, sir.

Next is Mr. Rex F. Daly, Agricultural Marketing Service of the United States Department of Agriculture.

STATEMENT OF REX F. DALY, AGRICULTURAL MARKETING SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE

Mr. DALY. Thank you, Mr. Chairman.

Domestic requirements for food and other farm products are expected to expand around 20 percent in the next decade and as much as 50 percent in the next 2 decades. With rising consumer incomes we will likely get a further upgrading of the diet, so that gains in total domestic use would be a little more rapid than population growth. These projections assumed a continued rapid growth in population, an expanding peacetime economy, and relative prices for farm products around 1956–57 levels.

2. Increases in population have been sharp in the last 10 years. With prospects for a continuation of fairly rapid growth, population was assumed at 193½ million in 1965 and 230 million by 1975. The gain of 37 percent from 1956 to 1975 compares with an increase of 34 percent from the 1925–29 average to the 1951–55 average.

3. The economy will continue to grow in the next two decades, possibly even faster than in the past, if employment is maintained. We were producing about twice as many goods and services on the average in 1951–55 as in 1925–29 and consumer buying power per person was up 55 percent, after adjusting for higher prices.

4. Consumption of farm products in total does not change much in response to changes in relative prices and consumer income, but a further shift among commodities and some upgrading in the diet is in prospect. Per capita use of all farm products projected for 1975 ranges 8 to 12 percent above 1956, depending on relative prices assumed; the increase for nonfood products is expected to be larger than for food products.

Increases in per capita use would reflect a further rise in consumption of livestock products, especially red meats and poultry, an increase in many fruits and vegetables, and a rise in use of coffee and tea. On the other hand, consumers will likely eat fewer pounds of grains, potatoes, dry beans, and some fats.

5. With an increase of some 37 percent assumed for population from 1956 to 1975, domestic use increases about 48 percent, assuming prices around current levels, and approximately 53 percent if prices are assumed at levels 20 to 25 percent lower. Substantial increases are in prospect for food use of both livestock products and crops. Requirements for feed and seed, which make up about half of all crops, rise about a third to 40 percent from 1956 to 1975. This increase reflects a continued rise in feeding efficiency. Requirements for livestock products projected for 1975 total around 45 to 50 percent above 1956.

6. Although exports of major farm products may hold up well in coming years, they are not likely to exceed much, if any, the record exports in 1956–57. Thus, total crop requirements, both for domestic use and export, would increase by around a third to 40 percent from 1956 under conditions assumed for 1975. After allowing for a rise in imports and current excess production, crop output would need to increase around 28 to 36 percent and livestock products by 40 to 45 percent from 1956 in order to match projected needs. Total farm output, excluding feed and seed, would need to increase around 35 to 45 percent from 1956 in order to match combined requirements for crops and livestock products projected for 1975.

7. Burdensome stocks of cotton, wheat, and rice were reduced some in 1956 and 1957 by special surplus-disposal programs, but carryovers of these crops as well as feed grains are still large. We have not yet been able to effectively control production. As a result, prospective growth in technology and in requirements suggest that agriculture will continue to face the difficult problem of balancing production to market demand at prices considered remunerative to producers.

Senator SPARKMAN. Thank you, Mr. Daly.

Mr. Raymond A. Ioanes, Foreign Agricultural Service, United States Department of Agriculture.

STATEMENT OF RAYMOND A. IOANES, FOREIGN AGRICULTURAL SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE

Mr. IOANES. The Foreign Agricultural Service, at the subcommittee's request, has estimated foreign commercial dollar demand for major United States export commodities in 1965 and 1975, using reasonable assumptions and giving consideration to past relationships which affect the volume of exports. By the term "foreign commercial dollar demand" I am referring to the quantity foreign countries would be prepared to buy in the United States for dollars. The extent to which our estimates will materialize will depend to a large degree on the extent to which our assumptions prove to be valid.

Prospective foreign demand in 1965 and 1975 for major United States farm export commodities are compared with total (dollar and Government-financed) and dollar exports in 1956–57 and with the average of total exports in the period 1950–51 through 1954–55. We have made 2 comparisons for 1956–57, because about 40 percent

of total record exports 1956–57 was financed under special Government programs, such as Public Law 480, and 60 percent was exported for dollars.

Over the next two decades it appears likely that foreign demand for most of the selected agricultural commodities studied will increase substantially when compared with dollar exports of recent years. For some commodities, however, foreign demand may be lower than the record high total exports of 1956–57.

1. Substantial increase in both dollar and total exports:

Feed grains.—Expanded livestock production abroad to meet rising living standards is expected to require substantially more United States feed grains.

Fats and oils.—A population increase, as well as increased per capita use in many underdeveloped countries, is expected to open substantially larger markets for United States fats and oils.

Fruits.—A rising living standard is expected to result in regaining previous markets for apples and pears and for expanding present markets for citrus and canned deciduous fruits.

2. Substantial increase in dollar exports but reductions in total exports:

Cotton.—A gradual increase in foreign demand is expected to increase dollar exports, because consumption outside the United States probably will go up faster than production.

Wheat.—While dollar sales will be up, the outlook is less encouraging than for most export commodities due to expected production increases in importing and exporting countries.

Rice.—Prospective increases in dollar exports will be limited by United States export prices, shortage of dollars in importing countries, and large rice supplies available in short-currency countries.

Total exports, however, will be down substantially for wheat and rice and slightly for cotton. In evaluating these reductions, we should consider that substantial quantities of wheat, cotton, and rice were exported under special Government programs in 1956–57, and that 1956–57 cotton exports included some cotton representing demand deferred from earlier years.

3. About the same dollar but smaller total exports:

Tobacco.—Prospects are not bright, assuming United States tobacco will be available at not less than the support level due to encouragement being given foreign tobacco production as part of the continued drive to cut dollar expenditures.

Senator SPARKMAN. Thank you, Mr. Ioanes.

Prof. Glenn L. Johnson, department of agricultural economics of Michigan State University. We are glad to have you, Mr. Johnson.

Proceed in your own way, sir.

STATEMENT OF GLENN L. JOHNSON, DEPARTMENT OF AGRICULTURAL ECONOMICS, MICHIGAN STATE UNIVERSITY

Mr. JOHNSON. Despite the surpluses which are in prospect for the next few years, farm output will have to expand 25 to 40 percent in less than 20 years. This expansion exceeds, in absolute terms, any previous expansion of the United States farm economy for any similar period of time. And, at the end of these 20 years the farm economy will have to be prepared to continue to expand its output. Inter-

national tensions further underscore the importance of not becoming overconfident about our ability to produce farm products.

While there is considerable surety that these expansions can be accomplished, positive steps to encourage production will continue to be required in the future as in the past. All forecasts that surpluses will continue for the next few years, at least, are based on the assumption that conditions will be favorable for expanding production and that efforts will continue to be made to develop and adopt new technologies.

The past period of production expansion which comes the closest to being as large as that required in the next 20 years occurred from 1942 to date. That expansion was based primarily on improved technology and specialization. Production was maintained despite a heavy movement of labor out of farming through the use of labor saving equipment. It was increased through the use of land saving technology, specialization and increased scale of operations.

The capital required to finance the substitution of equipment for labor and to expand production came from a number of sources. Among these sources were capital gains to the extent of almost $90 billion during the 1942–51 period and unusually high wartime farm incomes.

In the years ahead, both better technology and more specialization will be required. More specifically, technological advances will be needed which will make it possible to bring more land into cultivation and increase production per acre and per animal unit. With the upward trend in nonfarm wages and earnings and the current low earnings of labor on commercial farms, new labor saving technology will be required, not so much to expand production as to increase labor incomes (see p. 90 of Policy for Commercial Agriculture) and maintain production despite movements of labor out of farming.

In recent decades, geographic specialization has occurred within agriculture. Also, individual farmers have specialized in the production of particular crops and livestock products. Still further, the farm economy has dropped production of (1) many marketing services, (2) much of its production of power units (horses), (3) fuel (horse feed and stove wood) and (4) building materials and equipment in order to specialize in the production cf grains, forages, livestock and livestock products. Each time farmers drop the production of a less profitable enterprise and use the freed resources to produce more profitable products, the overall productivity of the resources used by farmers increases. The same is true when they diversify by picking up production of a new product; in fact, any profit maximizing adjustment has this effect as long as we measure output by usual methods.

Specialization encourages the adoption of new technologies and new technologies encourage specialization. Both tend to lead toward larger farms in terms of volume of business and often in terms of acreages operated. Since specialization, adoption of new technology and larger businesses are often necessary conditions for each other, it is difficult to distinguish their separate influences. Governmental controls which prevent expansion in output per farm generally interfere with all three. Thus, care is required in the years ahead lest governmental controls prevent expansion of production.

A necessary condition for expanding production through specialization, larger businesses and of technological advance is the possession of money. Farmers may save it from earnings, inherit it, borrow it get it through capital gains, or receive it in the form of Government payments and grants. Data presented by Grove and Koffsky (Policy for Commercial Agriculture, Subcommittee on Agricultural Policy, Joint Economic Committee, 85th Cong., November 22, 1957, p. 90) indicate that postwar earnings of the average commercial farm operator's family do not permit extensive savings. Tabulations of capital gains and losses due to inflation indicate that during many past years of rapid expansion in production such capital gains exceeded net farm income even though those incomes reflected high wartime prices. Without capital gains it may be too much to expect incomes from marketings—at peacetime price relationships—to provide the capital base for the required expansion in production. Currently, for instance, financial arrangements are growing up to provide capital to agriculture for specialization and adoption of new technology. Among these developments is what is known as vertical integration. In the broiler producing industry, for example, specialization and the adoption of new technologies are being financed by organizations in position to tap the main corporate capital markets of the Nation. Along with acceptance of such financing goes surrender of certain managerial functions while the ownership of new farm resources may tend to pass into the hands of nonfarm people. If we don't like this it is well worth noting that vertical integration is not the only way of financing technological advance and specialization. Farm cooperatives could do it; so could Federal farm credit agencies.

There are important decisions to be made on how to expand production in the years ahead. We need more land and labor-saving technological advances, more specialization, increases in the size of farm businesses, and probably, revised capital structures to finance these changes.

Such changes can modify the structure of American agriculture profoundly. How we organize our farm economy to get the expansions required in the next 20 to 40 years will determine what kind of farming system we have. In any event, some people will benefit while others will suffer.

Neither economics, as a science, nor economists, as scientists, are in position to evaluate the alternatives open to us in a quantitative scientific sense. We are simply not able to measure how much one person is benefited in terms of how much another suffers and, hence, cannot tell if the net result of a change is plus or minus. The nonquantitative evaluations which are to be made will be made by the sweat of the brows of political and agricultural leaders who will consider the political power of affected groups, the opinions of respected leaders and organizations and the "facts" and predictions served up by scientists, in addition to ideals, customs, and traditions.

Some of the criteria to be considered in making these evaluations include:

1. Our responsibility to future generations.
2. Our need to be able to back up our Nation in its international endeavors with ample supplies of food and fiber.

3. The set of values associated with the family farm idea—individuality, frugality, self-expression, agricultural fundamentalism, thrift, independence, and so forth.

4. Equality, long expressed somewhat inadequately, perhaps, in the parity idea.

5. Freedom.

6. Justice.

These are some of the relevant criteria (and the subcommittee is more aware of these and other criteria than a college professor) to be considered in deciding how and what kind of support is to be given to development of technical research. Similar criteria will be relevant in judging what kind of financial structures should be developed, what kind of financial structures should be prevented from developing, how large farms should be permitted or encouraged to become and what kinds of specialization should be encouraged and prevented.

Thank you.

Senator SPARKMAN. Thank you, Mr. Johnson.

Prof. James T. Bonnen, department of agricultural economics, Michigan State University.

STATEMENT OF JAMES T. BONNEN, DEPARTMENT OF AGRICULTURAL ECONOMICS, MICHIGAN STATE UNIVERSITY

Mr. BONNEN. Thank you, Mr. Chairman.

I was asked to address myself to the balance that we can expect between production and consumption in American agriculture by 1965.

Chronic, not temporary, overproduction plagues American farming today. Since 1949, with the exception of the Korean war period, farm production annually has exceeded commercial domestic and export needs by an average of 8 percent. The largest annual surpluses have occurred in the food grains (primarily wheat) where production has exceeded domestic and export needs by 50 percent. Next largest is cotton with a 20 percent imbalance; feed grains and oil seeds have exhibited an annual imbalance of 10 and 9 percent respectively. Tobacco has averaged 6 percent and dairy products 4 percent per year.

What are the possibilities of eliminating this imbalance between consumption and production by 1965? If there is no war or major depression, consumption per capita can be expected to grow about 4 percent while population should reach 190 million persons by 1965. These factors combine to lift total food consumption about 20 percent between 1955 and 1965.

Crop yields and the efficiency of feed utilization are expected to increase from 25 to 30 percent over the decade. Increases twice as large as this are physically possible. However, if consumption grows only 20 percent while yields and feed utilization efficiency expand 25 to 30 percent, it is obvious that agricultural resources will have to be shifted toward more extensive uses and some inputs reduced or the Nation will face even greater overproduction. This is all the more obvious when one takes into consideration the large surplus stocks and the excess production capacity of 8 percent per annum already in existence at the beginning of the decade 1955–65. If there are no adjustments in resource inputs an 8 percent excess of capacity combined with an increase of 25 to 30 percent in yields and efficiency of feed utilization will result in an output of farm products 15 to 20

percent in excess of 1965 consumption levels. This is a clear indication that the pressure of the surplus problem is growing and is likely to continue growing through 1965.

Before an equilibrium can be obtained important inputs will have to be reduced and the mixture of inputs reorganized. Cropland will have to be shifted to pasture uses reducing harvested acreage by about 11 percent or to below 300 million acres. In general, far more extensive use of land inputs is necessary. Farm labor force will very likely have to be reduced from the 1955 level of 6.7 million persons to slightly below 5 million by 1965.

Attempts to balance farm production and consumption simply by moving large amounts of one resource, such as land, out of agricultural production are doomed to failure. Other resources are simply substituted for land and identical or even higher levels of production result. The same may be said for proposals that see a solution in moving only labor out of agriculture. The substitution of capital for labor and land has been a characteristic feature of agriculture's technological and organizational revolution. Indeed, it appears that restrictions on land inputs have, in some cases, accelerated this revolution.

Due to these pressures on agriculture and the resulting changes, the number of farms in the United States will probably decline from 4.7 million in 1955 to slightly fewer than 4 million by 1965. The average size of farm will increase 20 to 25 percent. The family farm will still characterize American agriculture.

Examine some of the pressures being placed on the future balance between production and the consumption of particular farm products. Crop yields and the efficiencies of feed utilization are expected to increase 25 to 30 percent over the decade 1955–65. This involves an increase of 32 percent in the yield of cotton, 11 percent in the yield of wheat, 24 percent for corn, 43 percent for grain sorghums, and 24 percent for soybeans. Efficiency of feed utilization can be expected to increase about 12 percent in feeder cattle production, 8 percent in hogs, 5 percent for egg production and 10 percent for poultry meat. These increases are due only in part to the technologies of genetic improvement, more complete use of improved pesticides and fertilizers, and other technical innovation. Of equal or greater importance are the organizational changes such as a continued shift toward the more efficient areas of production, further specialization of farm enterprise, more complete adoption of continuous materials handling as the size of the farm enterprise increases, and also changes in both the management function and in the capital and credit structure due to vertical integration. It is easy to see that the supplies of farm products are still likely to be excessive in 1965 unless very significant changes are made in the organization and intensity of use of the resources going into agricultural production.

Total consumption is expected to expand by 20 percent between 1955 and 1965. This is the result primarily of having 15 percent more mouths to feed. In addition, per capita consumption will expand. With no war and no depression a 25-percent growth in income per person can be anticipated. This greater income combined with expected changes in tastes will bring about a net increase of 4 percent in the per capita consumption of food. However, consumption per person varies widely by commodity. The significant per capita increases are expected in livestock and poultry consumption.

The per capita consumption of chickens can be expected to increase 32 percent and turkeys 24 percent, eggs will increase 6 percent, beef and veal consumption per capita will expand 7 percent, while pork expands only 1 percent. No expansion can be expected in lamb and mutton consumption per person and the per capita consumption of all dairy products will likely decline about 5 percent. Major declines will occur in wheat, potatoes, and tobacco consumed per person.

There are many potential technological and organizational innovations, the rapidity of development and ultimate impact of which we have no way of evaluating. These include such possibilities as (1) applications of atomic energy which may or may not come to fruition by 1965, (2) the use of solar energy, (3) artificial photosynthesis, (4) economic production of fresh water from sea water, (5) applications of growth regulators such as gibberellic acid to crop and pasture production, (6) microwave and radiation techniques of food preservation. At present it also is not possible to know the extent and impact upon agriculture of vertical integration. Partial allowance has been made in the estimates of livestock feed utilization efficiencies, but a rapid pace of vertical integration, such as occurred in the broiler industry, would result in much higher estimates, particularly for hogs.

A continued imbalance between production and consumption appears to be the most likely occurrence for 1965. The major imponderables in the situation are war, depression, and explosive organizational and technological innovations that are impossible to anticipate accurately today. Whatever are the uncertainties it is clear that for 5- to 10-year policy planning purposes the present surplus of production must be considered a chronic not temporary problem.

Thank you, Mr. Chairman.

Senator SPARKMAN. Thank you, Mr. Bonnen. Mr. Carl P. Heisig, Agricultural Research Service, United States Department of Agriculture.

STATEMENT OF CARL P. HEISIG, AGRICULTURAL RESEARCH SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE

Mr. HEISIG. Thank you, Senator Sparkman.

I was asked to take a look similar to Mr. Bonnen, but about 10 years beyond, about 1975, and to make some appraisal of the possible direction and general degree of adjustment in major crop and livestock items that would likely be needed to balance output with market demand by about 1975. I have also taken a look at some possible implications of these adjustments on land use, size of farms, number of commercial farms, use of labor, and other production resources.

As Mr. Daly indicated, the volume of farm output needed by about 1975 may be 35 to 45 percent greater than the record output of 1956 and 1957 if a population of about 230 million and a high-employment, peacetime economy is assumed. Projected needs indicate about 40 to 45 percent more livestock production and perhaps 30 to 40 percent more crop production than in 1956 or 1957. Because of our current surplus situation, however, more of the increases will need to come in the second than in the first decade.

Our chief means of getting the production needed by about 1975 probably will be through increases in crop yields and improved

efficiency in the feeding and care of livestock. Probably no more than a sixth of the additional production needed by then will come from expanding the acreage of cropland. Although positive efforts may be needed to fill these needs, particularly in the second decade ahead, it appears that during the next 20 years our production problems may continue to center around the need for adjusting the use of agricultural resources and the pattern of production to changing market outlets, rather than on an all-out effort to raise our production capacity.

Under peacetime conditions and with increased emphasis on adjustments in use of agricultural resources, the following changes can be expected: (1) The possibility of sufficient increase in demand during the next generation to provide a better balance between production and market requirements. But the current problems of unbalance may continue to be acute, at least during the next 5 to 10 years. (2) We can expect a continuation of the trend toward greater commercialization in agriculture, with high cash costs of farming and high investment requirements per farm and per farmworker. (3) Agricultural products probably will be supplied by fewer but larger farms, with a continuation of the trend toward farm consolidation. (4) We can anticipate a continued movement of low-income farm people into nonfarm jobs and a consequent increase in amount of resources used and of agricultural incomes of those who remain in agriculture.

It is possible to be fairly optimistic about the longer range outlook for farming if we can manage to work our way out of the current surplus situation and reestablish a reasonable balance between output and market demands. No one can know how rapidly new innovations may be developed and how technological advance will affect production response. It is possible that production may continue to press on market outlets for many years, with consequent pressure on farm prices and incomes. Many difficult problems of adjustment lie ahead. The question is not so much whether we can produce food enough, but whether we can obtain the necessary readjustments in agriculture at reasonable cost and with net farm incomes comparable to those in other occupations. We need a great deal more research directed toward improving our knowledge of needed and profitable adjustments in farming, and of the probable impacts of economic change on the number and kind of future opportunities in agriculture.

Senator SPARKMAN. Thank you, Mr. Heisig.

That completes the presentation of the papers. We will proceed with the questions.

Representative Talle.

Representative TALLE. Thank you, Mr. Chairman.

I was interested in your statistics, Mr. Koffsky. That is a difficult field in which to work, is it not, when you have so many kinds of farms and they vary from farm to farm and community to community, and region to region? You have differences in climate, differences in growing seasons. So I assume you find it a rather difficult thing. Do you have a cutoff for lower income farms in your statement? You excluded a number; did you not? Did you not start with a certain income figure

Mr. KOFFSKY. Mr. Talle, the break between the high production farms and the low production farms was the $2,500 annual value of

sales. Those that were above that we considered to be high production farms, and those below, all the rest of the farms were then called low-production farms.

Representative TALLE. Yes; thank you.

Mr. Benedict, I was very much interested in your statement about what constitutes good housekeeping as I call it. It is rather difficult to determine just how much stock should be held; is it not?

Mr. BENEDICT. Yes.

Representative TALLE. I think we have a case of that sort right now. That early heavy snow that came, you know, in the Middle West caused much of this year's marvelous corn crop and also soybeans to be left unharvested in the fields, and the net effect will probably be that the corn products processing industries will find that much of this year's crop is too moist for use. So they will have to depend on crops in previous years.

Mr. BENEDICT. Yes; I think that is an important point. I believe we must revise somewhat our ideas as to what is a normal carryover. If we go back to the 1920's, which is about the last time we did not have direct Government interference in these matters, the commercial carryovers were rather modest, say, 100 to 200 million bushels of wheat, perhaps a similar amount of corn and 2 or 3 million bales of cotton.

I think, with our larger population and the changed world situation, that just ordinary prudence requires that we maintain fairly large carryovers and that part of that will have to be done by Government and should be done by Government.

The feed situation, for example, can run into quite a severe pinch with just 1 or 2 years of bad crops. We had a very severe pinch in 1936 so far as corn was concerned and again in 1947. I think in general livestock grower sentiment has shifted toward being favorable to larger carryovers than would have been considered normal a few years back.

We could have again, say in 2 or 3 years, a pretty light crop, as we had in 1934 and 1936. Our reserve situation would change very quickly in the event of something of that kind. Of course in a war situation it might be worse.

Representative TALLE. I have not felt so worried about surpluses as some people have. I suppose I am wrong. But I would rather have too much than too little.

Mr. BENEDICT. I agree. I think there are at least four aspects of the problem here under discussion that tend to be somewhat underemphasized. If I may take just a minute, Mr. Chairman, I would like to mention those. I think this committee has made a very great step forward in separating the problem of the small farmer from that of the commercial farmer. This has come out more clearly in the two separate approaches that this committee has made than perhaps at any time before.

But one of the things that seems to me underemphasized is that we tend to take the period 1947–49 as normal and compare the present situation with it. If we use parity prices and parity incomes as a criterion of surplus or deficit we were actually in a deficit situation in the 1947–49 period up to 1949. Both farm prices and farm incomes were above parity during the late 1940's, until 1949. Consequently, we are comparing with what was by all odds the most favorable period

that American agriculture has ever experienced for a similar length of time.

The second point I would mention is that we may be unduly pessimistic about our ability to make some of these adjustments. We actually did not start to make any adjustments worth speaking about until 1953. We were still trying to maintain production in the late 1940's and, just as we were about to shift gears, the Korean war came on and gave another stimulus to production. Consequently such amount of adjustment as has been made has occurred mostly since 1952. That adjustment has been rather large in wheat and cotton. Corn is perhaps the exception—some of the other feed grains even more so. Now, the other thing that I think tends to cloud the issue, and I am quite sure some of my colleagues do not agree with me about it, is that we still are adjusting ourselves to a great historical change in agriculture. We are in about the second or third decade of a major industrial revolution in agriculture and if we look back to the amount of time it required to adjust to the urban industrial revolution in the early 19th century we realize this in itself is a slow process. We have mechanized agriculture in the last 30 years. We have not fully digested that change yet.

Representative TALLE. Thank you, Mr. Benedict.

I would like to ask the gentlemen from the Department of Agriculture how the barter program is coming along, that is, exchanging American farm products for products from abroad as we need them.

Mr. IOANES. Mr. Congressman, as you know, that program really did not get underway until Public Law 480 was passed, and in the 3 fiscal years, 1954–55 through 1956–57, the total volume of business was about a billion dollars. The volume has dropped off since the spring of this year, when the policy was changed in order to encourage the movement of commodities under that program into those markets where the exports of commodities would be in addition to United States commercial markets.

So the direct answer is that it has been reduced substantially.

Representative TALLE. I would like to turn now to something which was mentioned this morning, if I have time, Mr. Chairman.

Senator SPARKMAN. Go ahead, Representative Talle.

Representative TALLE. The chairman and I were talking about this just before we started.

All of us realize that the demand for food is inelastic. Beyond a certain point we do not eat anything more. But of course people do change diets as they did in the twenties. Because of the shortage of meat during World War I there was a shift toward vegetables and fruits, and it took some time to get back to more meat eating and so on. So there can be a considerable shift in consumption. Now, I wonder how far we have gone in the way of increasing demand by finding new profitable uses for farm products.

Mr. DALY. The only new work I know of in this area is a committee set up to investigate industrial uses, and so far as I know the magnitude of possible takings would be small. In any event at this stage they surely would be relatively small. I am thinking of industrial alcohol and industrial uses of that kind.

Representative TALLE. Is there not a possibility that profitable new uses can be developed? Furthermore, if farm products are not so

used in manufacturing and processing, then nonfarm products may be used. In other words, synthetics will be developed.

Mr. DALY. That seems to have been the case with cotton in the fiber market, where the price has been held relatively high. It encourages synthetics. I think that is possible.

Representative TALLE. It seems to me sensible to devote time to research, as a matter of self-protection, for the purpose of finding new profitable uses for farm products.

Mr. DALY. I think so. Yes, I would say so. We surely should exhaust the possibilities in that area.

Senator SPARKMAN. My attention has been called to the fact that this will be discussed in Thursday's panel.

I should like to say a word or two in explanation of Mr. Talle's comment about our discussion before the session began. I did not have time to argue it publicly. He referred to consumption of farm products as being inelastic and I argued that we ought not to accept that as being true so long as part of our people are undernourished, not getting enough to eat, and certainly so long as we are not doing too much, I am afraid, in the field of research for new uses and new methods of disposing of farm products, not only in this country but in all parts of the world.

Representative TALLE. Mr. Chairman, probably we should discourage——

Senator SPARKMAN. Do you agree with me on that?

Representative TALLE. I agree that consumption can be increased both at home and abroad. Perhaps also we should discourage advertising that promotes "slimming."

Senator SPARKMAN. Is that all, sir?

Representative TALLE. Thank you very much, Mr. Chairman.

Senator SPARKMAN. Congressman Mills.

Representative MILLS. Mr. Chairman, I have read the papers in the compendium written by members of this panel. I have also followed very closely this afternoon the summaries of those papers given to us.

I gather I would not be in error if I concluded that the prospective market position of agriculture as they analyze it is not very good. Is that what you are saying?

Mr. DALY. Relative to other kinds of products the demand for farm products does not expand rapidly. I would not say that the expansion which we have projected is greatly different from what we have had in the past. That is as far as domestic requirements are concerned. We can have some increase in per capita consumption but generally total requirements depend on population growth.

Representative MILLS. I am not criticizing what you said. You tried to tell us what you thought were the facts as you could interpret them for the future.

But I had in mind the question of whether or not in making these projections of a continued imbalance between supply and demand, both on the domestic and the foreign fronts, you were taking into account considerations which this panel said this morning were necessary for the agriculture of the future. In other words, are you assuming for purposes of reaching your conclusions about this imbalance that there will remain in agriculture about the same number or the same percentage of total available working people? Are you assuming

a continuation of existing programs which we have on the books? And what other assumption do you make with respect to your projection that imbalance between supply and demand will continue even as far in the future as 1965?

What I am getting at is this: You pick out, or some of you have, cotton, wheat, and rice, for example, as being those that perhaps have the greatest prospect of imbalance in the future. Are you in those instances assuming, for the purposes of your conclusion, that the same number of people will be engaged in the production of those crops, that we will have the same amount of acreage, and that we will have the same capacity and so on to produce? What do you conclude with respect to those facets of the overall problem?

Mr. BONNEN. I guess you intended that question for me.

Representative MILLS: I meant the whole panel because all of you have dealt with this imbalance to some extent.

I might say this: I thought the situation was not bright but you have practically scared me into a state of believing that it is dark.

Mr. BONNEN. Perhaps the reason for this is that people have been doing an awful lot of whistling in the dark. In general, over the next 5 to 10 years, the market outlook for many agricultural commodities is not good.

Representative MILLS. Not good?

Mr. BONNEN. The outlook is not good. It looks like production will continue to overrun consumption. That is, annually we will produce more than we can normally consume or export. This does not necessarily mean we cannot get rid of all of it.

We have been doing a pretty magnificent job of getting rid of much of our excess production through extraordinary Government measures. Of course it remains to be seen how long we can do that on a large scale. Some of our friends abroad resent these activities.

To answer your original question, yes, there are any number of assumptions behind the projections of production and consumption. These assumptions are listed on page 145 of the volume of formal papers prepared for this hearing. In my projections, I tried to get at what an equilibrium would look like for the purpose of seeing just how big the potential imbalance is. Since there are a lot of assumptions, there remain a lot of "ifs" in this.

The labor force, for instance, I projected to drop from about 6.7 million in 1955 to somewhat below 5 million in 1965. These, by the way, are Bureau of the Census labor force estimates.

Representative MILLS. Even with that kind of a drop in the available labor force, you still anticipate this imbalance up to 1965?

Mr. BONNEN. That is right, if no other resource adjustments are made. I think one of the most important things that we heard this morning, and I think it is obvious in this panel, too, is that, although many people will have to move off the farm in order to obtain a decent income, this type of movement of labor is not likely by itself to improve the incomes of those who remain on the farm.

We cannot and will not solve either the commercial-farm income or the production-surplus problem in agriculture by simply moving underemployed labor off the farm.

Programs operating only on 1 resource will not solve either of these 2 problems.

Representative MILLS. Let me see if you mean for me to understand that between now and 1965 we can expect, even though we change our programs, even though we have this adjustment in agriculture that was referred to this morning, that we can still expect price to be depressed in the market place by a burdensome surplus or at least an imbalance between supply and demand.

Mr. BONNEN. In general; yes. I think the picture we want to draw from this is that the race between growing population and changing tastes on the consumption side, as compared to the improvement in technology and the increases due to specialization and reorganization of agricultural resources on the production side, is in all likelihood going to result in production exceeding consumption. The disparity between consumption and production will grow, potentially double, if we do no more about it than we are doing at present. It may very well be we will have an equilibrium, as I have attempted to project, by 1965, but it is going to take some doing. It will take more than just trying to move labor out of agriculture. Now, there are some additional assumptions that I would like to point out. We have to assume no war. Immediately upon the occurrence of a war, surpluses become badly needed reserves.

Representative MILLS. No depression on the other hand?

Mr. BONNEN. Yes; it is assumed that no depression will occur. There are some very real questions associated with this assumption that are still unanswered in my mind. Just what would be the impact of a depression on the imbalance between consumption and production? We do not know with any certainty. Consumption would not expand as much as anticipated, but, then, neither would production probably, either.

However, research done by Dr. Johnson, on my left here, would certainly indicate that it is not a simple problem, and that, if you did seriously affect the asset structure of agriculture over a depression, we might have a balance by 1965, although it would be a balance achieved at the expense of the—well, perhaps at the expense of bankrupting a lot of people out of agriculture. It would be a very painful balance, in other words.

Representative MILLS. You reached the conclusion, then, that our present programs are not doing enough to bring a proper balance between supply and demand.

Mr. BONNEN. Certainly, I have assumed, as you indicated, the same general framework of our present agricultural policy. I could not assume anything else. But you are right in that I am saying that, unless the restrictions are more strenuous, unless we are much more careful in the design of programs, and we make much greater effort to cut production, production is going to continue to exceed consumption.

In this respect, I think we have 2 problems, not 1. I do not think you are going to solve the commercial-farm-income problem in agriculture with the same tool with which you attempt to redress the balance between production and consumption. These are distinct problems, requiring distinctly different tools for solution.

I think this is obvious in part from Drs. Koffsky and Groves' table on page 86 in the compendium of papers for these hearings, which shows that, despite the tremendous exodus of farms and farmers from the low-productivity portion of commercial agriculture, the

incomes of the high-productivity sector did not increase. This is something a number of economists have thought for some time, but it is the first time that I, for one, have seen any statistics that substantiated it. I think it is a very important contribution to the facts of the situation.

Representative MILLS. Mr. Benedict.

Mr. BENEDICT. I would like to comment just briefly on another aspect of this, not so much from disagreement with Dr. Bonnen's view, but because I do not think this phase of it has been brought out. I would agree that the potential he indicates is there. We can have this excessive production. I think it is less certain that we shall have it. I think it should be emphasized that these are projections, not predictions. The validity of those projections depends, of course, upon the representativeness of the period used as base for them.

We came into the 1940's with a tremendous backlog of technological knowledge which had not yet been put into use. We had then a period of about 11 or 12 years in which there was every incentive and every opportunity for these innovations to be put into effect as rapidly as possible. It is, to quite an extent, that 10- or 12-year period that we are using in making these projections. There are some factors that are working the other way.

One of those that has been pointed out is that the amount of cash cost in agricultural production now is much higher, proportionately, than it used to be. That fact, in itself, is apt to make agricultural production more sensitive to prices than if costs were mostly of the noncash type. So, I would expect farmers to be somewhat more sensitive to unfavorable prices in the future than they have been in the past. They now have to buy gasoline; they have to buy tractors; they have to buy a good many other things which they did not have to buy in earlier periods.

We may be overemphasizing what some people would call an optimistic outlook in respect to our food-production possibilities. Some of the older of us can remember back to the days, in the early part of this century, when there was quite a lot of concern as to whether we were going to be able to increase production fast enough to keep up with the growth of population. That situation changed along about in the 1920's.

These projections do not take much account of the possibility of prolonged droughts and wars and things of that kind. On the other hand, of course, a serious depression could throw the balance the other way. But I do think it is rather important that we not regard these as predictions unless we take full account of the assumptions on which they are based.

It is entirely possible that we may not introduce new technologies as fast in the next 10 to 15 years as we have done in the last 10 to 15 years.

Senator SPARKMAN. Mr. Heisig.

Mr. HEISIG. Yes. I would just like to supplement what Dr. Benedict said. I think there are some specific bits of evidence that can be pointed to right now that indicate some slowing up in the adoption of some of these new technologies. For instance, in the case of fertilizer, where we had an increase over the past 15 years or so of about 3 times, the use of fertilizers in the last 2 years has stayed just about at the same level. Also, with the lower farm incomes of the

last 2 years, we have seen a considerable drop in the amount of machinery purchased by farmers. We see some of these things beginning to show up already, which may suggest that, while there are these vast potentialities. if the income situation is not favorable, farmers do respond by reducing their investments.

Looking ahead further down the road, I think the situation will be quite different if we see the kind of developments continue to occur that we have seen in the past 15 years with respect to shifts toward larger farms. As I remember the figures, in 1940 we had about 900,000 farms which produced $5,000 or more value of sales, on a 1954 price level basis; by 1954 that had moved up to 1,300,000 farms. In other words, many of the farms with smaller incomes were beginning to move up into larger income categories. If you project the rate of shifts that have occurred of this kind to the next 20 years or more, it is entirely possible that we might have 2.2 or 2.3 million farms in this higher income category of farmers. So, while there may be real problems, it is entirely possible that with this larger volume of output that is going to be required there will be far more farmers with the potentiality to be in the favorable income categories than we have today, even with this prospective large increase in output that may be coming along.

Representative MILLS. Unless there are further comments, that is all, sir.

Senator SPARKMAN. Congressman Curtis.

Representative CURTIS. Mr. Chairman, I have just one point on this that I am not sure that I understood correctly. Two of the panel seem to think the rate of increase in productivity is slowing down now. Is that what I understand?

Mr. HEISIG. My comment was that there are indications that farmers, with the low incomes of the last few years, are slowing down in the rate of increase in use of such things as fertilizer, farm machinery purchases, and so on, and if this continues we might expect a lower rate of increase in farm output than we have seen in the past 10 or 15 years.

Representative CURTIS. Of course, if you had continual increase in irrigation and some of these other things that increase production—this vertical integration that we talk about, which is now going into pigs, I understand—that would indicate productivity might continue to increase. It might slow down in one area. I wonder whether the panel tends to agree that we can look forward to a slowing of the rate of increase in productivity, because I think that is a very important factor.

Mr. BENEDICT. May I just clarify my comment on that before the other panel members take up?

I did not want to be understood as making a positive prediction that it would slow down, but I raised some question as to whether it would continue at this fast rate of recent years. It will be a mixed situation. Some of these things will be coming in faster and some will be coming in more slowly. But if we take a thing like the use of fertilizer, which was almost nil in many of the large farming areas back in the 1920's and the 1930's, we have had tremendous yield increases which were due to quite an extent to increased use of fertilizer; but it does not follow that it pays a farmer to keep on adding more and more fertilizer. It does not necessarily mean he will get the

same proportionate increase by adding another 200 or 500 pounds. This is a cash cost and if the price situation is not attractive to him he will not keep on increasing his inputs of cash items of that kind. This has been quite a revolutionary change. But some of the others, as you mentioned, will probably become of increased significance.

Mr. BONNEN. I think there is an important distinction to be made here in whether we have continued prosperity or a depression in farm prices. If we have a continuing and deep depression in farm prices, then changes in expectations and farm liquidity and asset structure is certainly going to have an effect on the inputs going into agriculture, and thus on production, too.

Representative CURTIS. Yes.

Mr. BONNEN. As Mr. Hathaway pointed out this morning, there appears to be a relationship both to production and yields over past cycles.

Representative CURTIS. Take, for example, this business that is happening in the industry of vertical integration. I think it was your paper that pointed out where capital was coming from outside farm sources. I know they raise more chickens in the city of St. Louis in old warehouses than they do in any rural county of Missouri. Maybe it will just go out of what we have been referring to as the agricultural sector of our economy.

Mr. BONNEN. This is really Dr. Johnson's question. He has done research on some of these problems.

Representative CURTIS. I think it was his paper; yes.

Mr. JOHNSON. I am not sure I can answer the question, but I think I might summarize the position of the panel about as follows. It seems to me that what we are saying is something like this: Up until about 1965 or so, increases in production are in the cards. We can look at the technological advances available, the present capital structures and see these increases in output.

Beyond that date, as we go further into the future, things become more and more a matter of choice. We can make choices, for instance, about how much support we are going to give to the development of new technologies in our various research programs. We can make choices about what kinds of capital institutions we are going to permit to develop, and how much support we are going to give to those that are in existence. We can even change our institutional arrangements to influence how large our farms get. We can influence the amount of specialization which occurs among regions, between the farm and nonfarm sectors and among farms by handling allotment programs and this sort of thing in different ways.

Beyond that 10 years, I am quite sure that there are decisions which would keep production in line with supply and, for that matter, some which might bring about shortages.

Representative CURTIS. There is one other matter I would like to be sure I have got clear. That is the discussion of the increase in the market for agricultural production. The panel is in agreement that there will be an absolute increase in the demand for farm produce? And the only question has been whether the percentage increases will keep up, that is, percentage of the gross national product, or whatever you want to tie it to, the relation of agriculture in importance to other products. But agricultural products, themselves, there will be an increased demand in the absolute; will there not?

Mr. DALY. Yes.

Of course, agriculture is a declining proportion of total output. Because of the very inelastic demand for farm products, demand does not expand as rapidly as demand in the nonfarm sector; so agriculture does become a proportionately smaller part of the total in a growing economy.

Representative CURTIS. Yes.

One of the things that complicates the understanding, I believe, lies in the fact that at the same time we increase productivity we require a less labor force to produce the increased amount.

Mr. DALY. Say demand in agriculture may be increased one-fourth as rapidly as in the nonfarm sector. Yet technological developments in agriculture are probably just as rapid. In the last 10 or 15 years they have been a little more rapid than in the nonfarm sector. That of course creates this situation.

Representative CURTIS. One factor to throw in is that agriculture does industrialize. It has similar economic problems to the other industrialized sectors of private enterprise, and I was going to raise this question: It frequently becomes a question in the nonagriculture sector, as productivity increases where do the gains from that go, to capital, to labor, or to the consumer, or how is it apportioned? And, to date, it seems to me most of the discussion in the agriculture sector is an assumption that all increased productivity passes to the producer and very little to the consumer.

Am I wrong in that statement?

Mr. BONNEN. It has long been observed that most of the increases in productivity in agriculture have been passed on to the consumer.

Representative CURTIS. A lot of them have; yes. I am talking about our discussions in the panel papers. Would it be presumed that increase in productivity, part of it at any rate, would be passed on to the consumer, or is it going to remain in the agriculture sector through maintaining the price? In other words, your unit costs as productivity increases becomes lower. But if you maintain a fixed and rigid price, the attempt would seem to be to pass all gain from productivity on to the producer.

Mr. JOHNSON. Without price supports of some sort, I am quite sure most of us would agree that the benefits of increased productive efficiency would pass rather quickly to consumers. Sometime in the past I made a study of burley-tobacco support programs and, with the price supports then in effect for burley, reached the conclusion that burley-tobacco producers were able to retain for their own benefit a considerable amount of the income produced from improved burley-tobacco technology.

Representative CURTIS. I want to make it clear I am not arguing the case pro or con. I am just trying to bring it out so I can examine it. I might be the very first one who would say, under the circumstances, that that is economically sound. Then I want to go now to the next question, if I may, that I had in mind: The income of the farm sector has been measured. In fact, there are some papers that refer to the set of statistics that we have used to measure farm income. Yet several of the papers have pointed out that, actually, a good bit of the income that comes to the agricultural sector is measured in what we have traditionally thought of as capital gains.

What attempt or what information is available toward the measuring of the full returns to the agricultural sector, if a great deal of the income does come in what we call, under our tax structure, capital gains?

I hasten to add this: In Great Britain and Canada, although they do not tax capital gains, they have entirely a different definition. What we regard as a capital gain they regard as ordinary income. So, this definition of capital gain is more a tax definition than it is an economic definition, and what I am seeking to learn is what measure we might have of the income that comes to the farmer. It would be a combination of what we regard as income and, also, capital gains.

Mr. JOHNSON. Dr. Hathaway's paper, which was presented this morning, contains a tabulation of some such estimates, and the paper which I have in the compendium contains data taken from Dr. Hathaway's table. The capital-gains figures are our estimates of the increases in the value of assets held by farm people due to price changes only. Presumably increased values due to changes in physical quantities have been removed. This was done, however, by using a number of indexes and adjustments, not all of which are entirely accurate. As you could see when you looked at those figures, the total net income of farm operators, plus capital gains and losses, presents a much different picture of farm income than the one which we ordinarily have when we just look at the net income of farm operators.

Representative CURTIS. Yes. That is why I wanted to emphasize that. This needs emphasis; that the only kind of farmer who gets that is the landlord and, therefore, it becomes important to throw into the discussion the percentage of ownership.

Mr. JOHNSON. No.

Representative CURTIS. Am I wrong there?

Mr. JOHNSON. I forget the exact figures, but I would guess that approximately 40 percent of our farmers are renters.

Representative CURTIS. Yes.

Mr. JOHNSON. And that, say, half of the total income which they produce goes to them. Thus, about 20 percent of the total net income figure goes to renters. If we look at the capital gains on livestock and on crop inventories held, we will find that capital gains on livestock and crops held by renters amounts to a rather sizable portion of their income.

Representative CURTIS. Yes.

Mr. KOFFSKY. May I ask one question?

Representative CURTIS. Yes.

Mr. KOFFSKY. I believe these capital gains and losses include the value of land?

Mr. JOHNSON. They include the value of land.

Mr. KOFFSKY. They include the value of land, and this capital gain only becomes realized when the farmer sells out. Do you see?

Representative CURTIS. No; they would be realized through his credit position.

Mr. KOFFSKY. Yes; through credit.

Representative CURTIS. There are many ways it could be realized, if it is an asset.

Mr. KOFFSKY. Yes, but I think this does not rightly belong in the income estimates.

Representative CURTIS. How can you consider what is happening to the agriculture sector if you do not interject it? Let us get away from agriculture. A person could have an interest in a business, sell out one business, and go into another. Certainly, the realization of the capital gains there is a very real return.

Mr. KOFFSKY. I do not think this affects the actual return he has for his family living and for his investment. As a matter of fact, it may require a greater investment to get into farming.

Representative CURTIS. For someone else to get in?

Mr. KOFFSKY. Yes.

Mr. JOHNSON. May I give an example? I have relatives who have received these capital gains in agriculture. They find it possible to get along with much smaller insurance programs, for example, than I am able to get along with. They have the security of these gains. They own these assets. They are very real assets to them.

Representative CURTIS. Yes. This is one reason I was leading up to that. Of course, I was very much interested in these figures on page 165, I think they are, in Mr. Heisig's paper, where he points out the increased capital requirements in agriculture. This is an average, of course, and he breaks it down into type of operation. I think this is the Corn Belt. The average investment of the family farm runs up from $75,000 to $100,000 today. The question I was coming around to was, in considering the soundness of the agricultural economy, where does the money, or the finances, the investment for growth come from, and where does the investment for research and development come from? Is it plowed back in, and is there sufficient so that there can be?

I think most of the papers indicate that research and development, to a large degree, come from the Government rather than from the private sector. But, certainly, the growth in production and acquiring machines, and so forth, comes from the private sector, and that requires additional investment. Now, is it coming from outside the farm area? In this presentation of this vertical integration, there is an example where the capital is coming from outside, but I wonder if the panel would agree that, essentially, the growth of our agriculture has been financed by plowed-back investments.

Mr. HEISIG. I think that is right, Mr. Curtis. We have participated in a study of capital formation in agriculture, and, as I recall, something like 90 percent of the additional capital investment over a long period of time has come from farmers' savings and investments and plowing back the returns that they themselves have made, so that most of the capital investment does come from farmers themselves.

Representative CURTIS. Thank you.

Mr. Chairman, I have just one other line of questioning, if I may pursue it.

Senator SPARKMAN. Go ahead.

Representative CURTIS. This is for my own information. I was just trying to visualize this. Our subject this afternoon is the current and prospective market position of agriculture. I was just listing, for my own information, where I thought the farmers had lost markets and where farmers had gained. I would appreciate the panel's comment on this, with any additions, deletions, or anything else, for that matter.

The farmer has lost these markets: Production of horsepower, including the horsepower he used to raise for himself; raw materials for fiber, for example, to synthetics, poultry, broilers, in this vertical integration process, and also some cellulose, apparently. Some of these big companies actually have their own tree farms, and have taken over that operation. There are also the various processings that used to be done on the farms, feed mixing, and so on. The war market, which, although it was a temporary thing, it seems to me that has an impact upon our immediate situation.

Now, on the other hand, I have as the major markets where the farmers have gained, increased population, which has been commented on, and the increase of per capita income, which is a different thing, although collateral. Some things, like industrial alcohol, are a source of new use. Plastics is another source.

I found this: As to the trees as a crop, at least down in some of our smaller Ozark farms, they have actually developed a small degree of tree farming, which formerly they never did at all. Then, of course, there are the foreign markets which I do not know whether it is a plus or minus.

But I wonder if there has been any other comment. I wonder if there are any major areas that I have left out that the panel would like to substitute or one that I might have erroneously included in trying to weigh the markets from the standpoint of what has been gained and what has been lost?

Mr. BENEDICT. Mr. Curtis, I think this works both ways. We have been gaining some in industrial markets but we have also been losing to industrial products. One of the most striking cases is of course in cotton where we have had the substitution of rayon and other synthetic fibers and it has cut in some on our wool market. Perhaps the most striking case is that of butter which we used to use at the rate of around 18 pounds per capita per year. It is down now to about nine. But we are not consuming any materially smaller amount of spreads of that kind: the other 9 pounds is now margarine.

Representative CURTIS. Yes; but that is still an agricultural product so it remains in the agricultural sector.

Mr. BENEDICT. Yes; although it affects agricultural income quite markedly because it is a lower priced product.

One of the problems, I think, from the standpoint of maintaining the market is to keep prices in such a situation that they will not speed up unduly shifts of that kind. That does not necessarily mean, of course, that prices to farmers have to be low enough to meet that competition but I think in the case of cotton, for example, we do need to be very conscious of our foreign market for cotton and the price at which we can maintain at least our current share of it.

Back in the early part of this century we had about 60 percent of that market. Now we have about 40 percent of it. If we keep our cotton prices very much out of line with world prices we will lose some more of it.

We are bridging that gap at the present time by subsidizing the export of cotton. By either that process or by adjustment in price support I do think it is probably in the interest of the American cotton industry and the American cottongrowers to try to retain at least as much of the world market in cotton as we now have.

Representative CURTIS. I had one addition suggested to me that soap fats are being lost through the development of detergents.

Mr. DALY. And rubber-base paints also.

Representative CURTIS. Yes. Those are the factors. I know the panel does weigh these things. Those are the factors that naturally we have to weigh in projecting these markets in 1965 and 1975, and I presume they were taken into consideration.

Mr. DALY. Yes, sir.

Senator SPARKMAN. I think the field has been pretty well covered, but I want to comment, Mr. Benedict, particularly upon your statement. The view was shared in part by some of the others in dealing with these surpluses. It seems to me you have given us a very realistic approach to the surplus when you discussed the amount of reserve that we ought to have and showed that actually all of our surpluses are not so tremendous.

By the way, I notice in regard to cotton you referred to 5 to 6 million bales now in excess supply. Do you know what type of cotton it is we have? I have heard, and I do not know whethe it is true or not, that most of our good staple cotton has been sold and what is left is very low grade.

Mr. BENEDICT. I believe that is true, Mr. Chairman, but I am afraid I cannot give authoritative figures on it. Maybe some other member of the panel can.

We do tend to speak in averages, both on quality and other things. The point I was wanting to bring out was that I think we should not, in the interest of our cotton industry, let our reserves fall as low as they did in 1951. I think we injured our cotton export market by the extremely high prices that came about during that period.

Senator SPARKMAN. Not only did we have high prices, but is it not true we actually had an embargo, in 1951 and 1952 I believe, on cotton?

Mr. BENEDICT. Yes. If we want to maintain a good marketing climate, I think we must, like any other merchandiser, be ready to supply the needs of the market when our product is called for. We were not able to do that at that time. It was due, of course, to a number of factors, including the Korean war. But, nevertheless, we did get down too low, it seems to me.

Senator SPARKMAN. Is it not true that at the beginning of the Korean war we had the same situation with reference to our cotton? We had several million bales on hand but it was a low-grade cotton and we had to place an embargo in order to protect our better grades of cotton?

Mr. BENEDICT. I think this is true; yes. This has sometimes been a factor in the wool market, where we had what seemed to be a surplus of wool on hand but it was not the type of wool that the trade was wanting.

Senator SPARKMAN. Do you recall about the same time you are talking about, when India applied to us for wheat, one of the questions raised in this country was whether or not our reserve was sufficient to make the shipment.

Mr. BENEDICT. I believe so; yes.

Senator SPARKMAN. About 5 years ago.

Mr. BENEDICT. Yes.

Senator SPARKMAN. Did you want to say something on this, Mr. Ioanes?

Mr. IOANES. Mr. Chairman, I am sure you follow cotton in the domestic scene as closely as any of us. But Congressman Curtis said something that interested me. He did not know whether the foreign trade was a plus or minus factor. I think we should keep this fact in mind: that whether it is a plus or a minus, it is big business.

Representative CURTIS. Sure.

Mr. IOANES. The acreage we are talking about in this area for the past year was about 60 million acres, and so it is a big plus factor when you talk about adjustment.

Senator SPARKMAN. Would you mind repeating that statement? What was the extent of our exports?

Mr. IOANES. Yes. I mean to the extent that figure were 20 million or 30 million instead of 60 million, it would become an additional adjustment factor we would have to take into account.

Senator SPARKMAN. I think I saw somewhere the other day that we exported 1 acre out of every 5; is that correct?

Mr. IOANES. Yes.

Senator SPARKMAN. Or 1 out of every 4.

Mr. IOANES. No, sir; it was 1 acre out of 5.

Senator SPARKMAN. One acre out of every five we exported. In other words, 20 percent of our farm acreage was used to produce farm products we sold abroad.

Mr. IOANES. What we are trying to do——

Representative CURTIS. Are you talking about all crops?

Senator SPARKMAN. All crops, everything.

Mr. IOANES. Cropland.

What we are trying to do in our study is give you both sides of the coin. We tried to show you in our comparison what was sold for dollars and what went out in total. In this way you can see the influence of Government programs on total exports.

So, as you look ahead in the years, you see 60 percent of what went out last year, or 60 percent of 60 million acres was paid for commercially by foreign buyers, whereas the balance of 40 percent went out under Government programs. I repeat that even 60 percent of 60 million acres is a lot of acres.

Representative CURTIS. Mr. Chairman, may I correct one thing.

Senator SPARKMAN. Yes.

Representative CURTIS. When I said plus or minus I was thinking whether it would enlarge or decrease.

Mr. IOANES. Yes.

Representative CURTIS. I could not agree more it is——

Senator SPARKMAN. You mean projected over the years?

Representative CURTIS. Yes; projected as to whether it was a plus or minus.

Mr. IOANES. We have a figure showing the total by 1975 for the items we studied. The volume of foreign demand would be slightly ahead of the total exports of those same commodities last year. This does not relate to acreage at all but the physical volume.

Representative CURTIS. I had a question I was going to ask you on that. The percentage of that in relation to, say, our GNP would probably be down, would it not?

Mr. IOANES. Yes, sir.

Representative CURTIS. Even though we have those figures.

Mr. IOANES. Yes, sir.

Senator SPARKMAN. While we are talking about that, let me say just this and I do not intend to be critical; but I have found myself asking this question as the various papers have been presented here today. As you project this program into the future, are you actually suggesting a progressive, courageous program or are you assuming we are just going to continue to run on the same basis we are running now? It seems to me that if there is something lacking in the program presented here today it is that we do not contemplate any bold program that could be devised to solve these problems, and I think that something was said by Dr. Talle in the beginning about a research and development program. I cannot conceive of our talking of a program in the future without at least trying to take into consideration the stepping up of consumption of farm goods. And when I say that, I do not deny, as I said to Dr. Talle awhile ago, that after I have eaten a Thanksgiving dinner, I have all I can consume and I am out of the market. But there are lots of people that are not eating that Thanksgiving dinner in this country.

Can something be done to bring more of them into the market, not only in this country, but all over the world?

Does anyone care to comment on that, or is it just a crazy question?

Mr. BENEDICT. May I say this?

Senator SPARKMAN. All right, Mr. Benedict.

Mr. BENEDICT. I think we do need fairly bold programs, and these should be included. I think though that it would be a mistake to assume that some one line of action would solve this problem. Certainly we should not be content so long as part of our own people are not well fed. That group now is not terribly large. It was in the 1930's. Of course there are some very large groups abroad. But one of the difficulties is that if we were to really help out very much in the low-diet countries abroad, we would have to have a different kind of surplus than we have now. They are not so much in need of what we have to spare. We have a lot of wheat to spare, but last year I spent a little time in Spain and Portugal. They are not well fed, but it is not wheat that they are needing. It is other things. The same way in Italy. So we have some very difficult problems there.

Another aspect of it is that I think we ought to set aside in some way our concern about returning some of our surplus lands to Federal ownership. I know that is not a popular thing to say, but we just went a little overboard in alienating Government lands from Government ownership, and I think the time has come when we should reverse that process. It will not solve the farm problem. It is one of those things that may help. We are going to need very badly in the years ahead more recreation areas and things of that kind. It seem to me rather expensive and futile merely to take land close to the margin out of production for a while but to leave it in a position where it will go right back into production if there is a little extra rainfall or a little extra price. We do have a rather deep-seated conviction among many people in the United States that somehow or other Federal ownership of land is bad. I do not agree with that. Also, with respect to this need to get some of the people out of the agricultural labor force, and this is mainly in the lower income group, I do not think we need to assume that they must necessarily move away from where

they are. There is a tremendous amount of movement of nonfarm activities into the rural areas, and some of those people, if they can get additional jobs and stay where they are, are almost certainly better off than if they were to move into a city. Both types of movement are occurring. I think some of the increase in output per man-hour as shown in the figures is somewhat deceiving because we have a tremendous amount of agricultural activity that has shifted to custom work. Farmers are not doing all of the things they used to do. They are bringing in custom hay balers, they bring in a custom fruit picking outfit and so on. The data pertaining to these things should not be taken as too hard and fast.

Senator SPARKMAN. I am glad you made that point, Mr. Benedict. One thing that impressed me about the chart that Mr. Koffsky presented, particularly for the low-production farms, was the amount of the income that is coming from off the farm. Now, I presume that means that people who are living on the farms are earning that income from off the farms. Is that right, Mr. Koffsky?

Mr. KOFFSKY. That is right.

Senator SPARKMAN. By the way, let me ask you, in that figure, total income, do you include there only what was sold off the farm?

Mr. KOFFSKY. Farm income?

Senator SPARKMAN. Yes, sir.

Mr. KOFFSKY. The crosshatched part there that says "from the farm" includes all of the income from the farm, including the value of the inventory change in that year.

Senator SPARKMAN. Does it include what the family itself consumed on the farm?

Mr. KOFFSKY. Yes, sir, it does.

Senator SPARKMAN. I wanted to be sure of that because I think it often is one of the most valuable parts of income on the farm.

Mr. KOFFSKY. Yes.

Senator SPARKMAN. Of course, Mr. Benedict, there is a lot in what you say. Yet there are areas of the country, and this is particularly true down in the section from which I come, in which off-the-farm employment is simply not available for a high percentage of the people.

Mr. BENEDICT. Yes, I am well aware of that, and I think one of the directions we should take, and this again is a part of the problem, is to encourage to the extent we can the movement of industry into those areas that will make possible more of this part-time off-the-farm work. This has been happening at a very rapid rate in California in recent years. Whole towns have grown up right out in country areas and are employing large numbers of people.

Senator SPARKMAN. I must say I would much prefer that approach over the approach which was presented this morning as to the necessity of getting more people off the farm. If we could get some kind of off-farm sources of income and let the people stay on the farm I think we would have a happier situation.

Representative TALLE. Mr. Chairman, may I mention something that is related to your point?

Senator SPARKMAN. Yes, sir.

Representative TALLE. Our Federal Government is committed to a policy of dispersal of industry, for the reason that it will contribute to our security. That might prove to be helpful.

Senator SPARKMAN. If carried out, it would.

Representative TALLE. Yes. It has not been pushed hard enough to suit me, Mr. Chairman. I have done what I could. Then, the States are doing something and the cities are doing something because they have committees on industrial development, nonprofit organizations which encourage the location of industry in their States and in their cities. That has been done and is being done in my district and in my State as a whole.

There is another factor that can help, namely wise tax policy by our State legislatures. They can do something to encourage industry in their States, if they take into account the wisdom and advantage of favorable tax policy. Bad tax policies can drive industries away.

Senator SPARKMAN. Mr. Curtis.

Representative CURTIS. I just wanted to interject one other matter into the discussion. It possibly will come out in another panel, although I tried to figure out just where. That is the impact of the futures market on this question of the current and prospective market. Our stockpile has, of course, become a sort of a market, but just what impact might the futures market have in here? How much storage have they done in the past if at all? Is it a factor that needs to be considered? Could it be increased at all? One reason I raise it, I happened to attend the opening of a new grain exchange in my own home town of St. Louis and I had to listen to several speeches saying the CCC program had badly hurt the development of the futures market business. I did not know the merits or demerits of it but I thought it was a factor that bore on this subject.

Mr. BENEDICT. May I make just a brief comment on that? I think this question is better suited to the panel on marketing which is coming later in the week, but I might say that this depends a good deal on the firmness of the policies adopted with respect to the quantities carried by the Government. If a Government agency announces a specific plan of disposal and the trade believes it will abide by it, I think it will not have any great effect. The additional supplies that are not being sold do not affect the market very much in the futures sense, but if there is uncertainty, then the size of that holding is a very important depressing influence. This was very well illustrated in the Farm Board holdings of wool in 1930. The trade did not know whether the National Wool Marketing Corporation, would undertake to dispose of its entire stock during that year or whether it would carry some of it over.

We have a very interesting example of a different approach which was used by the British Commonwealth wool industry, what they called the joint operation, just following the war. We came into the postwar period with I think about 2 years' supply of wool in the world wool market. The British Commonwealth group set up this organization to liquidate that carryover. They set it up on the basis of a 14-year liquidation program. Actually, with very favorable conditions, it was liquidated in about 5 years, with almost no adverse effect on the market. That is, it was a very orderly procedure. It is the sort of thing I think we ought to contemplate with respect to our large holdings of current stocks. Get a well-considered and orderly plan of liquidation and announce it and stick by it. But the trade has to be convinced that this has been thought through and that the plan will be followed.

Representative CURTIS. Thank you.

Thank you, Mr. Chairman.

Senator SPARKMAN. Thank you. Mr. Brandow.

Mr. BRANDOW. I would like to ask Mr. Koffsky a very short question.

It seems to me that these farm programs exist very largely because there is a widespread feeling that without them farm income would be rather low and farmers would be pretty hard pressed. However, as I talk with economists who are not agricultural economists I find this questioned a good deal. I think that as policy proceeds there will be increasing attention to the distribution of income in agriculture. Certainly we see that some of these programs which result in large payments to particular individuals arouse a lot of criticism. It seems to me therefore that in the future we are going to need some pretty solid income statistics about agriculture and on a basis where we can make a more precise comparison with nonfarm income than we are now able to make, both with respect to average incomes and with respect to the distribution of income.

I know Mr. Koffsky has done more thinking on this, he and the folks who work with him, than probably anybody else in the country. I wonder if you could give us just a brief word, Mr. Koffsky, on this need for better income statistics.

Mr. KOFFSKY. Thank you, Mr. Brandow.

I think it worthwhile to point out to this committee that a year ago this chart that we have presented here today would have been impossible. In 1956 the Congress did provide us with enough funds to do a nationwide survey on farmers, farmers income, and expenditures according to their economic class. This we have been able to piece together with some previous information from the censuses of agriculture and of population to come up with these figures.

But let me point out that unless provision is made for some expansion in this statistical program we are not likely to have these figures extended beyond this present period nor, if you are interested in what is happening within these various groups of high-production farms and low-production farms, are we likely to get any further than we are now unless we get some expansion in our statistical program.

Senator SPARKMAN. Mr. Talle.

Representative TALLE. May I ask Dr. Koffsky whether the Department of Agriculture is planning to ask for money for this purpose in the next budget?

Mr. KOFFSKY. I do not know whether it will be contained in the agriculture budget.

Representative TALLE. I am a member of the subcommittee on statistics of this committee and I can assure you that you will have my support if you do choose to ask for the money, and I will be disappointed if you do not do it.

Mr. KOFFSKY. Thank you.

Senator SPARKMAN. I think the entire committee would express that viewpoint.

Is there anything further from anyone?

Thank you very much, gentlemen.

We certainly appreciate your fine cooperation and the fine studies that you have presented to us.

The subcommittee will stand in recess until 10 o'clock in the morning.

(Thereupon, at 4:34 p. m., Monday, December 16, 1957, the subcommittee recessed, to convene at 10 a. m., Tuesday, December 17, 1957.)

POLICY FOR COMMERCIAL AGRICULTURE

ITS RELATION TO ECONOMIC GROWTH AND STABILITY

TUESDAY, DECEMBER 17, 1957

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON AGRICULTURAL POLICY OF THE
JOINT ECONOMIC COMMITTEE,
Washington, D. C.

The subcommittee met at 10 a. m., pursuant to notice in the old Supreme Court Chamber of the Capitol, Senator John Sparkman (chairman of the subcommittee) presiding.

Present: Senator John Sparkman, Alabama; Representative Wilbur D. Mills, Arkansas; Representative Henry O. Talle, Iowa; Representative Thomas B. Curtis, Missouri.

Also present: John W. Lehman, acting executive director; George E. Brandow, economist; Dr. Reed L. Frischknecht, legislative assistant to Senator Arthur V. Watkins.

Senator SPARKMAN. Let the subcommittee come to order, please.

I might say in the beginning that I have a letter from Senator Homer E. Capehart, making suggestions to the subcommittee.

(The letter referred to is as follows:)

DEAR SENATOR: I sincerely hope that the Agricultural Policy Subcommittee of the Joint Economic Committee, now holding hearings, will give serious consideration to S. 724, a bill introduced by me and consponsored by you—

and I might interject, by a good number of other Senators—

for a greatly stepped up program of research into increased industrial uses of farm products.

You know as well as I do that we have spent billions of dollars in trying to reduce the farmers' production and have scarcely made a dent in it. I have come to believe that it is fortunate that we have not succeeded in reducing this production because it would depress the entire economy relating to agriculture. Fewer farm implements would be sold, fewer automobiles, fewer trucks; the railroads and the trucks would haul less agricultural products; there would be less labor employed either on the farms or in the related industries.

If I am not mistaken considerable opposition from southern business interests was expressed at the last session against the soil bank because of these reasons. I think it is high time that we quit treating our greatest national asset negatively and began pursuing it affirmatively.

The need is not to shrink our farm production but to make use of it. The President's Commission on Increased Uses of Agricultural Products composed of some 200 eminent agricultural scientists, farm experts, and representatives from industry made a several months' study of the subject and rendered a very comprehensive report.

Senator Curtis has sponsored a bill to implement the Commission's report and I heartily endorse it. It differs from S. 724 only in administrative detail and the amount to be made available.

You will be interested to know that for the past several months my office has been sending a weekly letter to 1,700 newspaper and magazine editors and other interested persons with a view to promoting S. 724 and our response has been gratifying.

Sincerely,

HOMER E. CAPEHART.

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I thought reading that letter might provoke some thinking on our part in the discussions this morning.

This morning we resume hearings on policy for commercial agriculture. In two sessions yesterday we discussed the adjustments required of agriculture as the economy develops, changes currently needed to bring agriculture into balance with its markets, and adjustments likely to be needed in the future.

There was general agreement among our panelists that in the years to come, fewer people will find employment in agriculture, farms will be larger, and some shifts in kinds of products produced will be needed. Yesterday's discussions were all in broad terms, applying to agriculture as a whole.

In this session, we want to see what these changes mean in terms of actual farms and farmers in different sections of the country. Our topic is Adjustment Problems Faced by Commercial Farmers in Major Geographic Areas. We would like to see in some detail the principal difficulties farmers are up against in trying to stay abreast of changing methods and shifting markets.

We would also like to know whether the trend to larger farm size is going to change agriculture from a predominantly family-farm one to large-scale farming.

The 7 participants in this morning's panel are from 7 regions of the country. Each is in close touch with the farming of his region and well informed about it. The fine papers they have contributed for these hearings amply demonstrate that.

Gentlemen, we are delighted to have you with us this morning. I am looking forward to our discussion. Our procedure will be to have a 5-minute summary of each panelist's paper, taking the panelists in the order in which they are listed in the schedule of hearings.

When the summaries are completed, the members of the subcommittee, in turn, will ask questions of the panelists. I hope we can proceed in an informal manner and that each panelist will feel free to discuss other papers as well as his own.

We will begin the summaries of papers with Prof. L. C. Cunningham of Cornell University, department of agricultural economics.

Mr. Cunningham, we are glad to have you with us, and we will be pleased to hear from you at this time.

STATEMENT OF L. C. CUNNINGHAM, DEPARTMENT OF AGRICULTURAL ECONOMICS, CORNELL UNIVERSITY

Mr. CUNNINGHAM. Thank you, Senator.

Farmers' problems in this region are in the nature of continuing shifts in choice of farm enterprises, in number and size of operating units and in ways of controlling costs, particularly of mechanization.

One of the most important adjustments taking place in northeastern agriculture is the concentration of farming into fewer and larger operating units. Family farms continue to dominate the picture but they have changed from self-sufficient to commercial operations. More than ever before, modern commercial farms depend on nonfarm consumers for their market and on nonfarm industry for the goods and services used in production.

Despite the shift to larger farms that has already taken place there still remain many units that are too small to compete successfully in present-day farming.

According to the 1954 census of agriculture, 11 percent of the farms in the Northeast had fewer than 10 milk cows and nearly 50 percent had less than 20 milk cows. Such small herds are not likely to be able to withstand the economic pressure for increased efficiency.

Active industrial employment in the region provides alternative job opportunities to farmers who have not or cannot make the necessary adjustments to increase their efficiency.

However, these same industrial circumstances mean strong competition for the hired and family help on commercial farms. Operators of these farms have turned to mechanization of the enlarged farming operations to increase the output per worker. This is the most important way to compete successfully for labor.

Increased size of farm, more mechanization and a relatively high price level all make the dollar figures of investment in the present-day farm business materially larger than a generation ago. To illustrate, on crop and livestock farms in western New York, the average capital per farm jumped from about $18,000 in the late twenties to nearly $40,000 in 1954.

The mechanization of farming in this region, although well on its way, is far from complete. It is one of the more fascinating and glamorous changes in present-day farming. The hazards are many, however. Much more economic research and education are needed to fit the machine to the job in northeastern agriculture.

The market orders for the New York milkshed provide the means for overcoming the lags in price movements with changes in the supply of and demand for milk, and for protecting producers against violent price fluctuations. This role by government has been generally successful in the Northeast.

Farmers of the Northeast will continue to make the adjustments described. The rate of their progress can be speeded up by these conditions:

(*a*) Active research and educational programs, especially those concerned with mechanization.

(*b*) Reasonably free market prices of products sold and of goods and services purchased.

(*c*) A minimum of Government production controls.

(*d*) Reliable sources of and suitable kinds of farm credit.

Senator SPARKMAN. Thank you very much, Mr. Cunningham.

Next we have Prof. Earl O. Heady, of the department of economics and sociology, Iowa State College.

STATEMENT OF EARL O. HEADY, DEPARTMENT OF ECONOMICS AND SOCIOLOGY, IOWA STATE COLLEGE

Mr. HEADY. The Midwest adjustment problem stems from (1) rapid technological advance which has allowed output to increase at a slightly faster rate than demand and results in the substitution of machine capital for labor, (2) farm birthrates which cause the labor supply to exceed opportunities in farming, (3) an average farm size which is somewhat short of fully realizing the main cost advantages of modern mechanization, and (4) a consumer demand situation which causes a greater price premium to attach to the cost items of farming,

than to the products of the region. Technology has increased the physical productivity of labor and has decreased the amount of labor required to meet food demands.

Also, labor has been costly relative to machinery in the postwar years, causing a substitution of capital for labor. With a higher price premium on the cost items of agriculture than on farm products, incomes of many farmers have been low relative to employment opportunities outside of agriculture.

Generally, the situation must be viewed as one in which the consumer is saying, through the pricing mechanism, that he wishes fewer resources used in producing farm products of the region and more devoted to nonfarm products. A given collection of resources will continue to return less income in farming than in nonfarm opportunities until better balance is attained in the interindustry allocation of resources.

Although the Midwest is one of the Nation's most productive farming areas, an important proportion of its farms have incomes below nonfarm family incomes of the region. The amount of capital resources used per farm and per worker is too small to allow comparable returns for most farms in the census economic classes IV, V, and VI.

After deducting interest on capital, the gross value of output per worker in 1954 was:

Economic class:	*Gross value of output per worker*
I	$10,862
II	7,059
III	4,182
IV	2,430
V	1,313
VI	254

Farmers in economic classes IV, V, and VI have relatively small farms and little capital per worker. Farmers in these groups, if they are to have returns on resources comparable to those of nonfarm employment opportunities, are faced with the problem either of expanding their units or quitting full-time operations.

Included in these classes are especially beginning farmers, older operators moving near retirement or who have experienced economic adversity and middle-aged farmers who started from a low base in capital and experience.

If its structure is to be meshed with economic growth, Midwest agriculture is faced with a shift to somewhat larger farming units with more capital per worker. It is not likely that such shifts need endanger the family farm or greatly change the pattern of agriculture.

The problem more nearly is one of adjusting the resource structure to allow more family farms of efficient size. Consolidation of small, low-income farms can proceed only at the rate allowed by occupational migration and operator retirement.

The major obstacles to adjustment in the Midwest include:

(1) Lack of sufficient long-term economic outlook for farm youth and farm families; too few are acquainted with the pattern of consumer preference and employment opportunities which can be expected under continued economic growth;

(2) Lack of industrial development and nonfarm employment opportunities over much of the region;

(3) The large capital investment required under modern technology for operating farms of efficient size;

(4) An educational system for rural youth which is not geared to the needs of economic growth and a rapidly changing technology;

(5) Vocational guidance and employment services which are of insufficient coverage for current-day needs.

Changes in the number of farms and the capital/labor ratio are not likely to remedy the relative surplus problem in the near future. Consolidating farmers generally use more efficient techniques than do farmers who leave the industry.

Remaining farmers can, of course, gain from a more efficient scale and lower unit costs. Capital items such as fertilizer, insecticides, feed antibiotics, and others are sufficiently low in price that it is profitable for efficient farmers to use more of them.

Hence the region includes three main groups of farmers:

(1) Those who can remain and extend scale, to gain from greater volume and lower unit costs;

(2) Those who may leave to obtain greater income in other employment opportunities;

(3) Those who remain and are unable to expand scale because of limitations in capital, age, health, and similar reasons.

Adjustment trends which result in farm consolidation and further gains in output relative to demand promise no income relief for this third group.

Senator SPARKMAN. Thank you, Mr. Heady.

Now Prof. J. H. Blackstone, of the department of agricultural economics, Alabama Polytechnic Institute. We are glad to have you with us.

STATEMENT OF J. H. BLACKSTONE, DEPARTMENT OF AGRICULTURAL ECONOMICS, ALABAMA POLYTECHNIC INSTITUTE

Mr. BLACKSTONE. Thank you, Mr. Chairman.

Large commercial farms make up 25 percent of all farms in the Southeast and produce 75 percent of all products marketed. They produce 60 percent of the area's cotton and 70 percent of the tobacco. They account for the production of most of the truck crops and fruits and nuts, much of the livestock and livestock products, and most of the woodlot sales.

Large commercial farmers have made many adjustments over the past two decades partly because they operated farms above average in size, above average in general fertility, and generally adaptable to livestock. They had resources for making changes and they were above average in managerial abilities and skills. They were able to finance adjustments out of past savings, current incomes, or credit obtained through well established credit institutions.

While many of these farmers made adjustments about as rapidly as was technically feasible, they still face needed adjustment problems.

Some of the adjustments needed are as follows:

(1) Adjustments in types of farming: The Southeast has long been dependent upon a cash crop system of cotton, peanuts, or tobacco. Some farmers have adjusted from cash crops to new enterprises such as livestock. Others have supplemented cash crops with livestock.

As a whole, control programs with an almost continuous year-to-year decrease in acreage allotments have led to an accumulation of needed adjustments. Still more shifts are needed away from cash crops by some farmers.

On the other hand, some operators need to specialize and expand in cash crop production. The development of specialized systems of production is a trend now underway in the type-of-farming adjustments in many parts of the Southeast and can be expected to continue in the future.

(2) Adjustments in size of farm business: The trend toward larger but fewer farms is expected to continue. Associated with this is the need for shifts to more mechanization, the rapid adoption of new technology, and the use of more capital goods.

Increased production can occur on farms of all sizes of the Southeast. Some of the current problems of adjustment are in the development of a volume of production consistent with demand, and of overcoming the present cost-price squeeze.

(3) Adjustments in the use of available farm credit: Trends in types of farming and size of farms with more mechanization require greater use of credit. This often places adjustment restrictions on established farmers and severe limitations on your farmers.

While credit may be available for the development of a given enterprise, it may not be available for complete farm adjustments.

(4) Adjustments to an urbanized industrial Southeast: The growth of urban areas in the Southeast presents problems in adjusting production for local markets, in labor available for farmwork, in part-time farming, and in costs and availability of some needed agricultural services.

(5) Adjustments to meet specific problems: Individual farmers face such problems as adjusting to full-time or to part-time farming or to nonagricultural employment; increasing output per farmworker, per acre of land, or per unit of livestock; and adjusting to a reasonably free market and seeking a minimum of Government controls.

In many cases, problems related to farm tenure, part ownership, lack of profitable alternatives, lack of managerial skills, age of operator, and many others face individual operators. Woodlots have been largely treated as a sideline. As farmers were faced with making adjustments that required learning new skills, they have concentrated on those that promised more immediate returns.

Adjustment problems faced by large commercial farmers cannot be completely removed from those faced by other farmers. Small commercial farms account for 37 percent of all farms; they produce 20 percent of all marketed farm products (35 percent of the cotton and 26 percent of the tobacco).

Part-time and residential farms account for 38 percent of all farms; they produce 5 percent of all products marketed (5 percent of the cotton, and 4 percent of the tobacco). Adjustments made by these farmers either within agriculture or to a nonagricultural status often influence the kinds of adjustments that may be made by large commercial farmers.

For most farmers of the Southeast, the major problem is to adjust to more agricultural income or to more nonagricultural income. Farmers in the Southeast have not one adjustment problem but

several. Some of these are in the nature of farm problems while others are more of a social, educational, and welfare nature.

Future Government policy should emphasize long-term guides and a minimum of restrictions. Adjustments must be made by individual farmers, but they should be guided by research, education, and favorable public policy.

Senator SPARKMAN. Thank you, Mr. Blackstone.

Now the next speaker is Prof. Tyrus R. Timm, department of agricultural economics and sociology in Texas A. and M. College.

STATEMENT OF TYRUS R. TIMM, HEAD DEPARTMENT OF AGRICULTURAL ECONOMICS AND SOCIOLOGY, TEXAS A. AND M. COLLEGE

Mr. TIMM. The States of Texas, Oklahoma, Arkansas, and Louisiana are presumed to comprise the Southwest. However, many of the same characteristics and therefore, many similar adjustment problems are found in nearby States.

The southwestern region ranges from extremely humid to almost arid climate and has widely varying soil, topographic and vegetative conditions. These physical hazards plus rising production costs and widely fluctuating farm product prices have combined to place commercial agriculture of the Southwest in a relatively high risk situation in relation to its national setting.

Several significant trends underway point up the fact that commercial farmers are making many adjustments now. These trends are: Increased dependence on the general economy, rapid adoption of new technology, larger and fewer farms, greater capital requirements, distinct shifts in types of farming and decided changes in tenure patterns.

Basically, individual commercial farmers are trying to make their adjustments through: (1) the continuing adoption of on-farm technological practices for greater efficiency; and (2) finding alternative off-farm employment afforded by an expanding general economy.

With regard to on-farm adjustments, commercial farmers are making these by gaining control of more farm resources, changing their type of farming, improving farm practices, participating in vertical integration and certain other contractual arrangements.

A number of problems arise and have to be met as commercial farmers try to make desired adjustments. Some of these follow:

1. In increasing the size of business, one may have to purchase or rent more land. Sometimes contiguous tracts cannot be purchased or leased. Rising land prices add to the farmer's woes. Furthermore, he probably will have to increase his use of capital by adding livestock, power equipment, and buildings.

2. In obtaining water for irrigation, adjustment problems differ with location, source of water, and present stage of development. In some areas, the rate of recharge of ground waters is far less than the current rate of use. In other areas where plenty of surface water is available for future development, the problem is complicated by a scarcity of suitable reservoir sites, confused water-right situations, inability to finance construction, and conflicts between increasing urban-industrial demands and agricultural use.

3. Agricultural adjustments are hindered by a lack of profitable alternatives. In grazing areas, changes in size and in combination and quality of livestock are generally the only adjustment opportunities. In crop areas, major shifts in farm organization often are costly, involve considerable risk and, as a consequence, credit institutions are hesitant to encourage drastic changes.

4. A most important adjustment problem to be resolved is the conflict between the necessity for the individual farmer to drive for efficiency through greater total production and the need in agriculture generally to shift resources to more extensive use or out of farming in order to balance production with demand.

5. In adjustment to off-farm employment, still other problems emerge, such as how to keep some of the young, better prepared farmers on the land.

These are some of the adjustments and issues faced by commercial farmers in the Southwest, as I see them.

Then, Mr. Chairman, my final comment which is not included in the prepared statement is this: Our commercial farmers and ranchmen who are practicing good husbandry have a characteristic that is important to me. I believe it is more important to our democracy than the physical and economic characteristics that I have just recited.

This is that they believe that they will come back regardless of adversity. Therefore, those of us who try to be of some assistance to them believe, too, that somehow we will make the adjustment and before too long we will have a more prosperous southwestern agriculture.

Senator SPARKMAN. Thank you, Mr. Timm.

The next speaker is Prof. George Montgomery of the department of agricultural economics of Kansas State College.

STATEMENT OF GEORGE MONTGOMERY, DEPARTMENT OF AGRICULTURAL ECONOMICS, KANSAS STATE COLLEGE

Mr. MONTGOMERY. Thank you, Mr. Chairman and members of the subcommittee.

The topic of my paper is the adjustment problems faced by commercial wheat farmers in the Great Plains. These are the problems of one group of specialized farmers in one particular area. I will summarize the statement.

Wheat is a major source of income in this area, comprising a third to a half of the cash income in much of the area. Wheat is essentially a highly specialized industry, and substantial concentrations of resources of both labor and capital and investment are present, as well as of land, devoted to wheat.

The adjustment problems of the commercial wheat farmers arise primarily from two longtime trends which dominate the wheat industry.

The first of these is the trend in consumption of wheat for human food. There has been a longtime, persistent decline in per capita consumption of wheat as human food. If we go back to 1910, the per capita consumption was around 200 to 210 pounds, and it has now dropped to around 120 to 125 pounds.

This decline in per capita consumption has prevailed through depression, through prosperity, through war and peace. In other

words, it seems to be a persistent trend. The increase in population has about offset the per capita decline so that our total consumption of wheat for human food has remained relatively stable and constant at around 480 million bushels.

The other uses of wheat, such as for feed and industrial uses and for export, have been highly variable, ranging at times up to 500 million bushels for feed and 100 million for industrial use in 1943 and exports of 300 to 500 million in other years.

The other major trend affecting the wheat industry is the increase in productivity, and increase in efficiency. Another way of stating it is, the increase in output per man-hour, also, there is increased yield per acre. There are a number of contributing factors, such as improved varieties, the use of improved tillage practices, summer fallow, and disease and insect control, and some use of fertilizer. But the major factor is mechanization, the application of power to the production of wheat. This has been occurring over a long. period of time, but it was speeded up after World War II. Farmers have found it difficult and sometimes confusing to attempt to adjust to these trends.

There have been a number of confusing situations. For example, there were guaranteed prices to stimulate production during World War I, and also during World War II and the postwar period. At other times we have applied allotments and payments for not producing. Another complicating factor is periods of almost complete crop failures, such as from 1934 to 1936, and, again, small crops from 1953 to 1956.

In contrast to this, we have had periods, such as after World War II, of high yields and high prices which have brought attractive incomes.

One of these trends farmers feel they can do relatively little about individually, namely the declining per capita consumption. To the other trend, more mechanization and increased productivity, farmers have made substantial adjustments.

The changes indicated by mechanization and increased productivity are essentially changes toward larger farms with fewer workers. There are fewer hired workers and fewer people in the rural areas. This has been occurring at a very significant rate.

For example, the number of farms in four States of this area, North and South Dakota, Nebraska, and Kansas, declined by 131,000 during the period 1939 to 1954. This was a decline of 27½ percent. However, the amount of land in farms increased during this period by about 14 million acres from 170 million to 184 million. Also, the average size of farms increased by nearly 50 percent.

The average for these four States went from 350 acres in 1935 to 534 acres in 1954. That is an increase, on the average, of about 185 acres per farm.

This, of course, has been accompanied by an increase in investment in machinery and in land, and a decrease in hired labor. There has been a bidding up of land prices to obtain larger and more efficient operating units.

The other major trend, the declining per capita consumption, is a problem requiring group or Government action, because the individual farmer feels there is relatively little that he can do.

The wheat industry is faced essentially with adjustment to increasing productivity and increasing output per farm on the one hand,

and, on the other, to a declining per capita consumption of wheat as human food.

Senator SPARKMAN. Thank you very much.

The next speaker is Prof. George T. Blanch of the department of agricultural economics and marketing of Utah State University. We are very glad to have you, Mr. Blanch, and you may proceed in your own way.

STATEMENT OF GEORGE T. BLANCH, DEPARTMENT OF AGRICULTURAL ECONOMICS AND MARKETING OF UTAH STATE UNIVERSITY

Mr. BLANCH. Senator Sparkman and members of the committee, in treating this problem, I chose to place emphasis on the problems that are peculiar, at least in degree, to the Mountain States.

Nearly 40 percent of the cash receipts from farming in the 8 Mountain States is obtained from cattle and sheep enterprises. Because of limited moisture, high elevations, or steep and rough terrain, a large part of the land which produces this income has no alternative agricultural use. An additional 14 percent of the cash receipts comes from wheat. Most of the wheatland has no other use except grazing of livestock. The major part of the remaining income, 46 percent, is from crops and livestock associated with irrigated land. The area of land irrigated is limited by the amount of irrigation water available. The physical environment severely restricts the choices open to farmers in the Mountain States.

A large part of the farm products of the Mountain States must find markets in eastern cities or on the west coast. The high, fixed costs of transportation also serve as a barrier to the production of many products, particularly those that are bulky or perishable. This further restricts adjustments in types of farming that are feasible for most farmers.

The absence of a large amount of manufacturing in the region, and the sparse population tends to limit part-time off-farm employment and also shifting from agriculture to full-time nonfarm work.

Farm adjustments in the Mountain States are further inhibited by the system of landownership and tenure. Title to half of the land is vested in the Federal Government, and another 7 percent in State governments.

Much of this land is grazed by privately owned livestock under a system of permits that limits the management decisions of the operator and makes uncertain the extent or duration of his tenure.

The major problem has been the reduction in numbers of livestock permitted and period of time allowed. The problem is further complicated by the fact that much of the land serves as watersheds, recreation areas, the habitat of big game animals, and for timber production.

Laws governing the kind, time, place, priority, and the exchange of water rights often restrict adjustments that would lead to more efficient and socially desirable uses of water. Acreage allotments for wheat, where no feasible alternative use exists, have greatly reduced the efficiency of resource use. Price supports on wheat seem to have largely removed wheat from the feed market. This has added to the

wheat stocks and apparently has had an adverse effect upon the poultry producers in the region by increasing feed costs.

Poultry numbers have been declining in spite of improved local markets. Acreage controls on cotton have the same effects as controls on wheat acreage.

Probably the most fruitful adjustment open to commercial farmers is the enlargement of their farm businesses. Most farms produce too little to be highly efficient or to provide satisfactory family incomes. Reduction in number of farms or the development of additional water resources provide the most feasible methods of enlargement.

The availability of suitable land at a fair price that can be obtained to enlarge existing farms is too limited to make such adjustments easy. The demand for such land exceeds the supply. Also credit is not always obtainable. Such problems at present are beyond the abilities of some farmers to solve.

Other adjustments needed and that can be made by some farmers include the return of some wheatland to grazing. Favorable wheat prices and moisture conditions following 1945 resulted in plowing substantial areas of grazing land for wheat. Some of it is not suitable for continuous wheat production. The biggest problem in this shift is to reestablish a stand of grass.

It is probable that in some areas of short water supply a concentration of the available water on the better soils would be economically and socially desirable. In most cases detailed studies should precede such changes.

Sheep operators have trouble in obtaining experienced and dependable sheepherders. Labor for farm jobs of only a few days' duration also gives difficulty.

The adoption of improved production practices would improve the condition of many farm operators and their families. Fundamental to this is knowledge of available alternatives and how to use them.

Also important is the desire to solve one's own problems. Too much attention has been given to Government programs as the cure-all for farm problems.

Senator SPARKMAN. The next panelist is Prof. Chester O. McCorkle, Jr., of the department of agricultural economics of the University of California.

We are glad to have you with us, Mr. McCorkle.

STATEMENT OF CHESTER O. McCORKLE, JR., OF THE DEPARTMENT OF AGRICULTURAL ECONOMICS OF THE UNIVERSITY OF CALIFORNIA

Mr. MCCORKLE. Extensive shifts in relative demands for agricultural products are projected for 1975. Output requirements commensurate with these demands have been estimated. Anticipated shifts in land use and the impacts of these shifts on land and water resources, factor requirements, size of farms, and business organization and control on the west coast are examined in light of these demands and output projections. Substantial proportions of the national output of products for which demand increases are expected—citrus and deciduous fruits, tomatoes, and vegetables—are currently produced on the Pacific coast. While other areas will undoubtedly

expand the production of these commodities, extensive adjustments in western agriculture are anticipated.

Adjustments in land use in the West must be viewed separately for irrigated and nonirrigated areas. The large number of alternatives and sensitivity of land use to shifts in relative net earnings for the irrigated areas is in sharp contrast to the limited number of alternatives and the relative stability in land use of the nonirrigated areas. Changes in relative prices reflecting demand shifts are important determinants of land-use changes. In the irrigated areas producing a wide variety of specialty type crops, the effects on relative production costs of alternative rates of development and adoption of technology has been, and is expected to be, highly important in inducing land-use changes.

Wheat is expected to remain the dominant crop in Northwest dry-farmed regions though more of the total production will undoubtedly be converted to livestock products. Experience discounts extensive transfer of wheatland in the Pacific region to dry-land range or hay production, even with wheat priced in terms of livestock feed.

The future of citrus production in California will depend largely on the opportunities for expansion elsewhere. Production of oranges in California for processed outlets is expected to decline. Production of winter table oranges is expected to continue to increase. Citrus acreage in southern California faces strong competition from nonagricultural uses of land.

With two-thirds of the present United States supply of deciduous fruits being produced on the west coast, it is anticipated that this area will continue to be a major source of supply. Mechanization of harvest, the logical technological innovation on the horizon, suggests a possible yield reduction but these crops should be strong competitors for land in the Columbia Basin and Willamette Valley and, to a lesser extent, in the Central Valley of California. Further shift from drying to other forms of processing is anticipated.

It is expected that the west coast will continue to be an important source of vegetable production since California alone currently produces nearly one-third of the total value of vegetables in the United States. Increased acreage requirements in the Pacific States will depend on rates of yield increase, changes in ratios of production to utilization, and production increases elsewhere. Production of vegetables for processing is expected to expand in the Columbia Basin of Washington and Oregon and in the Central Valley of California as additional rotation crops. Seasonal production in California for fresh shipment nationally is expected to expand. Seasonal production in the Southern States must be considered.

Field crops, particularly those produced on irrigated land, will be challenged strongly by more intensive crops. Cotton will continue to be the major field crop in California, barring drastic reductions in acreage allotments. Such crops as sugar beets and dry beans are expected to become relatively less important. Feed grain production will depend in part on the future role of livestock in the West and transportation rates. Further transfers of feed-grain acreage to hybrid corn is anticipated. Water availability and cost will affect in large measure the future of feed grains.

Some expansion in output of livestock products on the west coast is anticipated but far less than in proportion to population growth.

Beef, lamb, and pork will be shipped to the West in increasing quantities. The increased need for fluid dairy products will be met by further conversion from manufacturing to market milk production with the needs for manufactured dairy products being met by intermountain and Midwest producers. Dairy production will be intensified. Less feed will be produced on the farm, replacements will be purchased rather than farm-produced and herds will be larger.

Competition for water and land on the west coast is becoming increasingly intense particularly in the most productive agricultural areas. Urban and industrial users can pay more for land and water than can commercial farmers. Nonagricultural demands for land and water resources are expected to lead to increased production costs, particularly for irrigated farms. Rural zoning and legislative restriction on property tax assessment bases are measures that have been taken to protect rural areas and farmers. As yet the acute competition for water found in California does not prevail in the Pacific Northwest.

Changes in aggregate agricultural output and its composition will have a serious impact on factor markets, on the west coast, particularly the labor market. Expanding employment opportunities outside of agriculture have accentuated the seasonal labor shortage, particularly in those enterprises not yet mechanized to a high degree. Further mechanization of fruit and vegetable harvest plus farm enterprise organization changes resulting in a more uniform labor requirement over the year are two adjustments likely to be made. Further mechanization and more intensified crop production will increase capital needs. Lenders are expected to meet these needs though sales contracts, grower-processor integration, or other means of reducing income variation will be strongly encouraged by lending agencies.

Farms in California are increasing in size, and capital requirements per farm are increasing rapidly. Many farmers on small farms have sought other employment, turned to labor-intensive crops or acquired additional land. Hired labor per farm has increased along with farm size and the number of farms operating only with family labor declined by 9 percent between 1950 and 1954. As farm size increases greater use has been made of agricultural specialists and technicians, an increasingly important segment of western agriculture.

Several developments in agriculture in California and, to a lesser extent, in other Western States suggest likely trends in future farm business organization. Specialty crop tenant farmers possessing skills in the production of single crops rent a part of several farms on a rotation basis. Integration of production with processing and marketing is finding widespread application in the West. Of far-reaching significance is the rapid growth of farmer owned and managed processing and, in some cases, marketing facilities. Already prevalent in grapes, wine, vegetables, and fruits, similar developments are expected in livestock production on the Pacific coast. Sales contracts for many crops with private processing firms are extensively used but these arrangements fail to provide the advantages associated with grower ownership and operation of processing facilities. Increased use of purchasing and marketing contracts and integration can be expected in commercial agriculture in the future.

Senator SPARKMAN. Thank you, Mr. McCorkle.

By the way, in the opening statement that I made yesterday morning, I called attention to the fact that by the use of the term "commercial agriculture," we were not referring to big corporate farming that some people think that term to mean, but we were using the term in the sense that the Bureau of the Census uses it.

I wonder if you gentlemen would very briefly define "commercial farming" within that term?

Would someone do that in order that we may all know that we are talking about the same thing?

Mr. BLACKSTONE. In the Southeast we used the term "large commercial farms" to mean economic classes 1 to 4, inclusive.

Senator SPARKMAN. I noticed, Mr. Blackstone, that you referred to classes 1 to 4, and you called them large commercial farms. Now, I noticed in 1 of the papers preceding you, class 4 was put within the small—and I take it more or less uneconomic size—group. That was in Iowa, I believe.

Is that an overlapping there, or is it due to the difference in the type of agriculture.

Mr. BLACKSTONE. In the Southeast you have to include class 4 to get a large enough sample and to approach the definition given us by the committee.

Senator SPARKMAN. Would you give us a breakdown of those types, and what they mean? What are the classifications?

Mr. BLACKSTONE. It is related to income, to farms with $2,500 gross sales or more. In other words, your group 4 is $2,500 and up. In the case of Mr. Heady, using group 3, it would be gross sales of $5,000 or more.

Senator SPARKMAN. I may say for anyone that may be interested, the breakdown is given on page 758 of the compendium.

I think it might be well to read it off: "Class 1, $25,000 and over; class 2, $10,000 up to $24,999; class 3, $5,000 up to $9,999; class 4, $2,500 up to $4,999."

Now, is it your understanding that that means $2,500 worth of farm products sold from the farm? I think it is important that we have that distinction in mind because a great deal of the good that comes to the farm family, particularly on the family-sized farm, is what the family itself consumes on the farm. For my own thinking, I want to know if that is included or if that is excluded in these figures.

Mr. HEADY. I would have to look back at the technical details of the other papers, but I have presented these figures as being cash sales.

Senator SPARKMAN. Mr. Brandow tells me that that is right, and that is the definition that he stated to me earlier. But I thought it was well for us to keep that in mind.

Before I call on the panel members, I have a few questions I should like to ask. I have been very much impressed by all of the panelists, in both sessions yesterday, and those of you this morning, in your general agreement that there is a widespread need to increase the size of farms. I noticed this even out in the Corn Belt where farms are already large, at least in comparison with those with which I am most familiar. There is a widespread impression that many farms in the Corn Belt and in the West, and certainly most of the farms in California, are large-scale factory-type farms. I would like to begin my

questions by asking the panel to go more deeply into this question than it was possible to do in the summaries.

Mr. Montgomery, will you give us something on that?

Mr. MONTGOMERY. Well, the large Kansas wheat farms are essentially family farms, where the owner and his family perform the labor with relatively little hired labor. The trend is for hiring less labor than in the past.

Senator SPARKMAN. And more mechanization?

Mr. MONTGOMERY. Yes. There is substantial hiring of services such as combining and trucking, and some absentee landlords hire other operations such as plowing done. This is done on a custom basis. But it is still essentially an owner-operated business. There are no corporation farms in Kansas; it is illegal for a corporation to engage in farming in Kansas.

Senator SPARKMAN. Would that be true in the corn farming area?

Mr. HEADY. Eventually the same story holds true in the corn farming area. Iowa can be taken as an example. The State was carved out of the wilderness in 160-acre farm units. That was over 100 years ago, and the predominant or modal size is still 160 acres. The average for the State as a whole is about 175 acres. The 175 acres operated with modern technology is a relatively small farm, as compared to the 160-acre farm of 100 years ago, which was then operated by horse techniques and man labor.

A farm of 160 acres is purely a family farm, and one which sometimes doesn't use modern machinery and family labor efficiently. A family on 160 acres with livestock geared only to the feed supply of the farm, is only two-thirds employed, if it can't find other profitable use for its labor. This is true for the other areas of the Corn Belt, outside of a very, very small percentage of very large farms. The typical 240-acre farm is easily a family farm, and uses practically all family labor.

The typical 320-acre farm is still a family farm. In general, as Mr. Montgomery has pointed out, these farms are more nearly family farms than they were 25 years ago; they use a greater proportion of family labor than they did then. Use of hired labor particularly of the seasonal type used in corn harvest, is actually declining.

Senator SPARKMAN. What is the average yield of corn per acre on an Iowa farm?

Mr. HEADY. The average yield over a period of years is about 55 bushels per acre.

Senator SPARKMAN. How is corn selling now?

Mr. HEADY. It has been down considerably this fall, of course, because of the large crop and wet weather.

Senator SPARKMAN. About how much per bushel?

Mr. HEADY. There is some current variation due to quality and wet corn, but it is being quoted at about 95 cents per bushel in central Iowa.

Senator SPARKMAN. Mr. Mills says it is about 55 percent of parity, is that right?

Mr. HEADY. I am not entirely up on parity figures, but that is the approximate level of 95-cent corn.

Senator SPARKMAN. What is the average yield of wheat per acre?

Mr. MONTGOMERY. Around 16 to 17 bushels in Kansas, with very large fluctuations. That is due to moisture, primarily.

Senator SPARKMAN. I noticed you used 20 for 1947, and it is easier to figure, and so I am going to use 20.

Mr. MONTGOMERY. That is a little high for an average.

Senator SPARKMAN. I noticed you used it for years of good crops.

Mr. MONTGOMERY. That was 1947 and 1948.

Senator SPARKMAN. You say the size of the farm is 300 acres?

Mr. MONTGOMERY. There is a wide range there.

Senator SPARKMAN. I thought you gave an average figure?

Mr. MONTGOMERY. The average figure is more than 500 acres. But this will not be all in wheat at any one time.

Senator SPARKMAN. What do you do with the land that is not in wheat?

Mr. MONTGOMERY. In the western part of Kansas, in the dry area, it is a common practice to summer fallow, which is putting half of the land in wheat and leaving the other half fallow or idle to conserve moisture.

Senator SPARKMAN. It is completely idle, and you don't graze it?

Mr. MONTGOMERY. That is right, it is not grazed.

Senator SPARKMAN. What about the California farms?

Mr. McCORKLE. I think that there are some misconceptions about California agriculture.

Senator SPARKMAN. That is why I wanted to ask the question, to see if we can clear up some misconceptions.

Mr. McCORKLE. Even though we have a diversity of products in California, and this makes averages for sizes of farms somewhat misleading, the average size of farm measured in acres in California at the last census was just over 300 acres per farm.

This is an increase of 100 acres per farm in the last 20 years. They are roughly half again as large.

With respect to the measure of farm size in terms of sales, when you raise the types of products that we do on farms in California, it is not difficult for a commercial farmer to amass $25,000 worth of products. For example, a lettuce producer may do this on a relatively small acreage, and be a family-type farmer. I have some information here that may be of interest to you.

Inefficiency in use of resources in California agriculture concentrates on the small farms. That is, those selling less than $5,000 worth of farm products. These farms accounted for 11.4 percent of the farmland in commercial farms, 18.1 percent of the investment in land and buildings, and 22.5 percent of the farm labor. In other words, a quarter of the farm labor in California is on small farms. But they produced only 6.3 percent of the total value of farm products sold.

By comparison, the large farms and these are the class 1 farms with sales in excess of $25,000, comprised only 14.2 percent of the commercial farms. They accounted for 60.9 percent of the farmland, 48 percent of the value of land in buildings, utilized 44.6 percent of the farm labor, and produced 67.6 percent of the total farm sales.

I think this gives you a fair picture of the commercial nature of agriculture in California.

With respect to corporate structure in California agriculture, it is legal for farmers to incorporate. Incorporation is used somewhat more extensively, I suspect in California, than in other Western States or the rest of the United States. I think the primary reason for this is to place the family in a situation to acquire the capital necessary

to undertake agricultural production of specialty type crops, where a great deal of capital is required both in terms of long-term investment and short-term production capital. That is one of the primary reasons. A great number of the incorporated farms in California are still family farms, in that the family will control 100 percent of the stock in the corporation.

Senator SPARKMAN. Thank you.

Now, let me ask a hypothetical question, to bring the economics of this matter of farm size into sharp focus, if I can. Let us suppose a well equipped family can handle a 200-acre farm. We say that a farmer of 100 acres earns a low income because his costs are high. But the income of the man on the 100-acre farm depends on the price of what he sells as well as on costs.

Suppose by some program, prices were raised to the point where the 100-acre man earned a good income. Is this a possible solution of the small farm problem?

Mr. HEADY. It would give the small farmer more income, but it would probably not go far in solving the basic farm problem of surplus under economic growth.

The theme brought out yesterday and the same theme that has been brought out here today, is that we haven't had a sufficiently rapid migration of people from agriculture to take care of the resource returns problem and make it possible for us to get away from ever-increasing stocks or surpluses. This would still be the difficulty because farmers would produce even more at the price level necessary for this income on a 100-acre midwest farm. We might raise the income of the small farmer, but we wouldn't take care of our product supply and resource transfer problems. To the extent that the operator on 240 acres has lower costs, there would be a premium for him to expand his operations further, to have more than 240 acres, with the result that he could pay more for the land and the beginning operator for 100 acres would again be bid out of the market. He would have low returns on his investment at prices the large operator could pay for land.

There would be more premium on this kind of an expansion.

Senator SPARKMAN. I believe it was in your paper, Mr. Heady, that the statement was made that the adjustment of the size of the farms must depend upon the migration of other farmers away from farming. You indicated, I take it, that that is going to be gradual and rather slow.

Mr. HEADY. It has and will be gradual in the Corn Belt. People in the Corn Belt have left agriculture. They have left for three reasons: One is the birth rate on farms. One is current day technology which provides an operating cost advantage for farms of larger size, and has made it profitable for them to buy additional land. In this way, the pressure towards consolidation causes some units to disappear. This, indeed, is a gradual process.

Other people have been drawn from farms by favorable employment opportunities elsewhere. This also has been a gradual process, but it has speeded up in recent years. I think that I emphasized this in my paper: One of the major needs in bringing about adjustments, of the two greatly needed, is the availability of industrial employment.

If industrial openings are nearby, within 30 or 40 miles in an agricultural community, people are much more likely to take nonfarm

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employment, than they are if they have to travel half way across the country to look for employment.

The other need is education so that the farm people and farm youth know the economic opportunities before them. In the Midwest, adjustment in the structure of farming will come particularly from the number of people who enter the industry. It is not new or revolutionary that people migrate from farms. This condition has held true for 200 years since there has long been more people born in agriculture than could find opportunities in farming. Our industrial labor force has been fed from farms. This migration talk sometimes sounds like a revolution, but it is no revolution. Migration from farm to town and city has been the historic flow in the United States.

We simply need a little faster rate of migration than we have had. Again I say that the main adjustment will come from the number of people who enter agriculture. Determining and effecting this rate is quite largely an educational job, a task of providing more information and for mobility of more young people. Change in the size of the farm labor force in the Midwest is going to come mainly from the number of young people who enter farming. In the Corn Belt, the adjustment period will require 10 or 15 years. But, we need to train and educate farmers who will be needed to produce our future food. Good farmers are needed more in the future than in the past.

Senator SPARKMAN. Mr. Blackstone, do you know in the Southeast, according to the figures from the United States Department of Agriculture, we have lost 1 million people from the farms each year during the last 5 years. I would like to ask you two questions: First, where have they gone, and secondly, what effect has it had on the size of the farms, or the nature of farming?

Mr. BLACKSTONE. Senator, in terms of farm people, I assume that figure you give is correct. In terms of number of farms in the last 5 years, we have lost about a half million farms as such, that is farm families. They have gone, I would say, in two directions.

Many of them, of course, have stayed in the South and the Southeast locally, whereas a large group have gone all over the United States. They are found now throughout the country.

In terms of the effect on size: As 1 farmer leaves, someone else takes over that farm—some remaining farmer has taken it over—and so within that 5-year period our average size of farm has increased approximately 20 to 30 acres, or from about 76 acres up to about an average of 106 acres now. So the size of the farm increases as other people leave the farm. Does that cover the point you had in mind?

Senator SPARKMAN. Yes. So the adjustment is taking place, leaving aside the question as to its desirability.

Mr. BLACKSTONE. Yes, sir.

Senator SPARKMAN. Which I must say frankly I question.

Mr. Timm, do you have a comment on that?

Mr. TIMM. I would like to comment on the migration of farm people, and the emphasis that is being put upon vocational opportunities. This worries me a little bit. I have a feeling that the vocational advisers from industry and business may do a better job if we are not careful, than those of us who are interested in keeping the best young men in particular farming occupations.

Therefore, I would just like to add these comments, largely a matter of emphasis. With vertical integration taking place, contract

farming, farms getting larger, and becoming more specialized—I don't think that we know too well or can even guess the kinds of farm jobs we are going to have and the farm opportunities for intelligent farm youth.

First, I think we have done a better job of pointing out to farm youth the opportunities of becoming a doctor, or a lawyer, and the like.

Secondly, I don't think that we have done an equally good job of finding the kind of young man with the type of training and experience that today's agriculture needs. For example, and this is an extreme example, the dean of our school of agriculture was sent to school by his parents to study medicine. But he had been a farm boy, and he was also interested in animal nutrition. It turned out that he didn't have adequate information about animal nutrition. But in college, he found out about it, and today fortunately for us, he is one of the top animal nutritionists in the country.

I think this has happened many times over. A person may specialize in some business pursuit, and at the same time could specialize very well in an integrated farm system.

This is the only point I wanted to make.

Senator SPARKMAN. Does anyone else wish to comment on that? If not, I will pass the questioning over to Dr. Talle.

Representative TALLE. Mr. Chairman, first of all I want to say "thank you" to all of you who are cooperating with us so well, and I desire to compliment our staff economist, Professor Brandow, who was able to arrange the kind of program we have from day to day during the course of the hearings on a most vital subject.

Now turning, Mr. Cunningham, to your last words, will you explain what you mean where you say, "Reliable sources of and suitable kinds of farm credit."

Mr. CUNNINGHAM. There are 1 or 2 points that I had in mind. A good deal of the farm credit in the Northeast, of course, is carried by commercial banks. The commercial banks generally in their short-term credit operations, really mean short-time credit. That is 3 months or perhaps not more than 6 months.

But within the trends in agriculture, the need on the part of the farmers for a somewhat longer time operating credit is coming into the picture quite rapidly. The classical example with us is the so-called bulk milk tank, which may cost $3,000, and the purchaser of this bulk milk tank on his farm cannot expect to pay for this item in 6 months.

He needs perhaps a 3-year term for this. This is just one of the examples.

With the changes occurring in the capital structure of farming, the credit needs are also changing, and I feel there is a bit of a lag in the sources to meet this new need.

Representative TALLE. Thank you.

In the matter of shipping farm products, I would like to ask the gentleman from California, are your citrus growers using these large tanks for shipping citrus juices? I think they are used in Florida.

Mr. MCCORKLE. It is mostly in Florida, as I understand it.

Representative TALLE. That is a fairly recent development, is it not?

Mr. MCCORKLE. Yes, sir.

Representative TALLE. It is turning out to be a very profitable thing for them?

Mr. McCORKLE. I am not too well acquainted with the way it is being done, but one would certainly expect this to be profitable, because systems of this type have been profitable in other agricultural products.

Representative TALLE. Apparently there was something about the citrus juices that required special kinds of tanks, and they discovered what they needed to do to succeed?

Mr. McCORKLE. That is correct.

Representative TALLE. Mr. Heady, is there very much custom work in the State of Iowa? I know that there is some.

Mr. HEADY. There is a considerable amount in harvesting corn, small grains, hay, and in fertilizing and spraying. This latter type has increased since the war.

Representative TALLE. That would be helpful to the small farmer, would it not?

Mr. HEADY. It decreases the investment necessary in machinery. This custom can spread even wider than it is at the present time as an aid in lowering unit costs on small farms.

Representative TALLE. I think that works out better, than to have a group make a joint purchase, because it is hard to find 3 or 4 farmers who take the same care of machinery, and not all of them would have equal use for a particular machine.

Mr. HEADY. It is one way by which smaller farmers can obtain the cost advantages of modern machines. They can hire these machines, operated on a large enough scale by custom operators to obtain low per unit costs.

Cooperative ownership of selected machines might allow the same thing. But cooperative ownership does not always work out well, because of such decision as who uses the machine first.

Representative TALLE. Thank you very much.

What did you say, Mr. Blackstone, about woodlots? Did you say they are considered a mere sideline in Alabama?

Mr. BLACKSTONE. Throughout the Southeast, that has been largely true. It is a historical type of thing. Our farmers to start with, of course, were so busy with cash crops that they did not have time for the woodlot, and then as they got into a period of having to make adjustments, they concentrated on making adjustments that promised immediate returns. It is only now that our farmers are beginning to treat woodlots as part of the farm program in the way they should.

Actually in the Southeast, of the woodland we have, only 52 percent of it is farmer owned. But of the average farm, half is woodland, so that the farmer has enough woodland that it should be treated as a farm crop, so to speak, with good management.

It is relatively new in the sense that they are beginning to handle the woodland as they should.

Representative TALLE. It is relatively new in the State of Iowa too, I may say.

Senator SPARKMAN. May I interject a thought there?

Mr. Blackstone, I am thinking of a newsprint plant, and they tell me that in the 11 counties surrounding that plant, they pay more to the farmers for pulpwood than the cotton crop amounts to in the same counties.

I think that bears out your statement, that they are beginning to pay attention to it.

Mr. BLACKSTONE. That is right.

Representative TALLE. Iowa State College is helping us a great deal in that very thing. Scientific farm forestry is developing in northeast Iowa. That is a good development. I think perhaps Georgia has done more than you have done in Alabama.

Mr. BLACKSTONE. I think that is right, sir. Of course, the pulp industry and the paper mills, and so forth, started over in that section and then just spread out. I think better woodlot management is a thing that is coming, with the commercial timber industry that is moving into the Southeast.

It started along with industry. It is being promoted by industry, as well as being aided by research and education.

Representative TALLE. Mr. Blanch, you said something about the desire on the part of the individual to succeed. I think that is a basic fact to remember. Will you repeat that? You made the point at the close of your paper.

Mr. BLANCH. I believe the point I was trying to make is that, a large number of farmers have been convinced that there is not much they can do for themselves. It is a matter of looking to the great white father in Washington to take care of them.

I believe, myself, that that has tended to restrict the use of their own initiative in working out their own problems, and adjusting to changed economic conditions.

Representative TALLE. I agree with you 100 percent.

There is a statement at the end of your paper, Mr. McCorkle, that I wanted to ask you about, it is on page 4. You say there:

> Of far-reaching significance is the rapid growth of farmer-owned and managed processing and in some cases marketing facilities. Already prevalent in grapes, wine, vegetables, and fruits, similar developments are expected in livestock production on the Pacific coast.

Who organizes that, and how is that done?

Mr. MCCORKLE. The groups that so far have made the most progress in this direction started out as cooperative organizations of producers. They have been able to contact and organize producers. At the present time as one example we have producers in 4 or 5 of our big fruit industries organizing as a single cooperative and purchasing canneries, so that they will be sole owners of the canning facilities for their products and thereby will have a voice in the management of the processing and marketing.

Another type of development we have had is illustrated by some of the grape producers who have purchased and are operating wineries, and contracting with sales agencies who were formerly in the wine-making business to market the wines on a nationwide basis.

Representative TALLE. May I ask Mr. Heady something about the Iowa State Farm Adjustment Center? Will you tell us about that?

Mr. HEADY. Iowa State College has established an organization called the Agricultural Adjustment Center. It is designed to take a deeper look at and provide solutions for exactly the kinds of problems which are being examined in the several panels presented at these hearings.

It arose out of the concern of college administrators and farmers with a farm problem which has been with us for some long period of

time. We have come to realize that the problem is not a temporary sort of a thing, but is rooted deeper in economic growth. Perhaps in the past farmers had considered the problem to be tied to such things as depression in the total economy.

The purpose of the Agricultural Adjustment Center is to focus intense research and educational effort on the farm problem stemming from economic growth. Its goal is to suggest remedies which will put resource returns in agriculture on a par with those of other industries. It seeks to determine the basic causes and nature of the current farm problem, and the steps needed to remedy the same.

The college staff presented seminars which are now available in published form and deal with the problem now before us. The State legislature provided $100,000 to the college to initiate deeper investigations into solutions to the problem. You might say that there are two basic goals in our activities:

One is to develop an activity which does in fact help to bring adjustment to agriculture. The other is to carry forward technical advance in the manner of the past. We need continued technical, scientific, and economic development in the United States. It is a fact that we now have some important worldwide competition. Thus we must continue to expand our effective resource base, and make the best use of our resources by increasing their productivity.

Part of our national strength rests on increasing the productivity of resources through technical advance. We need to put emphasis on technical development in the future. We thus increase the effectiveness of our labor force. But in technical development, improving the productivity of agricultural labor, without helping agriculture to adjust, we have lost a large amount of our gain in labor productivity.

In other words, if we make labor more productive but leave labor stranded in agriculture, we have only created a problem. Our hope is to facilitate these gains through aiding transfers, and at the same time help create a profitable agriculture which provides resource returns comparable to those of other industries.

We would like to provide income and informational guides for people to help them realize the most effective and satisfying life, whether in agriculture or elsewhere. Many different solutions to the farm problem are suggested. We hope to make fundamental analyses of these, and other avenues as well. What are the opportunities in demand improvement versus adjustments of the kind which are being discussed here? What positive programs are needed and are politically possible?

We hope and expect that it will be a national center. Iowa State College does not expect to solve this problem by itself. It does hope to provide a center which will facilitate the work of people in other land-grant colleges, the United States Department of Agriculture, and other universities. The problem is national in scope and can be solved only in working on the problem cooperatively, both in research and education.

Representative TALLE. Thank you for your statement. It is a development that I heartily commend and venture to predict will bring fruitful results.

Mr. Chairman, here we have capable scholars from New York, Iowa, Alabama, Texas, Kansas, Utah, and California. I want to say

thank you to them again. I believe this is a wonderful way to proceed in our study of vital problems.

Senator SPARKMAN. Congressman Mills, will you proceed?

Representative MILLS. I am always enlightened when I have an opportunity of discussing important matters of Government with these eminent economists. I might say, however, that I am not always left with a sense of pleasure when I hear discussions of facts and realities, as most economists deal with them.

But, I am left in this instance with a few questions in my mind, and I hope that I am not anticipating or getting ahead of the plan or study we have under way.

All of the members of this panel have suggested that adjustments in every area of the United States in agriculture are needed or that they should be made. I am left with this question in my mind.

How can Government best proceed to help farmers in making these changes which you suggest should be made; and as a part of that are our present programs doing enough to assist? Where are they helping and where are they hurting?

Am I going ahead too far? It would be most unusual if I got ahead of a panel.

Senator SPARKMAN. I think it is a very appropriate question and I would like to hear the answer to it.

Representative MILLS. Would you start off on that Mr. Cunningham?

Mr. CUNNINGHAM. The point of your question is, "How can Government help?"

Representative MILLS. How can Government proceed to help the farmers in making these changes, and I include in that question 2 or 3 other questions. Are present programs doing enough to assist? Where are they helping, and where are they hurting?

Mr. CUNNINGHAM. First, I would like to say that I feel very definitely that Government is doing two things that are of great help to agriculture. I hope you realize I am speaking off the cuff and these are thoughts that occur to me on this basis.

One, the thing that Government is doing to maintain overall economic stability, which of course is helpful to agriculture as to all other industries—this is not new but I think it is important to keep in mind the nature of agriculture is such that major changes in price level are very serious to them. So this matter of the things that are being done to maintain economic stability, I think, are great contributions to this industry.

Secondly, as I tried to refer to in my paper but very briefly, the work that Government is doing in research and education in agriculture, although it seems to bring it to problems for example of imbalances in the production picture, over the long swing the research and education that is made possible by Government is a great contribution to this industry.

Other industries tend to support their own research programs. Agriculture because of the fact it is organized in relatively small units asks Government and Government does sponsor these efforts.

Just briefly, I feel personally that the efforts on the part of Government to curtail production through controls hampers the solutions that we are seeking. Basically, as I see it, agriculture is trying to

keep abreast of the output per worker which is rising rapidly in all industry of America.

To keep abreast of this increasing output per worker, farmers are rapidly making the changes which this panel and yesterday's panel described. Individual farmers are becoming increasingly specialized in their fields, and they are enlarging their operations mainly to increase their output per worker.

Some of the controls that are in existence in agriculture seem to me personally to defeat this purpose.

Frankly, these are the only ones I think of, just off-the-cuff that loom large in this question of how Government can help.

Representative MILLS. I had in mind, in addition to the programs of Government which you discussed, the specific programs for agriculture. As you know, we have programs that endeavor to support price, that endeavor to control production, that endeavor to dispose of surpluses.

You have discussed the one on controlled production. Do the other two programs contribute to the making of these adjustments or do they deter the making of these adjustments, in your opinion?

Mr. CUNNINGHAM. I have the feeling that supporting prices, and some of the production controls are, of course, interlinked. To the point that we attempt as Government to support prices of individual commodities above the actual market levels, we are, I think, delaying the actions that are necessary.

You mentioned the accumulation of surpluses. To me they are the aftermaths of supporting prices at uneconomic levels. Although we talk much about the surpluses, I thought a fine perspective was given to them yesterday by one of the panelists.

It led me to the thought, which of course is not original, that if we were by some miraculous method able to get rid of our three major surpluses of corn, cotton, and wheat overnight, but did nothing else in our agricultural programs, these surpluses might accumulate again. So to merely get rid of the surpluses I think, should not be our fundamental objective.

Representative MILLS. All right. Would you proceed, Mr. Heady?

Mr. HEADY. I would comment on both sides. Our present agricultural programs, are they helping the adjustments needed? My answer is a qualified no. They are not helping greatly in the adjustment, although they provide some major income supplements. In some areas, they retard adjustments of the basic type needed.

A commodity discussed on this panel is wheat. In order to receive income supplements through present Government programs, the farmer must remain in agriculture producing wheat. Some people would have shifted out of wheat if we had not had programs of the kind in existence over the last two decades. And it has been profitable to produce more wheat even with governmental control programs.

As we look at the pattern for the country as a whole, we have a patchwork program which developed over a 25-year period. The basic framework of our current program was started for an entirely different purpose. Perhaps it was suited for the original purpose for which it was built, supplementing incomes during national depression. A few more elements were added during wartime. We have added a few more elements since the war. As I see it, our overall farm program is not at all designed to accomplish the thing that we are discussing here at the table.

In general, people have to stay in agriculture and they keep on producing price-supported commodities which are in surplus, to collect the kind of income subsidies which are available. In general, the programs act in the opposite direction of needs, in adjusting types of farming and the resource structure of agriculture.

Perhaps current programs do not retard labor mobility as much as has been sometimes suggested. But certainly, they are not positive aids to the extent that the solutions of the farm program require a shift of resources out of agriculture in some particular locations.

More important than the fact that present programs don't solve the basic adjustment problem is the fact that the same money could be used for positive farm programs which would accomplish much more toward adjustment.

There are many ways by which adjustment could be aided through programs. On the negative side of the current programs, I summarize by saying that current programs accomplish little in solution of the major problems. However, there are some worthwhile elements of current programs.

One is support price programs to promote stability. Of course, price supports do not cover the majority of agriculture in the United States. I think the figure is about 25 percent of the value of agricultural products which are covered by price supports. Price supports do provide income stability for a small amount of agriculture, but not the major part of it. But support prices are being used wrongly, as compared to the more positive opportunities.

I think that we always need some kind of support price mechanism, to take care of the type of variations in output which farmers can't manage. It is fluctuations in weather and the extreme interyear price fluctuations and uncertainty which attend it. We do need some kind of price supports which keep prices from fluctuating too much in going too high at one time and too low at another time for planning and decision purposes.

We have not been using price supports mainly for this purpose, although this can be one of the more important aspects of a program. The main positive thing we can do through price programs is to provide stability in agriculture so that the farmers can plan more efficiently. We do need some kind of price support and storage programs for these purposes.

Representative MILLS. How can you provide stability in agriculture without some Government program which tends to stabilize the price and tends to stabilize production and then a more effective Government program tending to stabilize the costs that the farmers have to pay to produce their crops?

I always understood that net income results from the multiplication of price times volume and subtracting the costs from it; this gives you the net income. How can we bring about greater stability in agriculture if we don't move in the direction of trying to stabilize the price or stabilize the volume and stabilize the costs?

Mr. HEADY. I would be the last to suggest that it isn't necessary to have some kind of a Government program in this respect. I don't know how else we can provide this kind of stability, except through some kind of Government program.

It requires a storage program to take some product off the market in bumper yield years and put something back on the market in

drought years. If we want to stabilize price, so that the farmers can plan more effectively, programs could be devised accordingly.

I know of no other organization which could provide this kind of longer run stability. But there is an essential difference between this kind of a program for stability purposes and the kind of price and storage program we have at the present time.

Price and storage programs aren't being used mainly for these purposes at the present time. They are being used mainly to supplement income. Consequently, we have price levels above the level dictated by supply and demand and consumer preference. This is the thing which gives us huge stocks of agricultural commodities beyond the quantity needed for ever-normal granary and stability purposes.

Representative MILLS. Thank you, Mr. Heady.

Mr. Blackstone, would you care to comment on this question?

Mr. BLACKSTONE. In the Southeast, as was brought out earlier, we have 1½ million farms with almost a million of those classified as commercial. The census tells us that 73 percent of all the commercial farms in the Southeast are cash-crop farms; 34 percent of them are classified as cotton farms, as such. The others are peanut, and tobacco, and other farms. At least three of the basic crops are the primary crops of the Southeast. Our farmers are very dependent upon them.

As a result, the Government programs, of course, have had effects on them. It has varied from farm to farm in terms of the type of effect it has had. For instance, in 1930 we had 16 million acres of cotton in the Southeast and in 1957 we planted 4 million acres.

At one time we had no commercial corn counties but of the 38 new counties to come in in 1958, 35 of them are in the Southeast. So farmers who supplemented cotton with livestock and corn are now caught with cross-compliance in terms of corn and other basic crops.

So the program on acreage control gets smaller each year. We get caught in more ways. The effect of the price of cotton is certainly a controversial kind of thing. You can build an argument for or against a high or low price, either way.

Certainly I think that Public Law 480 and surplus disposal have shown that the world price of cotton was lower than the domestic price. Of course, as we play with domestic price we can get into all types of discussion. We know that only about 13 percent of the textile dollar goes back to the farmer. So it isn't much you can play with. However, it may be that the domestic cotton price will have to become competitive at least with rayon.

I am aware that 98 percent of our cotton farmers and 93 percent of our rice farmers recently voted to continue with the program of price supports and controls. Certainly, I think that we have to get rid of our surplus, particularly in cotton, before we are in position to make some changes.

Of course, the Government program that worries us may not be altogether the one that we have now, but the one that may hit us, say, in 1959. If memory serves me right, we have a frozen cotton acreage of about 17½ million now, but by 1959, if you make the adjustments that might be necessary, it might drop as low as 13 million acres and, of course, that much reduction would certainly take out a lot of cotton in the Southeast.

So, I think that we have to have some type of Government program in those areas of acreage control, price support, and storage, but I would raise the question if it wouldn't be possible to develop a longer run type program than that we have had in the past.

That would give us some indication of what we need to do so that we could begin making adjustments over a period of time instead of more or less waiting to see what the program is going to bring next year.

In other words, it would give farmers some type of planned adjustment that they could work toward, instead of making adjustments simply to fit the programs once they know what the program is. That would be the major thing, I think.

Just to take all controls off at the present time would cause chaos in the Southeast.

Representative MILLS. Mr. Timm, would you care to comment on that?

Mr. TIMM. I should like to preface my remark with the fact that our institution sort of prides itself on agricultural policy education. We feel that farm organization leaders and elected representatives of the people are the ones who should recommend policy. What we try to do is provide the important facts, the issues, the alternatives, and some of the possible consequences, hoping then, that more intelligent decisions can be made.

But since you have asked me for my comment on the programs, I do want to do my best for you. In the first instance if we withdrew the major price supports, production controls and surplus commodity programs, completely and immediately, as has already been indicated, it would create economic chaos among the affected farm people, and among our business people closely associated with farm people.

We have about 13 percent of our people engaged in producing crops and livestock but some 40 percent are involved in supplying farming and ranching and adding value to farming and ranch products.

So my first point is, regardless of whether these programs are good or bad, it would just seem to me to result in almost a catastrophe in many areas if we took out the programs all of a sudden. Therefore, whatever is done, it is going to be of an evolutionary nature rather than a revolutionary nature.

I think one of our problems we get into is that we worry so much about efficiency and productiveness per person and the like. These factors are extremely important—particularly in the long run. However, we can easily conclude that we are not making these shifts as fast as we should.

What we are doing in this instance is analyzing the farm problem. More important than the farm problem is the farm people's problems. I have an idea that a good many of the basic shifts that we are attempting to bring forward in the United States are generally occurring.

Whether they would occur faster in the absence of certain programs can't be tested too well. Surely, there are serious shortcomings in all of these programs and there will be shortcomings in any programs, but I think we can modify these as we go along. For example, in cotton, although we are creating a good many adjustment problems for farm people, at the same time we are gradually adjusting to the more efficient areas over the long run.

Another example, the wool production incentive program, with some shortcomings, appears to be reaching the goal of increasing the production of wool that we want.

Professor Heady has mentioned the wheat program and wheat is a very difficult problem. I worked out in the wheat area in the 1930's and saw the terrible conditions. All of us know that wheat farmers don't necessarily leave their farms in the absence of wheat-price supports. It is very difficult to find a second enterprise, which will pay nearly as well.

We have this same proposition in cotton. Even with grain sorghum that we consider the second most profitable enterprise, the dollar return investment would not be more than two-thirds of that in cotton. So in terms of solving the farm people's problems, and in terms of doing it within the framework of our political and economic institutions in this country, we may be moving along about as fast as we should.

We don't want to get too efficient, too fast, in the economic and statistical sense, because I am a little fearful we may lose something in the human sense.

Again my remarks are not intended to condemn or approve current Government programs but merely to point up some of the considerations involved.

Representative MILLS. Thank you.

Mr. MONTGOMERY. Before referring to your specific question dealing with the farm program, I would like to relate the overall question to a question I believe you raised yesterday, whether adjustment is enough, and also to another question that came up in connection with this, of what type of people are leaving the farms and are these the potential leaders or the less efficient people.

In connection with these two questions, it seems to me it is very important that we look at the services and the programs that the Government has provided for services to agriculture in terms of things such as rural electricity and roads and communications and also, I think, in terms of medical services and education.

These are some of the factors that in my judgment are going to have an influence on the type and the number of young people and particularly, people who are potentially future leaders in agriculture. These factors influence whether they remain in agriculture or leave.

When we are thinking of the services of Government, it seems to me that these are areas that we ought not to overlook or slight at the expense of more current income programs.

Another area somewhat similar here, it seems to me, is the area of encouragement of cooperation among farmers. There are many things that farmers can do by working together collectively to solve their problems. This is true in both the marketing of their products and also true in terms of acquiring farm supplies.

As Professor McCorkle mentioned, this has been applied to the question of integration in California. Here is a type of activity, an effort on the part of farmers, that it seems to me can be encouraged and can go a long ways in solving some of the problems of agriculture.

Again, this is a slow and difficult route, but one, I think, that has great potential.

Now, turning more specifically to the question of whether the current programs contribute to or hamper the adjustment in wheat, I am

of the opinion that the existing program of price support has hindered or limited the kind of adjustments that are essential in the wheat industry. The program has added substantial income, and it has been of great benefit to many farmers, but if we are looking at its influence on adjustment, I would be of the opinion that, overall, it has complicated and hindered desirable adjustments rather than contributed to them.

For example, consider a farmer who has a fairly optimum operation in wheat but under controls has to take a substantial portion of this out, 30 or 40 percent. This leaves him with an uneconomic unit, and he increases his unit costs of operation.

This results in his bidding for more land to reestablish himself as an efficient operator. This is responsible, in my judgment, for substantial parts of the increase in land prices in areas such as Kansas.

We have areas in Kansas where currently land prices are 8 times what they were in 1940, even after you adjust for changes in the price level. This has been due very largely to the bidding up of land values by farmers to acquire additional acreage for an efficient unit.

Looking more specifically at what direction future programs might take, I would be inclined to think that we should explore more fully programs that are in the area of encouraging consumption or increasing utilization of alternative products from the resources.

I would think of these particularly in terms of products such as meat, poultry, and dairy products. We have made substantial increases in per capita consumption of these, but it seems to me there is opportunity for increasing and encouraging the consumption of these by all of our population and, particularly, the lower income levels of our population.

This would absorb—or require additional—resources in agriculture and would in my judgment provide a chance to convert some of the land that is now used for wheat for human food to production of feed grains for supporting a larger livestock population.

Again, this is a program that would have to be done gradually over a long period of time to develop the proper adjustment as we went along.

Representative MILLS. Thank you.

Mr. Blanch, would you comment on this question?

Mr. BLANCH. The only commodity in the Mountain States that I am acquainted with that is included in the basic programs is wheat. Our experience has been similar to that just stated by Professor Montgomery. It has tended to accentuate the problem rather than to solve the problem of adjustment.

It has brought into production some new land that would not have come in without the price supports. Much of that is marginal land normally.

I would agree with the other comments also, that what we need is a more stable program through time rather than one that partakes of the nature of a continuing emergency. So far our farm programs have been temporary in certain respects and those working in this area have not been certain how long they are going to continue.

We all agree, I think, that the end objective of policy should be people and not lands or institutions. While I agree that prices are extremely important to farmers, probably we need to think of farmers' incomes—since they are independent businessmen—not in terms of

what they get in any 1 year, but the average over a period of several years.

We should do what we can to prevent extremely high prices at any particular time as well as extremely low ones. We should try to get some equalizing through time. I would think that programs probably should be directed toward that end, with less direct emphasis on prices as a fundamental solution to the problems of adjustment.

I think more emphasis should be on educational opportunities outside of agriculture.

My attention was called by one of my colleagues recently to the farm youth situation in the county in which our university is located. He said that 90 boys from farm families would be graduating from high school this coming spring.

With the normal replacement of farm operators and farm labor in that area, there would be a place for not more than 40 of them on farms. That means that about 50 boys will either have to take a part of the family farm, which is going opposite to trends, or find employment elsewhere.

The high schools have been training these boys to get back into agricultural production. I think the vocational training there should take another slant—to make these people familiar with opportunities elsewhere. Such educational programs, I think, might extend even to young adults.

Educational programs are, of course, longtime programs and must be. We cannot accomplish these objectives immediately. But the programs at the high-school level—and that might well extent to young adults—should not stop with only telling them of opportunities but should provide opportunities for acquiring knowledge and developing skills to enable the students to fit into factories and other off-farm jobs.

In distressed areas, it might be well to provide financial assistance to enable some people to transfer to other areas of greater opportunity.

I have just one other thought. This has been alluded to before, but probably there should be some study made of the credit needed and that which is available to full-time commercial farmers who need to make farm adjustments. Apparently, in every area many of the farmers who would like to make adjustments are unable to because of lack of credit on a reasonably secure basis.

Representative MILLS. Thank you, Mr. Blanch.

Mr. McCorkle, would you care to comment on that question?

Professor MCCORKLE. There are two types of major agricultural programs that are particularly important on the west coast. One of these is the acreage and price programs which affect both cotton and wheat. The other is the marketing agreement and order programs, which are extremely important in California. However, these are to be covered in a subsequent panel and I would like to defer discussion of these until that time.

The acreage-control and price programs have both hindered and helped adjustments, it seems to me on the west coast, but certainly the adverse effects have outweighed the positive effects.

The history of the growth of cotton production of California under a period of high price supports, gives us a good example. Under a system of price supports, cotton production became extremely profitable and we had the entry into production of a large number of people, some of whom were not previously farmers and the development of

a lot of land. For the great bulk of these people an opportunity existed to recover the capital investment in a relatively short time so they are now with us as producers.

Of course, this leads to some rather distasteful adjustment problems when acreage allotments are deemed necessary. When the allotments are applied we find that the changes in production practices and timing of operations is such that when we cut our acreage in California, we have now been able to increase yields to the point where we are producing almost as much cotton as we did before the acreage allotments were imposed.

Certainly, what Dr. Montgomery said about wheat in Kansas holds equally well for cotton in California. On the positive side of the cotton-allotment program it can be said that with the introduction of allotments farmers were encouraged to introduce new types of crops and it is interesting to note that some of the crops that they have shown increased interest in are the types of crops which, in 25 years, we foresee as being needed in larger quantities.

I am thinking primarily of the vegetable-type crops. Certainly, the wheat-price program has had a terrific impact on the utilization of Northwest wheat. A few years ago, prior to the price-support programs in wheat, a great deal of that Northwest wheat was used for poultry feed in the West, particularly in California.

Now, with its price support, this wheat has been priced out of the feeders' market and these high prices are capitalized, of course, in land values, which increases costs for wheat producers, and thereby makes adjustment back toward the utilization of this wheat for feed more difficult than it would have been.

There is one other point I would like to mention which I think has not been stated as yet. We are aware of it in the West particularly.

Any Government program which fosters the development of new agricultural areas and the creation of farms which are of such size that they are profitable producing units for families only under the conditions of high prices, is creating a future problem of adjustment for agriculture.

We are particularly aware of this in the Columbia Basin and in the areas of California where it has been necessary to increase the size of many of the units that were originally planned, particularly for the Columbia Basin area.

This creates for the future a problem that we have been talking about all morning—farms that are too small.

Representative MILLS. Thank you, Mr. Chairman.

Senator SPARKMAN. Congressman Curtis, will you proceed?

Representative CURTIS. Mr. Chairman, I have three details that I want to check on and then I have a few general questions. I think it was in Mr. Cunningham's paper where he gave an estimate of the average capital per farm, which jumped from $18,000 in the late twenties, to nearly $40,000 in 1954.

Does that include an estimate of land cost, or is that simply capital used in machinery and so on?

Mr. CUNNINGHAM. It does include land, sir. It is livestock and equipment, also.

Representative CURTIS. I thought it did, but I wanted to be sure. A question that was brought out in Mr. Heady's paper was in regard to this question of what I call the birthrate on the farm. I posed the

question to the panel yesterday because it had always been my understanding that students of demography had concluded that large families always develop in rural areas.

That crossed racial groups and occurred in societies throughout history as well as our contemporary societies. It was true that families in urban areas tended not to have as large families as families in rural areas.

The importance of that is this: If that is a basic fact of human nature, we are going to continually have increased sources of labor coming from the farm areas which would accentuate the basic problem that all of the papers seem to emphasize, that there is already a labor surplus.

I think, Mr. Heady, you indicated that was certainly a factor in the Midwest, but I think it was Dr. Schultz yesterday who said there had been some studies recently that indicated that maybe that was changing. I was just wondering what your thought on that would be.

Mr. HEADY. Customs and values changed after the war, and we may be heading in a good many directions. The figures would show that birthrates on farms, while not in absolute level, have declined relative to those in cities, or rates in cities have gone up relative to those on farms.

There may be even different directions in the future. It is going to take another 15 or 20 years for this relative difference to have much effect in demand for farming opportunities versus going into other industries.

Representative CURTIS. You have a feeling that probably the studies that Dr. Schultz was referring to might have broad application? I think one of them was in the New England area. That might be peculiar to New England. I myself would be very surprised if there has been any real basic change. I think it is very important to the farm problem and the rural problem to know whether that is something we are going to be coping with for the next decade.

Mr. HEADY. As far as I know, there have been slight changes in the relative birthrates but not a reversal in absolute rates between farm and nonfarm families. But I would not look upon these as being a structure upon which the farm problem would be solved.

Representative CURTIS. Some of the projections we had in the panel yesterday afternoon were 1965, and 1975, and of course we are trying to look at this somewhat long range.

The third detailed thing was this: I was very much interested in Mr. Timm's presentation, in your basic paper, where you referred to a new source of income to the farmers that I had never thought of or heard about. That is recreation. Was it your paper that brought that out?

Mr. TIMM. I referred to it.

Representative CURTIS. I was wondering how big a factor that is, because certainly, the additional point you made was that that is going to be an increasing source of expenditure of funds in our society as the weekly rate of labor declines and the per capita income increases.

We are going to spend more money on recreation. Is it of such or has it become really a sizable factor in farming in the Southwest?

Mr. TIMM. In farm income in the Southwest as a whole, it is not a sizable factor. In certain areas, and particularly in range areas that have had very serious drought, west of San Antonio and of Austin,

Tex. for, example, it is a very important factor because deer leases have run from $1.50 sometimes to $2 an acre.

If you have a drought and your cattle numbers are reduced with no other particular income in sight, this is enough to pay taxes and a few other necessities.

In certain farming areas, particularly near our biggest cities, Houston and so on, a good many of the farmers have found a very profitable investment by putting in duck blinds on their farms. Others have established quail-shooting farms.

Although we will not secure a large amount of additional income, the very fact that we have these larger cities and people have more leisure time, requires us to at least investigate all of the opportunities possible for farmers to obtain income in this manner.

Representative CURTIS. I was impressed by that and I think that maybe that is going to be a significant or could become a significant factor in farm income.

Senator SPARKMAN. I might mention one other thing that we have done in Alabama and I am sure in other States. That is the fishponds out on the farms.

Representative CURTIS. The American people still seem to like to hunt and fish. One of the general questions I was going to raise was this: Here we have the panel set up on a regional basis, which to me was very good and very significant. But throughout the papers, I found that in certain regions, at any rate, with one exception, certain crops were predominant, and particularly certain of the basic crops. Now, being from Missouri, I find one of our problems to be that we are always the tail wagged by the dog in regard to some of these basic crops. We have a certain amount of tobacco, but we have very little to say about what is done in the overall tobacco program. We have some cotton, but very little to say about that. We have wheat, and we have corn, and so on. One of the papers, which was Mr. Cunningham's, for the Northeast area, it looked like price supports was really of very little consequence in that area. So the question I am wondering about is this: What studies have been made of the impact of these basic-crop supports in certain areas or regions? You can take Missouri as an example. There you have a mix. We are not in a situation like the Northeast, where we are not influenced by crop supports because of the fact that we do raise some of these basic supported crops. Yet we are not in an area like Kentucky, or North Carolina, where tobacco is so important that they pay attention to that, or in the South with cotton.

The reason I raise the question with this panel is this: Isn't this problem of mix, if we can use that term, a very basic problem in here? Do we not have to give some thought not just to crops, and not just to regions, but also to this mix?

Probably we have, but I wonder if anyone would comment on that.

I am purely an amateur, and I would like to have some experts tell me I am wrong or that observation has some merit to it. Would you comment, Mr. Heady, on that?

Mr. HEADY. I think that your question is very important. It is one which makes some difference even in States like Iowa. Not all farmers have the same mix in terms of the products produced or the same mix in terms of the resources used. Therefore, the fairly stand-

ard programs we have do not equally fit all of the farmers of these different mixes.

In the case of Iowa, some farmers sell grain. Some feed all the grain they raise. Price supports contribute little to income even for a farmer who feeds all of the grain he raises. Some farmers feed more grain than they produce and gain nothing.

Even in the more homogeneous State, programs may be against the interest of this kind of farm. In a State such as Missouri, on the tail end of the specialized regions, programs are more typically aimed at these other regions which may not fit the situation of the State. This is one of the difficulties, with current programs. Programs have been standard, but farms are heterogeneous.

Even though Iowa is a relatively homogeneous State, as compared to Missouri, there are large differences between farms and the gain that farmers realize from programs. Some are penalized. Some gain nothing. These differences also exist between the Midwest and the Northeast, as Mr. Cunningham would suggest. Some midwest farmers gain in terms of higher prices for feed grains, while northeastern farmers lose in terms of higher feed costs.

Representative CURTIS. But within each region, isn't it true that although you have certain regions within regions, certain areas within regions, where one crop will predominate, you have in that same region places where they have the mix that I described existing in Missouri. I am just wondering what that impact would be and the significance would be. I would think it would tend to keep in the area that is dominated by one particular crop, keep that area in that crop and to tend to create more of a mix outside of the area.

Would that be a result?

Mr. BLACKSTONE. I think in crops where the acreage has been cut tremendously, as in the case of cotton, you get the mix coming in there because the farmer tries to supplement cotton with livestock or some other cash crop.

In the case of peanuts or tobacco, where you have not had as much decrease in acreage, I think you would have an area that would stay with it pretty well, and the shifting would come in the less specialized adjoining areas.

Representative CURTIS. Also not having other areas coming into peanuts or coming into tobacco, even though it might be economic that it do so. I think one of the papers in discussing it from the standpoint not of crop supports or price supports but in regard to irrigation, which is a similar manipulation, stated we were keeping in production certain lands that were really not as economically arable. These are just thoughts in my mind that I wanted to bring out.

Mr. BLACKSTONE. Certainly in the case of cotton you could find in the Southeast some indications that that might be happening. This crop is still the main source of income for some areas even though this might not be the most efficient place to produce it. Certainly our hill farms of the Southeast do not use the large machinery that is an aid to cutting costs of cotton.

On our small commercial farms which make up roughly 37 percent of all of the farms in the Southeast, we have about 250,000 cotton producers. Of course, you can raise a question whether or not they could ever be as efficient cotton producers as those in an area where they can use the types of machinery that are developed for cost-

cutting purposes and can use irrigation and other things that lead to lower costs.

Representative CURTIS. The second thing I wanted to bring out here was this: Reading the papers of all of the regions, and listening to these comments, I was impressed with the fact that we have a rather large number of common denominators in the agricultural programs. Yet, in certain respects, there was one area that differed from the others. I was just curious as to why it would be different.

That was where the west coast differed from the rest as far as labor and ownership were concerned. There is also the development of the corporation as a device for operation.

There are those three factors that seem to be different in the West from all of the other regions. I was wondering what there was about the west coast that made it different. Then I would like to ask one specific question, is it the migration, the rapid migration to the west coast which produced the very unsual rise in population?

Very little of that migration has gone into agriculture, is that right? It is almost all in the nonagricultural sector. Could it be that that has done it?

I noticed also there is an automatic check on farm acreage, and withdrawal of farm acreage due to suburbanization and industrial use, and the water problem.

Mr. MCCORKLE. That is correct. I think the answer to your first three questions can be traced directly to the types of products produced in the West, and the way they are produced. First of all, and you probably are well aware of this, about a quarter of the irrigated land in the United States is in the State of California. In an area like that if you are going to produce summer crops at all, they have to be produced under irrigation. About 50 percent of the acreage that is farmed in California, that is irrigated, relies on underground water supplies. The water is pumped primarily from deep wells. This means that the capital that is necessary to set up and operate a farm is considerably higher than it is in an area where you could rely on natural rainfall. Of course, there are certain advantages that go with this, in that you have a little more surety of water in any given season and better control over its distribution where you are pumping it from below, rather than relying on rainfall.

Secondly, we produce a large variety of crops. Many of these are crops that involve very heavy inputs, not only of water but of labor. Very often fertilization is carried on at high levels and there are large amounts of machinery. This means large cash costs.

This requires a great deal of capital. These are expensive crops and money is made in their production, but a lot of money has to be put in by a farmer before any return is realized from the sale. When you combine the fact that you need lots of capital to operate, and you need a lot to get into the farming business to start with, this means that you are going to have to have some means of gaining control of these types of resources. One way that it has been done is for the individual family to attempt to form a business organization that permits them to borrow a little more heavily than they could if they were borrowing on an individual basis. This is one reason for the corporation and one of the important reasons. I think this leads to a great deal of misunderstanding, and to some people it means large corporate farming.

With respect to the use of hired labor, this stems from the kind of crops we grow. If you are involved in the production of vegetables or fruits, you are producing crops that are difficult to mechanize in some of their phases of production. It is hard, for example, to mechanically pick ripe fruit without damaging it. I am thinking primarily now of the deciduous fruits. It is equally difficult to handle certain types of vegetable crops. If you are going to harvest these crops, it takes a good deal of labor on a seasonal basis. Over the years we have of course had a lot of seasonal labor for this purpose. I fully expect that mechanization will take place in these areas. A great deal of work is being done in the experiment stations, attempting to find ways and means of mechanically handling these crops.

With respect to population and growth in the West, it is true we are expanding our population very rapidly in the West, but not in agriculture. These people are coming West primarily with the industrialization of the West, which is taking place at a very rapid rate. Of course, it is the industrialization and population growth that is causing part of the difficulty with respect to the allocating of the States' limited water resources.

Representative CURTIS. In regard to the question of ownership of land and leased land, am I right that the lessees are largely pretty well financed groups, Mr. McCorkle; we are not talking about any tenant farm are we? I imagine in some instances your lessee might be a lot better financed than the owner.

Mr. MCCORKLE. This is true, and again this stems from the kind of products we produce: You can't grow some of the specialty crops on the same land every year. That is because of the disease problems and soil problems primarily. Therefore, you find people who become specialists in the production of tomatoes, rice, and similar crops, that have to move from year to year. They will farm part of several farms on a rotation basis and their entire capital investment in agriculture may be in machinery. But this is not a small investment. The rice harvester may cost $35,000. That is one machine. So their capital is in the machinery, and some one else will own the land, and rent a part of their land to this tenant, farming the rest of the land themselves in the rotation crops. This is the type of tenancy I am talking about.

Representative CURTIS. I am glad to have that emphasized, because I thought that was true. I am just wondering in my own mind if what is happening in the west coast area might not give us guidelines of what might develop in other areas of the country in agriculture. Maybe it is peculiar out there, and maybe it is peculiar to irrigation. The Mountain States have some irrigated lands in there. Would you say that the situation on the west coast is comparable to those areas where irrigation is the basic factor in agriculture? Is this really the result of irrigation, or is it a more general development in all agriculture?

Mr. BLANCH. I think it is not restricted to irrigation. As Mr. McCorkle has mentioned, it is more a matter of the type of crops they are growing, and the advantages of large operations associated with the production of those crops. They require relatively large land areas. In the Mountain States, I am not familiar with any developments of that type at all. Fundamentally it is an irrigated area, but we don't have the large expanses of land of relatively uniform soil types

that is adaptable to this large vegetable operation such as he is talking about.

Representative CURTIS. I have one other general remark. I think it was Mr. Heady who suggested that in this problem of stabilization of prices, about the only way to do that is the Federal Government. I have often wondered just what has happened to the futures market in this area. People who are in the business of agriculture futures have said or have alleged that it is Government interference that has stunted the development of the futures market to the extent that it might have developed.

I don't know whether that is true or not, but I am just wondering if the futures market could be developed and expanded, isn't that a possibility for solving this problem of stability?

Mr. HEADY. It is a possibility for short-term and seasonal fluctuations. I am not sure it is a possibility for longer term fluctuations such as we have had over the last 25 years. I am thinking of some of the longer weather cycles.

Representative CURTIS. Wasn't our main problem, before the Government entered into this, largely a technical problem of storage? Now that we have been able to advance in technology in storage, it seems to me that it might be possible for the private sector of the economy to take over a great deal more, if it weren't being hampered—and I am not alleging that it is because I don't know—but if the allegation were true that the private sector has been curtailed and its growth stunted, it could be a long-range thing with modern storage methods, it seems to me.

Mr. HEADY. There are a few recent studies with which I am not well acquainted. A person would have to study these carefully before he could say that the futures market could replace governmental programs for all stability purposes—particularly income.

Representative CURTIS. There wouldn't be anything immediate, I am sure of that. But I was speculating as to the future.

Thank you.

Senator SPARKMAN. We have with us this morning Congressman Hagen of California. Congressman Hagen, would you like to ask some questions?

Representative HAGEN. I would like to ask one question.

In considering this farm problem, we sometimes think there are only two classes of farmers, the subsistence farmers, and the corporation farmers. I think there is a whole area of small farming in between, which is really the area we should seek to help that involves a proper definition of a small farmer.

In that connection I want to ask one or more of the panel members, Is there a limit there? We have heard a great deal about a point of diminishing returns in the size of enterprises. Is there a point of diminishing return in the growth and size of farm units? Has there been any study made on that?

Mr. HEADY. I am not as concerned about whether diminishing returns in size of farm units come into play, as I am impressed by the fact that there are not any real great economies to scale for very large farm units. In agriculture, generally, outside of some very specialized types, a farm which is large enough in acres or animal units to use modern machinery fairly efficiently, is one which is operated by the farm family. To set an impirical example, in the Corn Belt, a farm

of around 280 acres, is large enough that it gains most of the cost advantages of modern machines, the spreading of fixed costs of machines over more acres. A farm of 560 acres has about double the costs of a farm of 280 acres. It has no extreme cost advantage over one of 280 acres. A 280-acre farm could last, in terms of unit costs, about as easily as a farm of 560 acres, while the reverse also is true. I think that this is the important point, that there are no great increasing returns to farm size after common machine units are used on an efficient acreage. It would be hard to prove that there are diminishing returns to farm size. But the important thing is that, outside of some very specialized cases, such as the one Mr. McCorkle mentioned, and even then if you doubled the size after using machines efficiently, there is no great cost advantage for a farm twice as large. This is the relevant side of the question.

Mr. McCorkle. I think that I would like to comment briefly on what Dr. Heady said. Essentially this, of course, is true and the only variations you would find in California would be variations caused by the types of equipment that are associated with different types of agriculture. If you have an investment in machines of $10,000 in one type of farming, and another type of farming with a machinery investment that runs up to $40,000 or $50,000, the point then would be how to define optimum farm size in terms of acres. That would vary with the type of farm that you are discussing.

Senator Sparkman. Are there any other comments?

Mr. Timm. I might comment on one little analysis we made in our most highly commercialized area, and that is the high plains, cotton and sorghum area. We found this to be true.

In a study which included a rather long period, farms of around 240 acres had a net return of some $1,600, just to generalize, and when we got up to farms doubling that size, there was quite an increase, up to about $6,000.

The economies of scale were really apparent from 240 to 480. But adding on another equal amount of acres, we found although they made a little additional income, some $1,800 more, you would certainly raise a question whether the risk would offset this, and whether enough people with that type of risk and the need for the additional capital would actually go into it.

Also our people in preliminary studies, in dairying, which is changing rapidly in our State, say, that the efficient dairy is changing in the direction of larger units, but we don't yet know just how far this can go before some get into difficulty.

So these two instances, although isolated, seem to us to indicate that this is an area to study a lot.

It is also heart warming to me the way the credit institutions, both Government sponsored and private institutions, are becoming more alert to these "size of farm" studies. When they see that farms of a certain size grouping are doing a little better than the few which are getting real big, I think this will have quite an impact upon their lending policies. It will also determine to a large extent how fast and how much our farms are going to increase in size in the future. The bankers are pretty alert now, in my opinion.

Senator Sparkman. Thank you.

Are there any further questions?

If not, I want to express my thanks, and those of the subcommittee, again to the panelists who have made such able presentations to us this morning. You have been most helpful.

The subcommittee will stand in recess until 2:30.

(Whereupon, at 12:40 p. m., the subcommittee was recessed, to reconvene at 2:30 p. m. the same day.)

AFTERNOON SESSION

Senator SPARKMAN. The subcommittee will come to order, please.

This afternoon we resume hearings on policy for commercial agriculture by discussing the marketing system for farm products, particularly as it has implications for farm price and income policy. We do this because the marketing system is very complex, absorbs more than half of the retail expenditures on farm-produced products, and has an important influence on prices received by farmers. We wish to inquire how marketing margins between the farmer and consumer affect the level and stability of farm prices, what factors cause marketing margins to change, and to what extent greater marketing efficiency promises to be a solution to farm income problems.

Like farming, marketing changes as time goes on. We would like to know how changing size and organization of marketing firms is affecting demands for farm products, and what part the integration of production with marketing functions may play in the farming of the future. Finally, we have taken this opportunity to discuss marketing agreements and orders, a type of farm program in which there is much interest today.

Gentlemen, on behalf of myself and the other members of the subcommittee, I wish to welcome you here today and to congratulate you on the excellent papers you have prepared for this panel. I know that you, as marketing experts, must feel that we are covering a lot of ground in a short time this afternoon. Unfortunately, time does not permit us to go into these matters as deeply as we would like. I hope that we can keep the discussion focused upon marketing in relation to farm policy and in this way narrow the field a little.

Our procedure will be to have a 5-minute summary of each panelist's paper, taking panelists in the order given in the schedule of hearings. When these are completed, the members of the subcommittee, in turn, will ask questions of the panelists. I hope that we can proceed in an informal manner and that each of you will enter into the discussion of all topics before the panel.

We will begin the summaries with Mr. Kenneth E. Ogren of the Agricultural Marketing Service, United States Department of Agriculture.

Mr. Ogren, you are recognized for 5 minutes.

STATEMENT OF KENNETH E. OGREN, AGRICULTURAL MARKETING SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE

Mr. OGREN. Thank you, Senator Sparkman and committee members.

My assignment on this panel was to provide perspective as to meaning of marketing margins and their significance as to farm prices and income with relation to these questions:

What is the relation of marketing costs to the level and stability of farm prices and to what extent is the farmer's share of the consumer's dollar a criterion of marketing efficiency?

Marketing of farm products is a big business. In number of workers and in dollar volume of business it is bigger than agriculture and has increased relative to agriculture in almost every year since the end of World War II.

For most consumer goods derived from agricultural products, the returns to marketing agencies are a larger part of the retail price than are the farmer's returns, particularly for those farm products used as raw materials in processing. For some products retail prices would be reduced by less than 20 percent if the farmer gave his products away. Likewise, retail prices would be increased by not over 10 percent if farm prices increased by 50 percent. Most of the products derived from the so-called basic farm commodities fall in this group; that is, products for which large percentage changes in farm prices would have relatively little effect on retail prices.

In general, agricultural prices are more variable than nonagricultural prices. Marketing and marketing costs are not, however, the primary cause of either instable or low farm prices. But marketing should not be overlooked because of this. An efficient marketing system does and can contribute toward stabilizing and improving farm income. The efficiency of this marketing system is not measured by the share of the consumer's dollar which it takes, nor do these percentage shares measure the net returns of either farmers or marketing firms. As the marketing system performs more and more services relative to agriculture, we may expect that the share going to marketing will increase.

In a broad sense, marketing contributes both to a higher level and greater stability of farm prices. Processing has widened the market for many food products by making them available in more forms in all seasons of the year and to consumers all over the country. Because of the vast network of transportation and distribution facilities, today's market for most farm products is nationwide. Specialization in production by commercial farmers would be impossible without the marketing system to bridge the gap between the farmer and the city consumer.

The farmer is more dependent on the marketing system than ever before. Few farmers sell direct to consumers but the real market for farm products comes not from the first buyers of farm produce but from consumers. The demand for farm products at the farm level is a "derived" demand, with the marketing system as the mechanism through which consumer demand for finished products is translated into demand at the farm level for raw materials.

Marketing and marketing costs tend to make agricultural prices more variable than retail prices. The costs that make up margins do not respond to changes in supply of farm products in the same way that prices of these products do. Margins per unit are likely to be as high—or in some cases higher—for a large volume marketed as for a small volume. Thus, with a given change in supply, farm prices are likely to change more than retail prices.

Marketing costs may change for two reasons: (1) A change in the services performed by the marketing system and (2) a change in

the costs of performing the same services. The effects on farm prices are likely to differ depending on the reason for the change in marketing costs.

Additional marketing services often replace those previously performed by housewives. These services may increase the demand for the product enough so that consumers buy as much as formerly at a price which covers the extra cost. But processing and other added services do not necessarily add cost. Transportation of a product may be less costly in processed form than in fresh form.

If marketing costs go up because of general increases in wages throughout the economy, the increased labor payments may raise consumer demand for food enough to offset the effect of higher marketing costs on farm prices.

Many factors need to be considered in analyzing the effect on farm prices of an increase in marketing costs. Whether cost increases are initially passed on to the consumer, deducted from the farm price, or absorbed by the marketing firm may depend on the market, or bargaining, position of the marketing firm. If a processing firm is the principal buyer of a farm product in a market, cost increases more likely will result in a lower farm price, especially if the firm is selling its product in a competitive market. A processor is more likely to either absorb a cost increase or raise his selling price if he is buying a farm product in a market competitive with many other buyers or if he is selling a branded product for which he has a special demand.

The firm may also increase both its costs and revenue by spending more on promotion to expand its market.

Thank you.

Senator SPARKMAN. Thank you.

Mr. DeLoach, Agricultural Marketing Service of the United States Department of Agriculture.

Glad to have you, Mr. DeLoach.

STATEMENT OF D. B. DeLOACH, AGRICULTURAL MARKETING SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE

Mr. DELOACH. Thank you, Mr. Chairman.

I was asked to concern myself with the question, "What is the cost of marketing the major farm products? How have the absolute and relative marketing margins changed over the years and why?"

The trend of the retail cost of food in the market basket has been up since 1947. A drop in 1949 and 1950 was followed immediately by a bulge during the Korean war. A slackening of prices occurred in 1953, 1955, and 1956. Retail prices started upward in June 1956 and have continued to rise since that time.

Marketing costs and farm values for food have tended to move continually upward since 1913. On most occasions the rise has been due to a steady increase in the volume of food products marketed as well as to a rise in food prices. Food marketing costs have increased every year since 1940. Table 1 gives a fairly good picture of that situation.

TABLE 1.—*Marketing bill for farm-food products purchased by domestic civilian consumers, retail cost and farm value, all farm foods and 5 major commodity groups, annual 1913–56* [1]

[Billion dollars]

Year	All farm foods [2]			Meat products			Dairy products			Poultry and eggs			Bakery and cereal products			Fruits and vegetables		
	Farm value	Retail cost	Marketing bill	Farm value [3]	Retail cost	Marketing bill	Farm value [3]	Retail cost	Marketing bill	Farm value [3]	Retail cost	Marketing bill	Farm value [3]	Retail cost	Marketing bill	Farm value [3]	Retail cost	Marketing bill
1913	3.53	7.41	3.88	1.35	2.26	0.91	0.62	1.23	0.61	0.45	0.66	0.21	0.44	1.42	0.98	0.55	1.44	0.89
1914	3.64	7.91	4.27	1.35	2.26	.91	.64	1.28	.64	.47	.67	.20	.49	1.62	1.13	.58	1.69	1.11
1915	3.63	7.99	4.36	1.21	2.16	.95	.66	1.33	.67	.48	.68	.20	.59	1.74	1.15	.56	1.61	1.05
1916	4.35	9.47	5.12	1.50	2.49	.99	.74	1.44	.70	.53	.75	.22	.68	1.99	1.31	.71	2.17	1.46
1917	6.05	12.40	6.35	2.03	3.03	1.00	.94	1.68	.74	.68	.94	.26	1.15	2.78	1.63	.97	3.10	2.13
1918	6.87	13.19	6.32	2.51	3.96	1.45	1.09	1.88	.79	.83	1.19	.36	1.05	2.45	1.40	1.04	2.72	1.68
1919	7.55	15.22	7.67	2.50	4.14	1.64	1.34	2.38	1.04	1.03	1.45	.42	1.21	2.90	1.69	1.13	3.33	2.20
1920	7.36	16.52	9.16	2.15	4.12	1.97	1.40	2.53	1.13	1.10	1.58	.48	1.17	3.16	1.99	1.30	4.21	2.91
1921	5.05	12.57	7.52	1.40	3.45	2.05	1.15	2.34	1.19	.77	1.16	.39	.62	2.42	1.80	.95	2.64	1.69
1922	5.19	12.88	7.69	1.56	3.49	1.93	1.14	2.31	1.17	.75	1.12	.37	.59	2.36	1.77	.99	2.97	1.98
1923	5.62	14.00	8.38	1.58	3.77	2.19	1.39	2.65	1.26	.83	1.24	.41	.59	2.43	1.84	1.03	3.15	2.12
1924	5.87	14.51	8.64	1.73	4.07	2.34	1.34	2.59	1.25	.86	1.31	.45	.67	2.52	1.85	1.06	3.31	2.25
1925	6.77	15.73	8.96	2.10	4.28	2.18	1.47	2.83	1.36	.96	1.41	.45	.87	2.81	1.94	1.15	3.60	2.45
1926	6.95	16.38	9.43	2.18	4.35	2.17	1.53	2.93	1.40	1.03	1.49	.46	.80	2.87	2.07	1.22	3.96	2.74
1927	6.72	16.23	9.51	2.04	4.25	2.21	1.62	3.09	1.47	.96	1.40	.44	.74	2.90	2.16	1.14	3.75	2.61
1928	6.94	16.27	9.33	2.11	4.28	2.17	1.69	3.19	1.50	1.05	1.53	.48	.74	2.98	2.24	1.13	3.47	2.34
1929	7.22	17.08	9.86	2.23	4.45	2.22	1.76	3.33	1.57	1.12	1.70	.58	.68	2.86	2.18	1.21	3.89	2.68
1930	6.33	16.15	9.82	1.94	4.25	2.31	1.57	3.13	1.56	.93	1.51	.58	.56	2.78	2.22	1.13	3.68	2.55
1931	4.66	13.06	8.40	1.37	3.58	2.21	1.25	2.66	1.41	.71	1.20	.49	.35	2.24	1.89	.86	2.84	1.98
1932	3.40	10.61	7.21	.91	2.67	1.76	.97	2.21	1.24	.54	.88	.34	.26	1.91	1.65	.61	2.29	1.68
1933	3.56	10.93	7.30	.92	2.61	1.68	.96	2.17	1.21	.48	.80	.32	.34	2.00	1.60	.73	2.59	1.86
1934	4.27	12.52	7.92	1.13	3.26	1.90	1.12	2.36	1.24	.58	.98	.40	.47	2.38	1.81	.80	2.83	2.03
1935	5.02	12.94	7.58	1.49	3.39	1.70	1.29	2.58	1.29	.75	1.09	.34	.52	2.41	1.75	.79	2.81	2.02
1936	5.78	14.29	8.51	1.79	3.79	2.00	1.42	2.81	1.39	.77	1.16	.39	.58	2.51	1.93	1.00	3.22	2.22
1937	5.98	14.18	8.20	1.90	3.95	2.05	1.49	2.90	1.41	.81	1.24	.43	.61	2.53	1.92	.95	2.76	1.81
1938	5.20	13.39	8.18	1.71	3.57	1.86	1.32	2.72	1.40	.77	1.16	.39	.41	2.42	2.01	.78	2.56	1.78
1939	5.17	13.37	8.19	1.69	3.54	1.85	1.32	2.76	1.44	.72	1.10	.38	.39	2.26	1.87	.86	2.79	1.93
1940	5.60	14.10	8.50	1.80	3.70	1.90	1.50	3.00	1.50	.80	1.20	.40	.40	2.30	1.90	.90	2.90	2.00
1941	7.10	16.30	9.20	2.50	4.30	1.80	1.70	3.40	1.70	1.00	1.40	.40	.50	2.50	2.00	1.10	3.30	2.20
1942	9.30	19.80	10.50	3.20	4.90	1.70	2.10	4.10	2.00	1.40	2.00	.60	.70	2.90	2.20	1.50	4.10	2.60
1943	11.40	22.30	11.10	3.60	5.20	1.80	2.30	4.30	2.00	2.00	2.70	.70	.90	3.30	2.40	2.10	5.00	2.40
1944	11.60	22.50	11.40	3.70	5.30	1.90	2.50	4.50	2.00	1.80	2.50	.70	.90	3.10	2.30	2.30	5.30	3.10
1945	12.60	24.40	12.50	3.70	5.00	1.70	2.60	4.80	2.20	2.30	3.10	.80	1.00	3.50	2.60	2.50	6.40	4.00
1946	15.70	30.80	15.60	5.20	7.30	2.40	3.50	6.30	2.80	2.40	3.40	1.00	1.30	4.20	3.00	2.60	7.20	4.70
1947	18.70	36.50	17.80	7.40	11.00	3.60	3.70	6.60	2.90	2.60	3.80	1.20	1.50	4.80	3.30	2.60	7.50	4.90
1948	19.20	39.00	19.80	7.60	11.60	4.00	4.10	7.40	3.30	3.00	4.30	1.30	1.40	5.30	3.90	2.40	7.60	5.20
1949	17.10	37.90	20.80	6.70	10.80	4.10	3.50	6.80	3.30	2.80	4.10	1.30	1.20	5.50	4.30	2.30	7.90	5.60

1950	17.70	38.90	21.20	7.40	11.50	4.10	3.50	6.90	3.40	2.50	3.90	1.40	1.30	5.50	4.20	2.30	8.00	5.70
1951	20.20	43.00	22.80	8.10	12.40	4.30	4.00	7.70	3.70	3.30	4.80	1.50	1.40	6.10	4.70	2.60	8.70	6.10
1952	20.10	44.50	24.40	7.70	12.50	4.80	4.30	8.20	3.90	3.10	4.60	1.50	1.40	6.20	4.80	2.90	9.60	6.70
1953	19.00	44.60	25.60	7.20	12.30	5.10	3.90	8.00	4.10	3.30	4.80	1.50	1.40	6.30	4.90	2.50	9.50	7.00
1954	18.30	44.90	26.60	7.20	12.50	5.30	3.70	8.10	4.40	2.70	4.30	1.60	1.40	6.50	5.10	2.60	9.80	7.20
1955	18.30	46.20	27.90	6.70	12.70	6.00	3.90	8.50	4.60	2.90	4.50	1.60	1.30	6.60	5.30	2.60	10.10	7.50
1956 [4]	18.80	47.70	28.90	6.60	12.80	6.20	4.10	8.90	4.80	2.90	4.70	1.80	1.30	6.70	5.40	2.90	10.70	7.80

[1] The retail-cost estimates represent the cost at retail-store prices of all domestic farm foods that were both sold by farmers and bought by civilian consumers in this country. Farm food products sold in the form of meals are included but are valued at what the food would have cost in retail stores. Farm value is adjusted to eliminate imputed value of nonfood byproducts. The marketing bill, or total marketing margin, is equal to the difference between the farm value and retail cost except for the years 1933–35 and 1943–46 in which the marketing bill for some groups is adjusted for processor taxes or Government payments to processors.

[2] Includes vegetable-oil products, sugar, and other miscellaneous food products in addition to the 5 commodity groups given in this table.

[3] The estimated farm values of milk, eggs, fruits, lard, and vegetable shortening used in bakery products were deducted from the farm values of other commodity groups and added to the farm value of the bakery and cereal products group.

[4] Preliminary estimates.

NOTE.—Some of the data for 1947 and later years are revisions of previous estimates.

Source: Reprinted from July 1957 issue of the Marketing and Transportation Situation, MTS-126.

Both the volume and the total costs were about 4 percent higher in 1956 than in 1955, and a further rise in volume and total costs can be expected in 1957.

Marketing costs amounted to 60 percent of the retail cost of food in 1956 and the first half of 1957. Percentagewise and dollarwise marketing costs are at the highest level since 1940.

Because of the high degree of processing and personal services required to process and deliver cereal and bakery products to consumers, marketing costs on these products run considerably higher than for other foods. The total marketing costs for the fruit and vegetable group amounted to about $7.8 billion in 1956 or 73 percent of the retail cost. Meat products require about 48 percent of the retail cost for processing and distribution, but poultry and eggs, for which markets have expanded rapidly over the last several years, required only 38 percent for marketing costs.

Both volume and total costs were about 4 percent higher in 1956 than in 1955 and a further rise of 5 to 6 percent in total costs can be expected for 1957. Between 1940 and 1956 the volume of food marketed rose about 50 percent. However, the marketing bill—including the cost of services in restaurants and other eating places—increased from $9 billion in 1940 to about $34 billion in 1956.

The Department estimates that $4.5 billion of the $25 billion increase was due to a rise in the volume of food marketed. About $14.5 billion is attributed to a rise of 110 percent in the general price level which is reflected in marketing costs. The remaining $6 billion was due to the cost of performing additional processing and marketing services in moving food from the farm to the consumer. These services included extra packaging, trimming, preparation, precooking, and meals purchased away from home.

The introduction and widespread use of frozen foods, a process which permitted the preparation of highly perishable foods outside the home, contributed greatly to the growth in services to consumers. While the numerous services consumers purchased with food have contributed to the rise in marketing costs, many of these developments have reduced spoilage and shipping costs and made possible certain economies that are normally associated with high volume operations in processing and distribution.

There have been some adjustments in the structure of marketing since 1940; however, the pattern of costs that accompanied the change has not varied greatly. Labor continues to account for about 47 percent of the costs; transportation and associated charges about 13 percent; materials, other costs, and noncorporate profits 34 percent; and corporate profits before taxes 6 percent.

The gaps in the statistical and analytical information on marketing costs, practices, and operating efficiency are real obstacles to developing more comprehensive analyses to aid in a solution of marketing problems. Much of the economic data which your committee must use as a basis for its findings are meager and inadequate. The data do not provide as sound a basis for establishing cause and effect relationships as you might wish. Nevertheless, the information is sufficient to help you delineate the major issues facing those who seek lower marketing costs. These are (1) a rising price level, (2) the sale of an increasing number and types of services with food, and (3) the

contractual and institutional barriers that prevent or delay improvements in processing and distribution that are now available through improved technologies.

Thank you.

Senator SPARKMAN. Thank you, Mr. DeLoach.

Senator SPARKMAN. Next we have Prof. Herman M. Southworth, of the Pennsylvania State University.

STATEMENT OF HERMAN M. SOUTHWORTH, DEPARTMENT OF AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY, THE PENNSYLVANIA STATE UNIVERSITY

Mr. SOUTHWORTH. My assignment is concerned with the possibilities of increasing efficiency in agricultural marketing and the possible benefit to farmers from that.

By any standards except our own we have a highly efficient and progressive system for marketing farm products in the United States. It supplies the daily needs of some 170 million consumers spread throughout the length and breadth of the land, in large cities, small towns, and rural areas. It supplies not just basic food requirements, but all the vast array of foods and food services demanded for our modern, high level of living. It supplies them reliably, day in and day out, year in and year out.

The system operates through millions of free and independent daily decisions by farmers, by consumers, and by the multiplicity of shippers, receivers, processors, storers, wholesalers, retailers, and other marketing agents that bridge the long gap between. Their decisions are independent in the sense that no one tells them what to do. Coordination comes about through the economic forces of the market place—and through the continuity of customary practice.

How the rise of our wealthy industrial economy has depended upon the freeing of most of our labor force for other employments than producing foods and fibers is widely recognized. That thisachievement has been equally dependent upon technological and organizational progress in marketing is less widely understood. Yet specialized areas of farm production must have access to wide markets, and urban industrial centers must be able to draw upon distant sources for their daily needs of food. Without an efficient marketing system capable of bridging this gap cheaply, neither would be possible. The cost of handling, transporting, processing, storing, and distributing the basic necessities of food and fiber would more than eat up the savings from geographic specialization in production.

POSSIBILITIES OF INCREASING EFFICIENCY

Historically, agricultural and industrial progress has thus depended upon progress in efficient marketing and distribution of farm products. We are concerned here, however, not with the achievements of the past but with the possibilities of further improvement. These possibilities are substantial.

The marketing of farm products is carried on by a heterogeneous industry. It typically involves enterprises that vary widely in age, size, and function, and their activities typically are decentralized and relatively uncoordinated. Such an industry structure provides great

opportunities for the flexible, competitive play of inventiveness and ingenuity. Yet it also is susceptible to inefficiencies that competition is slow to remedy.

The day-to-day essentiality of the industry is not conducive to rapid adoption of improvements. Established modes of operation can be improved piecemeal, but large-scale overhaul may be precarious except as it comes about gradually through a succession of small changes.

Many of the activities involved in marketing are less readily susceptible to the standardization, routinization, and mechanization of processes that have made manufacturing, or even commercial farm production, so efficient in the United States. Many operations are intermittent rather than continuous, dispersed rather than concentrated in location, and involve the handling of products whose variation in size, shape, and other physical and chemical characteristics is inherent in their biological origin. Marketing also involves interpersonal relationships between buyers and sellers that are harder to organize efficiently than physical productive operations.

Detailed studies of individual operations in many different types of firms have demonstrated substantial opportunities to increase efficiency in agricultural marketing. Broader studies of industry organization similarly have shown possibilities for substantial cost savings. The progress in modernizing outdated city produce markets, for example, is well known. Proposals along such lines are slower to be put into practice because they typically involve interrelationships among firms; single firms cannot act upon them independently.

These findings of research clearly indicate that we still have a considerable way to go in bringing marketing efficiency up to the level that present know-how would permit. In view of the structure of the industry, the speed with which this level is approached will be significantly affected by the extent of publicly supported research and educational and technical assistance.

Incentives to improvement are inherent in our growing, changing economy. Continuing increase in wage rates, for example, will maintain pressure upon marketing firms to make more efficient use of labor. The economic situation should be conducive to use of ingenuity and initiative in devising and experimenting with promising new methods.

Meanwhile, rapid technological advance in the economy generally means that new developments should be continuously arising susceptible of profitable application in marketing. The rapid growth of systematic research in scientific management and organization should be similarly fruitful. Thus it should be possible to keep our level of know-how advancing ahead of application.

We live today in an age of research. Supplying our people with their most elementary needs—for food and fiber products—is at least as suceptible to improvement through research, and as important a field for such effort, as other industries. And efficient supply of food and fiber products involves marketing and distribution equally with production on the farm. Progress in this field will continue to be important for the general economic progress of the Nation.

HOW FARMERS BENEFIT

I turn now to the focal issue of these hearings: Does the farmer get any benefit from making marketing more efficient? Certainly the savings resulting from more efficient marketing create the possibility of benefits to farmers. The question is how these savings are shared between farmers, marketing agents, and consumers.

As regards the marketing agents, we depend basically upon competition to prevent them from hanging on to the benefits from cost savings—to force them to pass on these benefits, pricewise, to those from whom they buy and those to whom they sell. That benefits of increased marketing efficiency do appear to be shared in substantial part, at least, can be inferred from the Department of Agriculture estimates of the marketing bill for farm food products and its components.

The next question, then, is how such benefits are shared between farmers and consumers. Simply stated, this depends upon the current terms of trade—whether there is a buyers' or a sellers' market. This varies from time to time and from commodity to commodity, depending upon demand and supply conditions. In a period of agricultural surpluses, like the present, the major advantage lies with the consumer. In other periods, as during the war, the opposite situation prevails. There is close analogy here to the case of improvements in the efficiency of farm production itself. Over the years, commercial farmers as a group have come to enjoy higher standards and levels of living. They have shared in the rising income that characterizes our progressive economy.

RELATIONSHIP TO CURRENT PROBLEMS OF COMMERCIAL AGRICULTURE

My conclusions, therefore, are as follows:

1. The pursuit of marketing efficiency cannot replace other policies for dealing with the present farm problem. Basic policy must be directed toward improving the terms of trade for agriculture. This implies efforts to curtail surplus production, supplemented by efforts to expand market demand for farm products.

2. Vigorous pursuit of marketing efficiency can, however, aid efforts more directly aimed at balancing demand and supply. Efforts to increase marketing efficiency will make the greatest contribution in this regard if they are accompanied by continuous surveillance of the effectiveness of competition within the marketing system, to assure that the benefits from efficiency are passed on.

3. Progress in agricultural marketing is, meanwhile, an important component in national economic progress, upon which, in the longer run, farmers along with everyone else depend for rising incomes and higher levels of living.

Senator SPARKMAN. Thank you, Mr. Southworth.

Next we have Prof. George L. Mehren, the Giannini Foundation of Agricultural Economics, University of California.

Proceed in your own way.

STATEMENT OF GEORGE L. MEHREN, THE GIANNINI FOUNDATION OF AGRICULTURAL ECONOMICS, UNIVERSITY OF CALIFORNIA

Mr. MEHREN. The committee assigned me a quite specific question, "How are buyer's requirements for volume quality and uniformity changing and what are the implications for producers?"

Largely within the last 10 years and certainly within the last two decades, the food and agricultural industries of this Nation have changed sharply in terms of increasing size of plants and firms in all segments of the tightly coordinated production and marketing system; new technical methods of operation; number, nature, and interrelations of products sold; amounts and rates of investment; types of markets and channels; and methods of procurement and merchandising.

Perhaps most important are two basic structural changes:

(1) In the larger firms a new type of internal organization is developing through which management of interrelated functions of procurement, production, and merchandising can be coordinated; and

(2) Among interrelated functional segments of the food system the same kind of coordinated or integrated operation is appearing—through ownership, contracts, or a variety of other devices designed to coordinate the interdependent levels of the total system. Increasingly, the new engineering or technical requirements of one part of the system require coordinated changes in all other parts of the system. Similarly, the requirements of new products and new merchandising methods at any one functional level of the system impose the necessity for correlative changes at all other levels.

It is increasingly clear that the open market, through which any farm product could once be cleared at some price, is no longer an appropriate mechanism for major parts of the new food system. That is a reason that other methods of procurement and even of guidance over the nature, volume, and timing of production are emerging. Perishable products are largely being purchased on direct specifications of distributors who can operate as they now do only if products are suited to the technical and merchandising attributes of the distributor's business. Processed and differentiated products must also meet these requirements although the basis of procurement may differ.

In the rapid process of expansion and change in the food system, the competitive strength of various types of firms, markets, channels, and policies is changing. Generally, the total market structure appears to be highly competitive. The resultant "farm problem" differs from that long associated with disparity or instability of farm income.

In many areas and for many commodity groups, three issues must be resolved by producers:

(1) The appropriate product or battery of products required by other segments of the food system;

(2) The organization by which the requirements of the system for package, delivery, or other terms may be met; and

(3) Means whereby adequate voice in price or margin determination may be obtained in the face of large-scale operations.

Detailed analysis of the various parts of the system indicate quite clearly that the changes are in fact closely interrelated among the segments. Most spectacular changes have occurred at the retail level, but these changes did not and could not have occurred without concomitant changes elsewhere. Adjustments by producers to these changes vary among commodity groups and areas. Some farm groups have slowly developed methods by which they have effectively adjusted product, terms of delivery, and price determination without intervention of government.

In other cases, new types of enterprises, markets, and channels have appeared through which the mutual adjustments of the various segments have been achieved without any contractual or other specific integration.

Finally, there have developed a large number of business relationships among firms in different segments by which their production or merchandising activities are coordinated. Some of these methods appear to protect producers against possible adverse effects of such coordination while they avail themselves of its benefits. Others do not appear to have these characteristics. About still others there is ignorance with respect to the form of coordination itself, as well as its likely effects upon various groups. The extent and variety of these developments indicate the need for further inquiry. The possibility of extending to other commodities and areas the adjustments by which some producers have successfully adjusted to change—and have done so largely without Government support or control—is an especially attractive line of inquiry.

Thank you.

Senator SPARKMAN. Thank you, sir.

Prof. John H. Davis, the Graduate School of Business Administration, Harvard University.

Glad to have you with us, Mr. Davis.

STATEMENT OF JOHN H. DAVIS, GRADUATE SCHOOL OF BUSINESS ADMINISTRATION, HARVARD UNIVERSITY

Mr. DAVIS. Mr. Chairman, and members of the committee, my comments shall pertain directly to the question that I was asked to talk about; namely, vertical integration and production and the marketing functions of agriculture.

Mr. Chairman and members of the committee, in line with the suggestion in the committee's letter inviting me to participate in its study, I shall address my remarks to the following questions:

1. Would the vertical integration of production and marketing functions contribute to the economic stability and progress of commercial agriculture?
2. Is such development practical and feasible?
3. Is it desirable?

CLARIFICATION OF TERMS

I shall use the term "vertical integration" in its usual sense of denoting the linking of successive business functions or operations through ownership or contractual arrangements. In addition, I shall discuss certain other vertical structures which traditionally are not

thought of as integration. To denote these I shall use the "vertical arrangement." When referring to both types I shall employ the more general term, "vertical structures."

The answer to the questions under consideration can be seen more clearly if due cognizance is taken of certain basic facts and forces which have characterized the technological evolution of the past 175 years.

VERTICAL INTEGRATION PREDATES TECHNOLOGICAL ERA

In the total food-fiber phase of our economy—which I shall refer to as agri-business—vertical integration is not new, having existed for centuries prior to the technological revolution. Such integration was characteristic of the era of a self-sufficient agriculture in which practically all phases of production, processing, and distribution were performed by the farm unit. Then, the typical farm family produced its own farm supplies, raised its crops and livestock and processed, stored, and distributed its farm commodities. Under such conditions the vertical integration of our food and fiber economy was almost complete. Furthermore, such integration was a function of agriculture itself, since all operations were directed and performed by the farm as a business entity and since decisions at all levels were made by the farm operator.

SEPARATION OF FUNCTIONS IN INTEREST OF EFFICIENCY

Along with the increasing tempo of the technological revolution in agriculture has come a gradual dispersion of functions form the farm to business—a trend that is still going on. In many instances, functions leaving the farm have broken into even smaller fragments in terms of ownership and management. The dominant force behind this trend has been economic—each operation gravitating toward a state of optimum efficiency with respect to organizational structure, location, and size of unit.

Early to leave the farm was the spinning and weaving of cloth and the milling of flour. Then, with the invention of the steel mouldboard plow, the reaper, et cetera, the manufacture of farm supplies assumed a significant off-farm status. Gradually, also, the processing of food followed suit as technology in this field increased and as the developing industrial centers provided markets for the output of new food factories.

So great has been the transfer of functions from farm to business that today our farms are left largely performing the specialized operations of growing crops and raising livestock for market—farmers generally even buying in processed form much of the food consumed by the farm family itself.

The magnitude of this transition and the general dimensions of the on-farm and off-farm phases of the food-fiber sector of our economy, as it exists today, are reflected in the following figures. In the year 1954, farmers purchased from off-farm sources some $16 billion of inputs which were not produced on the farms where used. Following harvest, farmers sold some $30 billion of products to processing-distribution firms which, in turn, converted such products into consumer items for which the ultimate buyers paid a sum of $75 billion. When

one adds to this total such items as imported foods and fibers, seafoods, and fabrics made from synthetic fibers, the aggregate consumer bill for 1954 is raised to over $90 billion.

Also, in 1954 the combined operations of the agribusiness sector of our economy utilized about 35 percent of our national working force—one-third of which were employed on-farm and two-thirds off-farm. The total capital investment involved in this undertaking was greater than that of the balance of American industry, combined.

COUNTERFORCES IN DIRECTION OF VERTICAL STRUCTURES

Simultaneous with the trend toward the dispersion of functions there has emerged a complex of counterforces pushing in the direction of vertical structures—some of which tend to link related on-farm and off-farm functions, and others to relate only off-farm functions.

VERTICAL INTEGRATION

Entering the arena of vertical structures through the route of vertical integration have emerged such devices as the farmer cooperative, the business-farmer contract, large scale farms which maintain their own services, processors who operate their own farms, and joint farmer-business ventures.

Before briefly considering each of these in turn, it is interesting to note that all of these devices have emerged largely as the result of voluntary action on the part of farmers and businessmen, acting individually or in groups, rather than through direct Government action.

THE FARMER COOPERATIVE

The farmer cooperative is one of the oldest types of vertical integration within the food-fiber sector of our economy. Basically, it is a device whereby a group of farmers band together to provide off-farm services for themselves of a type that no single farmer can efficiently provide for himself, because a single production unit is too small to support such enterprise. The use of this device has been widespread, reaching into such varied functions as the manufacture and handling of farm supplies; the storage, grading, processing, transporting, and merchandising of farm commodities; rural electrification; telephone service; irrigation; and insurance. In many instances the depth of vertical integration has been extended by the federation of farmer cooperative units through successive levels until some have achieved regional and national status. In addition, these organizations have created national trade and educational associations to serve their needs.

Today, some 20 to 25 percent of all farm supplies and farm products are handled cooperatively through one or more phases of operation. However, if one considers the total of all off-farm operations included within the agribusiness sector of the economy, farmer cooperatives probably perform little more than 5 percent of this aggregate.

BUSINESS-FARMER CONTRACTS

About as old as the farmer cooperative is the business-farmer contract form of vertical integration. Here, in general, the initiative for such an arrangement has come from the businessman rather than

the producer. Early to emerge was the processor-grower contract that has characterized the food-canning industry. For years most food canning has embodied such arrangements. A similar device is common in the production of certain seeds. Here, the seed firm contracts with the grower in precise terms as to variety, production practices, quality, quantity, and price. The use of hybird seeds has given added impetus to this type of activity.

More recently the use of the business-farmer contract technique has spread to the poultry field, particularly the broiler and turkey phases. Here, too, business has taken the initiative—particularly feed manufacturers who contract with the farmer to supply on credit the chicks or poults, the feed and other supplies. Frequently, also they contract to provide production supervision, veterinary services, and a forward sale of the birds to a dressing plant. For his services, the farmer gets a stipulated fee or earning plus a right to share in profits. Currently, more than 90 percent of all broilers are grown on such a contract basis.

Moreover, this technique is spreading into egg production and gives promise of extending into hog growing and cattle feeding. Today under somewhat different circumstances, much of the commercial milk production takes place under business-farmer contracts which set forth terms of quantity, quality, and price and which provide for pickup services. Here, frequently growers contract with processors on a group bargaining basis.

In terms of volume and scope, the business-farmer contract device ranks close to the farmer cooperative as a technique of vertical integration.

LARGE-SCALE FARMS

Another device of vertical integration within agribusiness is the creation of farm units which are large enough to warrant the ownership and/or control of supply, processing, and distribution agencies of their own. This, of course, is the type of integration that has characterized industry. But in agriculture it has gained only limited headway. Even in the case of the relatively few very large farms that do exist, there is no clear evidence that the economy of vertical integration has been the major force leading to the creation of such farms. Many of the largest units came into being before the technological era was well advanced.

There exists no clear evidence that this type of integration will gain great ascendency in the future. However, certain types of specialized vegetable production may tend in this direction.

BUSINESS-OPERATED FARMS

Along with technology there has emerged some trend toward vertical integration of the type in which business firms operate farms to produce commodities for their own use. However, this tendency has been mostly limited to specialized fields in which the control over the growing of the product has unusual importance such as seed production; where the manufacturing operation is integrally inseparable from the production of a farm product, as in serum manufacture; or where a farm provides a means of utilizing a byproduct, as in feeding the waste from a sugar mill.

In addition there have been instances in which meatpackers and retailers have entered such ventures as cattle feeding and where retailers have operated dairies. However, some such efforts have later been abandoned.

Aside from specialized situations of the types enumerated, there is little evidence to indicate the likelihood of a great surge toward business-operated farms. In general, business probably can fare better by letting the farmer assume the hazards of production.

JOINT FARMER-BUSINESS VENTURES

During recent years a number of instances have emerged in which farmers and business firms have joined forces in a common venture entailing vertical integration. In general, this has related to such activities as research, promotion, and market development. Illustrative of these organizations is the National Cotton Council; the Livestock-Meat Board; the American Dairy Association; the National Dairy Council; and the National Soybean Council.

In general, efforts of this type have been fostered by organizations and associations of farmers and business firms, rather than by individual farmers and firms.

VERTICAL ARRANGEMENTS

As indicated earlier, certain types of vertical structures for linking related functions have emerged within agribusiness which do not constitute vertical integration in a strict sense of the term. Important among these are marketing agreements and market orders—which hereafter will be referred to as agreement-orders—and farm price-support programs.

MARKETING AGREEMENT ORDER

The marketing agreement order is a vertical device for relating a given supply of a commodity to a prevailing market-demand situation by differentiating between uses in terms of quality and price—all for the purpose of enhancing the total revenue of the growers. Effective agreement orders exercise a strict control over both quality and use of product by classes as a means of influencing price. Maintaining a multiple-price system, they run counter to the principle of classical economics, that the demand for the marginal unit of supply will set the price for the entire market.

A marketing agreement order is a sort of hybrid between a private venture and a Government program. It exists by virtue of special legislation that imposes compliance on minority farmer interests who may oppose them and upon commercial handlers of the product. Also, an agreement order exists by virtue of special latitude granted by Congress under the antitrust laws. The Federal orders impose no direct control measures over farm production. However, in the case of certain specialty crops, grown largely in a single State, there are instances where State laws authorize production control over commodities regulated by State-sponsored agreement order.

Agreement orders do not carry with them the right to use the funds of Commodity Credit Corporation to acquire or hold stocks from the market. They do not seek to change the organizational structure,

corporate or noncorporate, of the farm and business units that are subject to their provisions. While they are supervised by the Office of the Secretary of Agriculture, each is governed by a control board composed of representatives of producers, business, and the public.

Marketing agreements now have been in operation on a few commodities for more than 20 years and currently are in force in some 70 milksheds and 30 fruit and vegetable crops. The number of agreements in force has almost tripled since World War II. However, to date none have been attempted for any commodity on a national basis.

GOVERNMENT PRICE-SUPPORT PROGRAMS

Supplementary to the several types of vertical structures already discussed has been the evolution of Government price-support programs. Inherent in such programs are certain properties of vertical linkage with respect to on-farm and off-farm phases of agribusiness. These programs have the effect of at times reducing the flow of commodities on the free market by giving farmers the alternative of committing their stocks to the Commodity Credit Corporation at the support level. The net result is that during periods of surplus supplies such programs tend to increase the price of supported commodities, both for the farmer and for the buyer of his product. In this respect they have had considerable influence on farm prices during the postwar period.

If a Government-support program is continued year after year for a given commodity, not only do farm operations become conditioned by it, but so too do the operations of off-farm business firms which handle and store the stocks held by Commodity Credit Corporation. Unlike the several types of vertical integration which have emerged with technology and unlike marketing agreement orders, Government price-support programs are administered and operated by public officials; entail the accumulation of commodity stocks in the hands of the Government; and involve the use of a sizable quantity of public funds. In general, such programs provide incentive for high volume production rather than high quality output which is tailored to meet a specific market demand.

Regardless of certain inhibiting side effects with respect to adjustments in agriculture, on balance it seems fair to state that price-support programs have constituted a major force for vertically relating supply and demand in commodity markets during the past 25 years.

VERTICAL INTEGRATION OFF FARM

Not all vertical integration within agribusiness has had the effect of organically tying on-farm and off-farm operations more closely together. This particularly has been true of the development of chain-store merchandising in the food field. Here, in most instances the integration of the firm has been in two directions: vertically to combine such functions as wholesaling, warehousing, financing, transporting; and horizontally to include multiple-unit operation. Similarly, certain processors have expanded horizontally as well as vertically to encompass a number of commodities—some of which are highly competitive as in the case of margarine and butter.

The effect of this type of development depends on the policies followed. Without doubt, a large integrated firm possesses certain advantages for market development, particularly with respect to quality control, product development, and market promotion. However, it also has a stronger bargaining position with respect to procurement—a bargaining position which could be used to weaken the farmer's relative strength in the market.

VERTICAL STRUCTURING TIED TO HORIZONTAL INTEGRATION

Simultaneous with the thrust toward vertical structuring has come a corresponding thrust toward horizontal integration. These two drives, both largely products of technology, have been closely interrelated—the former tying together successive stages of a given economic process and the latter welding together units performing similar operations at a single stage. Horizontal integration has made vertical integration both more feasible and more purposeful, and vice versa.

To illustrate, farm enterprises join together horizontally, either through a cooperative or by merger of several small units into a larger one, in order to be able to accomplish desired objectives, vertically; food processors expand horizontally to encompass a variety of commodities in order to develop a market on a multicommodity basis; and retail food firms reach out horizontally through the development of multiple store units in order to move vertically to perform for themselves such functions as wholesaling, financing, assembling, warehousing, processing, and promotion. Even farm price-support programs unite farmers horizontally in order to influence prices vertically.

While, throughout this paper, major emphasis is placed on vertical structuring, this being the subject assigned me, such vertical structuring would have been largely impotent if corresponding integration of a horizontal nature had not been taking place at the same time. In large measure, the economic effects that flow from vertical and horizontal structuring are a joint product of the two forces.

LIMITATIONS OF EXISTING DATA

Existing data are not adequate to permit the development of conclusive findings with respect to the questions set forth in the committee's letter inviting me here. I shall have more to say later about the need for further studies in this area. Even so, I now shall venture to be more specific, with the caution that the committee should consider the comments of the next two sections to be somewhat more in the category of hypotheses than statements of fact.

FACTORS MOTIVATING AND FACILITATING VERTICAL STRUCTURING

The motivation toward vertical structuring has come from several directions, including a desire for the following:

1. Greater efficiency.
2. Ability to make new or improved end products, requiring greater precision.

3. Assured source of supplies or raw materials, both at production and processing levels.
4. Strengthened competitive position.
5. Spreading or shifting of risk.
6. Greater price stability, particularly at the producer level.

The ease with which vertical structuring can be achieved seems to depend on conditions such as the following:

1. The natural limiting, by such factors as soil, climate, and/or the perishability of product, of the production or trade area of a given commodity.
2. The existence of an opportunity for economic gain through differentiation by grades and/or size of product.
3. The presence of the possibility of more orderly marketing through processing and/or the scheduled delivering of product to market.
4. The presence of a demand situation which gives incentive for an extensive effort toward market development.

In general, commodities strong with respect to the above characteristics have tended toward vertical integration and/or the use of marketing agreements whereas those not so situated have tended to gravitate toward support-type programs. There are, of course, notable exceptions, the major one being red meats, which have remained more or less free from any type of vertical structuring. No doubt, also, the type of leadership present in each commodity situation has been an important factor in determining the course of such commodity.

EFFECT OF VERTICAL STRUCTURING ON PROGRESS AND STABILITY

One of the questions posed in the committee's letter inviting me here was, Would vertical integration of production and marketing functions contribute to economic stability and progress in commercial agriculture? A second question was, Is such development practical and feasible?

Turning first to the second point, the answer is that vertical structuring not only is practical and feasible, it has been taking place in certain phases of agribusiness for years and now has extended in one form or another and in varying degree into much of it.

With respect to the first question, doubtless vertical structuring has contributed to progress. In fact, the two seem to be inseparable—the former being a byproduct of the latter. The effect of vertical structuring on economic stability in commercial agriculture is more difficult to assess because it involves forces moving in so many directions, including those culminating in horizontal integration. My belief is that in general all types of vertical structuring have contributed some toward economic stability at least at certain levels.

At the same time, one must admit that under certain circumstances it is possible for vertical structuring to add to instability. I suspect that integration that takes place entirely off-farm may have this effect, at times, with respect to the farming sector. This particularly may be true where integration takes place exclusively in the marketing phase of agribusiness. Also, this likely would be true of situations in which vertical structuring has had the effect of obstructing or delaying necessary adjustments.

Some may argue that economic instability in agriculture has actually increased during certain periods while integration has been taking place and that, therefore, integration has not consistently contributed to economic stability. My answer is that here we have to look for the net effect of a complex of forces, some of which have set in motion new thrusts that tend to upset stability, particularly during the time interval required for the economy to adjust itself to an innovation, and some of which have pressed toward stability. So great and so rapid have been the upsetting forces in recent years that counter forces, including those of vertical integration, have not consistently resulted in real economic stability in agriculture.

The very existence of marketing agreements and farm-price-support programs testified that vertical integration alone has not achieved economic stability to the degree desired by producers. Even so, I believe it has been an influence pushing in this direction; particularly in those instances where such integration includes both production and marketing functions.

Now I turn to the third and last question, Is vertical structuring desirable?

My answer is that this depends on the manner in which it functions. While its results doubtless have been mixed, on balance I believe the positive outweighs the negative. Anyway, strictly speaking, the issue is somewhat academic in view of the fact that it apparently is inescapable in the technological era in which we live. Hence, the more basic issue would seem to be, How do we make use of vertical structuring in agribusiness in a manner that is mutually beneficial to the commercial farmer, to business, and to the public?

As already indicated, my answers to these questions do not satisfy me. However, at present adequate studies have not been made from which satisfactory findings may be drawn.

NEED FOR AN INTEGRATED POLICY

The preceding discussion points up the need for an integrated food-fiber policy, an agribusiness policy, so to speak. Policy formulation needs to take place on a basis as comprehensive as are the problems of agriculture and in a manner that interrelates all pertinent facts, both vertically and horizontally. In brief, the need is for an integrated policy on an agribusiness scale. By this I mean the development of some mechanism or forum in which interested groups may exchange views and formulate policies together in an effective manner.

I congratulate this committee on organizing these hearings on a comprehensive basis of this type. I trust that its efforts will prove productive in pointing out the need, generally, for a similar approach to our food-fiber problems.

NEED FOR INTEGRATED RESEARCH

Of course, sound policies cannot be formulated without adequate facts and findings on which to base them. Today such facts and findings do not exist. Here, too, we need an integrated approach on an agribusiness scale.

The truth is that our research structure has not kept pace with technology. Our research institutions are lagging behind the needs

of the times. At the national level the problems of food and fiber no longer are confined to the Department of Agriculture; but cut across almost all of Government, particularly the Departments of Commerce, Interior, and State. At the university level they encompass the disciplines of certain physical sciences and phases of the schools of business and engineering as well as the colleges of agriculture.

Yet food-fiber research continues on a compartmented basis. The same is true in large measure of the training of researchers. In developing food and fiber research for the future, we need to be bold in seeking sound answers, even willing to explore entirely new approaches to problems. We should concentrate on utilizing the productive capacity of our farms in a manner mutually beneficial to farmers and the public. Among other things, we need to know more about many of the issues being raised by this committee. Equally important, we need to know how to fit facts and data into a sound overall policy.

Nor will it be sufficient to concentrate only on economic studies. In formulating a food-fiber policy we are dealing with people as well as things—people, rural and urban. Among other things, we need to consider the future status of the family farm. To adequately answer the questions confronting us, it frequently will be necessary to bring together a team of researchers, drawn together from several disciplines of learning.

To stimulate research and policymaking on the comprehensive and integrated scale needed, I suggest that Congress consider earmarking certain research funds for use only on research of this type—research to be done by institutions equipped to undertake studies on such scale. This need not mean the creation of new research institutions, but rather a cooperative pooling of efforts by existing institutions.

With respect to the subject of this paper, such research should explore the strong and weak points of vertical structuring as it has developed in the past and then analyze and evaluate alternative courses for the future, pointing out the strength and weaknesses of each possibility. Also, it should analyze and evaluate proposals that have not been tried, including ways of expanding the industrial use of farm products and plans for differential pricing, following the precedent set by marketing agreement orders.

Concurrent with all of this it is important, even paramount, that we analyze and reappraise the role of producer organizations—both those of general and commodity types. Vertical integration is placing a new heavy responsibility upon organized agriculture which today it is not well prepared to carry. Particularly important is the question, Should farm organizations lead or follow in the trend towards vertical structuring? Similarly, there is need to reappraise the role of trade organizations in the food and fiber fields. In this fast-moving era we cannot afford the luxury of fuzzy thinking and ill-considered actions.

If adequate steps are not taken promptly to bring agriculture into harmony with the forces of technology, then agriculture probably will lag even further behind industry, in terms of economic well-being. This would be serious to the whole economy. On the other hand, if appropriate steps are taken promptly, they can provide a basis for an increasingly prosperous agriculture and for a better-fed nation in years to come. In order to think and act more soundly, we must have better and more complete information and then we must objectively weave this together into a sound, integrated national food-and-fiber policy.

In conclusion may I, for the sake of clarity, point out that my emphasis here on vertical structuring should not be taken to imply that I believe it alone is the answer to farm problems. I do not. Rather it reflects an attempt to focus my remarks on the specific issues outlined in the committee's letter inviting me here.

Senator SPARKMAN. Thank you, Mr. Davis.

Prof. Sidney Hoos, University of California.

Glad to have you with us.

STATEMENT OF SIDNEY HOOS, THE GIANNINI FOUNDATION OF AGRICULTURAL ECONOMICS, UNIVERSITY OF CALIFORNIA

Mr. Hoos. Thank you, Mr. Chairman. I have been asked to comment on the topic, The Contribution of Marketing Agreements and Orders to the Stability and Level of Farm Income.

There are 35 Federal marketing agreement-order programs currently in effect for 30 different fruit and vegetable crops produced in over 20 States, and fluid-milk pricing is regulated by Federal marketing orders in 65 market areas. In addition, 17 States have legislation dealing with price regulation of milk, whereas 15 States have special enabling legislation covering various types of marketing programs for farm products other than milk. Yet, understanding of these market programs is still lacking in many quarters: What are marketing orders and agreements? How do they operate? What are their objectives; their results; and their contributions to the stability and level of farm income?

Marketing agreements and orders are economic institutional devices authorized by Federal or State enabling legislation which allow an industry group to affect the marketing of a particular commodity. Agreements apply only to those who sign them and are permissive for any product. Marketing orders, once effective, apply uniformly to all in the industry; Federal orders, however, are not permissive for certain farm products. Differences exist among States as to which crops may have marketing programs.

In general—aside from milk—the Federal orders include supply-affecting provisions—volume control and/or quality regulation—while State orders may also include demand-affecting and other provisions as for promotion and research—the permissive provisions vary among States; only four States permit volume control for a wide list of products. Price itself is directly regulated only in the Federal and State programs for milk; for other products price is affected indirectly through the use of supply and/or demand-affecting provisions of the marketing programs.

The primary intent of the enabling legislation and the objective of the marketing programs is improvement of returns to farmers. Increased stability and level of income to producers are sought by the use of marketing program provisions; consumer interests are recognized but as secondary considerations.

Enabling legislation outlines the procedures and administrative criteria to be followed in the establishment and operation of market agreement and order programs. To insure broad industry approval and support, a specified minimum vote to establish a program is required—the minimum vote varying by States and in the Federal legislation.

Although uniform and industrywide in application to producers and/or handlers of the product in a specified production or market area, marketing orders are not imposed on an industry without its majority approval. Authorized operations are limited to provisions included in the order which may be changed, amended, or eliminated. In general, administrative committees or advisory boards are established—usually drawn from industry participants—to make recommendations to the specified decisionmaking administrative authority—generally the Federal Secretary of Agriculture or State director of agriculture. Cost of administering and operating marketing programs are borne directly by the industry members through specified assessments.

Experience now dates from the 1930's, and new programs continue to be established at the Federal level and in various States. The desire for marketing orders continues to be expressed by producer and handler voting in various agricultural industries.

One example of continued interest is the marketing of fluid milk where a degree of price stability has been introduced in many areas through Government regulation involving direct price setting. Short-run effects seem to have been greater stability and probable increased returns to milk producers; long-run effects are not so clearly distinguished. Large segments of the fluid-milk industry have taken on some characteristics of a regulated public utility with particular reference to pricing. Yet, economic control of milk marketing also exists in areas free of Government regulation but where price determination is influenced by dominant producer bargaining associations or integrated private distributors.

The results of marketing programs for farm products other than fluid milk are highly varied. If judged successful by the participants, the programs tend to be self-perpetuating—some have operated for more than two decades. But they are not an infallible cure for all types of marketing problems. Market programs with volume-control provisions cannot substitute for, although they may temporarily ease, necessary production adjustments; quality-control provisions can be beneficial if they are not used as a mask for volume-control; and demand-affecting provisions may help to develop market outlets.

However, even under marketing programs with volume control, the total volume produced by growers is not actually controlled, and free entry into the industry remains. Realized or anticipated increased returns from the programs may encourage production expansion. Long-run flexibility in productive capacity, therefore, counteracts at least in part the short-run impact of marketing orders on grower prices and returns.

With stability and level of farm income as the goal, experience indicates that marketing order programs are suitable and feasible only under certain conditions—restricted area of application, community of marketing interests of producers, conducive market environment—these tend to be found in such farm products as certain fruits and vegetables, tree nuts, and various specialty crops. Such products, however, do not loom large in relation to national farm income. Hence, operation of marketing programs under favorable conditions may bring moderate, but possibly lasting, income increases to particular groups of producers rather than raise the average level of national farm income or reduce its instability.

Greater instability—from expanded production and increased competitive pressures from other products and areas—can result from overaggressive program operations; yet, the judicious and restrained use of Government-industry marketing programs can contribute in a modest and limited but meaningful way to the stability and level of farm income.

Thank you, sir.

Senator SPARKMAN. Thank you.

I should like to ask a few questions briefly and then I will call on other members of the subcommittee.

As you gentlemen are well aware, there has been hope for a long time that we could solve a large part of the farm price problem by making marketing more efficient.

Professor Southworth has discussed this point. But it is so important that I would like to hear other views on it.

Mr. Mehren, will you comment?

Mr. MEHREN. Your question is what, now, sir?

Senator SPARKMAN. Can we solve a large part of the farm problem by making marketing more efficient?

Mr. MEHREN. I would suspect that you could make a fairly significant contribution to the level and stability of income, except in a few of the basic commodities. I can personally see no particular changes in the marketing structure for feed grains at the moment, for wheat, possibly for cotton, which is where a great deal of your basic problem lies. With respect to efficiency, it seems to me to be developing quite nicely in a few of the other products. But your basic surplus does not lie in those, anyway.

Senator SPARKMAN. Any different view from that, or any supplementary view?

Does anyone have anything to add to that?

Mr. HOOS. Mr. Chairman, I would only add that efforts should be continued toward achieving increased efficiency in marketing even if the so-called farm problem is not solved through that increased efficiency. We need the increased efficiency in marketing, anyway, even if the farm problem is to continue with us.

Senator SPARKMAN. In other words, it would be an improvement?

Mr. HOOS. Yes.

Senator SPARKMAN. Even if not a complete solution?

Mr. HOOS. Yes.

Senator SPARKMAN. Anyone else?

Mr. MEHREN. Could I add one thought?

Senator SPARKMAN. Yes.

Mr. MEHREN. I think there are some other issues involved in this changing market structure to which Professor Davis has referred.

I have a feeling that in a lot of the commodities not involved in your basic surplus issue that the type of commodity produced by many farms is not fitted to the type of industry structure developing in the processing, wholesaling, and retailing levels; that they are not geared up to get it through the channels that are required to reach the shelf of the supermarket very well.

And in some cases they do not have many bullets in their pockets in setting markets and prices when you are faced with increasingly large people at every stage of the production system.

This is a different kind of problem. It is one to which some attention might be directed eventually.

Senator SPARKMAN. Mr. Southworth.

Mr. SOUTHWORTH. I would like to add one comment to what has been said. I believe that we need here to distinguish between shorter run and longer run problems. Over a sufficient period of years, I think increases in marketing efficiency can make a valuable contribution toward improving the situation of agriculture.

But I do not think that they can be relied upon to meet emergency problems when, for cyclical reasons, you have serious farm surplus problems built up. They are not suitable for effective attack on that kind of problem.

On the other hand, it does seem to me that agriculture has a continuing problem over the years, and that for addressing that problem the improvement of marketing efficiency offers a substantial contribution.

Mr. DAVIS. I am not sure whether the word "efficiency" as you are using it here includes a quality factor or not. I think in addition to the improvement of efficiency and actual physical operations, within the market there is great need for quality improvement and the relating of different qualities of the commodity to selected uses.

In other words, this would entail putting the best qualities to the higher preferential uses and the lower qualities to lesser uses.

In this way one could develop a market over a broader part of the demand schedule than is now the case. That probably is a little more in the field of market development than just a question of efficiency.

Senator SPARKMAN. Thank you, Mr. Davis.

The rise in the price level in the past 2 years has often been called a cost-push inflation. I suppose wages and costs rise in the marketing and processing of farm products along with this tendency throughout industry.

Now, as marketing costs rise, the marketing margin between the farmer and the consumer widens. Has there been any analysis of how farmers are affected by this?

Do they stand to gain or lose in this situation? Or is there no clear answer?

Mr. DeLoach, what do you say about that?

Mr. DELOACH. An increase in marketing cost does not necessarily mean that the farmer is being affected adversely. It is possible that the farmer will be in a position to attain greater markets or broader markets as a result of adding to marketing costs in the sense of transporting products farther to market, by further processing, and having other services provided for them to make their products more acceptable to consumers.

Our American market for farm products has been expanding largely as a result of an increase in population, and to a certain extent as a result of the fact that farm products have been made acceptable to consumers in the sense of the getting services with them that make the products more convenient.

Mr. OGREN. I would add this also: That over the last several years, consumers have been spending about the same part of their income for food—that is, about 25 percent. Labor costs make up a large part of marketing costs. And part of the rise in consumer income is accompanied—or you might say it another way: That the rise in labor costs is accompanied by a rise in consumer income.

So, this has meant that the consumers have more money to spend for food. This has been reflected in their increased expenditures for food.

Mr. DeLoach. I think we have spent a good deal of time looking at the marketing margin as being indicative of marketing efficiency and a measure of whether the farmer is getting a fair share of the consumer's food dollar. I think we need to look at something else.

Is what the farmer gets out of the products he sells adequate to take care of his costs and provide him the standard of living that he needs?

Now, I go back to the original statement that I made. It may be possible for the farmer to reap advantages from efforts in the field of marketing that may raise the marketing costs, but they do not necessarily mean that the farmer is getting a lower price for his products. We have had a good illustration of this situation over the past several years. Farm prices have gone up. But marketing costs have gone up more rapidly. Another side of the problem, however, is that rising production costs to the farmer are probably in excess of the higher prices he is getting out of his products.

Mr. Ogren. There is also likely to be quite a bit of variation in the effect on individual commodities of this increase in marketing costs, and the increasing national income goes along with it. For some products, like some of the livestock products, we have a relatively elastic consumer demand. Consumers will buy more with their higher income. But for some other products, like bread and some of our other cereals, we may not have that expansion in purchases and in some cases an actual decline in purchases.

So, those products may get more of the brunt of the increased marketing costs.

Senator Sparkman. Let me ask a question about this term "better marketing." We often hear better marketing urged as a way to help solve the farm problem.

I do not know exactly what is intended by this phrase "better marketing." Perhaps I should not ask you to tell me.

But I would like to know what is meant by "better marketing" in connection with this, and whether or not there are some promising things to be done in this regard.

Mr. Davis, can you enlighten us on that?

Mr. Davis. Well, I suppose that we could say that, as the term is used, it includes a tremendous amount of territory. And doubtless it means different things to different people. Some of the things encompassed in the term have already been discussed. The increased efficiency would be included. I would hope that it also would include the improvement and closer control over quality. And it seems to me that if we move toward closer control of quality, then we ought to expect the market mechanism to distinguish more carefully between the respective uses of the different qualities.

If that is not done, then little purpose is served in improving quality.

On the other hand, if the better quality brings almost the same price as the poorer, then pretty soon the producers of the better quality are going to revert back to producing the variety that turns out the most per acre. And this may not always be exactly what the market needs.

Therefore, my concept of better marketing is a rather comprehensive one. In this connection, I think that we might well resort to a term in my paper, the term "integrated marketing."

It seems to me that marketing improvement in one sector of commodity operation is rather insignificant unless it carries clear through up and down the whole production-marketing structure. Again, to illustrate this item of quality, quality improvement is not any good unless it really benefits the consumer on one end and the producer on the other.

Senator SPARKMAN. Mr. Hoos, let me direct this to you.

This question has to do with marketing agreements such as those for fruits and vegetables. As I understand it, they are usually administered by an industry committee under some kind of Federal or State setup. In contrast, our programs for basic commodities like cotton are administered by the Department of Agriculture.

Do you see any possibility that a program for a commodity like cotton can be operated along the same lines as a marketing agreement such as for fruits and vegetables? And would it be of any advantage if this should be done?

Mr. HOOS. That is a question, sir, that we have been asked so many times, because certain of the marketing programs of fruits and vegetables have been successful—successful in the sense that they have survived. And I suppose that is one test of success—survival.

Some of these programs have been in operation for two decades or more. If we take a commodity like cotton, or some of the other basics, it is my judgment, after studying the problem for nearly 20 years and working with dozens of crops, that marketing orders as we now have them, either under Federal or State legislation, would not be effective and not be useful devices in dealing with the types of problems that arise in cotton and other basics.

In fact, it might even be unfortunate to apply marketing agreement-order programs to basics, because I fear the failure of the marketing order-agreement approach—and I am convinced it would be a failure—would give the whole marketing order-agreement viewpoint a bad name. Failure in the basic crops might, perhaps, pull down the whole structure of marketing order-agreement technique, where in fact the marketing order-agreement approach is useful and is helpful in particular cases. And it would be too bad to lose its help in those particular cases.

Senator SPARKMAN. Does anyone want to add to that? Does anyone have a different viewpoint?

Mr. MEHREN. You must say that marketing agreements are not administered by an industry, and cannot be administered by an industry. They are administered by an officer of the Government. Industry participation is purely advisory and must be so under the Government statutes. Other than that I would say a hearty "amen" to what Dr. Hoos says.

Mr. HOOS. These programs are often referred to as self-help programs. And that makes them attractive, because we like to have people solve their own problems. But they are not really self-help programs. Only in the sense that the producers and handlers pay the direct first costs for operating these programs are they self-help. But it is obvious that unless growers and handlers can pass those costs on, unless they get back at least as much as they think the costs

are, they are not likely to continue supporting the programs. The programs are not really self-help; they are joint Government-industry programs where people from the grassroots—people who are familiar with the local problems and who are supposed to have a feel for the situation—make recommendations to the Federal authorities or the State authorities.

All decision making—by your legislation, sir—rests in the hands of Federal authorities. The local people only make recommendations.

Senator SPARKMAN. Professor Davis, vertical integration of farm business with marketing business, whether formally or informally, it seems to me, suggests a drastic change in farming, which now consists of independent family units. Is this kind of agriculture about to be upset by a vertical integration?

Mr. DAVIS. Well, I think it has been and is being upset in terms of such factors as the size of units and the requirements on the part of the individual operator in terms of know-how and managerial ability.

However, along with this, judging by the general statistics we have on the subject, I do not think we can see any marked trend toward relatively less emphasis on the family farm. The family farm is about holding its own percentagewise. Of course, the total number of farm units is going down. But as a percentage of that total, the family farm is staying about the same.

My answer to your question, then, would be that what happens to the family farm in an era of vertical structuring depends on how well it adapts to such era. I am quite sure that vertical structuring is going to take place, because I think technology imposes it.

Well, then, if we have good farm operators; if they in turn can find the financial backing they need, both for land and for other capital requirements, and if we can keep young men with adequate ability on these farms, then I think the family farm will survive as well within a structure of vertical integration as in any other type of climate.

Maybe it even will survive better, particularly if the producers themselves work together in establishing vertical integration units of their own through ownership or by bargaining with processors from a position of strength based on cooperative action.

Senator SPARKMAN. Mr. Talle?

Mr. TALLE. Mr. Chairman, it was pointed out on yesterday that there is need for improved statistical data on farm income. And I suggested that I would be very much disappointed if the Department of Agriculture failed to include in the next budget some money for that purpose. I want to implore the budget makers to add some money for that purpose.

The statistical data on farm income are very important. Now, in your paper, Mr. DeLoach, you mentioned another very important subject—marketing costs—on which we should have data. Since 1954, the Joint Economic Committee has had a Subcommittee on Economic Statistics. The chairman of this subcommittee is a member of that subcommittee. I am on it myself. And we are interested in doing as good a job as we can. But we will need the cooperation of the departments that are immediately affected. And in your statement, Mr. Davis, you mentioned, too, some information that we need and do not have.

That is the first thing on my mind at the moment.

Now, secondly, does the panel agree that the farmer does not get

a fair share of the consumer dollar? If there are any "noes", will you raise your hands

Maybe I should have put it affirmatively.

I think farmers are agreed that they do not get a fair share of the consumer dollar. I will put it that way. Now, what can be done to give him a larger share than he is getting? Do these improvements that are spoken of here in the way of efficiency, and so on—will again start after the farmer has sold his products and accrue to other people, or will the farmer get something out of this?

Mr. Ogren, do you choose to say anything about it?

Mr. OGREN. Well, there is no doubt but what the farmers will say that they are not getting a fair share. I suppose we may go on up the line and ask other groups that are marketing farm products and they may also say that they are not getting a fair share.

So, I think the first question I would like to raise is whether this share of the consumer's dollar is really the way to measure the fairness of returns to the different groups. That, really, shouldn't we look at the returns in dollars that each group gets in relation to the resources that they put into their jobs? We can look at different commodity groups and see that the egg producer always gets a fairly high share of the consumer's dollar, at least in relation to the wheat producer, or the cotton farmer, for example.

But, nevertheless, when eggs get down to about 25 cents a dozen in the Midwest, I know those Midwest farmers out there aren't satisfied with their share, even though it is still higher than that received by producers of most other farm products.

So, I would like to first raise that question, as to whether we would use this measure in that way.

Second, I think all other things being equal, if we can increase the efficiency of the marketing system, so that it will cost less to market the farm product, that we can expect some of the gains to go to the consumer and some to the farmer, as has been pointed out also in other papers.

Mr. TALLE. I wonder what difference it would make in the cost of a loaf of bread if the farmer gave his wheat free?

Mr. OGREN. I had this example in my paper in the compendium that the average price of white bread is now about 19 cents, and the value of the wheat that goes into that bread, less than a pound, is about 2½ cents. So that would mean a drop down to 16½ cents.

Mr. DELOACH. Dr. Ogren spoke of the value of the ingredients, that is, the raw materials, that go into the bread; but that does not necessarily mean that the price would drop proportionately, or by that amount. I think I am in agreement with Dr. Ogren on his statement with respect to the need for using the terms "margins" and the "farmer's share" of the consumer's dollar with a little bit of discretion. In other words, they do not reflect whether the farmer is getting an adequate return on his products.

Those of us in the Department of Agriculture who have been working with this problem of the farm-to-market spread are very nervous on occasions that the people take an aggregative figure which we develop and interpret it incorrectly. During the last 2 or 3 years, we have been using funds appropriated to us—in fact, earmarked by Congress—to get behind this problem of why marketing margins are what they are. This means a study of marketing costs.

I may point out to you, Mr. Congressman, that our data are still inadequate. We do not have good current records on much of the information we need regarding marketing margins by functions that will really give us an operating base for saying this is true or this is not true. We are going to have to strengthen our data very materially in order to get it to a point where it is most useful.

Mr. TALLE. That is right in line with what you stated at the close of your paper that you read.

Mr. Ogren.

Mr. OGREN. While we are on this subject of need for statistics, may I put in a plug for increased emphasis on another set of statistics?

I think that the censuses of business and manufacturing can provide us with a lot of useful data on marketing of farm products. And, in general, I think the collection of data through these censuses is an economical way of collecting statistics useful to many groups and for many purposes.

Mr. DAVIS. Mr. Chairman, on this subject: I don't think that we can say that there always is a direct causal relationship between the increasing market costs and the price that the farmer gets. These services, convenience items, built in service, and so forth; that have been mentioned here are a factor, of course. But it seems to me that the present price structure at the commodity level, the raw commodity level, probably reflects more the surplus position of certain commodities than it does the cost of adding on these services, as such. The point is that the presence of a surplus tends to reduce farm prices, under any set of conditions.

Also I think that the fact that most food items are purchased for cash, whereas, many other items are purchased on time, is a factor. The fact that families sometimes get themselves committed so heavily for payments that the amount of funds left for cash items is limited, may affect food purchases.

I would certainly agree that present statistics are not adequate to let us clearly distinguish as to what factors are at work and the extent to which each is a cause.

Mr. TALLE. I do think that if we would improve our statistics the results would shed quite a bit of light on this point.

Now, while we are talking about this, Mr. Davis, I noticed what you said about quality. The Iowa Swine Growers Association has been trying for some time go to along with that idea, to improve the quality of pork. Knowing that, I have paid some attention to what I see in the stores here in Washington. I don't buy at highest priced stores, nor at the lowest priced stores, but I must say to you that rather often what I see in the way of pork products I just wouldn't buy. There is too much fat, too much sinew, and too much bone. And when I have talked to farmers about that, they have agreed that to improve quality is the thing to do. But they say if we go to the market with that type of hog, we won't get any more because of that quality which we offer. We need the cooperation of the meatpackers.

There would have to be cooperation all along the line. The consumer will pay the price for good quality. But the farmer should also have a fair price for good quality.

Mr. DAVIS. I would agree with that. I have watched this situation for, oh, almost 30 years, having had a hand in a study back some years ago that pertained to it. It seems to me that we can say that

for 25 years at least we have been able to breed a type of hog that would produce leaner meat and better pork. Also, we have known how to feed it. And yet the incentives have never existed all up and down the line to get that type of animal produced and get the meat from it on through to the consumer.

I think that to get lean pork produced we need teamwork not only at the packer level but on through to the distributing level. And it seems to me that this is an example of an area in which vertical integration could be helpful, provided it is vertical integration of the right type. This example illustrates what I tried to bring out earlier, that vertical integration itself is neither good nor bad. The answer depends on what we do with it.

Mr. TALLE. That is right. That is exactly right.

There would have to be cooperation all along the line to make it successful.

Mr. DAVIS. It is probably going to take a good push from the producer level to get it launched, too.

Mr. TALLE. Yes. I quite agree with you.

Does anyone else have anything to say on that subject?

(No response.)

Mr. TALLE. Well, I will stop now and give somebody else a chance. Thank you for your help.

Mr. MILLS. Mr. Davis, if you will, I want to get just a little bit more information about vertical integration. Who starts it? That is, who inspires it? For whose benefit is it?

Mr. DAVIS. Well, I think it is a byproduct of technology in a large sense. The improved processing methods probably require a tighter schedule of products from the farm to the factory or to the processing plant. Maybe also, a greater control over the variety, the time of harvest, and so forth.

Now, I think in many instances vertical integration has been started by the processors moving back toward the farm as a basis for procurement. We do have instances, though, where the producers have united cooperatively, to take the initiative in vertical integration. A farmer cooperative illustrates this type.

Mr. MILLS. Would you give me an example of when you think the processor may have started vertical integration?

Mr. DAVIS. Canning operations, which have existed for 75 years or so on the basis of contracts with producers, provide such an example.

Mr. MILLS. Has vertical integration in that instance inured to the benefit of the farmers involved, in your opinion?

Mr. DAVIS. Yes, I suspect that we could say that this has helped open up new production opportunities for farmers. I think we could also say that probably in general it has helped farmers more when they were fairly strongly organized at the producer level, themselves.

Mr. MILLS. Well, is the broiler industry an example of vertical integration?

Mr. DAVIS. Yes. That is a recent example.

Mr. MILLS. They have done a remarkable job of marketing improvements. I have obtained some statistics from the Department of Agriculture that we marketed 292 million birds in 1946, and in 1956, 1,345 million.

Now, would you say that that is an efficient example or an outstanding example of success in vertical integration?

Mr. DAVIS. I would say it is one of the most dramatic examples we have had. It has all come about in the last 15 or 20 years. And in this instance, the major initiative for bringing it about stems from industry, first from the feed manufacturers, and more recently by the processers. I think that we can say that there has been improvements of many kinds in the broiler operation; improvements in the birds, and improvement in the efficiency of feeding and marketing. Probably on net balance, as it stands today, the consumer has been the greatest benefactor.

Mr. MILLS. Is this increased volume of broilers due to marketing or production efficiency?

Mr. DAVIS. I think both.

Mr. MILLS. Both?

Mr. DAVIS. Yes. And the fact that the whole operation was on a rather carefully tied together schedule.

Mr. MILLS. Well, if this is a typical example of vertical integration, I am going to have a hard job selling the other farmers in my district on going into vertical integration, because I get many complaints from those engaged in the broiler industry about the effects of, as you say, the feed industry or somebody else taking over the entire industry and putting them on a very low scale of wages or whatever it is that they may get. They are very lucky to get 4 cents a bird. It takes an awful lot of birds to make a living when you deduct the cost of the investment.

If that is a good example of vertical integration, I may have a hard time selling it to the rest of the farmers producing other commodities in my area. That is the reason I wanted to know a little bit about it.

Mr. DAVIS. I fear I did not answer your earlier question fully. I thought that your question was: Is the broiler industry a good example of vertical integration rather than an example of good vertical integration.

I didn't mean to imply that it is necessarily an example of good integration. I think the consumer has benefited most by it. As I see what has happened, the contracting operation, the tying together of functions by contracts has more or less moved full-circle in that today anybody that is in the feed business related to broilers is on this basis—growers, feed manufacturers and processors all are on the basis of contracts. Now, today the broiler business is a highly competitive industry with a tendency toward surplus capacity at most levels.

Today if you talk with the feed people, they are rather unhappy at the competitive situation, and so are the processers, and so are the growers. I think in a situation like this that there is a tendency for each element in the structure to try to protect its own interests and in that kind of a situation there is a tendency for the greatest risk to be borne by the weakest element in terms of its capacity to resist the acceptance of risk. And I think that today that the weakest link is the grower.

Mr. MILLS. Are you saying what I have thought, then? I had been thinking that the broiler industry had permitted itself to become incorporated in a vertical integration controlled by some nonfarm corporation. That is not the type of vertical integration we want for agriculture, is it?

Mr. DAVIS. No, it is not what we want. Even so, I think if we watch the broiler industry as it moves through successive stages toward economic maturity, we may find that the producers will take some kind of steps to strengthen their relative position in the vertical structure that evolves. And probably the tool that is most available to them is one of organizing cooperatively among themselves. This may be for operating facilities of their own or for bargaining as a group.

Now, I rather doubt, though, if we can block vertical integration in broilers because we do not like some of the effects of it. Technology in the broiler industry almost pushes us in the direction of vertical integration.

Mr. MILLS. Well, what can I tell them down home that they can do? What can I tell them that they can do to get out of this situation they are in, and how to utilize a vertical combination, if they want to do that. Would you outline for them some ways and means by which they can accomplish that result and get out of this entanglement they are in now?

Mr. DAVIS. I think one way they could do it is to organize horizontally themselves so as to be able to more successfully compete with the other segments of the industry for a satisfactory status in the market structure.

Mr. MILLS. You are saying they should organize themselves. You mean they should organize cooperatively?

Mr. DAVIS. That is the chief way I can see that they can strengthen their position. Some kind of a cooperative producer broiler organization that will add to their economic strength.

Mr. MILLS. They claim they haven't got the money to get started in this particular situation.

Mr. DAVIS. Well, let's see what some of the other panel members may have to suggest.

Mr. MILLS. I am trying to get them out of this vertical integration into something else.

Mr. HOOS. I think we might be careful about our use of this word vertical integration.

Integration is like a lot of other things in life. Whether it is fun or not depends on who is doing the integrating.

And I think the outcome of some of this is going to depend upon whether the farmers or farm groups are pulled into integration by other forces or whether they make the push. If they start the integration and try to pick up the benefits, that is one thing; if somebody else starts it and pushes it and they have to come along, it is another thing. Also I am a little worried about Professor Davis' words about this vertical structuring and integration. It sounds to me too much like a slogan. And I think agriculture, as well as the country at large, has suffered from slogans. Some of us remember when the phrase "equalizing the tariff" was going to do wonders. Then we moved to an era where "Cooperation" was going to solve all the problems. And then we heard another slogan "Parity income." And still another slogan, "Parity price."

I am a little bit afraid, with due apologies to Professor Davis, that agribusiness and vertical integration will become slogans that will be misinterpreted. It seems to me pretty fuzzy.

In fact, integration has been going on for a long time under a different name. It is like the fellow on the street who was surprised to learn that he had been talking prose all his life.

We have had all sorts of integration going on for years on the west coast. We have not thought in terms of solving all problems, and certainly not in terms of popular slogans. So I am afraid that unless we can articulate in a sharp way what is really meant by integration and have a better understanding of the economic operation of those types of systems, which we do not now have a complete understanding of, we are liable to lead a good many people astray.

So, I, for one, am—I see I have raised a response already—I, for one, am a little wary about integration and all of its implications. Out our way, a good many groups, sir, as in your territory, have been integrated into something. And they don't always like it. And when they ask "What shall we do?", it is rather difficult to answer constructively. When they are told to "integrate back," they say, "we have been trying to do that for years." And then they start asking lots of questions. So, with due apologies to Professor Davis, I would urge him not to raise the banner of integration without much more analysis and thinking, so that it does not degenerate into merely a slogan.

I think integration is something we need to learn a lot more about yet.

Mr. DAVIS. Well, I am learning some things about what I am supposed to have said here myself, I guess.

In the first place I have not advocated vertical integration as a solution to the farm problem. I have merely tried to depict in my paper the degree to which it has taken place. And I have tried very carefully to distinguish between vertical integration, vertical arrangements, and structures.

Agribusiness does not mean vertical integration at all. It by definition means the sum total of our food-fiber economy as it exists, vertically integrated or not vertically integrated. Those two terms are not synonymous in any sense.

Mr. MILLS. By the use of the term "agribusiness" and the establishment of a policy of agribusiness in food and fibers, I assume you mean that whatever policies we adopt should apply to the entire situation affecting food and fiber and not be predicated merely upon the production aspects alone?

Mr. DAVIS. That is right. To look at a problem in its total setting; the marketing part of it as well as the production part plus, also, the manufacture of farm supplies.

I think that this question of vertical integration raises many, many problems. Even so, it seems to me that technology is forcing us to relate more closely together the successive operations as commodities move from the farm to the consumer. Gradually tighter and tighter specifications are being imposed by processors and retailers upon the source of products from our farm. This is taking such forms as stricter terms of uniformity, more rigid schedules for the delivery of the product to the store, and firmer control over color and size, all of such factors.

Now, in order to meet these factors, there has to be a closer tying together of decision-making processes, not only at the distributive

level but reaching on back through wholesaling and clear on back to the producer.

Mr. MILLS. Well, Mr. Davis, because of the impression you had made on me with respect to the possible inevitability, in some instances, of vertical integration, I have raised the question of whether or not the farmer who is caught in vertical integration and doesn't like it must forever continue in that situation, or is there something that can be done for him, or by himself?

Mr. DAVIS. I think he will have to do most of it himself. Or rather farmers will have to do this as a group. And I would say, as I indicated earlier, that I think farmers are the weakest link in the vertical structure in general. Today the whole industry from top to bottom is so competitive and so affected by surplus capacity at most levels that each sector is trying to protect its own status. Therefore, the weakest sector in the structure is likely to come out poorest. I think that today the weakest sector is the producer.

Now, I don't know that the farmer can radically alter the status of other sectors in order to improve his own, at least in the short run. It seems to me that in that kind of a situation the farmer has to organize and improve his own status relative to that of others. In that way he can resist some of the tendency for the price disadvantage to move in his direction.

Mr. MILLS. Mr. Chairman, and members of the committee, I wanted you to know that Mr. DeLoach comes from my area, and that is the reason he has demonstrated unusual ability in this field of marketing. I wanted him to have an opportunity of commenting on my question.

Coming from the same area, he understands I am sure, the point I am raising here about the poultry industry.

Mr. DELOACH. Thank you. I suppose those born in Arkansas have to stick together.

I would like to raise another point, however, that is not necessarily related to State lines. It is this: the program of integration that we have seen advanced so rapidly in the last few years has to be recognized as a managerial tool to get certain things done. I believe it was essential in the initial stages of the development of the broiler industry to get things done and get them done under conditions that were not always favorable. It was necessary to create a new industry, to invest capital at places where the capital did not exist in order to bring the industry to areas where labor did exist. While I am not advocating vertical integration as a cure-all, I would recognize in the course of my comments that it is a useful device to get things done and in the process of using the device there are certain excesses at times which may be injurious to the public and to competitors. But I think we can view it as a useful tool. There has to be certain offsets to managerial programs on occasions when there are parties that are injured by the programs that are adopted.

Mr. MILLS. This afternoon I have heard that the broiler situation that I have been talking about may also be developing in the meat business.

Should farmers in the Corn Belt who are raising hogs look with any degree of concern at the fact that their situation may be taken over here or become vertically integrated? Mr. Mehren, do you have any thought about whether it would be good for the meat industry to get in the shape that our poultry producers are in or not?

Mr. MEHREN. To my knowledge there are only a couple of places in the United States in which any formal or contractual form of integration has developed in the livestock industry. I believe there are two contracts being considered by a major packer for the Southeast. I believe there are two small packers in Indiana who are developing a contract with producers there. Now, on the west coast there has been another form of integration, free of these rather loaded terms here which make me quite as nervous as they appear to make Dr. Hoos, which have developed for reasonable purposes. The question of what is useful, what is good, what is bad, are not the questions that we are particularly competent to answer. These are certain facts: if you are going to sell beef through Kroger or Safeway or A. & P., or a single-unit supermarket, you have got to have beef which is uniform in quality. It has got to have certain age on it; it has to be delivered in a certain sequence; otherwise, you cannot merchandise it. You cannot brand it, merchandise it, wrap it, or sell it, and the retailer goes bust. In order to get that beef, they have got to have wholesale units behind it. Safeway is an example. It keeps tens of thousands of head of middle grade not over 700 pounds in one warehouse in Los Angeles. Somebody has to slaughter that.

Back of that there has developed a brandnew type of packing plant which couldn't exist if it didn't have warehouses and retail stores like Safeway to go to. Safeway couldn't exist without them. I am not talking norms, or good or bad. I am talking the cold business facts of life.

You couldn't run that kind of a packinghouse which serves those kinds of retailers unless you had a new type of feed lot.

So there are feed lots developing which take up to a hundred thousand head of cattle. Back of that there is a new type of range. You can call this vertical structuring, vertical integration, whatever you want to call it. But I think there are three major facts involved in it. You can't run the present type of retail or wholesale or institutional merchandising without uniform products delivered properly of a type required by the trade. You can't merchandise it.

Secondly, if you are going to merchandise it, you have got to have a set of interrelated processing, transportation, and so forth facilities right down to the producing level. Because technically you can't make the system tick without it.

Now, with respect to good or bad, you can sign a contract which may not have the objective of meeting the merchandising requirements or the technical production requirements but may possibly be a means of getting interest on capital lent or some other nasty objective. But nobody is required, to my knowledge, to sign a bad contract.

Now, on the contrary, on the coast again, the canning producers have always had a contract which specifies precisely what shall be planted in terms of seed—where, when, how it is to be treated, when it is to be harvested, when it is to be delivered—for one simple reason. You couldn't run a cannery without that kind of an assured supply.

And if the cannery didn't run that way they couldn't service retailers, who demand that kind of uniform product.

Now, they are in business for the purpose of ultimately serving retailers. Therefore, they have gone back and gotten their supply assured. At the same time a group of people have developed who could be 5,000 little firms supplying a few large canners. But they

are not. They have developed means of getting together solely for the purpose of bargaining. Nothing else. So that you can put 1 person really representing all the producers against 1 of a few representing all the processors. There are ways by which this has been done. And there are some that are good for some people and some that aren't.

Representative MILLS. Well, is it fair to say that usually these situations that we are talking about—this vertical integration—occurs where there is somewhat of a void created by the lack of the organization to begin with among farmers? Some farmers in my own area, for example, raise vegetables under contract for some frozen food concerns. They get a contract to raise so many acres of okra, for example, and they do it. They are very well satisfied with those contracts. They are signing a contract they like.

Processors have stepped in there with those contracts because we had no group producing the particular type of vegetable that was desired. And they have supplemented the income of the farmers with these contracts because without them the farmers probably wouldn't be producing okra and so forth for sale anywhere.

Now, in those instances our farmers are very well pleased with the arrangement. But I am just wondering if these things that we call vertical integration come to fill a void of some sort that exists because of the lack of the cooperative effort among farmers to begin with.

Mr. MEHREN. I think they sometimes come to fill a void. Other times they come because an existing method of distribution which was adjusted to a totally different system doesn't work. A fruit auction was developed for the purpose of bringing a lot of stuff together from lots of people. Getting it in large lots in New York, or any other terminal market, dividing it up and letting small retailers come in and pick it out.

But small retailers have died out a lot, lot faster than small farmers have—and with infinitely less congressional attention in the process, I might add.

You see, the thing that has replaced them has made the old type of food auction completely impossible, both technically and from a merchandise end for some new channels. People retailing fruit have found ways of going together.

The same thing is true in the meat and dairy operation.

Now, it so happens that the parts of this system are closely tied together in the sense that we change one and the other has got to change or vice versa. If this is what you mean by "integration," certainly it is beginning to permeate the whole system. But I don't think you can properly say offhand that there is anything good or bad about it. It just is.

Representative MILLS. We have to be on the alert.

Mr. MEHREN. I repeat I think any group can sign a good or bad contract. But the real issues they have to decide, I think, is what they are going to sell. You can't sell rag-tag dogs and cats in the meat business, say, if you are going to service big chains or supers which are independent. You have got to get an assured supply of a particular type. Farmers who want to get into that market have to produce it.

The second thing that will determine what they get is how much they sell. No individual can do that very well by himself.

The third thing they have to determine is how they are going to organize to get it through this system. It is very obvious that certain types of yards, for example, aren't fitted for that type of system.

If they are going to be dealing with larger and larger people it is wise that they find themselves some way of getting themselves large enough to have a reasonably good bargaining position.

The tomato canners are organized. But the tomato producers are also organized and they are not pushed around very much. The cling peach people are organized and so are the canners. That is a fairly even battle and bargain there. These things have worked in most cases.

Representative MILLS. Are you suggesting that it is appropriate in agriculture to take a page from labor and acquire similar bargaining power to protect farmers?

Mr. MEHREN. If the purpose be to counter control over a large part of supply at another level of the system, I see nothing morally wrong with combination elsewhere. And certainly combination has been authorized for producers.

I am not talking in those terms. Generally I think they should get a better margin out of this kind of organization than they would get without it. And in many cases it has worked.

In others it hasn't. There are many commodities where I would never expect to see it work. And broilers happens to be one of them.

Representative MILLS. We have in our own area too, Mr. DeLoach, these milk marketing orders.

I find by and large the farmers who operate under those orders are reasonably satisfied compared with other farmers with respect to what they get.

Are these types of marketing orders just good for milk and a few things like that? Or is there any possibility that some of these ideas can be spread to other commodities?

Mr. DELOACH. I think Dr. Hoos answered that question in part, Mr. Congressman, by indicating that he didn't think marketing agreements and orders were applicable to certain types of commodities. I might suggest, however, that there is a good deal of work that needs to be done to determine just what they are applicable to and the benefits and detriments that might come from their operation in particular commodity areas.

That is one of the types of recommendations for research that we are proposing in our research group in the Department of Agriculture, to try to find answers where some of the answers do not exist. One of them, I think, is to the question which you asked. I can give you an opinion that isn't worth much.

Mr. MEHREN. There is an amendment in the Agricultural Marketing Agreement Act of 1937 which governs these programs; which provides that they have to be applied to the smallest practicable area.

That amendment went in about 1935. It went in because any effort to control even two areas for the same commodity under one market order—like Florida oranges and west coast oranges—was a failure. You have got the problem of administration which is almost impossible if you spread them out on a smaller area.

You have a more difficult problem of maintaining equity in terms of volume and access to markets. There is a long history of about 80 years of these things which indicates if you ever get out of one area

that your problems of maintaining equity are such that the Congress has already recognized that they have to be kept to one commodity and one place.

Representative MILLS. Thank you, Mr. Chairman and the members of the panel.

Representative CURTIS. Mr. Chairman, I wish to just make one comment on this very interesting discussion. One thing on this vertical integration on the broilers is to some degree it lifted the broiler production right off the farm.

And I know it put some of it right into old warehouses in the city of St. Louis, which is certainly out of the agricultural sector. And I am interested in this hog development, because—I won't reveal names, but I know that certain packers are not going to the traditional producers of hogs, but are setting up on marginal lands people who have never been in farming at all.

I don't know whether it works or not. That is something else. But that can happen in this field. And I think it bears right in line with what the panelists have been saying; that it is not choosing up sides with what is right or wrong. But the economic factors are there, and it is a question of technological development.

If the producers don't recognize this, why, it may be that a movement will be sufficiently strong that the new producers will come into the area. And they may not be the traditional agriculturists.

One question I would like to ask—in fact these are merely collateral questions, because I am deeply appreciative of the panelists' comprehensive presentation and their papers on the whole subject. But this one collateral point: what has been the effect of the Government disposal programs on our normal marketing efficiency?

And if we are in the surplus business for some time in the future, is it possible to handle the disposal in such a way that we minimize the effect on normal marketing efficiency?

First of all, the question is: Have we in our governmental disposal programs—let's take domestic first—have the size and manner of these disposal programs been such that normal marketing efficiency has been in any way affected?

Mr. DAVIS. Well, wouldn't the test of that be whether or not you get more of the product consumed?

And I think probably the answer varies by commodities depending upon the elasticity of demand as you made it available at a reduced price compared with the higher price that had existed before.

Representative CURTIS. Well, let me illustrate by one small thing that may get the thought across. We in Congress of course get the complaints. On the school-lunch program which is one that most people agree has been a very fine way of disposing of a lot of surpluses, at one stage we were getting rid of hamburgers. I got a lot of complaints from the normal retail outlets that that was interfering with their normal processes. They were accustomed to sell the schools hamburger meat.

And I can easily see from that little example how this thing could interfere with normal marketing efficiency. It actually could become in a sort of a way permanent, so it would prevent the normal—what would be otherwise normal development in the private sector of the economy from developing. I was just wondering if there had been any—whether this has been an important enough factor that anyone has observed it and has any comments on it?

Well, I will pass on because apparently there are no comments on that.

Now, the second thing that I was concerned about was the effect on marketing and on stability of farm prices of the technological developments in the area of storage.

It would seem to me that our technological improvements in storage would be a rather considerable factor affecting the instability, the traditional instability in farm prices. Also a collateral thing is how much the use of the consumers of deep freezes have affected the overall marketing of agricultural products, if at all?

Has storage capacity and technologies been such as to affect our overall marketing problems?

And has it been towards the end of increasing some stability in this area of marketing agricultural products?

Is it a negative factor?

Mr. DeLoach. Mr. Curtis, I don't know that the question can be answered with any degree of definiteness. But the availability of storage for perishable products, and the fact that storage is a means of decreasing the rate of perishability might be a stabilizing factor in a market, especially for some types of commodities. In other words, it would decrease the rate of flow at a specific time and improve the price at that time.

To the extent that it results in having available abnormal stocks of commodities that can be thrown into the market at any time, it might have a depressing effect.

There is no one answer to the thing. It depends upon your situation. But I do think there is a problem of extent to which storage facilities increase stability or decrease it. We have had a tremendous increase in storage capacity in the last few years, especially the cold storage or frozen storage capacity.

Representative Curtis. Well, that was the one question I was going to ask: Is a test of whether this was an important factor, the amount of increased cold storage? I am trying to use the word "storage" in its broad sense. And canning is a form of storage. So is deep freezing.

Now, I just recently went through a brandnew turkey-processing plant out in St. Louis. And it is connected right with a brandnew and very large cold-storage plant. They have got a great capacity there—and it is very obvious that they can store several months' supply of frozen turkeys. They take a turkey right in alive and he comes out maybe a few minutes later and goes into the deep freeze.

Now, under that process, it doesn't matter when the farmer produces his turkeys. They are capable of receiving him at any time, and they are capable of—if the market isn't there—of holding him.

That is the aspect that I was interested in. It seems to me that it would be a considerable factor in tending to stabilize the farm economy.

Mr. Davis. Well, it seems to me that the presence of storage does increase the ability to bring about stability, particularly seasonable stability. But on the other hand it depends on how the storage is operated. If the storage is operated deliberately to try to even out the movement, it should have a stabilizing effect, particularly on a seasonal basis. On the other hand, if it were to be used for the other extreme—that is, for manipulative purposes in the market—it could

have the effect of decreasing stability by either being the basis for withholding the product to let the price go higher or for dumping the product to cause the price to go down.

So I don't think there is any single answer to your question, other than that adequate storage should increase the potential for stability. The degree to which it does, it seems to me, is going to depend upon the manner in which the storage is operated. And the greatest opportunity for stability, I think, would be the enhancement of seasonal stability; that is, between periods of heavy delivery and periods of lighter delivery.

Representative CURTIS. Theoretically if there is real competition in this area, there would be very little use of this technique for manipulation, I would suspect. It seems that it is more to give a continuous flow into the markets. So that it isn't seasonal.

Mr. DAVIS. I wasn't saying that in all or even most instances, there would be manipulation. I was merely saying that more storage wouldn't necessarily have to result in greater stability.

Representative CURTIS. I appreciate how you were using it. The other collateral question to that, though, is this question of the extent of the import of the home deep freezes from the standpoint of purchasing. A great deal of the papers were devoted to the development of the supermarket. But it also seems to me that the increase in the use of the deep freezes and frozen food lockers by the individual consumer has had some effect on the purchasing habits of the housewife, and so in turn has had some bearing on marketing right back to the farm.

I wonder if there is any comment on that?

Mr. Mehren, you are the one who has devoted a lot of time to that. Has that become an important factor yet, or not?

Mr. MEHREN. I don't know what the home storage capacity is. But I do know that modern retail markets are pretty much geared to one-stop shopping; not just foodstuffs but the works in one place; that they are moving more and more and more to prefabricated convenience items. I also know, and I think attached in the testimony are the changes in frozen products among others.

Now, to get the changes, the very big changes, in annual sales of frozen products at retail which have occurred, certainly there must have been a correlative increase in home storage, unless women use them immediately, which I don't think they do, because their shopping habits at retail are clearly defined as becoming more and more just once a week.

So if you take it more or less logically, yes, I guess there has to have been a very great increase in holding storage of at least 1 week's length to have made the other types of changes possible.

Representative CURTIS. We have a very interesting thing that may still be going on in St. Louis where there was a meatcutters' strike. The result was that all the big superstores, and chains, closed down their whole operation. Everyone was anticipating there would be a great squawk from the housewife. And, strangely, it didn't develop. And apparently everything went along fairly smoothly—this has been in existence about a week. Which further indicated—to me, anyway—that the buying habits and the storage capacity involved here has had a marked effect on the marketing of agricultural products.

Mr. MEHREN. I think the only real change that can be supported statistically is a shifting of the storage away from the retailer. The retailer's rate of inventory turnover has gone up very nicely, which means his inventory holdings in percentage to his business are going down. This is a function of direct shipment from plant to the retail outlet.

So it seems to be shifting back. To my knowledge, the storage matter has never been a very stringent one in operating at the processing or distributive level, either one.

Representative CURTIS. Yes. It does seem to me, though, in stability of agricultural prices the factor of storage is a very important item. And I would be curious to know what the statistics are over a period of years as to increased amount of storage space and otherwise, for not just these perishables, because there has been considerable development in grain storage and other storage—using the word "storage" in its broadest sense. We have a lot of semifinished products that can be stored, where formerly you couldn't store them, or there wasn't adequate storage.

Do you know, Mr. DeLoach, whether there are any series of statistics that have been developed in this area of storage?

Mr. DELOACH. We have some statistics on storage availability, yes. And I was going to mention following Dr. Mehren's remarks that some preliminary data that we have would indicate that there is about 1 pound of home freezer space for frozen food storage for each 2½ pounds of frozen food produced commercially.

That is in the home commercially.

Now, Mr. Curtis, I want a chance to check my data there. But I think the figures are accurate.

Representative CURTIS. Mr. Chairman, if he could supply the record with any additional data on that subject, too, I would appreciate it.

Thank you.

Yes, Mr. Southworth?

Senator SPARKMAN. We will be very glad to receive any additional material from any of you.

I am informed that a copy of the transcript will be sent to each one of you. You will be given 2 days in which to correct that and send it back. And if you have any additional material, you can send it at the same time. We would appreciate it.

Representative CURTIS. Thank you, Mr. Chairman.

Mr. SOUTHWORTH. It is my recollection—and perhaps Dr. DeLoach can check me on this—that there is a study in the Department of Agriculture that has some bearing on what you are speaking of here. At the time that the soybean production was expanding so greatly' and markets for soybeans showed considerable price instability, isn,t it correct that a group in the Department made a study of the possible advantages to farmers from storing soybeans on the farm at time of harvest in order to hold them, a situation which it seems to be reflected the fact that the storage capacity for soybeans had not caught up with the great expansion in production of that industry?

I am not a follower of soybeans and I do not know what has happened since. But at that time, at any rate, the Department study indicated that farmers would find substantial advantage—at least they would have, on the average, based on an analysis of a preceding

period of several years—by holding their soybeans back on the farm providing they could have storage facilities for them there.

Mr. CURTIS. Thank you.

It just seems to be storage would be a good indicator or at least a factor that ought to be studied and followed in this whole area.

Mr. SOUTHWORTH. Could I make just one comment on your previous question with regard to the effect of Government distribution programs?

Mr. CURTIS. Yes.

Mr. SOUTHWORTH. I simply wanted to note for the record that one important argument for the food stamp plan that was operated as an alternative means of distribution during the war was that it did utilize the regular channels of trade in connection with surplus disposal operations rather than having an auxiliary Government-operated system of distribution setup. And the argument was that that was a more efficient use of resources than setting up channels outside of normal distribution.

Mr. CURTIS. Thank you. That is all.

Senator SPARKMAN. Any further questions?

(No response.)

Senator SPARKMAN. Gentlemen, we are indebted to you for the very fine contribution you have made to these hearings.

The subcommittee will stand in recess until 10 o'clock in the morning.

(Whereupon, at 4:45 p. m., the subcommittee adjourned, to reconvene at 10 a. m., December 18, 1957.)

POLICY FOR COMMERCIAL AGRICULTURE

ITS RELATION TO ECONOMIC GROWTH AND STABILITY

WEDNESDAY, DECEMBER 18, 1957

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON AGRICULTURAL POLICY
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D. C.

The subcommittee met at 10 a. m., pursuant to notice in the Old Supreme Court Chamber of the Capitol, Senator John Sparkman (chairman of the subcommittee) presiding.

Present: Senator John Sparkman, Alabama; Representative Wilbur D. Mills, Arkansas; Representative Henry O. Talle, Iowa; Representative Thomas B. Curtis, Missouri.

Also present: John W. Lehman, acting executive director; George E. Brandow, economist; Dr. Reed L. Frischknecht, legislative assistant to Senator Arthur V. Watkins.

Senator SPARKMAN. Let the subcommittee come to order, please.

In the earlier sessions of these hearings on policy for commercial agriculture, we have discussed several adjustments that are now needed in agriculture. Some of these will involve important personal and farm business adjustments for farm families.

For example, there is a widespread need to increase the size of farm, and in some areas changes in major farm enterprises are needed. Our experts have told us that many farm families, even including some in commercial agriculture, have their best opportunity for earning a good living in occupations other than farming.

One main purpose this morning is to discuss ways in which farmers might be aided in making needed changes on their farms or to find means of earning nonfarm income. We would like to discuss credit, which is said to be required if farmers are to make needed farm changes. We are also interested in the education, health, and housing of farm families and in the social-security program as it applies to farmers.

Finally, we wish to consider weather and other special hazards of farming, and how they might be reduced.

We have with us this morning six panelists who have written fine papers for us on the topics to which I have referred. We welcome you here, gentlemen, and we thank you for the time and effort you are contributing to the success of these hearings.

We will begin by asking each panelist to present a 5-minute summary of his paper, taking the panelists in the order given in the hearings schedule. When these have been completed, the members of the subcommittee, in turn, will ask questions of the panelists.

99348—58——11

We urge each of you to participate in the discussion of all topics before us this morning. If you have a comment to make or a question to ask another panelist, please raise your hand. We want full and ready discussion.

We will begin the summaries with Prof. L. F. Miller, of Oklahoma State University. Mr. Miller, we welcome you here. You are recognized for 5 minutes.

STATEMENT OF L. F. MILLER, DEPARTMENT OF AGRICULTURAL ECONOMICS, OKLAHOMA STATE UNIVERSITY

Mr. MILLER. Thank you, Mr. Chairman and members of the committee.

I would like to take a few minutes to discuss the problem of utilizing the existing agricultural services to facilitate farm adjustments. We believe that national policy should encourage agriculture resource adjustments within agriculture, and between agriculture and other segments of the economy.

At the same time, we would like to point out that we believe such adjustments alone are not likely to solve the income problem in agriculture, and that this problem should also be attacked on other fronts.

Existing agricultural agencies have aided farm families with their problems of adjusting the kind and size of farm operations to a changing economic environment. It is suggested, however, that with some changes in programs and procedures, the effectiveness of such efforts could be increased substantially.

These suggested changes are discussed briefly under four points:

(1) Provide additional information to farm families. Increased emphasis needs to be given to the following kinds of information:

(*a*) Information which will help existing farmers and potential farmers to evaluate their future in the farming industry.

(*b*) Information which will facilitate the transfer of existing farmers who are unable to remain in farm employment.

(*c*) Information which will advise farm youth of the alternatives in nonfarm employment and the kind of training that is required. It is unfortunate that those who are advising farm youth today generally fail to point up the possibilities that exist in industries closely related to agriculture.

(*d*) Information which will assist persons remaining in agriculture to organize and manage their resources in an optimum fashion in the face of changing conditions.

(2) Expand the development of long-range farm and home plans. The type of information called for under point (1) will mean little unless it is effectively brought to the attention of the farm family.

For those remaining in agriculture, the real problem is that of integrating the technical and economic information into individual farm and family plans. The difficult job is not one of informing farm families of improved practices, but rather of combining these practices, along with the families' resources, including labor, land, and capital, into an effective business unit.

This job of developing longer range farm and family plans has been started under the farm and home planning programs, that we have in the various States, but no more than a beginning has been made.

Those farm families who find it impossible to remain in agriculture require an opportunity to obtain the skills which will fit them for productive employment in industry. This need is urgent, and prompt steps should be taken to provide farm youth and older persons with adequate training in nonfarm skills.

It should be recognized that the informational and educational programs called for here do not mean that all farm families without a full-time opportunity in agriculture must leave the farm and move to the city. If they have the necessary training to obtain good positions in industry, the expanding highway system and the decentralization of industry may provide an opportunity to remain on the land and commute to jobs in industry.

(3) Expand the Government's cost-sharing program for specific agricultural practices and adjustments. The Government's present cost-sharing program may greatly reduce the impact of the lack of capital and of the high risk involved in making adjustments to changing economic conditions.

It is thus a vital part of any comprehensive program to facilitate such adjustments. The program should be given increased financial support, however, and should be broadened in scope to include additional practices and some of the specialized capital improvements involved in making adjustments in both type and size of the farm business.

These payments should be made to assist only the families which have developed a sound longer range plan in line with their goals and resources.

(4) Establish a coordinated agricultural programs board at the county level. Anyone familiar with the actual operation of the various agricultural programs at the county level is impressed with two facts:

(*a*) The total number of full-time personnel working on the various programs is substantial.

(*b*) There is little coordination between the programs or personnel as they work with the individual family. This does not mean that county personnel are not at present working together harmoniously. In most cases they are. Rather, the point is that each tends to work with some phase or piece of the farmer's problem without any overall notion of how the pieces fit together to make a more profitable and satisfying family-farm unit.

Achieving coordination of these activities at this time is going to be difficult. Each agency or group working at the county level has built up independent farmer support over the years. Nevertheless, a genuine and serious need for coordination exists, and it is our suggestion that an agricultural programs board be established in each county.

This board would be composed of a professional representative from each of the existing agencies working directly with farmers in the county, and of the farmer chairman of the advisory committee of each of these agencies.

The functions of this board would be to develop a coordinate educational program, to appraise the longer range farm plans developed by the farm family, and to approve the specific cost-sharing payments and other services that would help put the plan into effect

over a period of years. This is only one possible solution to a serious problem.

Our major suggestion on this point is that the necessary legislation and funds be provided to develop several trial programs in selected counties. This will provide practical experience as a guide in coordinating the present excellent personnel and financial aid into a unified program aimed at facilitating the adjustment problems faced by today's farm families.

Senator SPARKMAN. Thank you, Mr. Miller.

Next we will have Mr. Ernest T. Baughman, assistant vice president, Federal Reserve Bank of Chicago.

Mr. Baughman, we are glad to have you with us.

STATEMENT OF ERNEST T. BAUGHMAN, ASSISTANT VICE PRESIDENT, FEDERAL RESERVE BANK OF CHICAGO

Mr. BAUGHMAN. Mr. Chairman and members of the committee, agriculture in the United States consists predominantly of small businesses and as is typical of small businesses most of the capital is provided by the individual farm families.

Creditor claims are estimated to amount to only about $20 billion as of January 1, 1958, or 10.6 percent of the total value of agricultural assets. Most farmers relegate credit to a distinctly marginal role in their planning.

Nevertheless, at least one-half of all United States farmers utilize credit from financial institutions, and probably a substantial number use credit from other sources, largely to finance current production of crops and livestock or to finance their initial purchase of real estate.

Also, many farmers use credit to help finance adjustments in the size, type or methods of operation of farms, but the amount is not known.

Farmers in all agricultural areas now have access to several sources of credit, and effective machinery exists to tap the credit resources of the Nation's major financial centers. Thus, agriculture is equipped to obtain the amount of credit farmers desire to use on terms that are competitive with other credit demands.

There appears to be no problem with respect to the adequacy of the total supply of agricultural credit. The barriers to a more effective use of credit to facilitate agricultural adjustment lie in the areas of (1) the quality of credit service and (2) the failure of many farmers to appreciate the contribution which credit can make to the achievement of desirable goals.

Areas in which the quality of credit service can possibly be improved, to the end that credit can make a greater contribution to the achievement of needed adjustments in agriculture, would include the following:

1. Development of "one stop" credit stations—lenders that are equipped to provide all the kinds of credit needed by individual farmers. This would enable lenders and farmers alike to place greater emphasis on the financial requirements of the farm business as a whole, and to plan credit programs which would make the maximum contribution toward achieving desired objectives including adjustments in the size, type, and methods of operation of farms.

This would be facilitated by the merging of production credit associations and national farm loan associations, the greater use of correspondent banks and insurance companies as supplementary sources of credit by country banks, and providing greater flexibility in the kinds of agricultural loans individual lenders are authorized to make.

2. Building staffs which have a better knowledge of the financial requirements of modern commercial agriculture. These are needed by both the lenders and the educational organizations serving farmers.

3. Improve the planning of loan terms so that they mesh more closely with borrowers' expenditures and receipts, including a more general use of flexible repayment schedules.

4. A greater use of loans secured by mortgages on farm real estate to help provide for the growing need for intermediate-term credit.

5. Authorize permanent real estate loans to the end that this may help facilitate transfer of economic size farms in areas of high land investment per worker.

6. Study the possible applications of loan insurance as a means of spreading risks and thereby enabling individual lenders to improve their credit service in specialized agricultural areas.

In addition to the improvement of credit services, all possible means of providing for the provision of equity capital for individual farm business from more than one family should be explored fully.

Since agriculture is now overexpanded (and gives evidence of continuing in that state for a number of years) any proposal to provide large additional amounts of credit to the industry on subsidized terms should be viewed with great skepticism and analyzed carefully to assure that the program would not result in an addition to the excess capacity already existing in the industry, and to assure that it would not contribute to a bidding up of capital values, particularly land.

Senator SPARKMAN. Thank you, Mr. Baughman.

Next is Prof. Roy E. Huffman, of Montana State College.

Mr. Huffman, we are glad to have you with us. Will you proceed in your own way?

STATEMENT OF ROY E. HUFFMAN, DEPARTMENT OF AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY, MONTANA STATE COLLEGE

Mr. HUFFMAN. Mr. Chairman and members of the committee, farmers and ranchers everywhere in the United States face the problem of fluctuations in yields and production resulting from variations in rainfall as well as the other uncertainties of the weather. Frequent and extreme variations in income present a constant threat of insolvency to many farm operators.

Obviously, the possibilities of insolvency are vastly greater in regions where rainfall variations from year to year are a major characteristic of the climate. The Great Plains is such a region.

Research has failed to establish any definite weather cycles in the Great Plains. On the contrary, it has been demonstrated that the rainfall pattern is quite unpredictable. The Great Plains is properly termed a "high-risk area."

Technological developments have reduced the risk situation somewhat but the weather remains the dominant factor in the Great Plains.

There are several areas of public policy which, if properly formulated, could serve to reduce the risk and uncertainty faced by farmers and ranchers of the region.

The individual farm or ranch operator will find his greatest opportunity in flexible management to meet the climatic uncertainties of the region. Flexible management to achieve increased stability of Great Plains farms and ranches requires an unusually high level of information by individuals regarding the technical and economic alternatives available to them in offsetting the uncertainties of the weather.

Adequate knowledge regarding a host of physical, biological, and economic relationships is necessary if the farmer or rancher is to be able to evaluate the uncertainties facing him and to choose a line of action which will reduce the risk in his operations.

All of agriculture is heavily affected by public programs, primarily those of the Federal Government. To achieve stability through flexible management, farm and ranch operators need permanent programs designed to offset the peculiar climatic hazards of the Great Plains.

Individual operators will not be functioning in a framework designed for maximum effort to solve the high risk problems of the Great Plains so long as the emphasis is on emergency programs to provide temporary relief from whatever critical situation may arise.

The most certain thing about the Great Plains is the uncertainty of the weather. Permanent programs aimed at the most obvious dislocations associated with the weather would serve to reduce the uncertainty faced by farm and ranch operators.

As uncertainty is reduced, the management function can work toward a more stable agricultural economy. These program areas include crop and income insurance, income-tax revision, feed reserves, crop loans and storage, adapted credit, and weather-crop relationships.

For purposes of this summary, I commented in detail only on a part of the areas listed here.

Income taxes affect farm and ranch operators with highly variable incomes in such a way as to intensify their financial problems. Operators having highly variable incomes will pay more in income taxes over a period of years than if their income had totaled the same amount for the period but had been relatively uniform each year.

This is true because years of large income will put the taxpayers in a higher tax bracket, which, under a progressive income tax, is not offset by a lower tax bracket in years of little or no income.

Loan and storage programs have been important in reducing market gluts at harvest time. This feature is particularly valuable in the Great Plains with its highly variable wheat production. If there was no surplus of wheat, a loan and storage program would still contribute greatly to stability of farm income.

Without these programs, many farmers would find themselves selling their large crops in good years at low prices at harvest time, and thus, eliminating much of the possibility of offsetting the low income of poor crop years.

In closing, I suggest that an expansion of weather research is needed as it applies to agriculture. This needed research involves microclimatic relationships as they affect plants and animals and is quite different from the macroclimatic research which is so important

to worldwide military operations. The specific impacts of weather upon plants and animals is important because, in the Great Plains, rainfall is near the critical point for crop production in most years and any drop below this point creates immediate problems.

Senator SPARKMAN. Thank you, Mr. Huffman.

Next is Prof. Howard W. Beers, departments of rural sociology and sociology, University of Kentucky. Mr. Beers, we are glad to have you, and will you proceed.

STATEMENT OF HOWARD W. BEERS, HEAD, DEPARTMENTS OF SOCIOLOGY AND RURAL SOCIOLOGY, UNIVERSITY OF KENTUCKY

Mr. BEERS. The package of abbreviated statements apparently got lost in the Christmas mail, and, for those who do not have copies of the statement, I may call it to your attention that this is lifted verbatim from certain pages in the report, pages 362, 367, and 373.

We deal with three topics, health, housing, and education. It would be misleading to proclaim that our present rural health situation is critical, but, on the other hand, it would be unrealistic not to recognize the numerous danger spots. The health of our farm people has been steadily improving and in most respects is as good as that of the nonfarm population, whether rural or urban. Yet one of the most tragic aspects of the rural health situation is that so many human lives are still lost and so much disabling illness is experienced simply because of the failure to apply existent knowledge and available measures of environmental health and preventive and remedial medicine.

That farm families appreciate the value of good health is evidenced by the fact that they expend a considerably larger proportion of their income for medical care than do other families of the Nation. But the inescapable facts remain that the provision of health and medical services in rural areas is relatively costly, and the ability of our farm families to bear the necessary costs is far below average.

The provision of Federal aid to communities seeking to improve their health facilities through the medical facilities and hospital survey and construction program must be considered one of the most significant contributions to the health of our rural people in the Nation's history. Similarly, the Health Amendments Act of 1956 is a promising start toward the provision of desperately needed professional public health personnel.

These and other programs of Federal assistance must be continued and expanded if our rural population is to be provided with equitable opportunities for adequate health and medical care.

It is only through the coordination of many programs and activities, however—those that will effect a rise in farm income, Federal-State assistance programs for the provision of medical facilities and the training of health and medical personnel, and voluntary cooperation of local groups—that the goal of optimum physical and mental well-being for our rural farm population will be approached.

Perhaps half of all commercial farmers having inadequate housing would be able to make satisfactory adjustments if they had aids in the nature of research findings, improved means of communication, and more effective credit.

On the other hand, between a fourth and a third of all commercial farmhouses—those occupied primarily by the lower income groups—by virtue of age, size, and physical condition, are probably not worth being improved to a level of decency even if incomes would warrant such improvements.

In view of the relatively poor condition of a large percentage of the housing of commercial farmers, and in view of the limited number of houses that farmers now are able to build, the question may be asked, "What, if anything, can be done to improve the housing conditions of commercial farm operators?" Toward this end the following suggestions may be considered.

1. The Federal Government, in cooperation with the State governments, could foster the merging of small, uneconomical farms to form larger units that are more justified economically. This would level up farm income, reduce the number of low-income farmers, and allow many dilapidated houses to be torn down.

2. Although a number of Federal programs have attempted to improve farmhouses, the total impact of such programs, with the exception of that of the Rural Electrification Administration, has been very limited. Therefore, especially in view of the large number of older low-income people for whom it will be difficult to find off-farm work, subsidy is probably the only alternative to substandard housing for close to 1 million commercial farmers.

3. A study should be made of the adequacy of all sources of credit, private and public, for improving farm housing.

4. Over a period of more than 2 decades various Federal programs have been attempted which have had some influence on farm housing. A systematic analysis of these experiments and experiences should be made.

5. It is doubtful that the Federal Government has spent $1 on farm-housing research for every $1,000 spent on agricultural production research. Research is needed to (*a*) find ways of getting lower costs for such basic features as central heating, water supplies, storage units, and adequate lighting for the farm home; (*b*) determine how people in various situations think and feel about their housing needs—the ways they use their houses, their plans, and hopes for the future; (*c*) determine how much farm families know about and make use of present sources of loans, credits, etc.; (*d*) find means of strengthening the effectiveness of the cooperative Agricultural Extension Service and other informational channels so that the flow of information from laboratories to farm families can be increased.

Educationally, the family in commercial agriculture has the same needs that other families have in the same communities. Meeting these needs in general, although involved to some extent in the formulation of national agricultural policy, is more likely to be of concern in discussions of public educational policy in general.

Inequalities among communities, with differential burdens, and making differential efforts, put the children of many farmers at considerable educational disadvantage. Rural-urban differentials exist in enrollments, costs, and personnel, and all other important elements of education. There seems no likelihood of eliminating these disadvantages without Federal-State cooperation in financial equalization.

School reorganization, which offers greatest likelihood of educational progress, is a matter for local and State determination, but the stage cannot be set for complete success in reorganization without a national program to assist the States in equalization, within each State and among the States.

Federal cooperation with States in their support of research, agricultural, and home-economics instruction in high schools and colleges, and in extended educational services must be maintained, increased, and modified where appropriate to serve the broadened definition of agriculture.

Senator SPARKMAN. Thank you very much, Mr. Beers.

Next is Prof. Vernon W. Ruttan, of the department of agricultural economics, Purdue University. We are glad to have you with us. Proceed in your own way.

STATEMENT OF VERNON W. RUTTAN, DEPARTMENT OF AGRICULTURAL ECONOMICS, PURDUE UNIVERSITY

Mr. RUTTAN. Implementation of the rural development program and the extension of old-age and survivors' insurance to hired farm workers and farm operators represent important steps in the development of agricultural policy. Both of these programs stand in sharp contrast to the farm-price programs of the last two and a half decades which have been primarily designed to deal with the problem of price and income instability which has plagued commercial agriculture.

In analyzing the effect of the rural-development and social-security programs, it is helpful to consider the differential impact of the two programs on commercial farmers—who operated the 1.3 million farms with sales of more than $5,000 per farm and produced almost 80 percent of the Nation's farm output in 1954—and on the noncommercial or low-income farmers who operated 3.6 million farms in 1954.

THE RURAL DEVELOPMENT PROGRAM

With respect to the rural development program, I would like to make three points:

1. Expansion of local nonfarm employment is essential to the solution of agriculture's low-income problem throughout most of the generalized low-income areas.

In the past, low farm incomes have, by themselves, not been sufficient to bring about the required adjustments between farm employment, resources, and technology. There must also be a "pull" exerted by the availability of jobs outside of agriculture. Those low-income areas in which farm people have made the greatest economic gains have generally been located in close proximity to developing urban-industrial centers.

2. Intensive technical and managerial assistance is required to upgrade low-income farmers to successful commercial farmers, even in those areas where farm population and resources are being brought into better balance.

The upgrading of any substantial number of low-income farmers to successful commercial farmers is dependent upon decisions by other low-income farmers (or, in some cases, other commercial farmers) to obtain nonfarm employment and thus make the land which they have

been farming available for reorganization into larger commercial units. This type of reorganization does not occur automatically. The required adjustments will be speeded if competent technical and managerial assistance of the type contemplated under the rural development program can be provided.

Before leaving this section, I should like to add two qualifications.

It should be recognized that in many low-income areas there is no potential reorganization of farm units which can provide reasonable levels of living to more than a handful of farm families. This is true in my home county in northern Michigan. It is true in several townships in our pilot county in Indiana.

It should also be recognized that development of local nonfarm employment cannot be an effective solution to the need for off-farm employment in all rural areas. When locational advantages for nonfarm employment are severely limited, the only alternative to continued low farm income is long-distance migration.

3. The rural development program will, on balance, contribute very little to the solution of the problems facing commercial farmers. The program must be justified, by and large, on the basis of its contribution to the solution of the problem of the lower-income farmers and not on the basis of its secondary benefits to commercial farmers.

It is entirely unrealistic to expect farm employment to decline at a sufficiently rapid rate to significantly affect short term changes in the level or the stability of incomes in commercial agriculture.

This conclusion is often taken as an indication that the problem of low-income farm families are of little or no interest to those concerned with agricultural policy.

I definitely want to disassociate myself from this view.

If the rural development program can play an important role in promoting the general level of economic development in the low-income areas the results will be fully justified (*a*) in terms of the increased output which those workers who shift from agricultural to nonagricultural employment make to the growth in the Nation's total output of goods and services; (*b*) in terms of the adjustment opportunities created for other farmers in those low-income areas where the farm population and resources are brought into better adjustment; and (*c*) in terms of the higher income and consumption levels which both groups will be able to enjoy.

SOCIAL SECURITY FOR FARMERS

The impact of the OASI program on agriculture is expected to manifest itself in three ways.

1. Retirement benefits are expected to be greatest and participation highest in commercial farming areas.

This point is illustrated in a Kentucky study conducted in a relatively high-income commercial-farming county in the outer Bluegrass area (Harrison), and two relatively low-income counties on the Cumberland Plateau (Menifee and Wolfe).

Of the farmers who will reach retirement age within the next decade and a half—those in the 50–64 year age bracket—only 35 percent were covered by OASI in the mountain counties. This stands in sharp contrast to the 68.3 percent of this age bracket covered by OASI in the Bluegrass country. Substantial numbers of low-income farmers,

particularly those located in the low-income counties, will continue to remain untouched by OASI.

2. Commercial farmers are expected to bear more than a proportionate share of OASI costs. But this will tend to be offset in part by a reduction in old-age assistance program costs.

It is generally recognized that payments and benefit schedules result in income transfers among the different groups who participate in OASI.

The higher income commercial farmers' contributions are greater, relative to the benefits they will receive, than are the contributions of the lower income farmers. This excess burden is, in part at least, being offset by reduced taxes resulting from a decline in the number of recipients of old-age assistance.

3. Secondary effects of extension of OASI to farm people are expected to manifest themselves through an increase in the number of farm operators who retire.

Initial effects in the form of a more rapid rate of increase in farm size and higher farm output as farmers attempt to build up their earnings base will be felt most strongly in commercial farming areas. Although no measure of its magnitude is available, to the extent that OASI does encourage this increased output, the effect on farm prices will be negative.

Senator SPARKMAN. Thank you, Mr. Ruttan.

The next speaker is Prof. Harold G. Halcrow, of the department of agricultural economics of the University of Illinois. We are glad to have you, Mr. Halcrow.

STATEMENT OF HAROLD G. HALCROW, HEAD, DEPARTMENT OF AGRICULTURAL ECONOMICS, UNIVERSITY OF ILLINOIS

Mr. HALCROW. Mr. Chairman and members of the committee, I should like to summarize my remarks under three points.

The first is the importance of off-farm income and employment, second, the effects of off-farm employment on farm operator efficiency and family income, and third, programs to increase off-farm income and employment.

This is all under the general heading of "Opportunities for Off-Farm Employment of the Farm Population."

Off-farm income provides an important supplement to farm earnings of commercial farm operators, averaging about $1,300 per year, according to the Census of Agriculture, for all commercial operators, and averaging considerably higher for the farmers who regularly work off their farms. During the past 25 years the total number of farm operators working off farm 100 days or more during the calendar year has about doubled (from 0.7 million in 1929 to 1.3 million in 1954). This is more remarkable in view of the continued decline in the total number of farms. This increase has been in total dollars per farm family as well as in percentage of total farm family income.

Total off-farm income is about equal to net money income of farm people from farming. In 1955, the total off-farm income of farm-operator families in the United States was $8.0 billion, of which $6.9 billion came from nonfarm sources and $1.1 billion from employment, rent, etc., on a farm other than that of the operator. In comparison, gross income from farming is estimated at $33.2 billion for 1955,

which includes $21.6 billion production expenses and $11.6 billion realized net income from agriculture. About $3.4 billion is nonmoney income, leaving a balance of $8.1 billion net money income from farming.

You will see that this net money income from farming compares with the $8.0 billion which is off-farm income of farm-operator families.

The commercial farm operators in census classes I–VI, which are normally classed as commercial farmers by the census, included about 3.3 million farm families, received $4.3 billion off-farm income, making off-farm income equal to more than one-third of the total net money income of commercial farm operators from all sources.

Since 1949 the trend toward increased off-farm employment apparently has been stepped up. The relative increase in off-farm employment and income has been greatest among the farm-operator families selling between $1,200 and $10,000 of farm produce. At the same time there has been a marked decline in the number of part-time and residential farmers who sell less than $1,200 of farm produce per year.

I think this point is important. It emphasizes the increase in off-farm employment, and off-farm income of the so-called commercial family farmers.

EFFECTS OF OFF-FARM EMPLOYMENT ON FARM-OPERATOR EFFICIENCY AND FAMILY INCOME

The major income effects of urban-industrial employment opportunities are transmitted to agriculture chiefly through the labor market. Urban-industrial opportunity does not result in increased income of the farm family from farming but, it does result in increasing the total income of the farm family, including farm and nonfarm sources. The relatively strong positive income effect exerted by industrial opportunities on agriculture is largely the result of the ability of such development to absorb the formerly underemployed farm labor.

When little underemployment exists among farmers, the effects of off-farm employment on efficiency of farm labor are less clear. The effects on labor productivity are related to technological progress and to the effect of technology on labor requirements on farms. Many workers—as many as 1.5 million according to recent estimates—could move out of agriculture without having an appreciable effect on total farm output. Further technological progress in agriculture should make it possible for larger numbers of people to move out of agriculture without creating a real labor shortage. The most logical presumption is that increasing off-farm opportunities will continue to drain off the underemployed labor in agriculture, resulting in both an increase in average family income in agriculture and an increase in the productivity per worker of those people still continuing farm operations.

PROGRAMS TO INCREASE OFF-FARM INCOME AND EMPLOYMENT

The way to increase off-farm opportunities for farm people is to increase the mobility of their labor through training and education, through the development of industry in formerly rural areas, and

through the development of transportation facilities to make it possible to commute longer distances.

Specifically, greater mobility can be created by developing and strengthening educational programs to prepare young people in rural areas for broader opportunities throughout the economy. Improved highway transportation facilities would make off-farm employment more readily available to members of commercial farm families.

The development of vocational training and guidance programs would help farm people to find their most advantageous opportunities. The development of industries in present rural areas would bring employment closer to farm people.

Various studies have shown that migration takes place most easily among people who are less than 30 years of age, and the people from 25 to 54 years of age generally work off farm more days a year than those who are younger or older. These facts suggest that the increases in mobility of the farm population will come chiefly through offering greater educational opportunities to young people and by offering more off-farm employment opportunities to those from 25 to 50 years of age.

Additional research is needed to determine the most effective way to develop off-farm opportunities for farm people. Such research should cover areas including the following: Commuting patterns in off-farm employment, including information on distances, travel, and commuting costs; types of employment utilized by farm people in off-farm employment; adjustment problems encountered by farm people in off-farm employment; effect of off-farm employment on farm labor income and efficiency; shifts in farm production patterns due to off-farm employment; types of farm organization best adapted to off-farm employment opportunities; utilization of employment information by farm people; types of training desired for off-farm employment and possible incentives created by training schools, short courses, or institutes.

Additional research along these lines would be directed at two major objectives: Determining (1) how the maximum benefit can be obtained from off-farm employment by farm people, and (2) how the farm-operating unit can best be adapted for efficient use of farm resources where off-farm opportunities exist. An additional objective might be to determine the effect of off-farm employment opportunities on the migration of people from farming to industry.

Senator SPARKMAN. Thank you, Mr. Halcrow.

Dr. Talle, do you have some questions?

Representative TALLE. Thank you, Mr. Chairman. I want to thank all of the members of the panel for the good work you have done, and for being here this morning to help us in trying to find solutions to some vital problems. I use the plural, because I don't think that a single solution can be found. I think the problems are plural.

Mr. Baughman, one of the panelists yesterday, at the close of his summary suggested that there was need for a suitable additional kind of credit in agriculture. I gathered from the first part of your paper that you believe there is ample credit but I believe later in your paper you indicated some revisions might be desirable. Will you expand your views?

Mr. BAUGHMAN. It appears that there is ample total quantity of credit available to agriculture, but there are areas where the quality

of credit could be improved. In other words, credit could be adapted a little more closely to the specific needs of individual farmers in the industry.

Representative TALLE. The purposes of credit, of course, vary so much that the matter of maturity in many instances is a very important factor.

Mr. BAUGHMAN. That is certainly true. There probably is a need for a closer adaptation of maturities to the specific flow of expenditures and income of individual farmers.

Representative TALLE. In questioning the panelists yesterday, it was pointed out that that was certainly one aspect to be considered.

Now Mr. Miller made a point that I had in mind in connection with your summary. I quote from his statement:

> These payments should be made to assist only the families which developed a sound longer range plan in line with their goals and resources.

My question is this: Who would determine the soundness of the plan?

Mr. MILLER. This agricultural programs board, Mr. Talle, composed of one representative from each of these agencies now in the county, plus a farmer representative who is now chairman of the advisory committee, would appraise these plans from the standpoint of their overall soundness and would talk to the farm family about them. I don't think this can be a very dictatorial process at all but I do think that there needs to be some longer range thinking than we now have, and that somebody needs to talk to the farm family about the plans.

Representative TALLE. If such a plan were put into effect, it would require diplomacy, and sympathetic attitude and at the same time the exercise of care.

Mr. MILLER. If the farm family just looks upon this as a requirement to get some financial aid, I don't think we will get anywhere with it. There is an educational job here, that would be needed before we move very far.

Representative TALLE. Our farmers are like other American people. They are willing to be led, but not to be driven.

Mr. MILLER. That is right.

Representative TALLE. Mr. Huffman, you are from an important wheat-raising State. Have we ever had a surplus of durum wheat?

Mr. HUFFMAN. No; certainly only on a very short-run basis, and not to the extent that we have had of hard-milling wheat.

Representative TALLE. Is the reason for that the fact that a certain kind of soil or climate is required for growing that wheat?

Mr. HUFFMAN. I think it is more a case of the climatic requirements of the crop, and the fact that the area which produces the quality of durum wheat which the milling industry demands is fairly limited. If that particular area happens to have an unfavorable crop year, actual shortages may occur, as was true a few years ago, and then we found durum wheat production extending into Montana on a big scale although Montana is not considered a durum wheat area.

Representative TALLE. The Government has no restriction on acreage for that crop as I recall.

Mr. HUFFMAN. Well, the program as it was extended into Montana was that the operators in the traditionally hard-wheat areas could seed 2 acres of durum wheat by taking out 1 acre of wheat from their regular wheat allotment.

Representative TALLE. What success is North Dakota and Montana having with dry farming, such as is done at Mandan, N. Dak., for instance?

Mr. HUFFMAN. You say to what extent?

Representative TALLE. What is the degree of success?

Mr. HUFFMAN. Well, it is a pretty highly developed and quite successful type of farming for areas of limited rainfall. Of course, I am most familiar with Montana, but the most of our dry farming there is done under the summer fallow system with half of the crop in wheat or grain crops, and half of it out for moisture conservation.

It has certainly made the dry farming much more stable and successful than in the past. The technological developments in the past few years have made for much better utilization of the existing moisture. They can grow crops with perhaps 12 inches of rainfall that a few years ago would have required 15 inches. But it still doesn't mean that we have solved the moisture problem, because there is a critical point to which the rainfall may drop and there is no crop.

Representative TALLE. I was impressed by what I saw out there at Mandan many years ago.

Mr. HUFFMAN. Mandan has one of the original and major dry farming experimental stations, yes.

Representative TALLE. Thank you, Mr. Huffman.

Mr. Beers, you discussed health, housing, and education. I am sure that you are familiar with what was done this year in getting a start on a study of farm housing.

Mr. BEERS. Yes, my colleague, Professor Montgomery at Oklahoma is the head of a newly established department which is, I think, the first department of its type in a university to give special attention to this problem. He has been associated with it and I haven't been associated with it myself.

Representative TALLE. Do you think that there is a real need for that kind of study?

Mr. BEERS. Yes.

Representative TALLE. You say so in your paper, I noted.

Mr. BEERS. Yes, at several points we stress the need for study of several aspects of farm housing. It is a matter which has pretty much escaped attention in the research programs of the past, but it has become of increasing interest.

Representative TALLE. It is a pretty good idea to do that through the land-grant colleges, isn't it?

Mr. BEERS. I would naturally be suspected of having a bias to that effect.

Representative TALLE. It is a bias that I share with you.

Mr. BEERS. Thank you.

Representative TALLE. I am speaking of the housing bill enacted in the last session. We provided, I think it was, $75,000 to start a study.

Senator SPARKMAN. We provided for $300,000, but we received an appropriation of $75,000. The point I referred to was that we provided in the legislature, itself, that it be done by the land-grant colleges.

Mr. BEERS. And the agricultural engineers and home economists are playing a very important role in carrying that out.

Representative TALLE. I think at the moment, Mr. Chairman, that is all I have to discuss.

Senator SPARKMAN. Mr. Mills.

Representative MILLS. Mr. Chairman, I have been impressed this morning, as I have on other occasions, by the statements of the members of the panel and have concluded from what has been said to date that primarily the crux of most of the problems that exist in agriculture is too little net income. If the net income itself to farmers could be, through some miracle, increased, most of the problems that we discussed this morning under farm and personal adjustments would be taken care of by farmers.

I know all of us have experienced the same thing as we have observed agriculture over the years, and individuals in agriculture. When their net income is sufficiently high, they have taken care of most of the problems that we have been discussing. I think most members of the panel would agree with that—that the basis for the conditions you discussed with us this morning is often too little net income to the farmer; isn't that right?

(Agreement indicated by panel.)

Representative MILLS. That is the crux of most of what we are talking about, I think.

I would gather very definitely that Mr. Ruttan has reached that conclusion in his analysis of the effect of OASI upon farmers. As you know, Mr. Ruttan, the program of OASI is compulsory, and you are either covered or not covered depending upon the amount of income that you have each year.

As you know, under the social-security provisions, when we enacted coverage for farmers we provided a special arrangement so that more farmers would be brought under social security through that provision; isn't that correct?

Mr. RUTTAN. That is right.

Representative MILLS. What you are emphasizing when you point out the effect of the social security program upon farmers is the low income that is derived by so many of those in agriculture. That is what you are pointing to; isn't it?

Mr. RUTTAN. That is right.

Representative MILLS. I think there is a very graphic portrayal on the third page of his statement, Mr. Chairman, of what the income situation is in so many agricultural counties. He says there that 68.3 percent of the agriculture group from 50 to 64 years of age were covered in one county under OASI and only 35 percent covered in another county.

Mr. RUTTAN. Particularly that agriculture group that is going to need it in the next few years.

Representative MILLS. That is the age group that is going to need it the most.

Senator SPARKMAN. Could I ask a question there?

Doesn't the law provide that these benefits will go to every farmer with a net income of $400 or a gross income of $800?

Representative MILLS. Yes, we have worked out a very special arrangement for farmers, trying to get more of them in, in recognition of the fact that many of them are in the low-income area.

Senator SPARKMAN. Are those figures correct?

Representative MILLS. We say that if a farmer has $800 of gross income, we assume that $400 of it is net income for purposes of social security. We don't make that same arrangement for everyone who is

covered by social security, of course, but the significant thing is that in the counties that he has analyzed, such a high percentage of farmers are not covered because they don't even have that amount of income.

Mr. RUTTAN. Part of this is also due to the fact that some low-income farmers have not been sufficiently informed, and could be under the program.

Representative MILLS. There may be some of that, but I think that you will find that it is a very limited situation. If I know anything about farmers, they are just about as well informed on what is going on for their own benefit in Washington as any other group.

I don't think that they are going to be unmindful of any program like social security in the long run. There has been too much advertising of it for that. I have had some come to me when I was home and tell me that they did not know in time, and we have been able to correct that situation by having an agent from the Internal Revenue Service go to them and help them to fix up their return for social-security purposes.

But so long as they have their amount of income, it is compulsory that they pay a tax on it, and they are covered as a result. It is not a question of voluntary selection or election, but they are compulsorily covered. The principal point, I think, that you make is that a large percentage of these people are in an income bracket that even this favorable provision of social security does not reach.

Now, what disturbs me in addition to that are these statements that we hear when we are told by some that 44 percent of our farms produce 91 percent of what goes on the market. There are 56 percent of our farms that produce the other 9 percent of what goes on the market.

We are also told that when we look to the poverty in agriculture, we find it largely among these 56 percent. As we analyze the effects of existing programs that are enacted by Congress, of course to create better income for agriculture—the primary purpose of the program is that—we find that these programs have less effect in helping this 56 percent of the farm population.

Now, you suggested a number of things that we can do, but I think all of these things, if we are to be realistic about it, must also be accompanied by an increase in the net income of these people. Is that not true?

What good is it to lend a man money, Mr. Baughman, if he is never going to make enough to pay it back? You are in the banking business, and when I was in the banking business we didn't make a practice of making loans to anybody we didn't think would pay it back. We can talk all we want to about available credit, but if the effect is to get the man further and further into debt without much possibility of his getting out, you and I wouldn't recommend that he get in that fix. So we come back to the final point, what can we do to increase the net income of farmers?

I am not saying that we can increase it for everybody. The difficulty is that it appears that we cannot supply a net return on all that they are capable of producing. But are not most of these things we are talking about this morning things that will themselves be resolved if we can make the adjustments in agriculture that will relieve us of the depressing effects upon prices, and stimulate prices so that the net incomes can go up.

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I notice that you are shaking your head, I thought I had the key, key to all of this.

Mr. RUTTAN. I do not think so. I think that the prices, agricultural prices could go up 20 or 25 percent and it would still be this 44 percent that is relatively well off compared to the other 56 percent.

Representative MILLS. I said prices, but I meant net income.

Mr. RUTTAN. I am sorry.

Representative MILLS. That is the crux of the problem. How can we raise it? How can we raise it for this 56 percent? That is the great problem with me. I know there are problems in the commercial farm area, but most of your problems in agriculture, it seems to me, are with respect to this 56 percent. They are far greater in numbers. Am I right about that?

Mr. RUTTAN. Yes, sir.

Representative MILLS. What can we do about that?

You mentioned some suggestions about off-farm income, but if we wait until we can have industrial development in rural areas to satisfy the needs for all farm families, we are going to wait a long time. There is just not going to be enough spread around over the United States where it is needed. What else can we do? What can we do in the short run to improve the net income standing of this 56 percent?

Mr. MILLER. I am not really going to answer your question. It is a very pertinent one but it is involved. I would say this: In looking at these low-income problem areas, through the South, we have quite a few of them in Oklahoma, we reach this conclusion: The real hope for this problem is in the education and training of these young people. We do not see any immediate solution to the income of the person that is 50 years old there, and perhaps we find a lot of them are not too unhappy with their situation, but we are very depressed when we see that this situation is just perpetuated unless something is done in terms of training these young people to take nonfarm employment when it is available. Very little is being done along that line at the present time.

Representative MILLS. You are thinking in terms of preventing the continuation of this situation in the next generation?

Mr. MILLER. That is right.

Representative MILLS. That may be the way to look at it. I have been unable myself, frankly, to come up with enough ideas to satisfy my own thinking of what we can do in the short run. I was in hopes that some of you might have some further suggestions to make to the committee with respect to the short-run situation.

Mr. BAUGHMAN. I would toss in one small point for consideration here. It seems to me the discussions have suggested that in many parts of agriculture, at least, there is relatively little that can be done in the way of getting needed adjustments until such time as some of the labor resources find other employment.

This seems to raise a question as to whether we have been directing our attention too closely to trying to solve agricultural problems within agriculture. It raises in my mind a question with respect to an organization such as the Farmers' Home Administration. Very often the FHA must necessarily come to the conclusion that the prospects for particular individuals in agriculture are quite limited even within the framework of all the FHA can do for them.

Would it not be appropriate for that agency in those kinds of situations, to have the authority to use the resources available to it to help such individuals become established in other lines of activity where their prospects might be more promising?

The FHA has representatives throughout the country and quite possibly it could be of much greater service to facilitate adjustments within agriculture than it has been thus far.

Representative MILLS. In our concern about agriculture, too little emphasis, I think, actually has been placed in our programs up to date on doing something about the predicament that this 56 percent of our farmers find themselves in. Is that right?

Mr. BAUGHMAN. I would agree.

Representative MILLS. I think we can say very frankly, those of us who have followed agriculture and those of us who have been interested in trying to do something to improve it, that we can feel proud of a lot that has been done with respect to the situation of the 44 percent. It is not perfect, of course, and a lot more can be done. We haven't solved all their problems, naturally. But there have been greater improvements with respect to this 44 percent, and much more improvement, than there has been with respect to the 56 percent.

Too little therefore has been done and too little thinking has been given to the needs and to the possible solutions of the problems of this 56 percent.

Do you agree with that?

Mr. MILLER. Yes.

Representative TALLE. I share your views, Congressman Mills, and I am not taking issue with you. But here is a point that I would like some member of the panel or all of the panelists to think about and probably they have done so already. I think this is the time to mention it.

Agriculture is the most highly competitive industry that we have. Therefore, I think that it requires special attention because I think that we are in no position to force, by law, a like degree of competition in other sectors of our economy.

Representative MILLS. I agree with your thought entirely, and I am not saying anything different.

Representative TALLE. That is where this cost-price squeeze situation comes in. When the farmer goes out to buy to satisfy his needs, he is buying in a market in which prices are not determined by this high degree of competition.

Representative MILLS. I am not saying that things have not been done to help this 56 percent, either. I am trying to point out that we cannot expect to solve the problems of this 56 percent by merely having agricultural programs that support prices and control production and try to dispose of surpluses. You gentlemen have pointed out to us the additional aspects that we must look to if we try to find, or if we succeed in finding, some solutions of the problems that are applicable to this 56 percent, as well as some of the problems that apply to the 44 percent. That is what you are saying; isn't it?

I want to thank you, Mr. Chairman.

Senator SPARKMAN. May I say in addition that we can't hope to find a program that is going to help greatly the 44 percent and disregard completely the 56 percent.

Representative MILLS. Of course we have to look to the 100 percent. We have to try to help all of them.

Representative CURTIS. Mr. Chairman, this line of talk has me a little disturbed, because I thought we had done the proper thing when we set out our title as "Policy for Commercial Agriculture." We tried to make it clear when trying to make a distinction between what are the problems of commercial agriculture and what we might say are the problems of our rural communities. These are very pertinent matters, of course, to commercial agriculture because the primary economy in the rural areas is commercial agriculture.

Representative MILLS. Would you yield to me?

I agree that that is the purpose of the hearing, to look to the situation with respect to commercial farming. What I am trying to point out now is that we cannot solve the problem of agriculture by looking solely at the problem of the commercial farmer. The problems that they bring to our attention this morning are not related solely to commercial farmers, but they have greater application, actually, to those that fall in what we call the low-income brackets of agriculture.

Representative CURTIS. I appreciate that. But may I make this clear, because I think that we are right to this thing.

I think that you can perhaps solve the problem of commercial agriculture by sticking to that particular thing, and solving that. We can thereby assist in solving what we say is the rural problem, but by simply solving the problems of commercial agriculture we can't think that we will solve the problems in the rural communities. That is rather presumptuous to think that we can do that.

If we keep our eyes off the main issue here, we are going to be back and flounder the way we have in the past. If we use the 56 percent in the rural communities who are outside of commercial agriculture as a basis for establishing our policy for commercial agriculture, we are not going to solve their problems and I suggest that we are not going to help in solving the problems of the 56 percent either.

The very way we set this up, with the emphasis on trying to figure out what the problems of commercial agriculture might be, in my opinion, was a step forward. If we get back into this muddle, we are going backward.

Representative MILLS. Will you yield to me further at that point?

As I understand it, and I would like to be corrected if I am wrong, at least 2 of the classifications of commercial farming, that is 5 and 6 according to the Bureau of the Census, are included in the 56 percent that I referred to.

Representative CURTIS. And I might say this, that most of the panel suggested that probably the answer to those groups are either to build them up so they can get into the other groups, that is one answer, or for them to get out, completely out, of what is called commercial agriculture.

Whether those are the solutions or not, I do say there is where we must concentrate in trying to analyze what the policy for commercial agriculture should be. It has a direct bearing on this other group.

But in my question, I do not want to be put in the position of not being interested in the 56 percent because I am primarily trying to hew the line toward the problems of commercial agriculture. That is my point.

I would be very happy to conduct studies into this other area. As a matter of fact, I think this committee has, Senator Sparkman, under your chairmanship, gone into the problems of low-income rural families, which may or may not be an agricultural problem.

Senator SPARKMAN. May I say, of course, you are exactly right in calling the attention to the drawing of the line in these particular hearings.

I share the feelings that Congressman Mills has expressed, and I find it difficult in my own thinking to draw that line clearly.

But the purpose of these hearings was to center our attention upon commercial farming, and that was done primarily because this subcommittee has, on two previous occasions, held rather extensive hearings, and put out, I think, a rather complete report in each instance, dealing with the low-income farm problems.

I think what we found then, and the recommendations that we made, are relevant today. This is not supposed to indicate that we are not interested in those problems and concerned with them.

I realize that these papers today have brought that into discussion. It seems to me that it does not impair our study, however, for us to consider them to the extent they have been presented today.

Representative CURTIS. Mr. Chairman, I did not mean it that way. I think we all have difficulty in separating these two phases of rural economy. In fact, I suggest that is one of our basic problems. I think that these papers today properly bear on our major problem. But that was not the point.

I was afraid, in the way we were developing it, we were losing this point; at least I was beginning to lose the thread.

Representative MILLS. Mr. Curtis, perhaps it comes down to a definition of what we mean by commercial farming. We went through that definition once before.

One of the panelists this morning referred to the Bureau of the Census, Agriculture Division, and included in his remarks commercial agriculture applying to the first six categories. It is to the fifth and sixth categories of commercial farming that everything I have said applies, as well as to those who are not in the top 6, you see; and everything that the panel has said would include those 2.

Representative CURTIS. The question I would pose, and I think it is the primary question, is: Can commercial agriculture provide a living for all this rural populace? That is what it comes down to.

Most of the panelists felt that presently it cannot support, adequately, this population, and, therefore, if we try to solve the problems of commercial agriculture within the scope of assuming that it is going to support the present population that is in the rural areas, I think, in my own judgment, we will end up not solving the problems of commercial agriculture or the problems of this 56-percent group.

Well, if I may go ahead with some points that I want to bring out, I do have some questions. I think one of the primary difficulties, at least in my mind, in approaching this question of commercial agriculture, is, No. 1, how to measure farm income.

I think it is brought out, too, in our problems in social security when we recognize, very properly, that a lot of farm income is not in cash, but is in living, you might say, and our social security program up until we moved into the agricultural area has been based on the urban economy, where most things are in cash.

A third aspect (in kind, in cash, being the other two) was brought out in some of the papers that just intrigues me. It is suggested that a great deal of farm income is reflected in capital gain. If that is so, we have not been measuring this thing too accurately.

I can see it from our tax laws, where that is true, and I am intrigued with that.

If capital gain is a source of farm income the way we have measured it through our tax laws, inventory is one way it reflects but probably the basic way is in land owership. So it becomes important to know what percent of the farming operation is done by the landowners.

The only reason I interjected that into the question here is I am not entirely sure that the first four sections of commercial agriculture are doing so badly. I do not know. Maybe they are. But certainly it is going to be wrong if we try, as we have in some of our programs I am afraid, to use the 56 percent as a basis, an emotional basis, for setting up our programs, when actually the 44 percent are the ones that actually benefit from it.

That is another thing that I would seek to measure.

If I may, we have on that panel some sociologists. I asked some of the other panels what I thought was one of our basic questions. Far from being a clear answer, it looks like there is considerable question about it.

On page 369, in Mr. Beers' paper, he says:

> Furthermore, it is known that half or more of farm-reared youth in the normal continuation of past trends will leave agriculture and move to urban places for nonagricultural employment.

What I would like to ask Mr. Beers is this question: Some of the panelists suggested that that trend had changed, certainly from the standpoint of the birthrate. Where it used to be heavy in rural families in comparison to urban, there has been a change there for the first time in history, I believe.

We have seen the difference there. I was checking yesterday with some of the people in Health, Education, and Welfare and they have affirmed that, and they say that there has been a very marked change, that the birthrates in the urban areas are now getting to where they are almost comparable with rural areas.

Would you develop that a little more as to what we know about that and what we might expect?

Mr. BEERS. Yes, Congressman Curtis.

Of course, I happen to come from Kentucky, and we have in Kentucky the county with the highest fertility rate in the United States, so you will have to watch my remarks for some bias. It is true, no doubt, although I don't have before me the specific birthrate figures, that rural and urban rates have tended to come more closely together, and even in the Appalachian region, which has had a very high rural birthrate, the trend has been toward conspicuous decline. But it has been from such a high "high" that the decline isn't by any means complete as yet.

The fact that urban and rural rates have been coming together doesn't really change the implication of this statement. The fact remains that many boys and girls are being born in rural communities. Whether the rural birthrate is the same as the rate of birth in urban communities has no bearing on the question of whether these boys and

girls will find opportunity in the rural communities in which they are born.

I think that the Health, Education, and Welfare statisticians would no doubt concur in the statement, that from half to two-thirds now, and continuing in the future, will not find economic opportunity in the places in which they are born.

It distresses me a little bit that so many people think that migration is a bad thing. A good deal of the greatness of our economy and our society in America has been attributable to the fact that we have been a freely moving people, and we have gone where we saw opportunity.

It isn't necessarily a bad thing that boys and girls leave the rural community. We still have a lot of emotional feeling about this, apparently. We think that all boys born in the country should stay there. But, if all the boys and girls born in eastern Kentucky had stayed there, we would have a population situation about like that of Java or Puerto Rico.

Representative CURTIS. I thank you for your comments. I might say I agree with that. I think it is a healthy thing, and even if it were not, the fact remains that it is going to continue. Whether it is because the agricultural sector of our economy is going to continue to decline in percentage of national income, or whatever, we are going to have the situation where more labor is born, you might say, or developed in the rural areas than at least the commercial farming center of our economy can take care of.

The question, of course, is—and these papers have brought it out—just because traditionally commercial farming has been such a predominant factor in the rural economy, does it mean that it would always remain the sole factor?

Maybe the movement of factories out into rural areas or other things of that nature will bring a picture in the United States where commercial farming is, although important and always will be the most important economic factor in the rural community or rural area, it would not be so predominant.

I have one other question, again because we have some sociologists here: What studies are there that indicate the type which moves from the farm to the urban areas?

Is there any indication that the brighter ones leave and the duller ones stay?

If there is, has there been any change in that, or is it that we just do not know?

Mr. BEERS. Mr. Congressman, this provides me a welcome opportunity to get into the record a favorite classification which I often share with my students. There is a widespread view to the effect that the smart and most intelligent youth leave the rural community.

Actually, in the large quantity of research which has been done, there is conflicting evidence. I refer to what is called the deterioration theory, that is, the theory that the best stock is being drained off continually by migration. Some of the studies in some places seem to confirm this.

There is another theory which I call the cream-and-the-dregs theory. This is that the better ability levels and the inferior ability levels are drained off disproportionately, and that the middle ability levels remain.

There is the third theory, which is the only one I can endorse on the basis of present research, and that is that "circumstances alter cases."

There are times when there is rural depression and urban prosperity in which everybody goes that can get away.

There are other times in which the economic situation is reversed, and there is a tendency for rural youth to remain in the community.

It seems to me that factors other than intelligence and ability are much more important in determining who goes and who stays. We do know that most of the migrants from rural communities leave between the ages of 15 and 30, normally.

Migration occurs a little bit earlier for young women than for boys, because there is less immediate opportunity for them to get employment in agricultural pursuits.

Typically, if the farm resident has not left before he is 30, he is not so likely to go.

Representative CURTIS. With the background that we have of the technological developments in agriculture within the past decade, let us say, and the suburbanization, I suppose, of our society——

Mr. BEERS. Well, we sociologists use that word. It is all right.

Representative CURTIS. I am a pure amateur, but I am trying to get across a thought. With that background, has there been anything that would mark as far as the type that has been leaving the rural areas in the past decade?

Mr. BEERS. We usually refer to this as selective migration, in the sense that migration selects out of the population some that leave while others remain.

As has been observed, migration is selective with respect to age. We know that it is selective also with respect to sex. It is not established, in my judgment, that it is selective with respect to intelligence or native ability. We do know, however, that it is selective to education. The farther one goes in the school system, the more likely one is to leave the rural community.

This, of course, establishes the very close relationship between progress in the school system and departure from the rural community.

A great many people put school years completed and intelligence together as though they were the same thing, but they are not. A great many of our more intelligent youth do not go very far in school. We have a way of saying in Kentucky that only about one-third of the top one-fourth in ability among high-school graduates go on to college. That is, two-thirds of the top one-fourth of the high-school classes do not go on to college.

So one cannot take years of schooling as an indication of intelligence. I would say, trying not to get this too complicated, that we do not know that rural-urban migration is selective with respect to intelligence, but we do know it is selective with respect to years of schooling completed.

Representative CURTIS. Has there been any trend at all in the age of those in commercial agriculture?

I have heard some of the papers which have suggested that in certain areas the age of the people in commercial farming as getting older.

Are there any studies that bear on that?

Mr. BEERS. Yes. I saw in this compilation of papers prepared by the panelists some statistics on the point. I am afraid I cannot find

it quickly enough to give you the figures at the moment, and I don't have it at tonguetip. There are data on this point.

There are age differentials among classes of commercial farmers, and there are trends toward aging.

Representative CURTIS. Rather than get into that, I will ask this question: Is it generally true that the age is increasing?

Mr. BEERS. This is my impression, though I would like to check the statistics before I sign my name to it.

Representative CURTIS. That could come about, I could suggest, possibly, from some of our situations in the tax laws, and what we call locked-in investment, where it is difficult to sell capital assets because of the tax situation.

There is a tendency, I would say, from our tax laws, to freeze in present holders.

Mr. BEERS. It may be that some of the other panelists who have been working with economic data may have some figures on the relationship between age and capital accumulation, or getting the resources of farming.

Are the farmers in class 1 older than the farmers in classes 5 and 6?

Mr. RUTTAN. That was not in my paper, but I remember in reading one of the papers there was a definite statement that the farmers in the lower 2 or 3 income classes were older by a considerable age than the farmers in the higher income classes.

Representative CURTIS. That was my impression, too.

There is one question I want to be sure of, and I think it is true, is this, Mr. Beers: If one of the major problems of commercial agriculture is this migration, or the taking out of commercial agriculture surplus labor, and that is going to continue, a rather detailed study of migration is necessary if we are going to find some answers.

Would you agree with that?

Mr. BEERS. Yes. You will find that a number of relatively small-scale studies are made by the research workers in the land-grant colleges, and the agricultural experiment stations in their own States.

It is possible to get very useful information from the decennial census when it is taken. There is a good bit of information on migration. No doubt it will continue to be an object of important study.

There has not been, as yet, to my knowledge, any very large study of what we might call interregional migration. In Kentucky, we can study the community of departure, but we cannot study the community of destination. That is, we have people leaving our rural communities and going to the States north of us.

We have to do our research within our own State. We are trying to interest some of our neighbors in devising some kind of a way of getting some regional studies going which will make it possible to find out what the link is between the rural community of departure and the urban community of destination.

This is an area in which we do not have very much. We get a lot of newspaper publicity about what happens to the Kentucky migrant in Chicago, but we do not accept this as reliable research information.

Mr. RUTTAN. There was a study completed at the University of Chicago by Eldon Smith about 4 years ago of rural migrants to Indianapolis. This compared the experience of southern whites, southern colored and white workers from Midwest.

The effect of the study was to indicate that the initial earnings of whites from the Midwest was higher than either the earnings of southern whites or southern Negroes. Initial earnings of southern Negroes were higher than initial earnings of southern whites, but after about 4 to 5 years the southern whites and midwestern whites achieved approximately the same earnings and the southern Negroes had lower earnings than the two white groups.

Representative CURTIS. The recommendations of the panelists here along the lines of need for further education all seem to me to be directed toward this problem of migration. Am I wrong in making that generalization?

Mr. Huffman?

Mr. HUFFMAN. I would like to make a couple of comments here in connection with the problems of migration and job opportunities in agriculture.

I think we need to back up and take a good look at the changing character of agriculture. I think it tells us the reason for some of our problems.

A lot of the things that used to be done on the farms are now done somewhere else up the line, and this accounts at least in part for the fact that there is a lot less labor needed in agriculture, itself.

It also accounts for the fact that we are always wondering why the farm producer is getting a lower percentage of the consumer's food dollar.

This, again, is because somebody else is doing some of these things which have been popularized under the term of built-in maid service. The best way I know that a farmer can get 100 percent of the consumer's food dollar would be to peddle his stuff from door to door and he will get it. The housewife does not want it that way now. She wants it done up in cellophane or even precooked.

This means to me that a lot of these people in rural communities, young people in rural communities, can probably find job opportunities in agriculture, but they are not in agricultural production. They are in agricultural services, processing and such areas, and this comes down then, since you brought this problem of education back into the picture, to the question of whether or not we are giving a lot of these young people the right kind of counseling, advice and education, whether or not we are pointing out to them where the job opportunities do exist if they want to stay in agriculture, and a lot of them do.

But they can stay in agriculturally related work even though they are not in agricultural production, and this may mean that the type of vocational training we give in rural high schools should not be directed so much toward training people to go back on the farms, as it should be to what I would call agricultural business.

There are job opportunities there, perhaps in their own communities, but certainly in work related to agriculture. I think in order to get this, we have to go clear back and see what kind of an agriculture we really have now.

Representative CURTIS. I talked to some people in Health, Education, and Welfare on that very same thing, and they expressed similar concern, that in vocational education in rural high schools, they wish more were done along the line you suggest instead of just the emphasis on going right back into farm production.

Mr. HUFFMAN. For example, I think it was the United States Office of Education which put out a study a couple of years ago which showed, I believe, that there were around 15,000 professional jobs in agriculture and agriculture related industries open each year, and that the colleges were training only about half that many for those particular kinds of jobs.

Representative TALLE. Will you yield to me, Mr. Curtis?

Representative CURTIS. Certainly.

Mr. BEERS. May I make a correction in the record? I am responsible for making an important mistake which should be corrected. In 1950 the median age of commercial farmers in classes I and II was about 10 years less than the median age of commercial farmers in classes V and VI. I think I gave you the reverse of that a few minutes ago.

This statistic is offered by Professor Montgomery, from Oklahoma, and I am embarrassed particularly as it is in my own statement on page 364.

He makes the point in connection with his observation that the commercial farmers in classes I and II are young enough so that they can make a different kind of use of credit for housing than the older farmers, 10 years older, in classes V and VI. He makes the point that they are young enough so that they can borrow money to improve their housing and still live long enough to pay it out.

Representative CURTIS. Yes.

Representative TALLE. I was not trying to cut you off, but I wanted to ask the panel if we should not take into account the effect of what has happened in this country since 1940.

In World War II there were 13 million young people in uniform.

A good many of those young people attended school during their military service as well as subsequently.

How many of those young people who left the farm and who wore uniforms stayed on in the service and how many went back to the farm or chose to work in some urban center?

I believe that the effect of the draft law, and the emphasis on the armed services, have very much influenced early marriages and higher birthrates. Benefits that accrued to those who were in the services encouraged larger families.

Since we are not far from April 15, let us remember that every new baby is a new exemption.

Mr. BEERS. Mr. Congressman, I do not know what the facts may be with reference to this. It is an intriguing hypothesis.

I do not believe any study has been made. One could comment only from a conjectural standpoint.

The changes in the birthrate and changes in family size, I am sure, are the result of more factors than this one, and I do not know what the influence of this one factor may be.

For sometime, the size of the family did decline and the birth rate was declining in the United States somewhat later than a similar decline had affected the other nations of western European society.

But as you all know, the projections of population made prior to World War II had to be revised. Some of the population people think that they can predict again now, but some of us are unwilling to make such prediction, in view of our lack of success before World War II.

It looks to me as though not only in urban America, but also in rural America, the social values which are associated with life in the family are settling us down to what might be called the small family or the middle sized family pattern. There are not as many big families as there used to be, and there are not as many childless marriages as there used to be, either on the farms or in the city.

Senator SPARKMAN. Mr. Beers, I might say I know one exception to that rule. I have a little farm, and I have a tenant on it who is a World War II veteran. He and his wife have 11 children, the oldest of whom is about 16. So when you talk about these problems, I am always thinking back to that particular family.

I often wonder if we do not get away from a lot of the real value in farm life, in what it means to that family to make at least a good living on the farm, even though they may not have a very high income.

When I think about $2,500 worth of farm products to be sold off the farm, and ordinarily he would produce that much, I think of how much more he is getting in feeding himself, his wife and those 11 children on that farm.

By the way, let me say, Mr. Beers, something about another subject.

Congressman Mills is going to have to leave, and he and Congressman Curtis, so far as I am concerned, are our tax experts here. They are both from the Ways and Means Committee of the House of Representatives.

In this question that Mr. Curtis has raised at different times about capital gains, the thought occurs to me that capital gains from farmland may be hurtful rather than helpful, since the farmer is holding onto his farm property. The great investment he has simply steps up the cost of farming and certainly it affords no yearly income from which he can feed his family.

Is there any comment on that?

Mr. MILLER. Mr. Chairman, I am glad you raised that point, because I think it is very important.

It is true that if you owned some good land over the last few years, you do have a capital asset which is worth more than it was before, but you cannot feed your family on it unless you sell it, and it certainly does not help the family that follows and tries to buy that land and make a living on it.

So the question does arise as to just how much attention we should pay to this factor in the income picture.

It seems to me that this capital gain is a factor for a lot of people who are not on farms as well as for those who are.

We would be on rather dangerous ground trying to evaluate that very much in judging whether or not agriculture was in a sound position, incomewise.

Of course, we also know that this land trend is not a one-way street. We have this increase in values over the last, say 15 to 20 years, but anybody that went through the 1930's knows that land values can go down and you can have the reverse just as easily.

That is not a prediction, but it is a possibility.

Senator SPARKMAN. It seems to be one of the real difficulties of farming today, and particularly for the small farmer, the family-size farmer. There is a tremendous investment that he must make in order to carry on his farming activities.

By the way, Mr. Beers, you said no adequate study had been made, I believe, of the question of regional migration. I think I can remind you of one which was a pretty thorough study. Do you remember the study that was made back about 1940 or 1941 under the direction of Congressman Tolan, of California?

Mr. BEERS. Yes.

Senator SPARKMAN. That was a pretty thorough study, was it not?

Mr. BEERS. Yes, sir.

Senator SPARKMAN. I wanted to get this on the record. I was a member of that committee. I agree with you on the question of migration. I think migration is a normal thing. But I want to say that I am disturbed when we have these programs advocating what seems to be almost a forced migration.

I know down my way a great part of the farm population has to migrate. There is no question about that. When they do migrate, it is almost a regional migration. In other words, they move to other parts of the country.

They go to Detroit until they cut down the auto production, and then they come back home and live off the home folks. Or they go to Pittsburgh, to Akron, to many places throughout the country, in order to get employment.

That is a normal and, I think under existing economic conditions, a healthy thing. But I do rather repel the idea of something in the nature of a forced migration, where people are simply forced. I want to say this—and I am not saying anybody has suggested such programs—but it seems to me there are implications to that effect. I repel the idea of farm programs that would have the effect of forcing people to leave the farm.

I still cling to an old-fashioned idea, and I suppose it is old fashioned, that there is a great deal more to farm life than just making a living.

I grew up on the farm, and at heart I am still a farmer, although I I have a pretty hard time trying to farm 1,000 miles away from that farm. But I get a lot of fun out of it anyhow. I still believe there is something to the old saying that farming is not only a way of making a living, but it is also a way of life.

I hope the time will never come when we depart completely from that philosophy. I think it is a good philosophy.

I would much prefer to see attention be directed toward the development of programs that will create a more favorable climate for those people to live there.

Representative TALLE. I agree with you, Mr. Chairman.

Senator SPARKMAN. Thank you. I feel fortified.

Mr. Beers, I started to say that I was glad you brought in the discussion about farm housing. My colleague has questioned you about it.

It happens that Mr. Talle and I are both on the Banking and Currency Committees of the two Houses. He knows that we have from to time given a great deal of thought to the idea that not sufficient attention has been paid to farm housing.

A great many people do not realize that some of the worst slums we have in this country are in the rural sections. They just don't show up so bad because usually they are individual houses, instead of a great collection of houses.

In the last bill, we inserted a provision authorizing $300,000 a year for 2 years, as I recall, to make a study of that.

Mr. Beers, you said something that indicated that it was already underway. My understanding is that it is still in the process of being set up, and that actually in January there is to be a meeting here in Washington of a group of agricultural economists who are working on the final plans. Is that correct?

Mr. BEERS. I am not personally informed on that.

Senator SPARKMAN. That is my understanding.

Mr. HUFFMAN. That is correct.

Senator SPARKMAN. I think you have given some very good suggestions. I do hope we may be able to get a program of farm housing worked out of this that will help us clean up some of the rural slums. That certainly makes a great deal for a more comfortable farm life; does it not?

Mr. BEERS. Yes; it does, Mr. Senator. I want to acknowledge the assistance of my colleague, Professor Montgomery, of Oklahoma, in preparing this statement on housing. He is deeply involved in research in this area. If he were here, he could give you more specific information on the point.

Senator SPARKMAN. Yes; I note in your paper you make notice of that, and in the compendium itself I notice the credit likewise is given.

One of you was talking about technical assistance to farmers. I have even forgotten just now who had that in his paper.

Are you familiar with the rural development program? Who was it that mentioned that? Mr. Ruttan?

Mr. RUTTAN. I was speaking of it specifically in connection with the rural development program, and I believe the program is operating in approximately 100 counties at the present time.

Senator SPARKMAN. It started off in 50, I believe, and I think it was extended last year to 100 counties. Have you observed its operations?

Mr. RUTTAN. I have been familiar with its operations particularly in Indiana.

Senator SPARKMAN. Do you think it is doing a good job?

Mr. RUTTAN. I think it is a very essential part of any program designed to work with the noncommercial farmers. We have on the one hand the pullout of agriculture, but this does not do the people who are left in agriculture any good unless they make the transition from part time or noncommercial farming, and this is something that does take technical and managerial assistance. And it takes it on a personal basis rather than the type of assistance we have been giving our commercial farmers who are able to take it on a somewhat less personal basis.

Senator SPARKMAN. My own feeling is that a great many of the farmers who may be called noncommercial could actually be made commercial farmers. With a little help, they could be brought into that category.

Mr. RUTTAN. I think a great many of them can, but as I mentioned I think it also requires decisions by other farmers to leave in order that a redistribution of land would be available.

Senator SPARKMAN. I am not accepting that.

Mr. RUTTAN. I see.

Senator SPARKMAN. Of course, again we come to the question that sometimes is posed to me, and that is this: Just what is our position in this thing of production?

Rather strangely, in the field of manufacturing, we are always talking about stepping up production. We are talking about moving these farmers out to increase the industrial labor force, which I do not think is going to be too easy, because sometimes the labor force is just about as full as our production can use.

The thing that is difficult for me to reconcile in my own thinking is the fact that we are always looking toward the stepping up of production in manufacturing, and yet it seems that we have developed a psychology of playing down production in agriculture. I wonder if there isn't something that we can do of a positive nature that would look toward better distribution, more complete utilization of the production of agricultural products.

Mr. RUTTAN. I think there are two facets here. In fact, I think one of them was emphasized in yesterday's hearing, something like 6 to 10 percent overproduction or overcapacity at the present time in agriculture. I have seen budgets from some of these low-income counties which indicated that at present prices they could increase their production by a third or by a half. Taking farmers who produce about 20 percent of the farm product now and if we increase their production by a half, we have added 10 percent, approximately, to total farm output. This means that although the prices we currently have indicate that the increase in production would be profitable it would no longer be profitable. I am no expert on the area of what we will do about surplus disposal and the possibility for industrial use and so forth, but from what I have seen the possibilities appear to be limited.

Senator SPARKMAN. Does the increase in population of 3 million a year take care of the margin of overproduction, or the margin of the productive capacity?

Are we going to be confronted a few years in the future with the problem of seeking greater production rather than curbing greater production?

Mr. RUTTAN. All the research that has been done seems to indicate that at least for the next 10 years, even if we were to reduce our labor force by substantial amounts, there would be overproduction rather than underproduction. People have not been able to make predictions as to where our new technology will carry us beyond 1975, but certainly there is every indication that the problem for commercial agriculture is going to continue to be excess production during the next 10 to 15 years. I think Congressman Curtis' statement earlier to the effect that these two problems must be kept separate is very pertinent here. Back a few years, we had the tendency to confuse the commercial program. We felt if we could solve the problem of the commercial farmers, we could solve all the agricultural problem. Recently we have gone in the other direction, that if we could solve the low-income problem, there wouldn't be any agricultural problem left. But I think there is a justification for the solution of each of these problems, and the solution to either one of them will not solve the other problem.

Senator SPARKMAN. But if there is a transfer of the labor force from the farms of this country to manufacturing or to off-farm activity, is it not normal to expect that it is going to be your low-income group that is going first?

Mr. RUTTAN. I would like Mr. Beers to check me on this, but the evidence that I have seen indicates that mobility has been about as rapid from Iowa as it has been from Kentucky or Alabama. It seems to me this is sort of an inefficient way to do the thing, that we actually need a more rapid rate of mobility, whether interregional or between farm and city in the Southeast, than we do in Iowa, but we have not been getting it.

Is that approximately correct?

Mr. BEERS. Yes, with the further comment on selectivity. The studies do indicate that there is a tendency for those from the low-income areas and low-income levels to move out at a more rapid rate. But this does not mean that it all comes from there.

Senator SPARKMAN. No, that is correct. I thought, as a matter of fact, the figures you pointed out a while ago, I believe Dr. Montgomery's figures, showed the 10-year age differential between the highest income level and the lower income level, and indicate probably that your young people were leaving the lower income farms.

Mr. BEERS. Yes. That would account for the older age levels of those farm operators who are in those classes remaining.

Senator SPARKMAN. Too, it seems to me that it is just easier to dislocate the low-income families than it is the higher income families.

I believe that was true of our "Okies" and "Arkies" in the dust-storm period. Did they move primarily from the low-income levels?

Mr. BEERS. Yes.

Mr. HUFFMAN. I would like to make one comment here. That is to the effect that when a low-income family leaves an inadequate farm unit in a rural area, the thing we like to think happens, at least in the areas I have observed, doesn't very often happen. In other words, the fellow next door, who also is a low-income farmer with an inadequate unit is not the fellow who gets the farm that is left. It is usually picked up by someone who already has an adequate unit, but who has the financial resources to buy the vacated farm.

Maybe this could be helped by the type of agricultural boards that Mr. Miller talked about or the rural development program could see that the fellow who ought to have it at least is in a position to try to get it.

Mr. MILLER. Senator, I would like to comment on your question you asked Mr. Ruttan about what he thought of the rural development program. I have made this observation: It seems to me that for the resources we have put into it, I cannot think of a program that has probably been more effective. But I am worried, frankly quite worried, about the fact that the Department of Agriculture, and I will include myself as a part of that, although I am a member of a land-grant institution—I am afraid we have overstressed the great benefits that have flowed from this particular program as if by some miracle we could take a million dollars or so and really solve this low-income problem in agriculture.

While we have made marvelous progress with very limited resources, I am afraid that the public generally is feeling that here is a case where we get a great deal for nothing. This problem is just going to take something more in the way of resources. That is, if we really do something about education, it takes resources.

You mentioned housing, and the need and value of a decent sort of house. That takes resources, and all of these necessary changes take

a great deal more resources, than we have led the public to believe. I am worried that we think we have really gone in and solved the problem here with just a very small program.

In saying that, I certainly want to stress that I don't know where we have gotten more per dollar, but we haven't enough dollars in this thing to really revolutionize this low-income problem.

Senator SPARKMAN. I want you to know that I agree with you wholeheartedly. I want you to know that I introduced a bill before this 50-county program was agreed upon, in which I proposed to put it into effect for 1,000 counties. I believe it will take some massive attack such as that in order to do the job—not just a farm here and there, but let it be available for use throughout the county.

I will say this in all fairness, that it was the attitude of the Department that there ought to be some experimentation, and I will go along with experimentation. But I certainly agree with what I think you say, and that is that we are not scratching the surface with the present program.

Mr. MILLER. That is right.

Mr. BEERS. Mr. Chairman, with further reference to the rural development program, may I say that this seems to me to offer the prospect of bringing together in one effort the attempts to solve the two problems that Mr. Ruttan was summarizing a moment ago, the problems of the noncommercial farmer and the commercial farmer, because the rural development program, although at present focused on the low-income areas, takes the total community point of view. The commercial farmers are there and the noncommercial farmers are there. It impresses me also, as Mr. Miller seems to imply, that this device, this coordinating element in the rural development program, is one which can very well be extended to other types of communities and areas than just those in which low income is concentrated. Here is a program in which the technical people, the agencies, and the people who live in the community work together on the analysis of their problems, and on working out solutions.

Mr. HALCROW. I would like to emphasize a point. I think that all agriculture is facing the problem of adjusting to modern technological conditions. That is, the Nos. 1, 2, and 3 farms have the problem of making capital investments to bring themselves up to date, and all farms have the problem of trying to enlarge their units, trying to modernize them, and trying to find capital to bring about this adjustment.

When we get down into the smaller farms, I think this problem becomes particularly acute. There the problem is one, I think, of offering economic opportunity, both on the farm and outside the farm. I agree fully with the idea expressed, Senator, that you do not want to force people to do some particular things. I agree fully with that. I think the great strength of a free society rests itself on the extent to which we give opportunity to people, make alternatives available to them, rather than forcing them to do a particular thing. I think in this connection the major problem becomes one of offering opportunity, both farming and nonfarming, to provide the labor transfers that are necessary.

Mr. BAUGHMAN. May I toss in one more comment? It seems to me that what we have been talking about comes down essentially to a little broader frame of reference, namely, what is the mechanism

of economic growth as a whole, and what are the factors that determine the rate of economic growth we can have in our economy. Most of the discussion here has suggested that one of the sources of labor supply, which has played a significant role in our rather rapid rate of economic growth up to the present time, has been labor generated in rural areas, and which has been absorbed in other sectors of the economy.

The reason this labor has been absorbed in other sectors of the economy rather than rural areas is primarily because it is the production of other sectors of the economy that people want more of as they raise their levels of consumption.

Therefore, as we talk about the possibilities of raising the per capita incomes in commercial agriculture, and along with that the need for a smaller number of people depending upon agricultural incomes as their major source of income, we are merely recognizing the fact that this transfer of resources from areas of relatively low income into occupations where they may earn higher incomes, has been taking place not quite fast enough, and, therefore, we should consider: Are there ways of facilitating it?

One which was emphasized, I think quite appropriately in Mr. Beers' comments, was that education plays a very important role in raising the ability of individuals to find their niche in society and their willingness to move in order to do it. Also, we should review public programs to see whether we are doing things which tend to interfere or retard movements which in fact should take place for the benefit of the individuals themselves.

A point has been made of the instability of employment in the nonagricultural sector of the economy, and this is certainly a very important retardant on people's willingness to move into an area where they may feel less secure. Furthermore, it tends to limit the rate of economic growth in the economy as a whole. But as we look back over our postwar experience thus far, I think we would have to say that the results look pretty good. There have been some short periods of significant unemployment, and at the present moment we are having some increase in unemployment.

But I come back again to the point that we probably can't solve the so-called farm problem on the farm, and that possibly as great a contribution as can possibly be made to commercial agriculture is that of making further progress in the direction of greater stability, of high-level employment in the nonagricultural sectors of the economy, so that individuals will continue to have available to them these alternative opportunities.

Senator SPARKMAN. In other words, it will serve to draw them, to be an incentive for the shifting of population.

Mr. BAUGHMAN. Yes, sir.

Senator SPARKMAN. One of our earlier panelists made the suggestion that in cotton allotments or in wheat allotments or in allotments for different crops that are under quota, the farmer should have the right to sell that allotment to somebody else, not transfer the acreage but sell the quota.

Does anyone have any thought on that?

Mr. HUFFMAN. It is a thing we have talked about academically quite a bid because it could do 2 or 3 things. It could certainly enable people to accumulate the wheat base that might be needed to make up an adequate unit.

It would probably do something else, too, which would be to concentrate the wheat acreage on the best land, which might intensify the problem by increasing the output from a given acreage of land. It would probably take out of production some of the lower quality lands that have come in. All in all it would presumably give us a better use of resources in the end, actually, by concentrating it where wheat can best be produced, and taking it out of other areas, but recognizing at the same time that it would probably increase the output of wheat from a given number of acres. This problem could be handled if allotments were in bushels rather than acres.

Mr. HALCROW. It would probably separate the value of the allotment from the land, so that the allotment wouldn't be capitalized in the selling of the land, but would occur independently from the land. Therefore, it would create greater mobility and flexibility in agriculture.

Senator SPARKMAN. May I throw out one other fast question? For a good many years we have had a crop-insurance program at different times and on different commodities, which seems to have a great deal of trouble in getting going.

Is there any hope for such a program working or doing a job?

Mr. HALCROW. Senator, I made a study of the crop-insurance program in connection with my Ph. D. thesis, and in this I came to the conclusion that crop insurance would have greater possibilities if placed on a different actuarial basis. That is, if it were placed on an area basis rather than on the individual basis.

We would take the average yields for an area as the basis for insurance, and whenever average yields ran below a certain insured level, then the farms in that area would receive an indemnity. This would have a major advantage of limiting what is called adverse selectivity, so that you could provide more complete coverage, I think, for an area without drawing in the adverse risks. That is, everyone would have an equal opportunity in the area I think actuarially sound.

Senator SPARKMAN. Thank you.

Thank you, gentlemen. We certainly appreciate the fine presentation you have made.

The subcommittee will stand in recess until 2:30.

(Whereupon, at 12:20 p. m., the hearing of the subcommittee was recessed, to reconvene at 2:30 p. m. the same day.)

AFTERNOON SESSION

Senator SPARKMAN. The subcommittee will come to order, please.

Our hearings on agricultural policy continue with a subject we have entitled "Adjusting Agriculture Through the Price Mechanism."

We have heard a great deal in earlier panels about adjustments now needed in agriculture and likely to be needed in the future. In this afternoon's session, we want to go into the question of how readily an unbalanced agriculture tends to right itself under the stimulus of price in an open market. We want to give main attention to the principles and facts controlling responses of production and consumption to price. These are basic to what happens in an open market, of course, and they also are forces that any Government program must take into account.

We have asked our panelists to prepare papers on what economic research shows about the behavior of farm supply and demand, on the effectiveness of prices in achieving internal and external adjustments for agriculture, and on the extent to which an open-market policy should be followed. Our panelists have responded with an excellent set of papers on these topics.

Gentlemen, we welcome you here this afternoon and wish to thank you for the time and effort you are giving in the conduct of our study. We will begin by asking each panelist, in the order given in the schedule of hearings, to give a 5-minute summary of this paper. When these have been completed, the members of the subcommittee, in turn, will ask questions of the panelists.

I hope we can proceed in an informal manner, in a spirit of inquiry and factfinding, to discuss the market behavior of agriculture. We want to have a full exchange of views, and each member of the panel is urged to discuss other papers as well as his own.

We will begin the summaries of papers with Prof. Karl A. Fox of Iowa State College.

Mr. Fox, we welcome you to the panel. You are recognized for 5 minutes.

STATEMENT OF KARL A. FOX, DEPARTMENT OF ECONOMICS AND SOCIOLOGY, IOWA STATE COLLEGE

Mr. Fox. Thank you.

My prepared paper was on the effects of farm product prices on production and commercial sales.

A good deal is known about the responses of production and consumption of farm products to price influences. I assume that today we are interested only in such aspects of this knowledge as are relevant to the question, "How much of the agricultural adjustment problem, or what aspects of it, can or should be entrusted to the price mechanism?"

The alternatives to entrusting any particular aspect to the price mechanism are, presumably, Government-sponsored programs to achieve stated price and income objectives. These programs include price support and the diversion of surpluses, rationing the right to produce or to sell in preferred markets, direct payments to farmers when market prices fall below specified levels, and other devices which substitute, or apologize, for the workings of the market place.

About five-eighths of cash farm income comes from sales of livestock and feed. Consumers make substantial adjustments in their purchases of most of the important livestock products in response to year-to-year changes in their retail prices. Consumer purchases of an individual red meat or poultry meat generally increase from 7 to 10 percent in response to a 10 percent decrease in the retail price of that particular commodity. The purchase response would be somewhat smaller if retail prices of all meat or all livestock products fell 10 percent at the same time—perhaps 6 percent for all meat and 5 percent for meat, poultry, and dairy products as a group. Retail price increases of 10 percent from year to year would lead to corresponding reductions in consumer purchases.

Prices of livestock products at the farm level change by about the same absolute amounts as at retail. This means somewhat larger percentage fluctuations in farm prices; however the probable variations in these prices under free-market conditions do not seem to be unreasonably large. Farmers make considerable adjustments in the production of individual livestock products from year to year, so that if the price of, say, hogs is low relative to other livestock products this year it is likely to be either back in line or relatively high within a year or so.

In principle, the amplitude of all livestock price fluctuations can be reduced still further by means of a price support and storage program for feed grains. But successful operation of this program presupposes that it will not attempt to raise feed prices above the free market level for more than a year or two at a time.

If the feed-and-livestock economy could be isolated from the rest of agriculture I believe its internal price relationships and production adjustments would be mediated quite satisfactorily by the price mechanism. The 10-cent hogs of 1955–56 must be attributed to the strictly abnormal effects of a 30-million acre forced reduction in plantings of wheat and cotton with no safeguards to keep the diverted acres out of feed production. So long as the total agricultural surplus continues to be converted into feed I believe the general level of livestock prices will need some indirect support through the price of feed.

Most of the potential price elasticity of demand for commodities such as wheat, cotton, and tobacco lies in other uses than the primary domestic market. If domestic price levels for these products were in touch with the world market, considerable elasticity of demand would be found to exist despite trade interferences on the part of other countries. When we support the domestic prices of these products well above export or feed price levels we support them at points where demand is extremely inelastic. Under our current price support policies for these crops we can achieve elasticity, or temporary market expansion, only through the use of export subsidies and sales for foreign currency.

On the supply side, farmers have demonstrated their ability to increase yields when marketing quotas are reduced; experience also indicates that farmers will increase yields, acreages, and livestock numbers substantially when it is clear that they will increase their net incomes by so doing. The rationality of this response is amply demonstrated by research in farm management and production economics.

The elasticity of demand for farm products in the aggregate is low enough that a monopolist acting on behalf of farmers could get higher than free market incomes for them—for a time. But such a state of affairs would in fact be rapidly undermined by the production responses of millions of individual farmers.

Thank you.

Senator SPARKMAN. Thank you, sir.

Prof. E. J. Working, department of agricultural economics, State College of Washington.

Glad to have you with us, Mr. Working.

Mr. WORKING. Thank you, Mr. Chairman.

STATEMENT OF E. J. WORKING, DEPARTMENT OF AGRICULTURAL ECONOMICS, STATE COLLEGE OF WASHINGTON

Mr. Chairman and members of the subcommittee, may I preface my remarks by saying that I think there is a possibility of misinterpretation of what I have to say in my paper because my paper deals with only a small part of a general problem. Lest anyone think that I consider it desirable to do away with all price controls, let me say that this is not my position.

The topic assigned to me is, "How effective are prices and incomes in bringing about adjustments within agriculture?"

A brief answer to the question is that they are very effective. Indeed, if there were no changes in the arts of production or in the resources available—including the weather, crop pests, and diseases—and if we maintained a system of private enterprise with freedom of the individual to produce what he pleased, changes in prices of agricultural products would be substantially the only means by which changes in agricultural production could be brought about.

Actual changes in agricultural production are, of course, very largely influenced by nonprice factors. Changes in weather, in the prevalence or virulence of crop pests and disease, and in methods of agricultural and nonagricultural production are all important and would cause changes in output if there were no changes whatever in prices. However, these nonprice factors are not ordinarily the means of bringing about adjustment, but rather the forces of change which cause production to get out of balance with consumption and which require a means of bringing about readjustment. Changes in prices and incomes—or in prospects for them—remain the principal means of inducing free farmers to make adjustments in their production.

Governmental authority is, of course, an alternative means of bringing about agricultural adjustment. We have acreage allotments and marketing quotas, for example, and these may take the place of free choice of individual farmers as influenced by prices and incomes bringing about production changes. In practice, however, the individual may not lose his freedom of decision under acreage restrictions and marketing quotas, and prices and incomes may still be a primary basis for his decision.

Why, for example, have we had overplanting of wheat in the past year? Is it not because some wheat farmers decided that their incomes would be higher if they overplanted? In effect, there were two prices for wheat, the "regular" price and the price for "hot" wheat. The latter was the regular price minus the penalty and this applied to the quantity that could be grown at average yields on the excess acreage. The regular price applied to wheat grown on the allotted acreage, plus whatever amount was produced by higher than average yields on the excess acreage.

It should be noted that the prices and incomes which directly affect what farmers decide to produce are anticipated prices. These presumably differ from, and they may differ widely from, the market prices prevailing at the times farmers are making their decisions. However, the anticipated prices will usually be based upon the farmers' experience with actual prices over a considerable period of time before the decision.

Numerous empirical studies have been made of the relationship of changes in actual prices and incomes to subsequent changes of production. Due to the technical difficulties involved these studies cannot be expected to show quantitatively the long-run effect of any given price or income change on production. They do, however, provide ample evidence that the general nature of the responses of agricultural production to price changes are consistent with economic principles—that price changes have been, in fact, effective in bringing about changes in agricultural production.

It has been argued by some that a decline in price of an agricultural product will cause farmers to increase their production in the attempt to maintain their incomes. While there is the possibility of a short-run perverse response of this nature, I know of no valid statistical evidence to support the view.

The response of production to a given price change—say a decrease of 10 percent in the price of the commodity—will depend on a number of attendant circumstances. These would include:

1. The elapsed time after the price change.
2. The commodity.
3. The duration of the price change.
4. The cause of the price change.
5. Adjustment by whom?
6. The prices of alternative commodities.

The process of bringing about adjustments in agriculture through prices and incomes is fairly complicated. Any price change has many and diverse ramifications. It would be difficult for any farmer to decide what he might best produce if he knew beforehand what prices would be. It is far more difficult for him to decide what he should produce in view of the instability of prices and the uncertainty as to their future. But in any economy of private enterprise with freedom of the individual to pursue his own gain it is a primary function of the entrepreneur to decide what he should produce.

Price changes have a dual role. They serve as a guide to farmers in planning future production. They also serve as a guide to marketers and consumers in disposing of past agricultural output. There seems to be reason to suspect that these two roles might be more efficiently performed if prices received by farmers fluctuated less widely than we have frequently seen them under the "free" market prices, and if prices paid by consumers at retail were more responsive to abundance and shortages of supplies in market channels.

This is not to say that the efforts of Government price control over farm products which we have thus far had have helped to facilitate needed agricultural adjustments. As I have indicated elsewhere, I suspect that the contrary is the case.

Such unsatisfactory results, however, are to be attributed primarily to a mistaken concept and legal definition of "parity" prices. If parity prices had been defined as "those prices which would efficiently adjust supply to the changing conditions of demand," instead of as "a price relation which prevailed in the past," our partially controlled prices would have constituted better guides for adjusting agricultural production.

Thank you.

Senator SPARKMAN. Thank you, Mr. Working.

Next we have Prof. C. E. Bishop, department of agricultural economics, North Carolina State College.

Mr. Bishop, we are glad to have you with us. We will be glad for you to proceed in your own way.

STATEMENT OF C. E. BISHOP, DEPARTMENT OF AGRICULTURAL ECONOMICS, NORTH CAROLINA STATE COLLEGE

Mr. BISHOP. Thank you, Mr. Chairman. Members of the subcommittee, my assignment is to discuss the importance of the level of farm prices and of the earnings of labor in agriculture in determining the rate of transfer of labor from farm to nonfarm employment.

The farm population of the United States is highly mobile. Over the period 1920–50 the average rate of migration per decade was 21 percent of the farm population. Since 1949 approximately 6.5 million people have migrated from farm to nonfarm residences, excluding persons entering military service. In addition, many people who continue to live on farms have transferred their labor resources to nonfarm employment. In 1950 there were 2,359,243 persons living on farms whose major occupation was in nonagricultural employment.

BASIC FORCES DICTATING NEED FOR MIGRATION

There are certain basic characteristics of the United States economy which dictate that labor must transfer from farm to nonfarm employment if labor resources used in agriculture are to receive returns equal to those received for comparable labor in nonfarm employment. These are:

(1) The demand for farm products increases at a lower rate than the demand for nonfarm products;

(2) Technological progress in the production of farm commodities has made it possible to increase production at a higher rate than the demand for farm products has increased; and

(3) The birthrate in farm families is relatively high.

FARM LABOR EARNINGS ARE LOW

The returns for farm labor are about one-third less than the returns for comparable nonfarm labor, taking into consideration differences in costs of living in farm and nonfarm locations.

MIGRATION AND FARM PRODUCT PRICES

In table 1, net migration from farms is compared with prices received for farm products and income from farming for 5-year periods beginning with 1920. When prices received by farmers decrease, net migration from farms also decreases. On the other hand, when prices received for farm products increase, net migration from farms increases, with the exception of the period 1945–49. This period is probably atypical in that the on-farm training program served as a deterrent to migration during this period and the earnings of labor in much of agriculture probably were greater than the earnings of comparable labor in nonagricultural employment.

TABLE 1.—*Net migration from farms and selected indicators of income opportunities in farming, 1920–54*

Years	Net migration from farms [1]	Prices received by farmers (1910–14=100) [2]	Net income per farm from agriculture [3]	Ratio of annual income per farm worker and factory worker [4]
				Percent
1920–24	3,331,000	$150	$776	40
1925–29	2,965,000	147	939	44
1930–34	1,051,000	87	454	32
1935–39	3,542,000	107	741	40
1940–44	5,309,000	155	1,445	52
1945–49	3,811,000	251	2,504	67
1950–54	4,250,000	271	2,631	53

[1] Farm Population, Migration to and From Farms, 1920–54, pp. 8 and 9.
[2] Outlook charts, 1956, p. 93.
[3] Farm Income Situation, October 1955, p. 46.
[4] Outlook charts, 1956, pp. 71 and 94, and Farm Income Situation, October 1955, p. 45.

The behavior observed in the migration from farms and in prices received for farm products is not what would be expected in a fully employed economy. We normally expect that as agricultural prices increase, there would be an incentive for migration from farms to decrease. But, we would not expect migration to be guided solely by prices received by farmers for their products. In fact, farm product prices are not a good indicator of relative earning opportunities in farm and nonfarm employment and are not a good indicator of migration incentives.

MIGRATION AND COMPARATIVE EARNINGS OF LABOR IN FARM AND NONFARM EMPLOYMENT

In comparing the ratio of earnings of farm workers to factory workers, we note that in only two 5-year periods since 1920 has migration proceeded as we might normally expect. During the period 1925–29, the ratio increased and migration decreased, as would be expected. During 1945–49, the ratio increased and migration decreased. During the other periods, migration changed in the same direction as changes in the ratio of income per farmworker relative to income per factory worker. During periods of rapid expansion of industrial output, farm people moved to nonfarm jobs in spite of the fact that the earnings of labor in agriculture were increasing relative to the earnings of labor in nonfarm sectors of the economy. We expect this type of behavior when labor is dammed up in agriculture because of lack of nonfarm employment opportunities or because of lack of information regarding earning potential in nonfarm employment.

PRICE SUPPORTS AND MIGRATION

The large surpluses that have accumulated in Government warehouses during the 1950's are ample evidence of the fact that the prices of selected farm commodities have been supported above free-market levels. During this period Government price-support programs have increased the incomes of farmers. But, the earnings of farm labor are still low, and farm people have transferred to nonfarm

employment in increasing numbers during periods when prices of farm products and incomes of farm families were increasing. During such periods expectations regarding nonfarm employment have improved and higher incomes of farm families have made it easier to finance the transfer of labor to nonfarm employment.

Since the benefits of Government farm programs have not been uniformly distributed among regions, we might expect migration to be impeded in those areas receiving the greatest benefits. Actually, between 1940 and 1950, both net migration and the net rate of migration from those States receiving a high proportion of their income from the six basic commodities were greater than from those States receiving a low proportion of their income from these commodities.

PRODUCTION CONTROLS AND MIGRATION

Only a few commodities have been subjected to control, and the rates of substitution in production and consumption of farm products are so high that aggregate production has been affected very little. However, certain provisions of the control programs have tended to impede migration. Allotments have not been negotiable, and certain provisions have penalized individuals for not producing their allotted quotas of crops.

REGIONAL VARIATIONS IN MIGRATION

People in low-income areas are responding to a greater degree to nonfarm employment opportunities. The average rate of migration between 1940 and 1950 for States with incomes per farm in 1950 of less than $2,000 was 33 percent compared with 23 percent for States with average income per farm of $5,000 or more.

AN APPRAISAL OF THE EFFECTIVENESS OF RECENT MIGRATION IN INCREASING RELATIVE RETURNS FOR FARM LABOR

Farm labor is responsive to nonfarm employment opportunities, but migration has not greatly increased the relative returns for farm labor. The return for labor services in agriculture increased relative to the return in nonagricultural sectors between 1935 and 1948. Since 1948, however, income per worker in agriculture has decreased relative to income per worker in nonagricultural employment.

Migration potential still is large. It seems clear that if the productivity of labor in agriculture is to be increased relative to the productivity of labor in nonfarm sectors of the economy, a policy of encouraging migration must be publicly accepted and programs must be developed to strengthen the rate of migration and the assimilation of farm people into nonfarm populations.

Thank you.

Senator SPARKMAN. Thank you, Mr. Bishop.

Prof. D. Gale Johnson, department of economics, University of Chicago.

STATEMENT OF D. GALE JOHNSON, DEPARTMENT OF ECONOMICS, UNIVERSITY OF CHICAGO

Mr. JOHNSON. Thank you, Mr. Chairman.

One of the major objections to a return to free market prices for agriculture is that the free market prices would result in an inadequate or unsatisfactory level of incomes for farm people.

The view that low farm prices result in low farm incomes represents in my mind an excessive simplification of the operation of our economy if it is not actually wholly erroneous. Farm prices and incomes—and by income, I mean the returns to workers, land and capital—are determined by a complex system of economic relationships. Insofar as one can attribute causality to the relationship between farm incomes and farm prices, it is that farm prices are low because the owners of farm resources are willing within the setting in which they find themselves to accept low returns for their resources.

If we compare farm incomes per worker after adjusting for changes in the cost of living for periods of times or years when the parity ratio was the same or nearly so, we find that there are wide differences in the level of income. The general pattern emerges, however, that when a later year is compared with an earlier year, the level of incomes has been increased even though the parity ratio, or the relative level of farm prices, has been held constant.

For example, in 1929 and 1953, the parity ratios were 92 and 93; respectively.

Yet deflated average income per farmworker increased by 87 percent. In 1923 and 1954, the parity ratios were 89 and the income level doubled within that period of time.

Other examples are given in the volume of papers prepared for these hearings.

When farm prices decline significantly over a period of a year or two, there is, of course, a direct response in the level of farm incomes. However, the response is mitigated by reactions of farmers in their adjustments to changed conditions.

For example, between 1947 and 1956, the parity ratio declined by 28 percent, while the deflated total farm income per worker decreased by less than 12 percent.

If farm prices did determine in some causal sense the level of incomes of farm operators and hired workers, this would mean that farm people merely accepted whatever level of income the fates gave them and failed entirely to use their intelligence and initiative to adjust to the circumstances in which they found themselves.

If such were the case, there presumably would be as many people living on farms and as many workers engaged in agriculture today as there was in 1947 or 1940 or 1929.

This we know is not the case, and consequently we must assume that farm people do adjust on the basis of alternatives available to them.

The most important factor that affects the return to labor in agriculture is the general level of labor productivity in the economy as a whole. If we trace farm income over the past century we find it has followed very closely the general trends of income in the economy as a

whole. This is not to deny that there have not been periods when incomes in agriculture have moved either more slowly or more rapidly than in the rest of the economy.

For example, from 1940 to 1947, farm incomes moved upward more rapidly than nonfarm. And since 1947, the average real income of the farm population has declined slightly while there has been a substantial increase in the nonfarm sector. However, if we compare 1956 to 1940, or with 1929, or with the period 1910–14, the base period for the parity calculation, we find that farm incomes are now in about the same or higher relative position compared to nonfarm incomes.

The reason for the rather similar development in the incomes of the farm and nonfarm people over time is that we live in an economy in which there is a great deal of mobility. And the incomes that can be earned in the nonfarm part of the economy represent alternatives to farm people. They do have a choice other than farming and the fact that over the past 16 years approximately a million people each year have either changed their residence from farm to nonfarm or have accepted nonfarm employment while remaining on a farm means that the alternatives are real.

The basic policy problem that is involved here, if we make an effort to return to a free market price, and especially if we are concerned with the level of incomes of farm people, is that of reducing the differential in income that is required to induce a given rate of migration.

I believe that it is possible to devise programs that would reduce the income differential without interfering directly with the freedom of choice of the individual and without having any undesirable effects on the nonfarm labor movement.

Thank you.

Senator SPARKMAN. Thank you, Mr. Johnson.

Mr. J. A. Baker, coordinator of legislative services of the National Farmers' Union.

STATEMENT OF J. A. BAKER, COORDINATOR OF LEGISLATIVE SERVICES, NATIONAL FARMERS' UNION

Mr. BAKER. Mr. Chairman, I consider it a special honor to be invited to discuss the key problem of farm policy with members of your subcommittee, who have so convincingly demonstrated deep understanding and wisdom of economic affairs in your own outstanding academic and public careers. I am also honored, and more than a little overwhelmed, to find myself on a panel, all the other members of which are nationally known theoretical and research economists.

We in Farmers' Union appreciate your taking the time from the already overcrowding demands on your energies to hold this series of hearings on farm policy. The Joint Economic Committee and its subcommittees have demonstrated a high order of economic statesmanship. We want you to know your efforts are not unnoticed nor unappreciated.

I shall summarize my position on the panel topic in a series of related propositions:

1. Farm income is too low. This is not in the national best interest. It is not satisfactory to farm people. In 1956, the average income of

farm people from nonfarm as well as farm sources was little more than two-fifths as much as the average income of the nonfarm population. Yet attainment of full parity farm income was declared the intent and policy of Congress many years ago (secs. 2 and 301 (a) (2), U. S. C. 1281).

2. Farm income would be even lower than it is if the 185 pages of existing Federal statutes that provide strengthened farmer bargaining power through commodity price improvement and supply-demand adjustment programs were not still in effect, even though their effectiveness has been scaled down over the past 4½ years. Elimination of existing price and income protection programs would reduce national farm gross income at least one-third below current levels. Farm net income would be further reduced by nearly half.

3. To amend existing programs in the direction of free market full flexibility through still lower price supports, still tighter credit and still higher interest rates would be to weaken farmers' market position and further reduce their income.

4. Farmers need stronger bargaining power in commodity and money markets and with respect to governmental decisions to balance up their position with respect to the generally administered-price and administered-production nonfarm economy to which they sell and from which they buy and in regard to their equitable access to governmental protection and services.

5. Federal farm policy should be improved to enable farmers to obtain stronger bargaining power and a less disadvantaged position in the economy. To do this requires extensive improvement of existing laws, the major of which are amendments that would—

(*a*) Transform Farmers' Home Administration into an effective yardstick family farm credit agency as provided by bills introduced by the chairman of your subcommittee, Senator Sparkman—S. 1533—and by Congressman Patman, a member of your subcommittee;

(*b*) Revitalize and expand the crop insurance program more rapidly;

(*c*) Improve effectiveness of old age and survivors insurance program as applied to farmers;

(*d*) Provide supplemental income improvement programs for particularly low-income farm families in depressed rural areas along lines proposed by the House Subcommittee on Family Farm Policy and in the bills sponsored by Senators Sparkman and Douglas and Congressman Patman of your subcommittee;

(*e*) Amend existing Federal farm price support and related programs into a comprehensive system of workable commodity programs and supplementary policies that will provide full parity of income protection for the family farm production of all farm commodities through giving farmers greater control over the market supply and price of their products with adequate consumer safeguards.

6. Farmers need more, not less control, over the price and market supply of their commodities. In the so-called free market, the family farmer would be at the mercy of those with whom he engages in commercial transactions. The farmer would have to sell his products for what price administering buyers would offer, and pay what price-administering sellers ask. The farmer would be completely devoid of bargaining power, unprotected by price supports, or marketing quotas, unprotected by import duties and quotas, unauthorized even to cooperate with other farmers to join together, through marketing

agreements and orders, or otherwise, to protect his price by controlling market supply. Such a market will not operate to raise farm income to an adequate level. The fully flexible free market would reduce price per unit by a larger percentage than it would increase the volume marketed, and will reduce national farm gross income at a faster rate than the decrease in farm population.

7. Scientific statistical evidence does not exist to substantiate the myth that lower prices reduce total farm output in the short run. Moreover, all the evidence of experience and knowledge of farmers' economic position in an administered-price economy indicates that in the short run lower prices will increase total farm production. In the long run, lower prices may slow down, but will not stop, expanding farm output resulting from the thrust of advancing technology in spite of the resourceful depletion, financial distress and human suffering that would result.

8. Moving farmers out of farming, by force-out or by migration incentives, will not reduce farm production. Nor would this be a feasible way to raise farm income to parity. Even, if feasible, it would do so very slowly, if at all, in periods of falling national farm gross income.

9. Practically all farm commodities are now being offered in foreign markets at competitive world prices or less. Exports in 1956–57 were at an alltime high. Further price drops probably would not materially increase exports. Increased volume of commercial exports could probably be bought only at the expense of greater percentage drops in price which would lower farm gross income thus injuring our own farmers as well as those in other countries.

10. Lowering of farm prices to increase volume of domestic consumption cannot raise farm income for several reasons:

(*a*) Assuming no change in the demand curve itself, lower prices cannot bring increased gross farm income because price per unit must be dropped by approximately five times the percentage increase in the volume of consumption.

(*b*) Lowering of farm prices will not reduce the widening marketing margin which trend is both increasing the farm price inelasticity of demand and pushing downward the demand curve at the farm level. In fact, over the past 6 years, the farm price elasticity of demand has been practically zero, because farm price drops were not pushed through to lower retail prices.

(*c*) Lowering of farm prices will not speed up the rise in consumer incomes. Moreover, as consumer incomes rise, both income inelasticity at the consumer level and the farm price inelasticity of demand become greater.

(*d*) Lowering of farm prices will do nothing to speed up population increase. However, the 1.7 percent per year increase in population will, to be sure, increase demand—shift the demand curve upward and to the right—if per person income does not drop.

(*e*) In total, demand can be expected to rise—demand curve shift to right—not more than 2 percent a year from the combined effects of increasing population and rising per-person consumer incomes in an expanding full-employment economy. But this will occur whether or not farm prices are reduced by application of the full flexibility policy.

(*f*) As of any particular year it would take at least a 5-percent cut in unit prices to obtain a 1-percent increase in volume of consumption and this ratio appears to be rising.

11. A fully flexible free market will not balance expanding supply to slowly increasing demand at a price level that will improve farm income in the foreseeable future. Under the full flexibility policy it would probably take at least 2 decades for the less than 2 percent annual increase in domestic demand, to catch up with the existing level of overproduction and overtake at some future date the slowed-down rate of output expansion brought on by falling farm prices and income. Meanwhile, it would take at least a 5-percent farm price drop to increase the volume of domestic consumption and exports by 1 percent. Lowering of farm prices to the so-called free market level cannot increase farm income unless some unexpected natural or military developments should bring about abnormal demand to build up stocks or should shut off a sizable part of foreign production from its normal world markets.

12. However, the volume of farm marketings can feasibly be adjusted to effective demand in a way that will improve farm income. That is by conscious market supply adjustment programs giving the farmer greater control over his commodities. By obtaining a 5-percent price increase for each 1-percent cut in total volume farmers can improve their gross income in percentage terms by approximately 4 times the percentage cut in market supply.

13. The fact that the farm price inelasticity of many individual commodities handled singly is less than the farm price inelasticity of the demand for all food and fiber commodities as a combined group, suggests the desirability of moving toward a comprehensive and integrated system of commodity market supply adjustment and price improvement programs that will involve market supply adjustments for farm marketings as a whole as well as of commodities individually. This system of market proration would include:

(*a*) Individual-commodity market proration goals: Such programs as marketing agreements and orders, individual-commodity marketing goals, marketing quotas, marketing premium payments, stabilization funds and similar private and public individual-commodity operations, adapted to the needs and economic characteristics of the different commodities, through which farmers producing each commodity would acquire the right and the power to cooperate with each other, privately or through Government programs, to balance market supply of the commodity with effective demand at a price that would return a parity of income to farmers by means of enforced marketing restrictions or by surplus removal operations with private and public funds or both methods in combination.

(*b*) All-commodity market proration goals: Establishment and operation of a compulsory all-commodity farm marketing goal and voluntary conservation acreage reserve program by which farmers would be enabled to balance the total volume of all farm marketings to effective demand at parity income equivalent prices.

(*c*) Parity income formulas: Use of the parity farm income provisions of existing legislation—section 301 (a) (2) (7 U. S. C. 1281)—to replace price parity formulas as the basis for measuring the effectiveness of farm commodity price and income improvement programs.

(*d*) Administered by farmers: Placing the control and administration of governmental as well as private farm income and commodity price improvement programs in the hands of farmers themselves through Federal, State, county, and township farm-income-improvement boards or committees, elected democratically by farmers, established within the United States Department of Agriculture.

(*e*) Parity import controls: Automatic fluctuating parity level tariff or compensatory payments or both combined, as in sugar and wool programs, on competing imports.

(*f*) Nationwide REA-type farmer-owned processing plants: Enactment and establishment of a nationwide REA-type program to extend loans and technical assistance to farmer-owned and controlled business enterprises to acquire, or build, and operate farm marketing, storage, and processing facilities and services to serve as a yardstick to measure the necessity of and to slow down the steadily widening gap between prices received by farmers and those paid by consumers.

14. Consumer safeguards: Establishment of this commodity supply adjustment and price improvement program should be accompanied by enactment of the following safeguards for consumers, for foreign policy, and other purposes:

(*a*) National food allotment stamp plan to protect unemployed and other low-income consumers;

(*b*) Expanded school lunch and milk for children programs;

(*c*) Additional international commodity agreements and an international food and raw materials reserve bank through or in connection with which United States export subsidy and expanded Public Law 280, Point IV, and reciprocal trade agreement programs would largely operate;

(*d*) Farmers should be prohibited from using market supply adjustments to raise farm prices above the parity income equivalent level;

(*e*) Parity deficiency or production payments, rather than market supply reductions, should be used to make up for insufficiency of demand resulting from increase of unemployment above the frictional minimum. Payments would, also, be used to compensate for forecasting errors and where required by certain commodities, such as probably cotton and peanuts, to successfully operate multiple-price plans. We also consider parity income deficiency or production payments as the appropriate manner in which to operate export subsidy and import compensation programs, but lacking the payments, farmers' only recourse is in parity level import controls. When payments are used they should be subject to a family-farm cutoff placing an upper limit upon the eligibility of an indivudual producer.

(*f*) Establishment of a national safety reserve or security stockpile of storable farm commodities and of storable products of perishables, stored in strategic locations and in a volume determined as needed by the President, upon advice of the National Security Council and the Administrator of Civilian Defense.

Thank you very much, Mr. Chairman.

Senator SPARKMAN. Thank you, Mr. Baker.

Mr. Warren E. Collins, assistant director, commodity division, American Farm Bureau Federation.

Mr. Collins, we are glad to have you with us.

STATEMENT OF WARREN E. COLLINS, ASSISTANT DIRECTOR, COMMODITY DIVISION, AMERICAN FARM BUREAU FEDERATION

Mr. COLLINS. Thank you, sir.

I have directed my attention in this paper to reasoning on the proper relationship between price-support levels and market prices.

The American farmer, just as any bona fide businessman, is motivated by the desire to make a profit. In his day-to-day and year-to-year planning, he is constantly studying how his productive resources may be most effectively employed to improve profitmaking opportunities of the farm business. Price is the focal point around which the farmer's thinking revolves as he makes the many decisions necessary to proper resource-use planning. His concept of price, however, is much broader than merely the dollar-cents value of a top hog or a ton of cabbage. In reality, farmers think and act in terms of price relatives.

On the production side of his business programing, he weighs the price of capital in terms of machinery, fertilizer, insecticides, and others, against the price of labor and, or, land with the objective of attaining a maximum degree of operating efficiency. On the market side, he studies the price relationships of different commodities among which his productive resources are interchangeable, and relates each of these to its respective input costs. Through this procedure the farmer formulates a general resource-use program which he feels will result in maximum net returns. Adjustments and modifications are made in the general plan from time to time as necessitated by changing economic conditions.

Price is the fundamental consideration in all these deliberations. It is therefore quite obvious that if the subsequent decisions are to be economically sound, the price information available to farmers must, insofar as possible, reflect true market values.

In view of this, the first and most important essential of a workable price support program is that it be consistent with the laws of economics. Most importantly, it must avoid interference with normal market price fluctuations unless it also provides for influences on supply and demand which are compatible with any influence brought to bear on price. Experiences with acreage allotments and quotas strongly suggest that production control is a virtual impossibility under our system of government, if indeed it is possible under any system.

Inasmuch as supply-and-demand conditions surrounding farm commodities are subject to change, it stands to reason that price, as the third character of the three-variable supply-demand equation, must be free to fluctuate also if it is to accurately reflect the true situation. This means that the proper level of support prices is somewhere below annual average market prices which would be forthcoming from the free interplay of economic forces.

The establishment of support prices above the supply-demand equilibrium level can and, as has been demonstrated, will lead to serious economic consequences. Price-support experiences over the last few years fully substantiate this statement. Through price programs which have been employed, legislatively established support

prices have in many instances obscured actual supply-demand conditions and as a consequence farmer resource-use planning has been misdirected. It is therefore no mystery that desired adjustments in production have not materialized.

The mammoth holdings of the Commodity Credit Corporation currently, in spite of its massive movement of excess stocks during the last 2 years, clearly denotes the extent of demand fictitiousness which has prevailed as a result of our price support program. Farmers throughout the country are now paying dearly for whatever benefits they may have been led to feel were provided by the program. The prevailing corn situation serves as a good example for illustration.

During the past year Commodity Credit Corporation supplied almost half of the total 750 million bushels of corn consumed commercially. It has been estimated that next year CCC will supply more than half the total commercial corn consumption. Furthermore, large acreages of land have been shifted from the production of other controlled crops into feed grains as a result of the program. These grains substitute directly for corn. Then there's the threat of the existing huge wheat surplus and continuing overproduction in response to Government price insurance and other production incentives.

The price of corn in principal corn-producing areas is currently about $1.10 per bushel. It is interesting to speculate what the price might now be if corn farmers could regain the big segment of the grain market which is now supplied by the Commodity Credit Corporation and the output of administratively diverted acreage. Undoubtedly it would be considerably higher than the prevailing $1.10.

Study of the present situation indicates that producers of cotton, wheat, and virtually all commodities to which Government aid for price maintenance has been extended, are suffering hardships of considerable severity. Ironically, the basic commodities which have received the most attention have encountered greatest difficulties. While in most instances producers of the controlled crops have been in position to divert temporarily displaced land to some alternative use, the results have been greater inefficiency of production, loss of markets, and reduced net income. Most regrettably, large segments of these lost markets may never be regained.

In isolated cases the price support and adjustment programs may have proved advantageous; but for agriculture as a whole, and the economy generally, these programs have been and continue to be extremely wasteful and expensive. Moreover, the ill-adjustment in agriculture which these programs were designed to correct is much more serious today than at any time in the recent past. Surely our price support and production control efforts of the last few years have proved sorely disappointing. Our disappointments are not without value, however, if we will now draw on the store of knowledge which has been accumulated through these experiences as our efforts are directed to the challenge of developing a workable farm program for the future.

Thank you, Mr. Chairman.

Senator SPARKMAN. Mr. Everette B. Harris, president, Chicago Mercantile Exchange.

Mr. Harris, we are glad to have you with us.

Mr. HARRIS. Thank you, Mr. Chairman.

I appreciate the opportunity to present my views to you and the other committee members on the subject, "To what extent should farm policy rely on free market prices."

STATEMENT OF EVERETTE B. HARRIS, PRESIDENT, CHICAGO MERCANTILE EXCHANGE

Mr. HARRIS. My name is Everette B. Harris. I live at 412 North Ashland, Park Ridge, Ill., a suburb of Chicago. Since June 1, 1953, I have been president of the Chicago Mercanitle Exchange, an organized commodity exchange, second only to the Chicago Board of Trade in volume of futures trading. For almost 5 years prior to my present position I was secretary of the Chicago Board of Trade, the well-known grain exchange.

A graduate of the University of Illinois, I have a masters from the University of Chicago, did graduate work in economics at American University, taught economics in the evening schools of the University of Chicago and DePaul University for about 5 years and spent several years as an economist in the Federal Government in Washington and Chicago. Born on a farm in southern Illinois, which had been in the family for four generations, I have always had an intense interest in farm prices and farm problems relating to them.

Present farm pricing policies reappraised: The present dilemma of most farm policy and farm price experts is so evident to everyone that the need for a nonpartisan reappraisal of the situation before this important subcommittee is obviously appropriate.

Who is to blame for the present situation is less important than what can be done to correct it and prevent its recurrence.

In the interest of brevity, at the moment let us go back only to April 7, 1949, when the then Secretary of Agriculture, Charles Brannan, stated—

> * * * Economic analysis of resource allocation and income distribution tells us that the price-making mechanism is not an appropriate apparatus for lessening the inequality in the personal distribution of income. If it were, why would we encumber ourselves with a complicated system of progressive income and inheritance taxes instead of simply increasing the price of the resources which the particular families who should receive more income have to sell? To attempt to use price supports for this purpose will have two highly undesirable consequences: (1) It will seriously impair the capacity of prices in allocating agricultural resources, and (2) it will affect adversely the distribution of income within agriculture in spite of the restriction imposed to limit the size of the benefits going to large farm operators * * *

With this particular statement I must agree. The present Secretary has stated and restated that rigid, artificial, arbitrary, and administered prices can only react to the farmers' detriment and to the disadvantage of the general public. With this I also agree.

It is, therefore, not surprising that the Congress is seeking a new and more successful approach to the continuing problem of farm price policy. This problem must be recognized as an economic problem primarily, but it is also a social problem, and, of course, a political problem.

I submit that our basic mistake in past and present farm price policy has been an indiscriminate commingling of these policies.

We are not here to testify regarding politics at which the gentlemen of the committee are obviously currently competent. But, as an economist and farm price authority, allow me to emphasize that the social and, or, political problems must be considered briefly before we go to our principal thesis or argument strictly in the economic farm price field.

May I timidly suggest that such things as the Federal Government temporarily acquiring large, and I mean large, segments of farm land traditionally planted to certain crops now in burdensome surplus might be one happy solution to part of the social and political problem. This is a soil bank approach which would work and cost less overall. Incentives to accelerate the already rapid exodus of people from farms to other fields might help. Here, I would suggest special emphasis on plans to lessen the hardships on older people who leave farms. When I left the farm as many other young people have done, and helped solve the social farm problem, we suffered little hardship. Obviously programs for training farm folks in new skills, new occupations, and for a somewhat different way of life might be helpful. But, believe me, it is better to be prosperous in town than poor on a farm—at least that is my experience. Compensatory payments, supplemental payments, or what have you, should be used to get people off farms—not to freeze them on farms.

FARM PRICES, FARM PRODUCTION, FACTS, AND FABLES

In the early 1930's there was a group of economic braintrusters in the Department of Agriculture, subsequently much publicized one way and another, who sold large segments of farmers and the public on the idea that the lower the farm price, the more production would result. They had some evidence peculiar to that period to support this idea. The great depression was a phenomenal combination of depressing economic forces no more easily explained than a 10-foot snowfall which might descend on Washington once in 2,000 years. As we used to say on the farm, all signs fail in dry weather. All economic laws seemed suddenly to be repealed in 1933 and economic black became economic white with many, many economic blues in attendance.

But certainly, there is no supportable evidence that this fable of low price, high production, and high price, low production pertains to the farm field any more than elsewhere in more normal times. Present times may not be normal, but 1933 thinking does not solve 1958 problems.

Present evidence is overwhelming that artificially high prices mean high production with the inexorable law of supply and demand bringing inevitably depressed prices later. Artificially high prices—I say artificially high prices, not normal or natural prices—will not solve the economic problem or the social problems of American farmers or the political problems of American Congressmen.

PRICE RATIONING VERSUS POLITICAL RATIONING

When World War II rationing ended and it was no longer necessary to use little paper coupons when we bought gas, shoes, or steaks, we all were pleased and relieved. But, of course, thoughtful people

realized we still had a rationing system. We simply had returned to price rationing instead of political rationing. We again had wonderful free-to-change prices and OPA price ceilings with political rationing and all its attendant evils were happily gone. Rationing coupons now consist of green and gray coupons—the $1 bill with "In God We Trust" properly inscribed upon it. These rationing coupons, hard earned and highly taxed currency with the full faith and credit of our Government behind them, do a job of rationing our great production to our people in such an efficient manner that it has been the marvel of the world.

One of the primary questions to be considered by this subcommittee, it seems to me, is this: Are we ready to have the Department of Commerce fix rigid industrial prices and the Department of Labor fix wages, as was done to a degree during World War II, and continue to have the Department of Agriculture attempt to fix farm prices? Can our free price, free choice, free enterprise system operate half fixed and half free?

Now, our free price system for agricultural commodities did not always exist. Countries had dictators and socialism and food price control systems of many kinds for many centuries before the American price system ever existed. And governments were often concerned with food problems because populations have a way of getting hungry three times a day. Let us look for a moment at our ancient economic history lesson. A fairly recent archaeological discovery reveals that the oldest known laws in the world were price-control laws—3,800 years ago in ancient Babylonia.

One of the best summaries of historical experience with price controls is easily accessible to governmental officials and others. In 1922, Mary G. Lacy, librarian of the Government's Bureau of Agricultural Economics, addressed the Agricultural History Society under the title: "Food Control During 46 Centuries." She pointed out how her search of history over this entire period revealed repeated attempts in many nations to curb by law the inflationary rises of price. She said:

> The results have been astonishingly uniform. The history of government limitation of price seems to teach one clear lesson: That in attempting to ease the burden of the people in a time of high prices by artificially setting a limit on them, the people are not relieved but only exchange one set of ills for another which is greater * * *. The man, or class of men, who controls the supply of essential foods is in possession of supreme power * * *. They had to exercise this control in order to hold supreme power because all the people need food and it is the only commodity of which this is true.

And, of course, the converse is true. It is just as ineffective in the long run to force farm prices up artificially by Government edict as it is to try to hold them down artificially by similar methods.

No system even considered rations of our agricultural commodities so efficiently, with such low middlemen's cost, higher returns to producers and lower costs to consumers, as our own free-to-change price system. Around commodity markets there is an old saying that, "A large crop has a short tail and a short crop has a long tail." Under a free price system if there is overproduction one year the price falls, rations out the commodity, and gives the producer a fresh and hopeful start the next year. No burdensome surplus hangs over the market to make the possibility of a substantial price rise hopeless.

If there is a short crop of some commodity some year—and it could happen—under a free price system, the price would go high and ration out the commodity more sparingly, requiring some substitute product at a lower price at times, and spread the short supply over the entire following year until a new crop could be produced. This may be something of an oversimplification, but I hope it is not so simple, so logical, so tried and true, so commonsense and practical that it loses appeal for this reason. Why is free enterprise and a free price system best for America? In my view, simply because it works best for us. If we have to accept the economic systems of socialistic and communistic countries to compete with them, we will lose the personal freedoms for which we fought. I don't believe this is necessary. I still believe that our free price system with the most ruthless competition at times gives off more social benefits both directly and as by-products than can even be achieved under any socialistic system of a planned economy.

Certainly farmers have a right to bargain in the market place. They are free to sell their commodities or to store them. They are free to bargain collectively as is labor. They may wish to work through co-ops. They may expect to obtain Government loans in time of distress. But under the guise of a loan system for the Government to take over the acquisition and disposal of all commodities with resultant fixed prices means that markets are no longer free and farmers are no longer free. Controls upon controls are required and we have come a long, long way toward this sorry end.

FORWARD PRICING—HELP OR HINDRANCE

Everyone has at sometime wished he could read tomorrow's newspaper and see the future in this manner. Similarly among some agricultural economists there has long been a belief that if farmers could know that prices would be low for one product or commodity next year and that prices would be high for another, they could be guided intelligently in expansion and contraction of various crops. There is something in this. The Department from time to time makes forecasts as to production, acreage, prices, and similar factors. These, in the opinion of most, are helpful to farmers. The most accurate forward pricing, however, is based upon actual supply and demand factors projected into the future and backed up with the money of those who are making the forecast. These are the quotations published daily in the press, announced by radio and transmitted promptly by other media to the Nation's farmers. They are the prices arrived at through futures trading on the Nation's organized and supervised commodity exchanges. These quotations may be projected from 1 year to 18 months in advance and give farmers the most accurate gage of the future price picture obtainable. Studies of forecasts of economic fortunetellers, on the other hand, have often indicated that they are less accurate than pure chance or coin tossing.

The relation of nearby prices or spot prices to distant futures prices is also a useful tool for the thoughtful farmer.

FLUCTUATIONS IN FARM PRICES

It has long been known that farm prices fluctuate more than the general price level or more than farmers' costs. This point has been

so widely discussed that I believe it is agreed that some degree of greater stability in farm prices is desirable for many reasons. Futures markets help stabilize farm prices without injecting any unworkable artificiality into the situation. Without futures trading in cotton or grain, for example, would see a ruinous and artificial postharvest decline with dealers and others storing the commodity to profit later. With futures trading in a free and open market, dealers can pay higher prices at harvest time and hedge in the futures market where speculators risk their money in the hope of future profit. All competent studies show that futures trading smoothes the curve of seasonal price fluctuation in commodity after commodity.

HOW THE FREE-TO-CHANGE PRICE SYSTEM, THE NECESSARY SPECULATOR AND FUTURES TRADING HELP THE FARMER

No element of our efficient and effective marketing mechanism is more misunderstood or less understood than the hedging of commodities to obtain price protection in a futures market.

Although contracts or agreements to buy or sell have existed in various degrees of formality for many centuries, the modern futures contract dates its beginning in Civil War days. Chicago papers of this era listed quotations for grain "to arrive" at a future date. Located between the producing West and the consuming East, Chicago was a logical place for development of the world's greatest futures market. Destined to become a center of both rail and water transportation, Chicago became the home of the Chicago Board of Trade and the Chicago Mercantile Exchange, presently the two largest futures markets in the world. The former exchange provides for trading in grains and other storable commodities and at the latter, butter, eggs, onions, potatoes, and other perishable commodities are traded.

In 1869, the Chicago Board of Trade adopted its first rules for regulating trading in futures contracts and until 1880 trades were usually for only 1 or 2 months in advance. The Chicago Mercantile Exchange was incorporated as the Chicago Butter and Egg Board in 1898 and changed its name with an amended charter in 1919.

In futures trading the parties through their respective brokers meet upon the floor of an exchange or board of trade and one agrees to sell and the other to buy a specified commodity for delivery in a specified future month.

The exchange, by a resolution of its board of governors, specifies certain delivery months and opens trading for delivery in such months and also specifies grades for the commodity and sets a time for the start of such trading. Such future month for delivery may be as distant in the future as a year or 18 months.

If one looks at the commodity price quotations published every day by all principal newspapers, he will note under the board of trade such terms as "December wheat," "March corn" or "July rye." Under Chicago Mercantile Exchange quotations one will note "September eggs," "March onions" or "January potatoes." Prices quoted are for the commodity to be delivered in the later month specified.

Trading in any contract month is terminated on the trading day prior to the last few days of the delivery month so that a seller who

does not close out his sales by offsetting purchases has the last few days of the delivery month to obtain the commodity (if he does not already have it) so that he may tender delivery not later than the last business day of the month.

The procedure for settling is provided by the rules of the exchange and it takes place through the medium of the clearinghouse of the exchange. Immediately after a person sells a commodity to another on the exchange for future delivery, both sale and purchase are cleared, which means that the clearinghouse then becomes seller to the buyer and buyer to the seller.

However, the clearinghouse merely acts as a conduit and what it takes with one hand it passes out with the other and it never takes or receives for itself any part of the commodity if it is delivered nor does it retain any of the funds if the transaction is offset.

It merely makes a service charge of so much per car, which does not vary, and it never receives any profit nor sustains any loss, regardless of the market. When the transaction is offset, it collects from the person against whom the market has gone and pays to the person on the other side who is entitled to the profit.

When a delivery is made, the delivery notice is tendered to the clearinghouse but the clearinghouse promptly passes the delivery notice to the buyer or buyers entitled to receive the delivery and the delivery is made between the seller and the buyer themselves.

The most important economic function of a futures market is to provide facilities for hedging. "Hedging," as used in futures markets, means price insurance or protection of inventories against price change. It derives from the English term "hedge" which is a thick growth of shrubs around a house to protect it.

The ownership of commodities involves a business risk because of constantly changing prices. In hedging, operations in both the cash and futures markets are carried on simultaneously and in opposite manners. When one buys a cash commodity, he sells an equivalent amount in the futures market, and when he later sells the cash commodity he buys in his contract in the futures, thereby "lifting the hedge." He has enjoyed price protection during the period of ownership of the cash or actual commodity. He has passed on the speculative risk to a professional speculator just as he passed on the risk of his house burning if he buys first insurance from professional insurance companies.

The speculator performs an indispensable function in futures trading. He stands ready to buy or sell at any time and makes hedging possible. He bridges the price gap at all times between hedgers who wish to buy or sell and he helps maintain a free and open market at all times.

Chief Justice Holmes in a Supreme Court decision (198 U. S. 236), which still stands, stated:

> In a modern market, contracts are not confined to sales for immediate delivery. People will endeavor to forecast the future and to make agreements according to their prophecy. Speculation of this kind by competent men is the self-adjustment of society to the probable. Its value is well known as a means of avoiding of mitigating catastrophes equalizing prices and providing for periods of want.

SUMMARY AND CONCLUSIONS

In brief, my recommendations and suggestions are as follows:

1. Yes, agriculture can be adjusted through the price mechanism, and only through the price mechanism if farmers are to retain any appreciable degree of freedom from controls.

2. Farm policy, from an economic point of view, should rely on free market prices and treat the social problems and political problems arising out of farming from a social and political—not economic—viewpoint.

3. The return to free markets, long overdue, must be accompanied by appropriate measures to alleviate extreme hardship. Some such programs must involve:

(*a*) The Federal Government might well use a different soil bank approach—might temporarily acquire large segments of land normally planted to crops now in burdensome surplus.

(*b*) Appropriate types of payments or benefits should be used to accelerate the already rapid exodus of people from farms to other fields.

(*c*) In the case of older farmers, special plans should be devised to lessen their hardships in shifting from farming.

(*d*) The need for more and better training, research, and other technological progress in farming is obvious.

4. The futures markets of America should be freed from Government interference in the form of Federal purchasing and selling of commodities so that they can more efficiently serve their proper purposes. These markets, of course, must be regulated, as our security markets are regulated, to protect the public interest and prevent manipulation.

5. Measures which were dreamed up during the depression to meet a freak situation and which have failed so miserably should be abandoned without delay. Some of these schemes, which may have seemed sensible when we were in an unstable economy, are certainly not necessary in our present stabilized, full-employment economy.

Senator SPARKMAN. Dr. Talle, do you have any questions?

Representative TALLE. Thank you, Mr. Chairman.

Mr. Fox, I was wondering if it would be more effective to attempt to control production by using measurements like pounds and bales and bushels rather than acres?

Mr. FOX. Theoretically, of course, what you want to control—if you are controlling anything—is the number of physical units of production. My impression is that this was tried on Maryland tobacco or some such commodity some 20 years or so ago, and my impression is that a lot of tobacco was "marketed" from farms other than the farm on which it was grown. How to prevent bootlegging if control is on a production-unit basis rather than an acreage basis—I think this is the main problem.

Representative TALLE. No matter which way we turn, we encounter difficulties, don't we? In speaking of parity price, I wasn't quite clear about what you meant Mr. Working. I think you said—well, what did you say about it?

Mr. WORKING. Parity price, as we have had it defined until modernized parity, for many years was simply that the price for any particular product should be increased or decreased from the 1910–14 level by the same percentage that the prices of things that farmers purchased were increased or decreased. That is still true for the general level of farm prices—that is the present definition of parity for farm products collectively.

Essentially, I think that the fact that we use the term "parity" implies that it is the right or fair price. That is the sort of thing you get, in part, out of a dictionary definition.

The fact that we have written this particular historical relationship into the law and called that, by law, a parity price, I think, is very unfortunate, because there had been vast changes in the methods of production for about a century before World War I. The history of changes in the arts of production had made it necessary for agricultural prices, by and large, to rise relative to prices of nonagricultural products.

Since World War I, however, we have had a vast revolution of farm power, changes in transportation, and other things which involved the methods of producing wheat and other products. Methods now are altogether different than they were back in 1914, and substantially the same thing is true almost everywhere. But, with those changes in the arts of production, we need to have changes in the relationship between the prices of the different products.

Representative TALLE. Thank you very much.

Now, Mr. Bishop, in speaking of returns, to labor, I wonder if you included in the word "labor" the efforts, say, of the owner-operator?

Mr. BISHOP. Yes. I have reference to a labor and management return. Is that what you mean?

Representative TALLE. Yes.

Now, the general subject that we are concerned with bears the title, "Policy for Commercial Agriculture," in its relationship to economic growth and stability. And we have, I think, had ideas presented this afternoon which vary all the way from rather tight control along the line to no control at all. The specific subtitle of the panel discussion is "Adjusting Agriculture Through the Price Mechanism."

In not many hours from now, there will be a job for this subcommittee to do, especially its economist, Dr. Brandow. And maybe you could help us with that job. So, I am going to put the question: When we come to writing our report, assuming that you were doing our job for us, on what would you put the emphasis?

Mr. Fox?

Mr. FOX. Well, I don't think that more interference or more rigid controls of farm production should be advocated. Let's say attempts at more rigid controls. I don't think they are going to contribute either to economic growth or economic stability.

I do think that a number of papers in the compendium which was printed for the committee hit the main note that is compatible with long-run economic growth. And that is to make it easier for young people who are now in agriculture to see where their comparative advantages lie as between farming the way they are, farming in some other way, or moving into some other occupation. For a city boy, we do not raise this question particularly. For example, what has

happened to all the sons of grocery-store operators who were operating grocery stores 30 years ago? I don't know that we feel that all of them should be currently operating grocery stores.

Some may be supermarket managers; some may be working for the supermarket; some may be doctors or lawyers; some may be Congressmen.

Representative TALLE. I used to work in a grocery store as well as on the old homestead.

Mr. FOX. A lot of farm boys might emulate this—and they might end up representing urban rather than rural districts.

But to make it possible for them to recognize their opportunities—I think this is the main thing from the standpoint of long-run economic growth.

From the standpoint of short-run economic stability, if you had, let's say, one form of an economist's ideal situation where you had some price supports just below the free-market level, then a price-support program like that would afford agriculture—and the rest of the economy, to a rather slight extent—some defense against the forces of recession.

I have published a paper on that, which your staff director knows about.

Representative TALLE. Do you think it would help if, say, the Department of Agriculture announced a year or so in advance at what price it would support a certain commodity the next year?

Mr. FOX. Well, I would agree with Gale Johnson on the theoretical feasibility of that. It would mean, I am afraid, giving either the Secretary of Agricuture or some sort of nonpartisan board an awful lot of authority as to the level at which these prices should be set. I might mention one thing in the actual experience with price programs: Under the act of 1938, as I recall, there really was some price flexibility for corn. It was dependent upon how large the corn crop turned out to be at harvesttime as to the price support that could be set. The price support could be set anywhere from 75 percent for a small crop down to 52 percent of parity for a large crop.

I am a little worried, you see, about whether the Congress ever would grant this much flexibility and whether the people who received this flexibility would have the fortitude to actually hew to the line. And, of course, Congress can revise its previous actions any year that it wants to.

Representative TALLE. I think you make a very good point. It might be a most difficult position for the Secretary of Agriculture to be in. I see that practical problem.

Mr. Working, do you have any thought along that line? Do you choose to comment on my first question?

Mr. WORKING. In general I think we have tended to move too much in the direction of controlling prices instead of allowing prices to be the result of competitive forces. Where we do have reasonably satisfactory—or have had in the past reasonably satisfactory—free market price formation and development, we have tended to move too far in the direction of controlling prices.

And where we don't have substantial freedom of competition and a satisfactory operation of what we may call private enterprise operating with free competition, I think there, of course, we need to have control.

We need to control monopoly, but I think we have not done a good job.

In general, I think we would do well to move in the direction of trying to allow farmers to have freedom of decision as directed under market price formation. They should have freedom of opportunity to decide what they should produce and how much they should produce. Though they should be allowed to do that, this does not mean that we should drop price controls altogether under the present situation, or that there should be any sudden change, which could be a very bad move. But I think we need to change our direction of controls.

Representative TALLE. Mr. Bishop, have you some comments?

Mr. BISHOP. I think perhaps the most important thing is to maintain full employment and the confidence of the people in the future of the economy.

I am personally rather amazed at the mobility of the population, at the speed with which people move from one situation to another when they expect to benefit from a change.

I think this should be our first and foremost policy—to maintain full employment. I agree with what the two gentlemen on my left have said about price guides; however, I do not think that we will necessarily get the most efficient use of agricultural resources by returning to a free market for farm products.

I think that with a completely free market the variability in farm product prices would be so great that we would find it hard to argue that we would have any more efficient use of resources in agriculture than we would have under a system of forward prices.

I agree there would be some difficulties of administration of forward prices. And certainly if pressure is put on the Secretary, if he is the person who administers the program, I do not know what the outcome might be.

I think that we may need to consider income adjustments of some sort to take care of hardship cases if we should move away from administered prices in the direction of either free prices or prices considerably lower than present support levels. I think that over the long pull we must recognize also that there will be a large number of farm people who will seek nonfarm employment, and we need to prepare them to be productive workers in nonfarm jobs.

Representative TALLE. Thank you.

Mr. Johnson, may we hear from you?

Mr. JOHNSON. Well, my own views, I think have been very clearly expressed, particularly in summary form by Mr. Bishop.

I might just make one further comment on the idea of the forward price proposal with which my name has been linked by Mr. Fox. I must say I had many of the same kinds of reservations about this.

I would argue, however, that if the basic directive of the Congress in setting up such a proposal were that of trying to approximate for the prices under supply and demand conditions on the basis of a normal crop where the output varied a great deal from year to year as wheat does, this would lead to a better situation than the kind of price policy we have had for the past 20 years.

It would be superior to a free-market situation through reducing uncertainty. It might be inferior to a free-market situation if many mistakes were made in establishing these forward prices.

And I am not sure in my own mind where the balance would actually come. At one time I was fairly well convinced that the balance would

be that the advantage would be in terms of reducing the price uncertainty. I do not know whether I would argue so strongly that way now or not, because of the many difficulties seen in recent years in making adjustments in the level of price supports when it was fairly obvious that the present levels were substantially higher than what was consistent with moving the output into consumption.

I would somewhat further emphasize from the standpoint of economic growth the real advantages to our economy of seeing to it that we do not have more people engaged in agriculture than can find productive employment there. I suppose that some time in the past, the very recent past, we might have argued that the United States was so rich and powerful that it could afford the luxury of perhaps having a million or 2 million excess people engaged in agriculture—excess in the sense that we could reduce our farm employment by considerable magnitudes and still produce necessary foods and fibers at a reasonable price for consumers.

But I would feel that the events of recent months and the relatively precarious international situation of the United States today would certainly place, or should place, much more emphasis on the need for economic growth and expansion than perhaps we may have felt at some time in the past.

That is, there is no question but that we are very rich, and we could, in some sense, afford this waste of our national manpower, as I would call it. But I doubt that we can much longer afford that in terms of our international situation. And I would feel that from the standpoint of rapid economic growth in the United States it is terribly important to us. And I feel that some changes in our farm policy of this kind would contribute to more rapid economic growth and would also be to the advantage of the people remaining on the farms.

Representative TALLE. Thank you, Mr. Johnson.

What would you say, Mr. Baker?

Mr. BAKER. Congressman Talle, in the first place, with Mr. Johnson wanting to run all the people off the farms——

Mr. JOHNSON. I didn't say run them off the land.

Mr. BAKER. It should be pointed out first that there are about 2 million of these low-income farm families, which the panel has repeatedly brought out, and even if all of them moved out of agriculture, it would not reduce production, but would probably increase the total farm output of the United States.

Secondly, annually there are almost a million imported farm laborers in the United States. So that the farmer now on the farm in Arkansas or Missouri or Iowa would probably think if you are going to start cutting out some numbers, Mr. Chairman, of the people that are working on farms, that the first place to start cutting, as far as that Missouri farmer is concerned, is to not bring in some Mexicans, or not bring in some Jamaicans, and let the folks that are living here stay on the farms if they want to.

Now, let's take a specific case, Congressman Talle, of this dropping of farm prices toward a fully flexible free market level.

Just this morning the Secretary of Agriculture announced that he is dropping the support level for milk to the minimum provided by law. He is going to quit supporting milk and butterfat at the level he himself established at the time of the veto of H. R. 12, and is dropping it to 75 percent of the moving average parity equivalent price for manufacturing milk.

Now, this panel is assigned the question of "Will dropping of these prices to free market levels make the appropriate adjustments in agriculture which in the short-run or the long-run will raise farm income?"

Will this action of the Secretary announced this morning, which takes effect April 1, of cutting the price of milk and butterfat, increase the consumption of those products? The last time he dropped it, it did not. Will it decrease the production of those products? The last time he cut it, it did not.

If neither consumption increases nor production drops, and the price drops from the support level that he has had to the new and lower support level, I see no way at all for farm income to increase, Congressman Talle.

Now, will this action of the Secretary this morning run any of your dairy farmers off the farms in Iowa? Will it run any dairy farmers off the farms in Missouri? Or will it chase out any of these dairy farmers that Senator Sparkman mentioned in Alabama? Or will it hasten the number of children of dairy farmers leaving the farm?

Maybe the latter will happen. But that is 15 or 20 years, a full generation away. These, it seems to me, are the types of things that your subcommittee needs to consider realistically and hardheadedly when you are writing your report, and not the classical economic theories going back to Adam Smith that you and I learned.

Representative TALLE. Thank you.

Mr. Collins, what have you to say?

Mr. COLLINS. I would like to say, Congressman Talle, that in regard to the opportunity available to government to assist the farmer and improve the farm situation, we certainly cannot in my opinion, overemphasize the importance of maintaining a strong demand for farm commodities. We know that the nature of farm prices is such that when there is a weakening of demand, the farmer suffers first and suffers most.

Secondly, I would like to say that I do not believe the Government can improve the situation by extending itself further into the area of supporting prices.

In fact, I have tried in my paper to build a case of how it might aid the farmer by backing off from this responsibility. It has been pretty well demonstrated that there is just no one who can manage a farm like the farmer. Now, when it becomes necessary for him to study support prices rather than market prices in the planning of his program, he can get pretty far afield.

While the farmer certainly is interested first and foremost in supplying what the market wants, he also is concerned with maximizing net farm income.

And if it becomes more attractive for him to follow Government price supports than market prices, I think that many of them will do that.

Thirdly, I would like to say that a price-support program in my opinion has been beneficial to farmers in one respect, one very important respect. And that is that it has enabled the farmer to take the loan at a time when he must meet financial obligations when he harvests his crop, and by having this available to him it has enabled him to hold his commodity and market it in a more uniform manner

throughout the year or as he feels he can take greatest advantage of the market price.

This, undoubtedly, has contributed to more orderly marketing.

Representative TALLE. Thank you, Mr. Collins.

Mr. Harris, will you complete the panel response?

Mr. HARRIS. Mr. Congressman, I want to reaffirm my faith in the "free to change" price system, which has worked quite well not only in agriculture in this country but in other fields.

I think price is a wonderful rationing agent. It is the only good one we have ever had. We were glad to go back from the ration stamps to the use of the dollar bill as a rationing coupon after the war.

There is an adage around commodity markets that a big crop has a short tail and a short crop has a long tail. It means this: that the price mechanism will take out of wasteful storage in a crop year and push into productive use all that is produced of a crop and give that farmer and those farmers who raise that crop—be it corn, potatoes, or whatever it might be—a fresh and hopeful start the next year without a cloud hanging over their heads, such as the cloud over the heads of the cotton farmers today.

As far as forward pricing is concerned, I do not think it can work because the forecasts of economists as to what is going to happen pricewise or even productionwise in agriculture has not been very good.

Studies indicate it is a little less than tossing a coin or chance. I think our futures markets, when allowed to operate freely, gave farmers a very good idea of what the price of a commodity would be 12 or 18 months hence.

Representative TALLE. That is all, Mr. Chairman.

I am sorry I have taken so much time, but I had reasons to believe that all the members of the committee were eager to get these responses from the panelists.

Senator SPARKMAN. Very good.

Representative TALLE. I want to thank all members of the panel. You were very helpful.

Senator SPARKMAN. Congressman Mills?

Representative MILLS. Mr. Chairman, I am very much interested in the subject matter under discussion by the panel this afternoon, which is "Adjusting agriculture through the price mechanism."

Let me ask this question first to see if I have correctly interpreted the majority thinking in the panel.

Is it the thought of the majority of the panel that the difficulty for agriculture in making the adjustments that the committee has been told by previous panels should be made within agriculture, is increased by the existing level of agricultural prices? Is that what the majority of the panel is saying?

Mr. WORKING. I might try to answer part of that.

I think it is clear that the support of prices at higher levels than would otherwise have prevailed since the war has resulted in the level of agricultural production over recent years being higher than it would have been, and also has resulted in materially larger surpluses of products such as wheat and cotton.

And, of course, if we had not got up to such a high level of agricultural production, the problem of getting the level of production in line

with consumption would be easier. I am not quite sure that is what you meant.

Representative MILLS. Let me ask this next question.

When we speak of adjustment in agriculture, are we thinking in terms, broadly, of adjustments that should occur in agriculture to bring into proper balance the relationship of supply and demand in the market place?

Mr. WORKING. There is more involved than that. That is one thing. But also there is a matter of adjustment within agriculture, which may have little effect on market supplies. There may be changes in how many people are farming, and what the sizes of farms should be.

We might take a comparison in a completely nonagricultural field.

In a town I know, 2 groceries have gone broke, and 2 others, 1 a national chain and the other a local supermarket, have built big new stores in the past 4 years. The grocery business in that town has had a problem of readjustment. Also in that same town, within about the last year, there have been three new filling stations built in spite of the fact that there were plenty of filling stations, as far as I can see, to take care of the business in the town before.

Well, those are all problems of adjustment, and we have similar problems within agriculture as we do there.

That is, you may have problems of individuals within agriculture who are getting along very badly when others are getting along very well.

Representative MILLS. Well, then, am I correct in assuming that in the final analysis what we are being told is that the present fixed prices by Government programs in agriculture tend to perpetuate the imbalance that exists within agriculture and in the market price between supply and demand?

I am not referring to your statement, Mr. Baker. I am asking for majority opinion now. I am coming to you in just a minute. I know that isn't your view.

Mr. WORKING. Yes. They have tended to result in a continuation of production at too high a level at the support prices. We require acreage restrictions, marketing quotas, or other things to keep us in a balance of production.

Representative MILLS. When we get to that point, then, we reach the conclusion that there is something wrong about the prices that we have, and that there must be some adjustment within the price mechanism in order to permit better adjustments within agriculture?

Mr. WORKING. If we want to adjust through the price mechanism, yes. Some people do not want to adjust that way.

Representative MILLS. That is leading up to my basic question.

I want to know just how effectively we can expect adjustments to occur in agriculture through the price mechanism?

As I recall, we have had a decline in agricultural prices. We have had a decline in net farm income over a period of at least the last several years. On the basis of what has been said, I would expect that that would tend to bring about a reduction in the production of agricultural commodities.

But, lo and behold, the Department of Agriculture startles me every year by telling us that we are raising more and more, and that in spite of the decline in net income and in spite of the decline in price in the last 7 years, our production goes up.

And we have been told by a previous panel that we may expect on the basis of their best projections that we will continue between now and 1965 to produce about 8 percent more than we can dispose of.

Now, what I am wondering about, first of all, is whether or not we are safe in relying upon the price mechanism to make adjustments within agriculture or to provide the atmosphere for the making of adjustments within agriculture, and then secondly, if we can rely upon price mechanism to provide the opportunity for adjustments in agriculture, how long is it going to take declining farm prices and declining farm incomes to finally accomplish the objective of reduced production in agriculture?

Mr. WORKING. Well, the response of agricultural production to prices is in many cases, of course, very slow; that is, it takes time. If a farmer expects higher prices for some things, he can increase the production quite quickly; for some other things, it takes a long time. For example, apples—when you plant an orchard you don't produce apples for a long time. Increased broiler production takes a much shorter time. It takes longer for beef cattle; that is, with the building of buildings, perhaps, and with fencing, you have a longtime investment there.

I have before me a rough chart which shows the parity ratio from 1910 down through 1956. If you were to look at that and try to figure out what the trend is—a sort of normal level of agricultural prices relative to other prices would be what that represents—you would have to say that there was a downward trend in the period from 1910 to 1940.

During the war, because of war conditions and inflation and all the things that went with it, we had prices of agricultural products far higher than that trend. Those higher-than-normal prices stimulated production.

If you study the trend of production from 1910 to 1940, had that trend continued our agricultural output today would be at a level of perhaps somewhere around an index of 93 instead of 113 or 114. I do not mean to say that is the level of production that we would now be maintaining if we hadn't had the price supports since the war. I think it would be somewhat above that, because we had a high degree of prosperity, a high demand. However, somewhere around 10 to 15 percent of this present level of agricultural production may well be attributable to the support prices and the war influence.

Of course, some of that obviously we had to have in connection with the war effort.

Representative MILLS. The basic question I am getting to is this: What confidence can we place in the price mechanism operating as a vehicle through which these adjustments in agriculture that everybody says must be made can be made?

Now, are we putting too much reliance upon the price mechanism to create the situation within which agriculture can adjust, on the basis of what information we have been able to gather to date from the history of agriculture?

That is what I am concerned about.

Mr. WORKING. I think within agriculture you can put a great deal of reliance on the price mechanism.

Representative MILLS. In other words, if the price goes down, production sometimes will go down? Is that what you mean?

Mr. WORKING. Yes. Production will go down if the price goes below a profitable level. Not that it will be a quick reaction. As you indicated, we have had a decline of prices since 1951, and production has not yet gone down. Even today if we made the adjustments in methods of farming, and so on, that are necessary, perhaps prices do not average below what they really should be. That does not mean that there aren't people in distress or difficulty. It does not mean there may not be particular prices that are too low. But the general level of farm prices may be high enough to stimulate, rather than discourage, production.

We have had tremendous changes in ways of producing, that have lowered the real costs of producing farm products.

Representative MILLS. What should we do? If we can rely on the price mechanism to bring about a reduction in production, what should we do?

Mr. Collins?

Mr. COLLINS. I would like to make just one comment in regard to whether the prices should be higher or whether they should be lower.

I do not think that is nearly so important as the fact that whatever price support efforts we make should be in the direction that is consistent with the laws of economics. To cite a couple of specific cases, now, we attempt to support the price of feed grains, but the market for feed grains is a function of the feed grain price. So that we may, through efforts to improve the farm situation, actually hurt the farmer by getting a price level that is too high on grains, because grains are not marginal products. Meat is the marginal product.

Consequently, we may encourage feeders of grain to cut back on hogs which take 40 percent of our total grain production through attempting to rig the price of grain which, in effect, makes the hog-corn ratio maybe unattractive to farmers. They cut back on hog production, and we have automatically cut off a slab of our grain market.

Quite obviously this is not in the direction of improving the farm situation. Then we have to recognize competition as in the case of cotton. We have gotten ourselves in a lot of trouble there because we have failed to recognize that there are substitute commodities for cotton. We have also failed to recognize that other parts of the world might care to sell more cotton and indeed have learned to produce and sell more cotton.

Many of these things have to be taken into account. What we are really saying is that a workable price support level must recognize the laws of the market.

Representative MILLS. What I am trying to get over is this: My own thought is that all of us have relied too much in the past upon the price mechanism, perhaps to do more than can be done in the way of adjustment. Maybe our thinking has not been correct in that respect.

Mr. Johnson?

Mr. JOHNSON. The point that I would like to make on this question is that it seems to me the important element is not the question of level of agricultural production, but is the level of the income of what we call, within our frame of reference here, commercial farmers. That is what we really want to get into adjustment, rather than the question of whether or not output is going to increase or what is going to

happen to it as a result of changes in prices, particularly reduction in prices.

We know that the many farmers make many changes each year that allow them to produce more with the same amount of land and labor that they had used the previous year. This is where a lot of our increase in output has come about. But in terms of achieving adjustment, our major objective should be, I think, that of the income of the farm people who are engaged in producing the bulk of our agricultural products.

On the whole, I would say we have been rather lax, as economists and others, in really trying to identify the income position of these people.

Your compendium, which was compiled for this committee, contains the first real effort to estimate for a period of time what is the income position of the group of people we are concerned with here, namely, the 40 percent of the farmers who produce roughly 90 percent of the output.

While I think it is clear from those figures that their incomes are below that of the nonfarm population, the discrepancy is perhaps not as large as we are sometimes led to believe by looking, say, at the relationship of the per capita income of the farm population to nonfarm population, which, I think, is now published at around 45 percent.

This discrepancy, as I remember it, was more on the order of a family basis for the commercial farms of about 25 percent. And some of this is compensated for by differences in the cost of living on farms.

For this group, this difference is not very great. So that perhaps these people have adjusted rather substantially. Although I feel there is more adjustment to be made.

And if there is an area in which I think we perhaps cannot rely entirely on the price mechanism, it again deals not with commodities, but with resources and really with people. One of the reasons why I think there has not been more adjustment in the farm labor force—and, after all, it is total income divided by the number of people who have to share in that income which I think is really the important thing rather than the total itself—is that the differential between farm and nonfarm income that may be required to induce the high rates of migration that we have had is somewhat large, and also that we perhaps should consider aiding the price mechanism by measures that would reduce this differential.

In other words, if we could get people to respond to an expected difference, say of a hundred dollars a year between their earnings in agriculture and nonagriculture and move to nonagricultural opportunities when the difference exceeded that, I do not think we would be at all concerned about the level of farm income. It would follow very closely what was happening in the rest of the economy.

And we know that our incomes are rising. So, here I think we should perhaps move away from a completely free market situation. And I think this would be our best bet if we were to so move rather than tinkering with the commodity prices themselves.

Mr. BISHOP. I think whether or not we would say prices might be effective would depend on whether we were talking about adjustments within agriculture and shifting from production of one commodity

over to another. When we are considering adjustments within agriculture, I have quite a bit of faith in the pricing mechanism. For example, I would expect prices to be highly effective in bringing about shifts of production from one grain to another. In fact, it seems to me that the rates of substitution are so great that in production of most farm commodities we can bring about a shift in resources from one to another through changes in prices.

I believe, however, that the differences in earnings of labor in the nonfarm sector and in the farm sector are so large that varying the prices of farm products to the extent we have varied them has not been very effective in impeding adjustments between farm and nonfarm sectors of the economy.

Representative MILLS. Well, Mr. Bishop, how much would we have to vary it?

Mr. BISHOP. I don't think you can drive people out of agriculture by lowering the prices of farm products. I think that migration depends largely upon information with regard to employment alternatives in the nonfarm sectors. If people are to migrate, they must have confidence that over a long period their earnings will be greater as a result of migration.

Representative MILLS. Mr. Fox, I would like to have your opinion on how much reliance we can place on the price mechanism to permit or bring about these adjustments that everyone says need to be made in agriculture?

Just how effective is it?

Mr. FOX. I think Mr. Bishop has brought the question pretty well in focus.

As between commodities, I think the price mechanism is quite effective. I think in terms of total agricultural production, you have to take a somewhat longer view than just year to year.

I think we had a good act on the books back in 1948. We undoubtedly would have needed to make further adjustments in it as time went on. But there was a Price Support Act, you see, which was supposed to cushion the transition of agriculture from the war situation. It was supposed to be a long-run price support program where your price supports for some commodities would have varied from 60 to 90 percent of parity, and would have been around 75 percent as an average support level for a normal crop.

Now, one branch of the Congress went for that. The other branch, in effect, accepted it, but said "Let's try it tomorrow." And they kept putting it off, you see, until it never did actually get into effect.

Well, land values have risen another 25 percent or more since 1948 due partly to high price supports, so that anybody who has bought wheat land in the last few years might argue that he had been "betrayed" by the Government to some extent if the Government now dropped the price-support program for wheat.

When the value of the land he has bought has been based on a higher level of price supports, that feeling is particularly strong. Anyway, with the price-support levels that we did continue after 1948, and with the additional shot in the arm that came from Korea, we got this tremendous accumulation of farm machinery and new investment in farm buildings and so on. And it takes a good many years to get this overaccumulation worked down.

Now, I am not advocating that the Government, having led farmers, you might say, way out on a limb over a 10-year period, should start shaking the tree. I think the market mechanism would work reasonably well if we could start out without too many strikes on us, without these stocks of commodities that we own, and without this souped-up farm plant that we have got partly as a result of our price-support policies and the Korean inflation. The price-support policies continued 10 years longer than there was real justification for them.

Representative MILLS. Mr. Baker?

Mr. BAKER. Congressman Mills, I am very interested in this discussion and your line of questions. And it has brought out, if I am correct, that 7 years isn't enough, and that maybe it has to be twice 7 or 3 times 7, of continued drop in farm prices and farm income.

In the last 7 years, there has been approximately a drop of one-fourth in the real income per farm family, and of something approaching 79 percent increase in urban wages with these trend lines going almost in perpendicular fashion.

The disparity that Dr. Bishop mentioned between urban incomes being higher than farm incomes has for 7 years been getting greater and greater. And I agree with him that I do not know if you tripled that difference between farm income and off-farm income that it would speed up the outmigration of people from agriculture, either the low-income ones or the commercial farm people.

As a matter of fact, just looking at it from a standpoint of an old hillbilly, if it was this differential that would make the adjustment automatically, there would not be anybody left farming, because it would already be gone. And that brings us up to December 1957.

Now, Senator Sparkman pointed out that each month this fall the bankruptcy rate of small business is greater than it has been in a long, long time. So, obviously these farmers that we are going to adjust out by dropping farm income do not have a very bright future in going into the small business that the gentleman from out West was talking about already going broke in his hometown.

Now, in December 1957, for 3 months in a row we read the Government reports saying that unemployment is increasing. The gentleman from the mercantile exchange, who is closer to these everyday minute economic adjustments than I am, tells us that it almost wipes out his previous testimony. I mean it gives it a different slant, that if migration starts going back toward the farm, our problem is going to be doubled. And that brings me to the proposals that I have made in my prepared statement that we must apply conscious application of our intelligence to the problem of farm income, through giving farmers themselves greater control over their prices and market supply of their own commodities in such a way that, without having to wait 21 years for resources to adjust, that within a year or so by proper administration of the supply of milk, you can start getting desirable dairy farm income and a fair price for fluid milk, manufactured milk, and other products of milk.

The same thing for other farmers where the assumption that production controls won't work and that production controls are the only known methods of farmers acquiring the same kind of bargaining power that the steel industry has, that the farm implement industry has, that organized labor has had. There is the assumption,

for some reason or other, that farmers are either too stupid or too undisciplined or too uncooperative with other——

Representative MILLS. Be careful what you say about the farmers.

Mr. BAKER. I take it that is what we are saying here. The Secretary of Agriculture in his last 57 speeches has had 2 paragraphs. The No. 1 paragraph says: I agree with old John that it would be possible to set up a market supply proration system by which farmers could be enabled to earn a parity income.

That would require that market supply be tailored, according to Karl Fox's formula, to the amount that you could sell as against the prices that would give you a parity income for that volume. But Secretary Benson goes on to say in paragraph 2, in effect, that farmers are too stupid and undisciplined to exercise any such controls. And since they don't want them, Congress won't enact them.

Therefore, since you can't control market supply, the only thing you can have is what these fellows are talking about—fully flexible free markets, which, as I see it, with technology pushing production by about 3 percent a year, and with population and growth in per capita income raising demand not more than 2 percent a year, you have got a 1-percent drag every year.

And that 1-percent drag means a drop in average farm prices of somewhere between 4 and 7 percent.

That summarizes my position. And I thank you for the opportunity.

Representative MILLS. Mr. Chairman, I have no further questions at this point unless some other member of the panel wants to comment on what has already been said.

Senator SPARKMAN. Is there any further comment?

Mr. HARRIS. I would like to comment very briefly, Mr. Chairman.

I want to say this: that I would be quick to agree that farm prices are more inelastic than some other prices. We cannot eat two dinners every night without gaining weight. And when we are in a prosperous time, which we have been in since World War II, we can buy 2 and 3 automobiles, which some people have done.

For that reason I don't think that the social and political problems of farm people can be solved with a free-price system. But the free-price system works so much better from an economic point of view than fixed prices. Fixed prices also fail to solve the social and political problems and they are not even good economics.

So what I have tried to say to you today is, restore a free-market system and let's try to solve these other problems by such things as getting more people off the farms through incentives, having larger farms, more efficient farms, and getting some of this land at least temporarily out of production, maybe total farms, as in this experimental thing. Maybe in 5 or 10 years we are going to need all that land again.

Human beings don't see that far ahead. We have had certain recent experiences in this country that indicate to us that we don't see very far ahead.

Senator SPARKMAN. Congressman Curtis?

Representative CURTIS. First I would like to reassure Mr. Baker. At the time Senator Sparkman first mentioned these figures on small-business failures, I meant at that time to interject that although the absolute figures are large, the percentage is less than the national

average. The absolute figures must be reflected with respect to our total economy. So we don't have a black picture there.

Now, one thing I was trying to follow at the time Mr. Mills had his line of questioning on price mechanism. I can't make out in my own mind whether we were talking about a price mechanism based on a free market or whether we were talking about the price mechanism that has existed in the agriculture sector for the past years, which is by no means a free-market system. And it is really a governmental manipulated one.

Now, what does the panel understand in answering their questions? Do they regard the use of the price mechanism as being a price mechanism based on a free market or simply the use of price, whether it was obtained through the free market or through Government pricing, or a combination.

Let me pose this question: Does the panel understand it to be simply the use of price whether that price was obtained through a free market or through a combination with Government pricing?

Was that the understanding? I assume it was.

Mr. WORKING. Certainly mine was directed toward consideration of price whether in a free market or controlled prices as a method of adjustment.

Mr. BAKER. Let me say in response to your question that would it not be true to say that all interest rates, all prices, and all wage rates are in a sense Government determined and therefore administered?

Representative CURTIS. No.

Mr. BAKER. Either by overt administrative action or by special authority given by the Government, either to commissions, such as the Federal Trade Commission, to the State public utility commissions, Federal Power Commission, to regulate prices?

Representative CURTIS. Oh, no.

Mr. BAKER. Or by actions of the Federal Government which establish the interest rate through the Federal Reserve System by the starting with the 14th amendment and the limited liability clause provided for corporations, we authorized the particular type of administration that allows oligopolistic industry to control its own market supply and price.

Representative CURTIS. I think you are making a good case for demonstration of how far the Federal Government has entered into the field of pricing in our economy. But to my way of thinking fortunately it hasn't completely gotten in there and still we have a basis of a free market.

Mr. BAKER. My point is this: that when you say what kind of price system did we have in mind when the question was being asked, the answer is obviously it is the partially Government-operated administered and set price system, which is primarily throughout our economy an administered price, administered production economy. Except in a few areas such as farming would be without the Federal program, which is purely competitive—the rest of them are pretty largely, as I know you know, administered price and administered production price systems.

Representative CURTIS. I thought that is what you had in mind. Because I then wanted to raise this question.

It has been brought out in the panel discussion that if it is being done through Government fiat rather than the market, free market, an error in judgment as to where the price should be may be the very reason that you don't produce the results that you thought would be achieved.

For example, the question you posed, Mr. Baker, of the cut in price of milk and your comment that it didn't increase the milk consumption nor did it decrease production, I presume you posed that on the grounds that price mechanism would not affect the milk-producing industry.

I would suggest, of course, there are other things that could be resulting from that price cut. It could be reflecting productivity. And if productivity were increasing you could have actually a cut in price that could neither increase the milk consumption nor increase production. Actually, it could be an economic gain to the consumer. Indeed it could be a gain to the farmer if he discharges or applies elsewhere the surplus labor, or the labor he no longer needs in the process through this increased productivity.

So your price could be reflected in that way. And another way it could be reflected, I think, in Mr. Collins' paper—I was intrigued with his suggestion that what the price of corn might be if the corn farmers could regain the big segment of the grain market, which is now supplied in other ways, or a part of it.

You could, through price mechanism, of course, actually move it out of that sector of the economy.

One thing that bears on the same question is the discussion we had on the previous panels of the broiler industry. There is some indication that even with all the talk we have had about the high price of labor in the urban areas outside the agricultural sector, now some broiler production is actually done off the farm. Some is being done in warehouses in my own town of St. Louis.

Now, something has happened there; either the farm labor was higher than the urban labor, or the efficiency of the urban labor, which I really think is the answer, was a great deal more. But through the price mechanism you can have it come out in that fashion as well.

So, it may not come out in increased production or increased consumption or in decreased production.

Mr. BAKER. Let's look for a minute at corn, Congressman Curtis, since you have mentioned that.

I am inclined to think that corn should be $2.19 a bushel instead of the $1.10 that has been mentioned. How can corn be made $2.19 a bushel? Certainly not by abolishing all the Federal farm programs. But it could be made $2.19 a bushel, which would be a fair price on the basis of existing freight rates, on the basis of existing minimum wages and the other fixed prices and charges in our economy.

Corn at $2.19 would be a reality next year if we had in operation a combined feed-grain-livestock marketing quota program by which farmers would market by Dr. Fox's formula the right amount of feed grains plus livestock, and by reducing the supply 1 percent, using his figure, we could raise prices by 2 percent. Every time you cut supply placed on the market by 1 percent, you raise prices received by 2 percent and thereby increase gross income. By adjusting it to the right cut, you would raise the price of corn and all other feed grains to the equivalent $2.19 per bushel for corn.

Representative CURTIS. Where do you think that would come out in the other sectors of the economy?

Mr. BAKER. In the other sectors of the economy, with the exception of the merchant marine and the aviation industry, who do receive certain Government subsidies and the publication industry which also receives direct payments, most of our special aids to different industries is in the form of their authority or requirement by the Government that they tailor supply to give the price that they want.

Now take minimum wages. Your shirt and mine—we as consumers pay minimum wages for our shirts in the price that we pay.

Representative CURTIS. What the minimum wage does is not even reflected there because the wages paid to laborers in textiles is way beyond minimum wages. But I want to get on with some other questions, if I may.

In this consideration of price as a mechanism, it seems to me there are two aspects of it. I wanted to check this with the panel. One is the short-range fluctuation, and the other is the long trend.

It seems to me that a great deal of the problems that are posed in the agricultural sector lie in these short-range fluctuations. Now, getting to Mr. Harris' paper—recommendation No. 4 in there, in which I am particularly interested, in reference to future markets—is it your thesis that the future markets to a large degree can take out, or iron out these short-range fluctuations in prices?

Mr. HARRIS. There is no doubt that they tend to do that. All studies have confirmed that. I don't say that they could take the entire surplus of cotton and wheat today, though, that has been piled up, if it were suddenly thrown on the markets.

Representative CURTIS. If that were so, is there anyone on the panel who thinks that there is any way in which we could affect long-range price trends?

In other words, you can iron out maybe these short-range fluctuations. But if the trend were over a period of years, that particular price on the free market were going down or going up, do any of the mechanisms that we have today, Government mechanisms, affect that—can they affect that long-range trend?

Mr. WORKING. I think that the Government regulations can affect the long-range trend if along with those go production controls or subsidies for consumption or export and that sort of thing, depending of course perhaps on how long a range you have in mind. But over a considerable period of years, the level of prices can be influenced.

Representative CURTIS. Won't the other factors that bring about whatever is happening in that particular commodity, for instance cotton versus the synthetics, just to assume the hypothesis that synthetics were going to continue to take over the fiber markets—not that they would—but some basic underlying feature like that—we might through price mechanism iron out these immediate depths and peaks. But could we affect the long-range trend in that particular area? That is what I am trying to theorize.

It doesn't seem we could. But maybe we could.

Mr. WORKING. Well, any time by price control, whether it be governmental or private industry administered prices, any time those prices over a considerable period of time are held at levels which are—well, I call them uneconomic—in the sense that they aren't levels which would work out under a free economy and under ready shifting

of resources—pressures build up which tend to break down the price which is badly out of line.

But still the power of the Government, and sometimes the power of private monopolies, whether they be capitalistic or whether they be labor monopolies, can maintain those disequilibrium prices over a long period of time.

Mr. BAKER. Senator Sparkman, I think, is among the sponsors of a proposal for cotton, which would use intelligent planning and administration of the price system to substantially, I think, solve the income problems of the cotton farmers by means of providing export subsidies for the export part of the crop and by providing production payments on the domestic share of the crop.

Representative CURTIS. Where are you going to export this? You have got countries abroad that are now growing cotton. It all comes down to what demand there is for the product. And if you try to mess around with that demand through a price mechanism, you are just damming yourself a sea of trouble, it seems to me.

I mean you can eliminate these peaks and valleys, but if you are not going in accordance with the long-range economic demand for your product, you are not going to solve anything.

Mr. BAKER. By placing American cotton on the world market last year at competitive prices supported by export subsidies, the exports of cotton were at a recent alltime high, last year.

Representative CURTIS. Yes, sir. And what problems have we got in foreign affairs complications as a result of it, is the other question.

Mr. Collins, did you wish to comment?

Mr. COLLINS. Thank you, sir. I would like to make first the comment that I think the Government is doing much to aid the farm situation at the present time, in such areas as maintenance of price stability which is most important.

I think we could have run into a much more serious farm situation than we have known in the past if we hadn't gotten hold of inflation as we did.

I think that the Government is doing much to help farmers in building markets. If we have proven anything, it is that you can't control production with administrative controls. As farmers learned to do better they became better businessmen, ranking with those outside of agriculture. They are ingenious people. They are going to operate their plant in such a way that they will maximize returns. This frequently doesn't mean they are going to let land stand idle or resources remain idle. They are going to use those in some way.

The question is how will they use them.

Now, the free market price in my opinion is the only way that the farmer can properly use those resources, both to his own advantage and that of the economy generally. Then in the areas of information, the Government is doing much for farmers through the Agricultural Extension Service, through research, through market reporting and these things, all of which the Government can do and perhaps only the Government can do in the light of the small unit that characterizes agriculture in this country.

But when it comes to this matter of making price, then we begin to conflict with our efforts to build markets. And there is where we get into trouble.

I would like to endorse a statement that Professor Working made in regard to parity. It seems to me that one of the greatest difficulties in our whole farm price support system is the written-in basic requirement that we go back to a period of years almost half a century ago which becomes rather absurd when we consider how dynamic our economy is today and the many, many changes that have taken place over this period of time.

It seems rather ridiculous to try to maintain a set of relationships that existed that long ago, not only between agricultural commodities and nonagricultural commodities, but certainly among agricultural commodities themselves.

Today, if we had the proper relationship based on 1910 to 1914 between wheat and milk; we would have to support milk at somewhere in the neighborhood of 350 percent of parity as compared to wheat at a hundred percent of parity.

Obviously we wouldn't care to do that because that gets us into the area again of our market. I hope the Government will never attempt to write a law that will force people to buy milk.

Then there is this matter of $2.19 corn. I think certainly we would be most happy if farmers could have $2.19 corn. But we also recognize this would mean somewhere in the neighborhood of $27 hogs. Again we run into that market situation: Would the consumer buy $28 hogs or would we, through our efforts to get $2.19 corn, just slab off our market as we have done in cotton and some of these other commodities?

It seems to me, then, finally, on this whole point, that it is just a little bit ironical that we would go back to a period as we are doing, 1910 to 1914, as our basis when actually that was a period before the Government was in this area of aiding farmers in any appreciable way. It just seems a little strange that we would go back beyond the period of Government program to pick up our base period.

Thank you, sir.

Representative CURTIS. My time is about expired. One point I would like to make—one request, rather—I would like to see a further development of the theme that you pursue, Mr. Harris. You say the futures markets of America should be free from governmental interference in the form of Federal purchasing in selling commodities so they can more efficiently serve their proper purposes.

Now, I heard that thesis advanced for the first time about a month ago. And I was very much impressed with it. But I have no data or information as to just how the Federal Government's disposal programs and the CCC programs and so forth, have affected our futures markets. I am sure that they have. And also, as to what could the futures markets do if they were built up and strengthened rather than being put in this particular position.

Now, that is a lengthy topic, but if there is data on that, I would appreciate receiving it and I think the committee staff would like to get it.

Mr. HARRIS. In the interest of time I will submit for later inclusion in the record, if I may, a rather complete answer to that. I would like to say that the cotton industry has some ideas about some remedial legislation which would return cotton to an economic basis and still give the social reward apparently needed by the cotton farmer in the type of some direct payments. I think that deserves a great

deal of study in the next session of Congress. And I think it will get it.

But the thing I have tried to say is our free price system has served this country very, very well. There is an idea today that fixed prices are something that are good in themselves. A free-change price system can go up as well as down. It accomplishes these many, many things that we know it accomplishes so efficiently and has been the basis of much economic growth in this country.

So I think we would be very unwise to say we are going to stabilize all prices here. We might find our whole economy stabilized in a motionless state one of these days.

Senator SPARKMAN. We would be very glad to receive that data for the record.

By the way, the transcript will be sent to each of you for your own correction. And you are asked to send it back within 2 days. If you could sent that information back at that time, we would be very glad to have it. (See appendix, p. 361.)

Mr. FOX. Could I have 3 or 4 sentences?

I lost the train of the discussion for a minute or two back there, when I heard about $2.19 corn. So I have been trying to figure from figure 9 in my printed paper here how much corn we could get you in Iowa for $2.19 a bushel. I think we are now getting yields of 50 or 60 bushels an acre. I think that at $2.19 a bushel within 5 years we could give you 130 bushels per acre.

If you take this many bushels per acre and leave the acres where they now are, this means that Iowa alone can provide the Government with another 700 million bushels of corn a year. If you turn around and say that you are going to have an airtight production-control program with no bootlegging, then you are going to have a problem of dealing with maybe 6 million out of the present 10 million acres in Iowa that are now in corn.

I am trying to give you some idea of the magnitude of the problems associated with Mr. Baker's "fair price" for corn.

Mr. BAKER. Since I seem to be the only panel member that thinks corn is worth $2.19, let me say that I am not talking about acreage controls. I agree with these fellows that acreage controls in the future and in the immediate past do not work because there is so many things, including human labor and fertilizer and various kinds of technology that can be substituted for an acre of land. I am talking about a complete feed-grain-livestock quota which if set and enforced, would place, by Dr. Fox's own formulas, the right amount of feed, grains, and livestock products on the market where it would return $2.19 corn without a dollar of cost to the Federal Government, and without any increase in the inventory of Commodity Credit Corporation.

Now, let me also come back to something that the gentleman on my right said about this wonderful program of production, research, and education.

I don't want to impose on what Bob Buck is going to say here Friday afternoon in the panel, and he is more expert on this, Mr. Talle, as you know, than I am. But as I understand what various ones of these people on the panel have said here today, that the benefits of farm production, research, and education, as wonderful as that has been, the main benefits of that has gone to consumers and processers and not to farmers.

And the more and the better farm-production research and education we get, the better it is for the national welfare. But the worse it is for farmers, unless they have some protective devices to keep that added supply from beating down their price and income.

Now, let me say also that I finally discovered something that I could agree with what was said earlier here. I, too, would like to see the parity formulas revised, from the price-parity formulas that are now existing to a set for formulas that would carry out the preceding paragraph in the Agricultural Adjustment Act of 1938, calling for parity-income formulas. To calculate the goal of farm programs.

Thank you.

Senator SPARKMAN. It is getting a little late. But there are two questions I want to ask very briefly.

First, I want to go back to the thought that someone advanced in his paper—I have forgotten which one it was—that lower prices do not step up production.

I have no facts and figures to refute it or to support that statement. But it seems to me that I recall that about a year ago, Dr. Clarence Poe, the editor of the Progressive Farmer, published an editorial in that paper in which he submitted figures for different years, in fact for a long series of years, showing that as the price of cotton went down, the production went up.

Does anyone remember that?

Mr. FOX. I don't remember that statement, but the only real analyses I have seen of the response of cotton production to price have been in terms of acreage responses to prices of the 2 preceding years. And these have shown that the acreage of cotton—this is in the 1920–30 period and earlier—increased pretty consistently whenever the price increased—not necessarily from the year before, but from a sort of normal level for the period.

So, I have never seen any real demonstration of this effect—falling prices causing increased production—coming about. It seems to me the logical implication of such an effect would be that if you run into a national emergency and suddenly should need an increase in farm output, then you should slap price ceilings on farm products at maybe 25 percent of parity.

That should get us a big increase in production—if lower prices did encourage production—because farmers would desperately try to increase their production two- or three-fold in order to come out financially.

Now, I don't think farmers would "come out" on this program. I think they would get out.

Senator SPARKMAN. I am not clear in my recollection, but I will see if I can find it.

Now, one question I want to ask and I don't want any long discussion of it, because it is getting late. That is the question of supports. I want to say this. I have long felt that perhaps we have overemphasized the support program. We have done it to the extent that a great many people throughout the country have more or less come to think of a farm program as being price supports—high support, low support, and flexible support. And most of the thinking of a farm program has been right in that field.

Suppose we removed price supports, immediately. What would be the effect, first, short range, and second, long range? Who wants to answer that?

Mr. Fox. I don't know that I want to answer it.

But one of the big questions is what Commodity Credit Corporation would do with the commodities that it now owns. You see, if it should dump all the corn simultaneously——

Senator SPARKMAN. I would assume that they hold them off the market.

Mr. Fox. Well, if you held these stocks off the market—I don't have all the necessary figures in my mind, but I think the general magnitude is pretty clear—and if you are going to take off marketing quotas on wheat and cotton—I think we could get you 3 percent or so more production by snapping these acres back into full use within a year or so, and you would probably get a drop of, I would say, 5 percent or maybe 10 percent, in farm prices.

Now, I don't think that this would make a great deal of difference to the rate of migration out of agriculture. It certainly wouldn't slow it down any. But it certainly would make a difference to the net income of farm people for a while.

Now, how many years would it take to get back on the line, get back in balance—this I would rather refer to other people on the panel. It would take some time. You have got lots of farm machinery and lots of people who know how to use it. We have more farm machinery than we can use on the present acreage. You have heard other panelists talk about this thing this morning.

Senator SPARKMAN. Anyone else?

Mr. BAKER. Mr. Chairman, without going into detail, I will preface this by saying that I was amused a moment ago to hear that free market prices in the foreseeable future for farm commodities, if we were on a free flexible market that they can also rise. I remember 4 years ago hearing it said that the sliding scale could go up as well as down. And after 5 years we have now had a recommendation that we change the sliding scale so it can't go back up, because that would be bad.

I am afraid if we buy this free market concept because it can go up as well as down, we may 5 years from now have somebody back here wanting us to repeal the "up" part of free market farm prices.

But that is not the major point. I think I have asked as many farm management people, both research and practical farm managers that I could get to in the last 4 years, this question, this same question that you asked: "How far down is the bouncing place where free market prices would go before this thing would start stabilizing out?"

And the answers you get run something like this: "The first thing that happens is a farmer trying to make a living for his family borrows money to put his crop in, to grow his livestock. Income goes down because supply has gone up. He can't pay back on his short-term credit. He starts then refinancing his short-term credit and his long-term credit. Stays on the same farm, keeps on trying to produce as much as he can to sell at falling prices, to get his gross up so that his net can stay above water.

Finally he reaches a point where it doesn't look like he can put any bigger mortgage—I am looking down the road of this free market road—where he can't get any more mortgages slapped on his real estate. Then he has got to decide whether he is going to stay on that farm any longer or allow it to be foreclosed on when he can't make his repayments.

Now, at that time if some other farmer who is expanding the size of his farm buys that farm, or if a dentist buys it and puts a tenant on

it, or if somebody else that is not a farmer buys it and puts a tenant or hired labor on it, it keeps right on producing at lower and lower prices each year.

Now, the end of that road it seems to me is finally for that part of the farming industry vertical integration takes over, starts taking care of itself through supply restrictions to maintain price and income.

For others who may be engaged in some kind of production that doesn't get vertically integrated, you will approach something like India or Egypt or the Philippines, where land values, farmland values are the highest per acre in the world, and there are the poorest people in terms of income living on it. You go through a considerable wringer of either going into vertical integration or through farm foreclosures. And none of these folks can tell me what percent of parity they have to drop to before this thing starts going up again, if there is a 3-percent increase a year in production, and only a 2-percent increase a year in consumer demand and exports.

Senator SPARKMAN. Anyone else?

Mr. COLLINS. It seems, Senator, for one thing, you might consider, is assuming that Dr. Fox is right in his estimates of what change might take place in price and what change might take place in production—and his guess is certainly better than mine because he has devoted a lot of time to studying matters of this kind—but it seems that even with a 5- to 10-percent drop in farm prices, it is quite possible that the net income of agriculture could increase on the individual farmer basis if we permitted the wheat people to go back to producing wheat and the grain people to producing grain and the cotton producing people to producing cotton, as an example.

Certainly we know that the cost of production must have increased very greatly for the farmer who has had a 35 to 40 percent cut in his principal crop. That is he still has had to maintain about the same machinery and various other things that would have been necessary for the larger crop.

So obviously his costs of production have increased considerably there. When we keep in mind that net farm income depends on price, times volume, minus cost, we begin to realize that adjustment might not be as bad as many people apparently feel it would be.

Then on the other point of production increase in response to a decline in price, we do know that the trend in production has been upward for many years in this country irrespective of price.

Now the individual commodity output has responded to price very significantly and many studies have been made on this. Two or three members of the panel have contributed something to it. But in no case have I seen a reputable study—by reputable, I mean a study that hasn't been challenged and discredited by other agricultural economists—to show that production does actually increase in relation to a drop in prices.

Senator SPARKMAN. Anyone else?

(No response.)

Senator SPARKMAN. Gentlemen, it has been a most interesting discussion. We are indebted to you, and on behalf of the subcommittee, I want to express our thanks.

The subcommittee will stand in recess until 10 o'clock tomorrow morning.

(Whereupon, at 5 p. m., the subcommittee adjourned, to reconvene at 10 a. m., Thursday, December 19, 1957.)

POLICY FOR COMMERCIAL AGRICULTURE

ITS RELATION TO ECONOMIC GROWTH AND STABILITY

THURSDAY, DECEMBER 19, 1957

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON AGRICULTURAL POLICY
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D. C.

The subcommittee met at 10 a. m., pursuant to recess, in the Old Supreme Court Chamber of the Capitol, Senator John Sparkman (chairman of the subcommittee), presiding.

Present: Senator John Sparkman, Alabama, Representative Henry O. Talle, Iowa; and Representative Thomas B. Curtis, Missouri.

Also present: John W. Lehman, acting executive director; George E. Brandow, economist; and Dr. Reed L. Frischknecbt, legislative assistant to Senator Arthur V. Watkins.

Senator SPARKMAN. Let the subcommittee come to order, please.

Our hearings on policy for commercial agriculture resume this morning with a discussion of price and income standards for farm programs.

In earlier sessions of these hearings, we have seen that commercial farming has an income problem. We have also seen that agriculture is faced with some major adjustments if farm production and resources are to be kept in line with markets for farm products.

Yesterday afternoon we discussed the effects of farm prices on production and consumption, and how an open market for farm products works. In the sessions that remain we shall be considering Government programs for agriculture.

It is appropriate at this point in the hearings to discuss parity formulas for agriculture. If we are to have farm programs, we seem to need some measuring stick we can apply to prices and incomes in agriculture.

But we also know that prices influence production and consumption. We need to consider, therefore, what we are really trying to do in farm policy, how well parity formulas can serve as a guide for achieving our aims and how present formulas might be improved.

We have a small panel this morning, but I am sure that the high quality will more than make up for the small quantity.

Gentlemen, we are very glad to have you with us. I want to express our appreciation for the fine papers you have prepared and for your presence here today.

Prof. Geoffrey E. Shepherd, of Iowa State College, was unable to get here, but sent us a telegram. Luckily we have Mr. Karl Fox, who was a member of yesterday's panel, who is going to replace Mr. Shepherd. In fact, Mr. Shepherd made arrangements with Mr. Fox to represent him, present his summary and answer questions in his place.

99348—58——16

Mr. Fox, we are glad to have you back with us. At this time we will begin with a short summary of each paper, but since the panel is small I do not think it will be necessary to hold each person to the usual 5-minute limit.

When the summaries are completed, members of the subcommittee will ask questions of the panelists. We hope that each of you will participate freely in discussing all questions even if they are on papers other than your own.

We will begin the summaries with Prof. Donald R. Kaldor, of Iowa State College.

STATEMENT OF DONALD R. KALDOR, DEPARTMENT OF ECONOMICS AND SOCIOLOGY, IOWA STATE COLLEGE

Mr. KALDOR. Thank you, Mr. Chairman.

I would like to commend the committee for undertaking these series of panels. I think at the end of these panels the committee will find that they have been worthwhile and that a real contribution has been made to improving people's understanding of what the problems in agriculture are about.

My assignment on this panel has been to discuss farm policy objectives. I am going to do this in rather broad terms to note some of the kinds of problems that arise in policy formulation.

Securing general agreement on a meaningful set of objectives is a necessary first step in formulating rational prices and income programs for American agriculture.

The objectives of policy describe an ideal or preferred situation. Only after objectives have been identified and evaluated is it possible to design effective and efficient programs for moving the actual situation into line with the preferred situation.

Much of the current controversy over farm programs arises from lack of agreement on the relative importance of various objectives. Because of different conceptions of what is good and desirable, peoples' evaluations of policy objectives differ. There is no simple way of adding these up to give a consistent set of social valuations. In our society we depend on democratic political institutions for solving this aggregation problem.

Policy objectives are seldom independent of one another. The relationships may be complementary or competitive. If there is a complementary relationship between two objectives, achieving more of one adds to the attainment of the other.

However, if the objectives are competitive, more of one can be attained only with some sacrifice of the other. In this case a choice problem arises. This is the reason policy objectives need to be evaluated.

If intelligent choices are to be made, some scaling of the social welfare importance of each objective is necessary. Only then can relative values and relative costs be compared, making rational social choices possible.

Over the years a large number of farm policy objectives have been proposed by political leaders, farmers and their representatives, labor leaders, businessmen, economists, educators, and others.

Although there is a wide range in emphasis, most of these objectives relate to one of the following: (1) Farm income; (2) farm prices;

(3) resource use and production efficiency; (4) agricultural organization and farm population; and (5) individual freedom and Government intervention.

One of the more frequently mentioned income objectives is that of comparable rewards for labor and capital in farming. This has been justified on the grounds that fairness demands equal income earning opportunities for all occupational groups.

Price objectives usually have been stated in terms of parity. Some people have proposed 100 percent of parity. Others have suggested 90 percent. Although these price objectives typically have been based on income considerations, income objectives have seldom been stated explicitly.

Efficient use of resources in agriculture has been suggested as a policy objective by many economists. The principal argument advanced in support of this objective has been that it is consistent with the broader goal of achieving the largest possible national income.

The United States long has had a policy of encouraging the family farm. Much of the justification offered in support of this objective has been based on its contribution to democratic institutions.

Although the concept of the family farm has undergone modification over the years, this objective remains popular with many people in and out of agriculture.

Some people have proposed that the number of farms and the size of the farm population be maintained or increased. Many of the arguments offered in favor of this objective are similar to those favoring family farming.

In addition, it has been argued that overcrowding in urban areas has contributed to crime, family disruptions, and other social problems. Achieving a larger farm population has been suggested as the best way of minimizing these problems.

Freedom of the farmer to make production and marketing decisions also has been proposed as a farm policy objective. Frequently this has been associated with the broader objective of achieving a minimum of Government intervention in economic affairs.

A number of arguments relating to the development of the individual, production efficiency, Government expenditures and other considerations have been used to justify this objective.

These examples of policy objectives illustrate both complementary and competitive relationships. The goal of resource efficiency is complementary with the income objective of comparable returns to labor and capital in farming. Improving the allocation of resources would involve encouraging labor and capital in farming to shift from low-return employments to high-return employments. Insofar as this were accomplished, rewards for labor and capital in farming would tend to rise and approach comparable levels elsewhere in the economy.

Farm people who shifted their labor and capital to nonfarm employments in this process also would experience an increase in income.

Achieving an efficient use of resources in agriculture, however, would mean a further decline in farm numbers and in farm population. This would conflict with the objective of maintaining or increasing the number of farms and the size of the farm population.

Also, it is likely to clash with the objective of minimizing Government intervention and expenditures for farm programs. It is most probable that an efficient use of resources cannot be achieved by simply reestablishing a free market economy in agriculture. Positive programs are likely to be needed to encourage adjustments in production and resources use consistent with economic efficiency.

There also is some conflict between production efficiency and the objective of family farming, although it is probably small in terms of the number of farms.

In some types of farming, an organization of resources involving relatively large amounts of hired labor appears to be more efficient than one largely dependent on operator and family labor. In such cases there is a real conflict.

But in most types of farming, technological and other conditions seem to favor an organization of resources built largely around operator and family labor. In these cases, the two objectives are compatible.

Achieving full parity prices is competitive with the objectives of comparable rewards for labor and capital in farming. On the best organized farms, these prices probably would give returns to labor and capital appreciably higher than what similar resources would be earning in other parts of the economy.

On the other hand, these prices would not be high enough to pay comparable returns on poorly organized units using outmoded technology and too little land and capital in relation to labor. And there are many of these farms in American agriculture.

The objective of full parity price also clashes with economic efficiency. It is probable that a level of prices equal to full parity, as this is now computed, would be substantially higher than the level existing in a well balanced economy.

If these prices were to be achieved by production control, one of two things would most likely happen:

Some resources in agriculture would be underemployed, or the amount of labor and capital employed in farming would be too small to give an efficient allocation of resources.

Maintaining or increasing the number of farms and the size of the farm population comes in conflict with public efforts to improve agricultural technology. These efforts increase the level of output that can be produced with a given input of resources. The gains from better technology can be taken in the form of more farm output or in the form of more nonfarm output through the release of resources from agriculture.

If the level of farm output is already too large, the only way these gains can be fully realized is by releasing resources from farming to produced nonfarm output. Encouraging an increase in the number of farms and in the size of the farm population would be a move in the opposite direction.

Because of the competitive nature of many objectives, a difficult problem arises in the formulation of farm policy. Figuratively speaking, we cannot have our cake and eat it. Choices have to be made. The key to the solution of this choice problem is the set of values to be used in determining the relative importance of different goals.

These values cannot be obtained from the financial page of any newspaper. There is no market in which they are established by bids and offers. In a democratic society, they must emerge from the political processes of representative government.

Thank you very much.

Senator SPARKMAN. Thank you, Mr. Kaldor.

Next will be Mr. Oris V. Wells, Administrator, Agriculture Marketing Service of the United States Department of Agriculture.

Mr. Wells, we are glad to have you again before the committee.

STATEMENT OF ORIS V. WELLS, ADMINISTRATOR, AGRICULTURAL MARKETING SERVICE, DEPARTMENT OF AGRICULTURE

Mr. WELLS. Mr. Chairman, I am very happy to be here and like Dr. Kaldor, I congratulate the committee on the group of papers which you have brought together in the volume on which these hearings are based. I think all of us will find them very useful for quite a long time to come.

Now, if you will allow me to say one word about the general framework in which my particular paper happens to be cast:

My paper has chiefly to do with the parity price measures as they are now calculated and suggested alternatives. I have cleared this paper, Mr. Chairman, of as many technical terms as possible and practically all statistics, because I assume we are dealing here with ideas and not particular statistical values, and parity calculations get very complicated in any event.

Also I want to call your attention to three unstated, but nevertheless, I think, controlling assumptions which I have had in mind in preparing the paper.

First, I am as much interested in farm income as anyone, but my paper chiefly has to do with prices. This is true because I assume that the largest portion of the income flowing to farmers from farming is realized today and will in the future continue to be realized through the price system.

Second, my paper has to do with parity as a system of measurement and not as a symbol for a farm program, large portions of which have little relation to parity. In other words, I am looking at parity as a system of measurement and not as a symbol of a farm program which I, or someone else, may like or may dislike.

Third, I am interested in this problem in a somewhat broader context than agriculture alone. I think one of the real contributions of the Joint Economic Committee has been through the publication of Economic Indicators and your other endeavors to help develop a system of statistical measures or guidelines to tell us what is happening in the American economy.

Now, to the paper itself: The current parity price formula has three moving parts—an index of prices received by farmers which measures average changes from month to month, an index of prices paid by farmers, including also allowances for interest and taxes per acre of farm real estate and wage rates for hired farm labor, and, third, the relative price experience of the several farm commodities during the most recent 10-year period.

Specifically, parity prices under the modernized formula are computed by dividing the average price for each farm commodity in the

latest 10-year period by the average index of prices received by farmers in the same period on a 1910–14 base. This provides an adjusted base price which is then multiplied by the current parity or prices paid index which reflects the change in prices and cost rates paid by farmers since 1910–14.

These calculations give a set of parity prices which yield for all farm commodities considered together the same average purchasing power as prevailed during the base period for the price indexes, that is, 1910–14, while, at the same time, the parity prices for the individual commodities are gradually adjusted so as to allow for persistence of continuing market trends.

In several cases, of course, the transition to the new or modernized parity has not been completed so that the current or effective parity price for the commodity is influenced to some extent by the somewhat simpler method of calculation that was in effect prior to the effective date of the parity provisions of the Agricultural Act of 1948.

The indexes of prices received and prices paid and the comparisons they make possible are among the most important statistics in the field of agriculture. These indexes would still be calculated and used as a basis for comparison even if they were not essential components of a legally defined parity standard.

Similar indexes and comparisons are widely used in the analysis of changes in the level of wages, profits, and business investment. Such comparisons, of course, only call attention to and assist in measuring the changes which are occurring. They do not themselves indicate why changes have occurred nor what should be done.

Suggestions are often made for new or different methods of calculating parity prices or comparable measures for farm commodities. Several such suggestions were considered in the recent USDA report to the Senate on Possible Methods of Improving the Parity Formula, Senate Document No. 18, 85th Congress, 1st session. The various alternatives discussed in this report were:

A. Moving the base period for the prices received and prices paid indexes forward: For almost a quarter of a century the parity price system has been based on the 1910–14 period. There has been increasing criticism that this base should be modernized—in fact, the relationship between individual commodity parities is now based on the relationships actually prevailing during the most recent 10-year period. There would also be some advantages in moving the base for the two overall indexes to a recent base period.

B. Separate parity or cost indexes for individual commodities: The present parity index is a broad measure of the change in prices paid by all farmers in the United States for commodities and services used in farm production and family living. Parity prices as now calculated are not "costs of production" nor do changes in the parity index necessarily measure changes in costs or cost rates for particular farm commodities. As a result, there are often suggestions for specific cost or parity indexes for individual commodities or related calculations which would come closer to measuring changes in, or actually establishing cost estimates for, particular commodities. This matter is discussed further in the paper which you have before you by Professor Shepherd.

To me at least, the use of separate cost-rate indexes for individual commodities or even related groups of commodities would mean a

substantial shift away from the general purchasing power or price level concept on which the current parity-price formula is based. Such a shift might well lead to many requests for different bases, different methods of calculation, and consideration of or allowances for special situations.

C. Efficiency modifier for parity prices: Some suggest that the parity-price formula, which measures the purchasing power of farm products on a per unit basis, should be adjusted to reflect increasing farm efficiency.

Preliminary calculations indicate that farmers are now using about one-fourth fewer inputs per unit of total farm production than in 1940. But in considering such an adjustment, attention should also be given to the way in which efficiency gains in the nonfarm economy are reflected in prices or returns. Nonfarm productive efficiency has also been increasing, probably at as fast a rate as farm efficiency if short-run fluctuations are excepted. If all nonfarm efficiency gains were passed forward to users or consumers, prices paid by farmers, and, consequently, parity prices for farm products, would also be lowered.

D. Parity prices modified for price stabilization costs: For some time Government support or stabilization programs have maintained prices of some products higher than would have been realized otherwise. This has been reflected favorably in parity prices for those commodities, and suggestions have been made that the influence of Government programs should be eliminated from parity calculations. Aside from the problem of estimating or measuring such influences, it would seem that this concept would work in the opposite direction from the declared purpose of the Congress.

E. Finally, there are a series of suggestions that some kind of a parity income measure might be substituted for the current parity-price formula: Generally, there have been two basic approaches to the problem of determining parity income. One involves the maintenance of historical income ratios which would allow farmers' incomes and standards of living to grow at the same rate as others. A second idea calls for equal incomes or levels of living as between farmers and others—as is in fact provided in the parity-income definition included in the Agricultural Act of 1948.

While parity income definitions have now existed alongside parity price definitions for over 20 years, Congress has not indicated nor directed that the parity income concept be substituted for parity prices as an actual operating standard. In addition to the problem of deciding what income level is desirable, there would also be the problem of providing a formula for breaking down the desired parity net income as between farm and nonfarm sources, for allowing for the necessary farm-operating costs in order to translate the desired net income from farming into a cash sales or gross farm-income figure, and for deriving a set of commodity prices or area returns compatible with the income standard.

After considering these several suggestions, the recommendations regarding parity which the Secretary of Agriculture advanced in the report were:

1. The Department concludes that the use of the current general commodity purchasing power concept should be continued; and

2. The modernized parity formula now contained in the Agricultural Adjustment Act of 1938, as amended, be continued except that the base period January 1910 to December 1914, inclusive, should be changed to January 1947 to December 1956, inclusive.

This would simply result in parity prices for all commodities at the present time at about 98 percent of the level as now published.

In conclusion, what I have tried to do is to call attention to the fact that the current method for calculating parity prices is derived from the fairly simple combination of three rather well accepted statistical measures—the index of prices received by farmers, the index of prices paid by farmers, and actual average prices of farm commodities over the most recent 10-year period.

The parity prices and the comparison which flow from this set of calculations are useful in calling attention to and measuring the changes in farm prices and the purchasing power of farm commodities which occur. But such comparisons do not in themselves necessarily indicate what can or should be done.

Meanwhile, there are a constant stream of suggestions as to how parity price calculations could be revised, or how substitute measures could be calculated. In general, aside from the proposal for shifting the base period forward, these suggestions call for a more complicated set of calculations than are currently being used.

Personally, I doubt whether any of these more complicated formulas will yield a more useful set of comparisons or guidelines. Statistical measures can help analyze problems or situations, but they can rarely be used as automatic guides for final decisions. Further, in the process of arriving at an informed judgment we are always free to look at as many different statistical indicators as may be appropriate; they do not have to all be rolled into any one single overall index or calculation.

Thank you, Mr. Chairman.

Senator SPARKMAN. Thank you, Mr. Wells.

Now we will hear from Prof. Fox, substituting for Prof. Shepherd.

STATEMENT OF KARL A. FOX, DEPARTMENT OF ECONOMICS AND SOCIOLOGY, IOWA STATE COLLEGE

Mr. Fox. Mr. Chairman and members of the committee, Dr. Shepherd's paper in the compendium is on Alternative Parity Formulas for Agriculture,and when I say "my," I am speaking for Dr. Shepherd.

My presentation begins with an examination of the present parity formula, that is, the parity price formula, to determine how accurate a standard it provides for measuring the economic status of farmers.

This examination leads to the conclusion that the parity price formula does not provide a very accurate measure of farmers' economic status, for the following reasons:

1. The original index base period, 1909–14, is out of date. A more recent base would seem to be more appropriate, and Mr. Wells has so indicated.

2. The same parity index—index of prices paid by farmers—is used for all the different farm products produced in the United States. Greater accuracy would result if separate indexes could be developed for each major farm product.

3. The parity price formula includes the prices received by farmers, but it does not include the quantities produced. It, therefore, does not accurately reflect gross farm income.

4. The parity index includes the prices paid by farmers but it does not include the quantities purchased. It, therefore, does not accurately reflect farm costs. This prevents accurate computation of parity net income—gross income minus costs.

5. The parity price formula measures the present purchasing power of farm products compared with their purchasing power in an earlier base period, when what farmers are really interested in is parity of income per farmer with per capita income in other occupations now.

These points suggest that a more accurate measure of farmers' economic status would be provided by a formula which measured parity income rather than parity prices.

The rest of my presentation deals with the conceptual, statistical, and accounting problems involved in devising a parity income formula and computing the data to put into it, and suggests how these problems might be attacked.

For this purpose, parity farm income can be defined as that income which yields returns to resources employed in agriculture equivalent to the returns received by comparable resources engaged in nonagricultural production.

The farm cost and returns tables compiled under Wylie Goodsell's direction in the Agricultural Research Service of the United States Department of Agriculture are a good source of basic detailed data for commercial farms.

The net returns to farm operators can be computed as a residual by deducting the costs from the gross incomes. The net returns per farm operator can then be compared with the earnings of a roughly comparable nonfarm group, for example, production workers in manufacturing.

It is difficult to measure the value of the intangibles associated with the different employments and different ways of living. Hence it is difficult to measure parity farm income directly for the current year. The income status of farmers can, however, be measured in relation to manufacturing workers' income by determining the ratio between the two which existed during an earlier representative period and multiplying the current nonfarm income per worker by this ratio.

In this respect the parity income formula is similar to the present parity price formula. Each provides a standard to measure only how much the relation between farm and nonfarm incomes—or prices received and prices paid—has changed from the relation that existed during the base period.

This is all for now. I hope that I can contribute some more ideas, in the general discussion.

Senator SPARKMAN. Thank you, Mr. Fox. We appreciate all the papers. They are most interesting and certainly thought provoking.

Dr. Talle, do you have any questions?

Representative TALLE. Mr. Chairman, may I be permitted to refer to yesterday's presentations?

Senator SPARKMAN. Yes, sir; indeed.

Representative TALLE. The last witness on yesterday was Mr. Harris, president of the Chicago Mercantile Exchange. You will remember that in response to Congressman Curtis' question he said

he thought there was great hope for improvement in connection with trading in futures.

I am sorry I did not have this letter I hold in my hand at the time because it bears directly on this matter. It points out, it seems to me, how varied agriculture is and how highly specialized some crops are. (See p. 362.)

Are you familiar with Professor Fitch, who used to be connected with the extension department of Iowa State College, Mr. Kaldor?

Mr. KALDOR. Yes, sir.

Representative TALLE. Do you remember his great interest in onions?

Mr. KALDOR. Vegetables generally.

Representative TALLE. Yes; vegetables generally, but he did a lot of work on onions for the reason that that is what might be called a nomadic industry.

Many years ago it was important in Ohio. Then, after some years, pests and diseases caused the industry to move to new soil in Indiana.

After some time there the industry moved to Iowa. There are only about four counties in Iowa that are important in commercial vegetable growing. They are Worth County, Cerro Gordo County, Mitchell County, and Scott County, with the emphasis on onion growing in Worth and Cerro Gordo Counties.

There are 6 or 7 diseases and pests that afflict the onion. The nastiest one is a little black bug called thrips. Along the border of Iowa in southern Minnesota is a rather large area which used to be a swamp and was ditched and drained. Dutch farmers came in. They are very successful vegetable growers and they raised a lot of onions.

Here is a letter from the Southern Minnesota Vegetable Growers Association. I will quote parts of the letter but I do not feel free to submit the entire letter for the record for the reason that there has not been time to get the writer's permission:

> There are now 70 onion growers in the southern Minnesota onion-growing area. These men are located in Faribault, Freeborn, and Steele County and Mower County. Of these 70 farmers and their wives, 67 families are wholeheartedly opposed to onions futures trading on the Chicago Mercantile Exchange. There were more onion farmers in this area, but because of the futures trading in onions a number of the farmers went broke.

Now, I pass to another paragraph:

> It is a costly business per acre. Producing a crop costing $500 per acre is quite an undertaking and also somewhat hazardous, weather considered and all. You can readily understand our concern when manipulators from Chicago, New York, and Boston step in with huge sums of money year after year on the Chicago Mercantile Exchange and sell the market down to less than the cost of production. The reason they can sell it down is that there is only a limited amount of onions produced in the United States and it is a highly perishable crop. Only about 20 percent of the onions purchased can be delivered to Chicago to apply on this contract, but they can so depress and so control the prices on this 20 percent that everyone in the business is forced to watch this price and then the entire onion marketing procedure is disrupted.

It is only fair to say that the writer of the letter points out:

> We are not opposed to grain, cotton, cocoa, or other futures trading, but we are opposed to it in this specialized industry.

I thought, Mr. Chairman, I should point that out. It has a direct bearing on what was said yesterday.

Senator SPARKMAN. We are glad to have it and such points as you desire may be placed in the record.

Representative TALLE. I think, Mr. Chairman, it would be best for me to get permission from the writer to submit his letter for the record and invite the Chicago Mercantile Exchange to comment on it.

Senator SPARKMAN. I think that will be a very good thing to do. (See p. 362.)

Representative TALLE. It is proper that I get the permission of the writer.

Does the panel have any comment to make on it?

Mr. FOX. I would like to make a brief comment. In my own paper in the compendium on page 412 I listed a number of "elasticities of demands" as we call them, for farm products.

I happen to have the prewar figure for onions in there.

Mr. TALLE. I remember that.

Mr. FOX. This figure indicates that even before the war—and the possibilities are that the demand for onions could be even more inelastic now—that a 1 percent increase in the production of onions due to weather or increased acreage or any other cause would cause a decrease of 3½ to 4 percent in the price of onions.

This is a very tricky sort of commodity to deal with, you see, purely from what you might call the natural economic characteristics of the demand for it.

Now, whether it takes manipulation or collusion to make it as bad as these folks say it is, I do not know, but a very inelastic demand for the commodity means that, with the best intentions in the world and, let us say, efficient performance of whatever functions the futures market is supposed to perform, onions are a dangerous commodity to grow unless a man has a good deal of capital or unless maybe he and his fellow onion growers are organized to control the supply actually getting into market channels.

Representative TALLE. I believe it is true that years ago Bermuda had pretty much of a monopoly on what is called Bermuda onions, but I think practically all the Bermuda onions grown today come out of Texas. I do not think the Bermuda market is important any more, is it, Mr. Wells?

Mr. WELLS. I think you are correct.

Representative TALLE. Much can be said about the great variation in agriculture. That fact makes it so complex. It is pretty hard, is it not, Mr. Kaldor, to find two farms that are exactly alike?

Mr. KALDOR. I agree with you thoroughly, Mr. Talle. One of the interesting facts, I think, about American agriculture, is the wide variety of organizational structures that we have and the wide range of efficiencies that we find in American agriculture. Even though American agriculture compares very favorably with agriculture in other parts of the world, we have a wide variation within our own agriculture economy in terms of the efficiency of different operating units.

This also is true within each of the various commodity segments as well.

Representative TALLE. Then there is variation from community to community, from region to region, the nature of the soil, the period of growth, and also wide differences as to methods and the abilities of the farmers themselves.

Mr. WELLS. May I comment on this, Mr. Talle?

I think the things you are talking about, the complexity of agriculture, the differences between adjoining farmers, the differences between areas, and the differences between broad regions, have a direct bearing on the problem we are talking about this morning. These complexities are so great that to calculate a parity or some similar single statistical measure which precisely fits each particular commodity or each particular region or each particular area or each particular farm seems to me impossible. This is really the basic premise of my argument here this morning, that many of the suggestions for revising parity are efforts to go part way toward describing this complexity. I have strong questions about these efforts to go part way toward describing this complexity being written in a legally defined parity standard.

Representative TALLE. Thank you, Mr. Wells. Mr. Shepherd's paper, as read by Mr. Fox, deals with this when he advocates a separate index for each product.

Mr. FOX. Might I comment on that very briefly?

Dr. Shepherd's paper is still in the context of what Mr. Wells calls a system of measurement.

Representative CURTIS. Will you please restate that?

Mr. FOX. In the context of a system of measurement rather than a set of price supports or a symbol for the whole existing price support program.

Now, what Dr. Shepherd proposes to do here is to set up a number of different measurements of changes in the economic status of different types of farms—that is where he starts from—and he would interpret these into different parities, different prices paid—indexes if you like—different changes in the cost of producing different commodities.

Now, I think I would agree with Mr. Wells that there are some dangers if you lay out about 100 different parities for interested groups to take hold of, and if there are 2 or 3 different ways of calculating each one of these hundred parity indexes.

There is, of course, the temptation to grab the index that gives the highest price. That gets you over into the program area, what are you going to do as a matter of price policy regardless of what measuring stick you have.

I might say that any parity formula is all right from an administrative standpoint provided you do not have to use it as an administrative guide—that is, if you can use anything from 50 to 100 percent of it.

Representative CURTIS. That is a very pertinent point, Mr. Fox, because members of this subcommittee are interested in finding out what can be done and, of course, the Members of Congress must pass laws that apply nationally.

We are happy you are here this morning, gentlemen, to help us with that task.

Senator SPARKMAN. Mr. Curtis.

Representative CURTIS. I might just pick up by referring to the point that Dr. Talle was pursuing.

On page 88 of the compendium Mr. Koffsky has put in table 3 on the average net farm income for high production farms by type and location, 1947–49 average and 1953–56 individual years; and I call attention to cotton farms, which are the fourth item there.

If we take a look at those variations I think we get emphasis on the difficulty we get into even if we just take a single crop like cotton. This has bearing on the point that Mr. Fox made, which I thought was well taken, that in his paper he is trying also to break it down by types of farms.

But taking a look at cotton, I wonder if we could even do that. Would you care to comment in reference to that one little set of statistics?

Mr. Fox. I don't think Mr. Wells and I are particularly far apart on the question of the complexity of the parity formula. I think what Dr. Shepherd would do with his parity income formula would be to take whatever income situation existed in the different cotton producing areas in a base period. He used 1937–41 as a base period for most of his calculations and this is a continuing study; he is not completely satisfied with it yet by any means.

Now, if the labor, both hired labor and the operator's labor and management, in this delta farming area were getting a dollar an hour during the base period, 1937–41, and if operators' labor, say, in some other cotton producing area with some other system of organization were getting 50 cents an hour during the base period—but they would be getting about the same price for cotton, you see, except for locational factors and grade and staple factors—then if the incomes of nonfarm workers nationally doubled the price of an hour of labor in each of these two cotton producing areas would be doubled under Dr. Shepherd's approach.

Now, this would not necessarily mean that the prices of cotton that would yield these "parity incomes" in the two areas would be widely different. Obviously, the delta cotton farmers included in this particular table of Mr. Koffsky's somehow got $20,000 a year net farm income out of the same price of cotton that returned to some other cotton producers only $1,000.

Mr. Wells. Now, I want to make it clear that I am as much interested in trying, as Mr. Shepherd, to find ways and means of describing what happens in each main type of farming area.

I have expressed reservations of trying to put those kinds of measures into a legally defined parity standard which I think must be a general standard broadly applicable and used with considerable flexibility and judgment.

I want to point out that I am interested not only in the differences between farms and farming areas, but both as Administrator of the Agricultural Marketing Service and an economist, I am interested in how and where farmers are going to sell their products and here also we have complexity and diversity. Farmers need to know not only what is happening on their farms but also what is happening to the demand for their product.

Again taking cotton we have discovered recently that there are some markets where, because of technical development, it is very difficult to sell cotton.

In other words, a groceryman does not use cotton bags for groceries because paper is cheaper. For many kinds of clothing cotton is the preferred textile and we can get very good prices for it, but we have learned over the last 3 or 4 years that using a fixed percentage for parity as a means of pricing our cotton in the export market just

does not price United States cotton competitively with foreign cotton and we have had to devise a different price standard.

So the market influence also has to be looked at.

Mr. KALDOR. I would like to make one or two comments if I may. I think we have two functions that our parity pricing indexes have performed in the past. One is, as Mr. Wells has suggested, measuring the status of the economic position of farmers or the terms of trade and, in the case of individual parity price calculations, the purchasing power of particular commodities.

This is a statistical measuring function that these indexes and calculations have performed.

In addition to this they have become goals or objectives to be achieved in connection with our particular farm programs.

I think these are two different kinds of functions that these computations or calculations do perform or have performed in the past.

I would like to say that in connection with the first function, the choice of a particular parity calculation has to be decided in terms of the particular purpose it is to be used for.

Certainly, the general parity ratio calculation we now have is a good method of trying to get a rough measure of the general terms of trade or exchange value of agriculture products and it is very useful for this purpose.

Another type of calculation I think would be very useful but much more difficult to put together would be one which would estimate what the costs of using our resources in agriculture were at a given time when these resources were earning essentially what they could earn in comparable employments in the nonfarm economy.

Then we could compare this figure with the total income these resources receive in agriculture production and this would give us a rough measure of the extent of economic disequilibrium in the industry. This would be useful for measurement purposes.

Whether it would be an appropriate calculation or computation for policymaking purposes would depend on the objectives of farm policy.

Representative CURTIS. Thank you.

Now I want to pick up one little point that Dr. Talle was raising in regard to futures markets in onions. I have been very much interested in our committee's pursuing, if we can, a study of whether futures markets can be of benefit; whether or not futures markets, the expansion of them, can be beneficial; and whether Government policy might be interfering with normal development. Indeed, I would raise the question: Are futures markets good? But in regard to onions, one thing that impressed me right off the bat is the fact that they are a perishable product.

I was trying to bring out the fact earlier that I thought storage had a great deal to do with whether or not a futures market was advantageous. This is purely theoretical, but a perishable item can be defined differently as lack of storability.

The other feature about onions I would like to mention is this. Is not that a short season crop? How long does it take to grow onions? I just do not know. I think that, too, the length of the season of the crop involved would have a direct bearing on whether or not a futures market for it would work. But the basic point is the one I think Mr. Wells proceeded to bring out—the words used were "manipulate the price." I wonder to what extent manipulators can manipu-

late? Are they really manipulating or are they performing an economic function reflecting what is going on through the law of supply and demand?

I recognize that people can manipulate all right but I know also that they can only manipulate within economic laws.

The suggestion was made, Dr. Talle—at least I inferred it and I would make it—than instead of casting aspersions on another group of human beings, we ought first to see whether it is not economic factors are being reflected rather than attempts to change and divert whatever economic forces are in existence.

Representative TALLE. If you will yield to me there, perhaps I might read another paragraph. It says:

> The big traders finance large farming operations. They then sell 100 carloads, for example, for January delivery. They have their farm operators grade and load 50 carloads and hold them in his community until all 50 cars are graded. Then in 1 day they will ship them all to Chicago and glut the market. The whole United States, from all shipping points, uses around 150 carloads of onions per day and these mostly are shipped by truck. So you can well understand what this one operator can do in destroying the market. We are not asking for any money from the Government, we are only asking for an opportunity to farm onions, the farm crop which we are trained for and that we have the equipment and warehouse for. We want a chance to solve our own problems in the production and distribution of onions.

Mr. WELLS. I hesitate to comment on this because we have in the Department a regulatory agency, the Commodity Exchange Administration, in whose field this problem falls. Further, there are several bills before the Congress to abolish futures trading in onions, and I know that the Commodity Exchange Administration has taken a look at this situation. I also assume that the Department of Agriculture has testified before the House Agriculture Committee on the particular question.

However, I would say this:

We have several different ways of making prices in the United States. In the case of wheat, in the case of cotton, and several others of our storable, widely traded major commodities, the futures market is generally looked upon as one of the major price-making forces. For some other commodities, futures trading is minor, the cash markets all important.

As you narrow the supply of a commodity and the number of people in the market, I do not think there is any question but what you increase the possibility of manipulation and the Congress has even thought in the case of cotton and wheat, you see, that these should fall under rules and regulations promulgated by the Commodity Exchange Administration, and be watched by them.

As far as the Agricultural Marketing Service is concerned, we have probably received more complaints in the last few years about futures trading in onions and potatoes than any other two commodities—that is, more requests for research.

Because of the kind of complaints which have been made in the onion market, the Commodity Exchange Administration has been taking a look at that rather than our research people. In the case of potatoes, we are doing some research work in trying to determine the value of futures trading in the market. Potatoes, of course, have some similarities to the onion but they are traded in larger quantities, especially the late potato crop.

Representative CURTIS. I would hope that our committee would get into the economics of this whole field because just offhand it strikes me that futures trading properly should tend to produce a more stable price, tending to iron out the peaks and valleys that normally exist for most farm products. Any market can be, of course, manipulated and requires proper regulation, but I think that if this is not carefully analyzed from the economic standpoint, we might actually be destroying something that could be very worthwhile if done under proper regulations.

So I would hope, Mr. Chairman, that maybe some time—we have so little to do, you know—we could take a good economic look at the futures market.

Representative TALLE. Will you yield to me, there, Mr. Curtis?

Representative CURTIS. Yes.

Representative TALLE. Only for the reason that you mentioned storage. Here is a sentence that applies to that.

> Most every onion farmer in the State of Minnesota owns an onion warehouse. A warehouse equipped properly to store onions costs approximately $25,000, which is a considerable investment.

These people are all located along the southern border of Minnesota and what applies there would likely apply to the 4 counties in Iowa, 3 of which are in northern Iowa.

Representative CURTIS. Storage and technological developments in storage go hand in hand with the futures market and I might say, with the overall marketing of farm products. I think we can learn a great deal by just a study of storage, just to see what is being done in that area. Now, if I may, I want to raise one general point. I think that probably there is really agreement on this, but I think probably it needs to be stated.

In Dr. Kaldor's paper, he sets out the various goals behind a farm program. The thing that has impressed me in all the papers, really, and in this paper too, is the emphasis on the farmer, when it seems to me a basic statement of our farm policy should be to get cheap, adequate, quality food and fiber to our society.

And then the secondary thing, of course: in order to do that over any long-run period, we have to have a healthy agricultural economy. But by putting the emphasis on getting cheap, adequate, quality food and fiber for our society, we avoid a mistake that I think is being made in a lot of agricultural policy where the emphasis is on the healthy agricultural economy. With the emphasis there, what happens frequently is that the agricultural sector loses a certain operation. The operation goes into another sector of the economy because farmers have not kept their eye on what their primary function is.

Now, what has happened in broilers is, to me, an intriguing thing. Through vertical integration possibly but nonetheless, in certain areas, the whole operation went off the farm.

As I have said before other panels, they raise more broilers in the city of St. Louis in abandoned warehouses than they do in any rural county in Missouri. I suspect that there our eyes were taken off this basic thing, to get cheap, adequate, quality food and fiber to our country. When the agricultural segment did that the production moved out of that sector, and I think we are seeing the same thing in the competition between cotton and synthetics.

There is a question of whether that is not going to happen to pigs in a very similar way to what has happened in broilers.

I think we can take that and apply it to many, many of the operations that we have normally regarded as agriculture but which technological developments have made it possible to transfer out of the agricultural sector.

Having said all that, I would appreciate any comments from the panel.

Mr. KALDOR. In my main paper I tried to set out what an efficient agriculture might look like if we achieved one, and I tried to specify three main conditions.

One would be that each product would be produced at a minimum of cost. This would mean using the best technology and the best combination of resources.

Second, that we would produce an appropriate pattern of output in agriculture so that we would not have too much of one kind of farm product and not enough of another kind of farm product.

Third, that our overall agriculture production would not be either too large or too small in terms of a level of prices that would permit an efficient producer to earn comparable return for his resources.

Implicit in this concept of an efficient agriculture is the idea you have in mind. It was not made explicit in our presentation here.

Representative CURTIS. I agree with you. That is why I tried to emphasize. In bringing it out, I did not want to create the impression that the panels and the papers were not aware of it, but I was trying to bring it out for emphasis. It seemed to me that, by failing to concentrate on that at times and concentrating solely on a healthy agriculture economy, we, in the long run, have been damaging the agricultural economy.

Mr. KALDOR. If I may, I would like to make one additional comment. Rapid advance in technology, both in agriculture and the general economy, has been one of the major forces behind the long-run rise in the level of living in America. In agriculture, advancing technology has made a major contribution to general economic growth, but it also has produced some problems. It produces adjustment problems. Some of our present difficulty in agriculture can be tied right back to rapid technological progress.

Representative CURTIS. Growth always does that.

Mr. KALDOR. That is right. There are always some problems in growth.

Mr. FOX. You mentioned "abandoned" warehouses in St. Louis?

Representative CURTIS. They obviously were not abandoned, but I meant to use the word in the sense they were very cheap, no competition for them, because no one was using them.

Mr. FOX. I do not know anything specifically about that situation in St. Louis. But I was wondering—could they build new warehouses or maybe better designed facilities, you see, covering the full amortization and interest cost of new "broiler factories" in the city of St. Louis, paying the going wage rate for skilled labor, and so on, and still come out—or is it partly that they have been able to get some warehouse space below its long-run cost?

Representative CURTIS. I think the thing that was attractive was that the warehouses were there, but the basic lesson still remains

Production moved from the agricultural sector of our economy to what we term the industrial sector.

Now, this is what has happened in pigs—and whether this develops I do not know, but here is a little model that is going on. Some of these supermarkets have found that their housewives do not want fat pork, and apparently they have been unable to persuade the producers of pork to give them a lean pig.

Some of the smaller packers who are looking around for other sources of supply, in conjunction with some grain dealers, are getting this kind of pig. They have taken land in abandoned coal-mining areas, which is not agricultural land at all, and have taken some people who are not farmers but who are former coal miners, and they are going into raising the kind of pig that the supermarkets say the housewives want. The whole operation is being financed outside of agriculture through packers and feed dealers.

Whether or not that thing will go the way broilers went, I do not know, but that grist is in the mill right now.

That is an example, though, of how, if your concentration is on a healthy farm economy instead of on getting cheap, adequate, quality food and fiber to the people, the farm sector might lose out. It can lose a big market in its concentration on what farmers regard as their own internal problem.

That is the only reason I raise it. I do not know; maybe they will go out of the chicken-producing business in the city of St. Louis. Taking a look at those operations—I do not know how basically economic they are—I did want to bring that point out. The reason I thought this had pertinency to the topic was that, when we discuss parity, of course, we are trying to figure out price, and in trying to figure out price we are talking about dollars. Then we come back to what we are talking about, which is the standard of living of the farmers. That brings up the other point I wanted to make.

In some of the other papers, the question has been raised: How do we measure the farmer's income? I might again emphasize commercial agriculture. We have deliberately separated commercial agriculture out, but not because we are unaware of the problem of the farms that are in agriculture but apparently not making a go of it. We are trying to see what is necessary to make a healthy, commercial agriculture.

Now, with that in mind, there has been some question raised in my mind as to how you measure the farmer's income. We have always known it is not just cash. A lot of it comes in other ways.

Another thing that has been raised by some of the panels is whether the farmer does not get a lot of income through capital gains, as referred to in our tax structure.

That brings to my attention the remark made on page 520, Mr. Wells' paper, where he said:

> It is noteworthy that our indexes of levels of living of farm-operator families indicate a persistent improvement in family levels of living from 1951 into 1956 despite declines in farm income during that period.

It strikes me that, after all, what we are really talking about is improvement in family levels of living and whether or not we actually can measure it in the traditional way that we talk of, farm prices. I think this is a very basic thing. This is not to say that we are ignoring the families that are really outside of commercial farming—they have

their problems—but we are not going to solve their problems in solving the problems of commercial agriculture.

Mr. KALDOR. I do not think there is much question, on the basis of the evidence that we have, part of which has been referred to by Mr. Wells, that over the last 40 years the level of living on America's commercial farms has substantially improved.

I think one of the crucial questions to be raised is whether the growth in income opportunities in agriculture has kept pace with the growth in income opportunities in the rest of the economy, or whether agriculture has fallen behind.

There is no doubt but what agriculture has participated in the general economic growth that we have had.

But has it participated on roughly equal terms with other groups?

Representative CURTIS. These figures, unfortunately, start from 1934, which people say is unfair to agriculture, but the per capita income of an agriculturalist in 1934 compared—I think the last year I saw the figures was 1956—the per capita percentage increase from 1934 to 1956 was greater in the agricultural sector than it is in the non-agricultural sector. That is the figure just using the cash income, modified by what we call the rent, and so forth, that the farmer gets; it has no regard to this other possibility that maybe the farm owner integrated, and, unfortunately most of our commercial farmers, the great bulk of them, a great deal of income comes in what we regard as the capital-gains sector.

Are there any further comments?

Mr. KALDOR. I think we would all agree that there are some very difficult problems in measuring income in its full context. I would argue that the only real basis we have for determining whether there is comparability of income is to observe what people do when they are free to choose among known alternative income earning opportunities. If they prefer one to another, we can be reasonably certain the preferred one was larger in terms of their values.

To get statistical measures of all the elements that are important to people in making this decision of where they want to live and work, is just beyond the realm of practicality as things now stand.

Representative CURTIS. One of the most important things to measure is that decision that fortunately many Americans are in a position to make, whether to spend a consumer dollar or investment dollar. That is a matter of choice.

It seems to me that a great deal of the decision in commercial agriculture, fortunately—for whatever the reasons—has been to make it an investment dollar, and the financing of this tremendous growth in commercial agriculture has come from within agriculture itself because that choice has been made.

Well, you do not see the tangible evidence of the income that has permitted that choice to be made because it certainly does not show up in automobiles and so forth, but it will show up in increased land-holdings and it certainly is in this picture.

Thank you, Mr. Chairman.

Senator SPARKMAN. I have enjoyed the discussion very much. However, when I get to thinking about this capital-gains question, I think that it works both ways. I know through the years of my farm experience I have seen it work both ways. I have seen those land

values shrink, I have seen them increase, and I have seen the change take place quickly.

I remember when a good team of mules would probably bring five or six hundred dollars. Today, I do not know how the market is but I know a year or so ago, when I tried to sell a team, all they could offer me was so much per pound.

I did not sell them. I decided to keep them.

I do want to comment on this statement that Congressman Curtis made to Mr. Wells in regard to his paper, the one Mr. Curtis quoted a few minutes ago. I think it does bring out a very pertinent thought we ought to keep in mind because sometimes I think that we lose sight of some of the real values that are to be had in farm living, and I think that is particularly true when we consider the whole logic that argues for some kind of pressure to get these people off the farm. I think there are values there that sometimes we fail to measure. There is a great deal to be had in farm living that cannot be measured just by the dollar income.

Representative TALLE. Mr. Chairman, will you permit me to offer a name for that?

Senator SPARKMAN. Yes, sir.

Representative TALLE. You see, I was born and reared on a farm and I have done all kinds of work that is done on a diversified farm with emphasis on dairying. I call it "psychic income."

Senator SPARKMAN. That is part of it. That is not all of it. A lot of it is not just psychic, it is real.

Mr. WELLS. May I comment on this, Mr. Chairman?

Senator SPARKMAN. Yes, sir.

Mr. WELLS. When we start talking about levels of living, we are talking about one of these very complex things that is hard to compress in a single measure. We do try carefully, on the basis of such material as we can get from the census, to calculate an index of the level of living of farm operator families because the census very largely gives us the availability of running water, telephone, electricity, automobiles, and so forth, by farm operator families. And it is quite true that our level of living indexes show a steady rise in farm level of living.

I come from a ranch in the mountains of New Mexico. I was out there only 2 weeks ago and there is no question in my mind that it has happened in that particular area. I think it has happened in other places. It happens because of a number of things. Partly because we have an educational system in the United States where the farm children get much the same type of formal education as nonfarm children and where, through radio, through movies, more recently through television, they get precisely the same type of informal education, so I think farm people are demanding a higher standard of living. I think it has worked itself out over the last few years where many young farm families, GI's back from Korea, married, if they could not get the kind of living they wanted from farming, just quit farming and went to town.

There has been a choice on the part of a great many farm people that they want a higher standard of living that they could not get from their inadequate farm resources. So part of this rise in the standard of living in recent years is due to the decline in farm population. Those people with the lower standard of living have been leaving.

Partly it is because quite a few farmers were also doing that during the war years. That was because during those years it was difficult to improve your house and farm equipment.

When we begin to talk about capital gains to agriculture, we should also examine the entire capital gains situation in the American system.

I will be very happy to have you people think something about it because I object, myself, to thinking about the American farmer who controls one of the largest blocks of capital, who has one of the most difficult management jobs and must also usually be a skilled laborer as just another laborer. However, capital gains have been characteristic of our farm economy since 1940 and have contributed in some part to a rising level of farm living.

Another force on which improvement in the standard of living on the part of farm people depends is community activity. For example, one of the major rises in standard of living of American farm people in the last 20 years has been the fact that practically every farmer in the United States now has available the choice as to whether he will or will not have electricity and, almost without exception, they have chosen to have electricity. But this was not a matter of income. This was a matter of having the facilities available through community effort.

The same thing is true of farm roads. I still like to drive on a paved road even in the farm area, but many farmers do not have this choice as yet because our highway programs concentrate chiefly on the heavy traffic arteries—we improve them first.

There are many things that enter into this improved level of living which we have talked about. Some of it is traceable to capital gains. Some to savings built up during the war. Some of it traces to statistical averages alone; that is, as people with lower standards of living leave the farm this raises the average level of living of those left. A great deal of it is due to community action over the last 15 or 25 years.

Mr. Fox. I wonder if I might underline or comment a little bit on this capital gains thing in agriculture. On page 864, the last page of your compendium, on "the balance sheet of agriculture," land values increased from about $34 billion in 1940 to almost $110 billion in 1957. Now, I do not know that many of the folks who owned farms in 1940 expected that this was going to happen. What I am saying is that this increase in land values just happened—it did not in most cases come out of savings or direct personal investment. Prices went up and the value of land went up because of this.

Then another thing that Mr. Wells mentioned was that farm incomes were good for most of 10 years, from 1942 through 1952 or 1953, and a good deal of the machinery, building, improvements and whatnot came about then.

Representative TALLE. Mr. Chairman, at this point perhaps we could put down about three or more reasons why land values have gong up in spite of the fact that some people complain about prices.

Is one reason this, that as the need arises for larger farms, and a farmer seeks to acquire some of the adjoining acreage, the seller is in a position to ask a better price because of that fact? Is that one reason?

Mr. Fox. I think I would concede that in a good many cases.

Suppose a man already has gone all out on farm machinery and he actually could farm another 80 acres without buying any new machinery. Sure, this 80 acres may be worth more to him per acre than he could afford to pay for a whole farm. The situation is something like that of the abandoned warehouse Mr. Curtis mentioned—the broiler operation might not pay out where you had to cover full amortization, and the farmer might not come out if he had to pay this price for an entire 320-acre farm.

Representative TALLE. Mr. Brandow, our economist, has pointed out to me that, on page 184 in the printed compendium, there is a pertinent chart that bears on this point.

Mr. KALDOR. Along this same line I wanted to mention that in Iowa during the era of horse technology, the average number of crop-acres per farm was 125. In 1954 it was only 145 with four-row equipment. There has been a terrific push to acquire larger areas of cropland to more fully utilize modern technology and equipment. These figures suggest that a large part of the demand for land comes from people who want to enlarge their units.

Representative TALLE. Because of changes in technology larger farms are required.

Is a second reason this: that some people may invest in land as a hedge against inflation because in a period of inflation physical property or claims on physical property like common stocks are the safest investment?

Mr. FOX. One thing comes to my mind. This second motive has been said to apply to quite a lot of nonfarm people who are investing in farmland. I think there may be some cases of that but Professor Timmons, at Iowa State, recently made quite an extensive survey and I think only about 3 percent of the farm land in Iowa was owned by people living outside of Iowa. This doen not mean that there may not be some of this sort of thing going on, but with the existing price support stocks of farm products, this would have to be a hedge against one whale of an inflation to make it a good investment in comparison with stocks or urban real estate or other things.

Representative TALLE. That is a good point. Where you have a high percentage of owner-operated farms this inflationary aspect is is not likely to be important.

I remember in World War I, in my home county, there was practically no change of ownership, and therefore the inflation that occurred at the time did not have any disturbing effect as far as farms were concerned.

Can you think of any other reasons, Mr. Wells, for the increase in the price of farmland?

Mr. WELLS. I do not know whether it is your reason. I have a third reason, yes.

Representative TALLE. I will be glad to hear it.

Mr. WELLS. Personally, I think farmers were very cautious and very conservative during World War II with the result that land values went up very little during the war period. Some of the increases in recent years have been really a catching up with what ordinarily would have happened earlier had it not been for this rather cautious attitude from roughly 1940 to 1950.

Representative TALLE. Can you think of any further reasons?

Mr. WELLS. I have one other one. Dr. Fox may disagree with me. We came out of World War II with a race of statisticians who like projections. In most projections of the future population of the United States and future demand for food, they see a better outlook for agriculture 15 to 20 years ahead than in the next 5 years, and I think there are some people who are investing in land because they agree it is not a bad place to have money immediately and over a long period it is probably as good as any other type of property in this country.

Mr. FOX. I would not disagree with Mr. Wells on this long-run outlook. The current returns on farm ownership are about comparable to those on common stocks.

Representative TALLE. Thank you, gentlemen.

Mr. WELLS. May I make one comment on capital gains, since it has been injected here?

Senator SPARKMAN. Yes.

Mr. WELLS. I think in discussing capital gains we ought to recognize that this is not an entirely one-way street for either farmers or businessmen. Some of my corporation friends refer to their "phantom profits," because when it comes time to replacing their plants they have to pay for replacement at the new and higher rates which more than eat up their capital gains and seemingly attractive profits.

I would point out to you in the case of agriculture, first, many of the farmers who have land that has gone up in value have not sold that land, therefore they do not have the money in hand.

I would point out to you, second, that the birthrate in agriculture is still in excess of the farm operator replacement rate and with the revolution now going on in the commercial farming this may actually become more exaggerated. So that there is still a constant flow out of agriculture of young people into nonagricultural pursuits. As farmers die and their estates are divided up this means an increased financing problem for the people who stay on the farms because the payments which must be made to the nonfarm heirs—this is a constant pattern in American agriculture, you see—have very considerably increased. So farmers have exactly the same problems in the capital-gains field as a businessman along with this inheritance problem which constantly calls for the shifting and refinancing of farms from one generation to another.

Senator SPARKMAN. When the tractor wears out and he has to replace it, he feels it even though he does not get the capital gains out of the land, which he continues to hold.

Mr. WELLS. Yes, sir.

Senator SPARKMAN. There is something out of his pocket to replace that tractor.

Mr. FOX. I wonder if this means that there should be more family corporations in agriculture owning farms? Would that eliminate the inheritance-tax problems and so on?

Mr. KALDOR. There are some families in Iowa who are considering the possibility of a family corporation as a device for keeping the land in the family and still permit one of the sons to farm without burdening himself with a heavy debt.

From time to time people come to the college and ask questions about this kind of an arrangement.

Senator SPARKMAN. In other words, that is a suggestion that corporation farming may actually spread. I think people usually think of corporation farming as a big factory farming proposition, but you are suggesting that it may become a real part of the family farming.

Mr. KALDOR. It may become a device for keeping the farm in the family without overburdening one of the sons with debt.

Senator SPARKMAN. A closed corporation.

Mr. WELLS. This certainly is being discussed in a number of places, with the machinery and land which it takes to run an efficient commerical farm.

Representative TALLE. That situation may be forced by Government taxing policy.

Mr. KALDOR. Of course, this is one of the obstacles that many people see in going to corporation farming because they feel that on the tax side the corporate arrangement is less satisfactory than a partnership or single proprietorship.

Senator SPARKMAN. Now that suggests a question to me about farm policy in general and the differences in opinion, perhaps, arising over a difference in valuation, different value systems. Sometimes it is easy to get facts and values mixed up.

I would like to ask this question. We have heard in practically every panel discussion we have had so far that the number of employment opportunities in agriculture is steadily declining, that this will continue, that we ought to encourage the movement of people out of agriculture.

Now, how much of this is in the area of fact and how much of it is in the area of value judgments?

Mr. FOX. Are you thinking of the emphasis on encouraging people to move out of agriculture?

Senator SPARKMAN. Yes, and let me say that in the course of these panel discussions we have had all different degrees of encouragement. Some of them seem to be almost a suggestion to move them out; others probably creating a climate that would make it favorable for them to move out and get off the farm, and so forth.

I think the whole question of the movement of farm population raises many complex questions.

Mr. FOX. If I could comment on this question of "moving people out of agriculture" or whether they move themselves, whether they move voluntarily, one of our extension men uses an illustration now and then about the way these decisions are actually made.

There was a certain farmer in Iowa who raised a lot of geese. A lady visiting from the city asked him how he told the male from the female geese.

He said, "We just put them all out in the field and let them figure it out for themselves."

Senator SPARKMAN. Let me ask you, Are you suggesting that is a pretty good formula for people moving off the farms?

Mr. FOX. Well, for letting them decide whether to move or not.

Senator SPARKMAN. I subscribe to it.

Mr. FOX. In other words, I think that the millions and millions of farm people who moved, particularly, say, from 1942 to 1953, were not driven out of agriculture, were not forced out. They looked around them and they were attracted out. In effect, industry gave them a better offer so they took it.

Now, the only thing that I would add there, the main thing, is to what extent do farm people, including young farm people, really see the array of career opportunities? To the extent that they are imperfectly informed, as apparently Mr. Wells was 35 or 40 years ago—it is hard to imagine Mr. Wells ever being underinformed, but he may have been at one time—if they do not know what the other alternatives are, then I think it is the job of our educational system, including perhaps our Agricultural Extension Services, to help them find out. Then if they decide it is worth $5,000 not to live in town, $5,000 a year, say, then they stay on the farm. But I do not know that anybody is trying to move them off.

Mr. KALDOR. We have to recognize that we have some difficult decisions to make. If we are going to have a rapidly growing economy, we need a lot of technological advance. If agriculture is to participate in this technological advance, along with other sectors of the economy, this will involve some difficult adjustment problems. If the future is anything like the past in this respect, additional technological progress will mean a further decline in the demand for labor in farming.

This will tend to put pressure on income opportunities in farming in relation to the rest of the economy.

If we are to adjust to this development, it will mean additional transfers of people out of agriculture.

If we do not want people leaving agriculture, we ought to question whether the rate of technological advance is too rapid. But this raises other difficult issues. Since technological advance contributes to the growth of the whole economy, we have to ask how much economic growth we want.

If we are to have a rapidly growing economy, adjustment is inevitable. In agriculture it means fewer and fewer people.

Representative TALLE. Mr. Chairman, the trouble is that with 2 wars in 1 generation and an additional 1 in Korea, the circumstances required the application of science and invention rapidly so that this technological advance has occurred at a terrifically rapid rate, and that makes the adjustment much more difficult to make.

Mr. KALDOR. As things now look, it looks like we will need to pour more resources into research and development. This certainly will have a bearing on the rate of technical advance in agriculture. So we may have an even more difficult adjustment problem in the future, at least from the technological side.

Mr. WELLS. Mr. Chairman, I want to make two observations on this. I agree with Mr. Fox. I personally believe in a society which is free and mobile—that is, where the educational and other advantages are such that young people can make a rational choice as to whether they prefer agriculture or something else. If we have that it is my opinion that farm population will continue to decline for a considerable number of years ahead.

Now, having said that, let me say that we sometimes talk so much about surpluses, so much about stocks, so much about falling prices, that we probably obscure the fact that the largest number of small businesses in the United States are in the farm field and that undoubtedly commercial agriculture now offers and will continue to offer many young farm people their best opportunities for economic advancement.

We talk so much about the other side that we forget this.

To answer Mr. Fox's question, why I left the farm, I grew up in a ranching community, 4 children—2 boys and 2 girls. The ranch at that time under those technological conditions would support one family. So obviously 1 boy and 1 girl had to leave the ranch.

Senator SPARKMAN. I want to say, Mr. Wells, that I subscribe completely to your statement. I think, yes, natural forces will bring about a decline in agricultural population.

Somehow or another I am shocked by suggestions that imply more or less forcing them off the farm. I think it is a matter of free choice to get the best opportunities they can.

Another thing, I think some of those who so blandly make these suggestions apparently overlook the fact that it is not an easy job to locate in off-farm employment—certainly this is true in the section that I come from—under circumstances that will give that farm family the advantages that they would enjoy even living under what you might call marginal or submarginal conditions in agriculture.

Mr. WELLS. Of course, this brings in one of the most neglected fields of farm policy, the question of what do you do to maximize opportunity for those people with currently inadequate resources who are going to stay on the farms.

Senator SPARKMAN. I think much of our thinking should be directed to the positive side rather than the negative side.

Mr. WELLS. And also why many of us have been interested in the decentralization of industry with industry scattered throughout the county to give the people a chance to work in the factory and still maintain a rural residence.

Senator SPARKMAN. Suppose I said to you I want to figure out a parity-price formula that is fair to the farmers, does not create surpluses and encourages needed agricultural adjustments? Of course, I do not really expect you to do that, but how far can you go toward doing that?

Mr. WELLS. My first answer, Senator Sparkman, would be that we can give you a considerable number of statistical indicators, indexes, and measures which are useful in arriving at a judgment as to what the agricultural situation is, but I know of no formula calculated on past data, whether it is calculated on yesterday's data, 10 years ago, 20 years ago, or 30 years ago, that will give you an all-purpose answer to the problems we face tomorrow.

Mr. FOX. Maybe this is stepping aside from your question, but there are some countries that operate entirely without parity indexes so far as I know, but which do have pretty extensive price support systems.

I think England, for example, goes directly at this question of estimating what is a reasonable or adequate farm income and then fans out a system of prices, you see, which would be consistent with that income. This may be too far aside from your main question. I think it is possible to deal with economic parity at least roughly, parity of income between agriculture and the rest of the economy, without even having a parity price formula.

Mr. WELLS. May I comment on this just a bit?

Senator SPARKMAN. All right.

Mr. WELLS. I interpret England's experience a little bit different. England imports an extremely large block of her food. They have decided over a period of time it is desirable to encourage at least a

considerable amount of agriculture within England itself. I get the impression, under these circumstances, whatever statistical formulas they may use, that the basic pattern in England today is a collective bargaining pattern where the leaders of their farm organizations—there is only one major farm organization—sit down with the Government and in effect bargain. Now, they use statistical tools to do the bargaining, but it is a collective bargaining process between the Government and the major farm organization group.

Representative TALLE. Mr. Chairman, may I ask the panel if it is true that farming in England is the most highly mechanized anywhere in the world?

Mr. WELLS. Not in my opinion, sir.

Representative TALLE. One British farmer said so to me. He said the average farm in that country is 40 acres.

Mr. WELLS. How much?

Representative TALLE. Forty acres.

Mr. WELLS. That is probably true.

Representative TALLE. He has several farms, I think three, and he said he needed a tractor on each one.

Now, how he uses the tractors I do not know. It seems like costly machinery for 40 acres, but it depends on what you are producing, of course.

Mr. WELLS. Congressman Talle, he may be right if he means they have more investment per acre in farm machinery. My answer is based on talking to farm experts who have been to England and who usually come back feeling they could dispense with a great deal of labor if they adopted America's method in maximizing the use of machinery. I would think some of the most highly mechanized farming in the world is in the United States. But they may well have a higher investment in machinery per acre, too.

Representative Talle. I assume, too, that their tractors like their cars are much smaller than ours.

Senator SPARKMAN. Let me make a reference to what Congressman Curtis brought up. The compendium, page 88, shows the income derived from cotton and other crops. The reference to be used there is the cotton farms. You will note in the southern Piedmont area the average cotton income was $1,708 a year in 1956 whereas in the irrigated high plains of Texas, it is $12,736. And down in the delta, it is still higher, over $21,000, I believe. Of course, in the Texas prairie section it was only $974. There is a terrific divergence in the amount.

Now, is there any way to figure out a parity price for cotton that is fair to all of these areas?

Mr. FOX. If I could take first crack at that one, it may well be that one cotton price is fair. Thinking about these particular figures, there must be an awful lot more land per farm and maybe a $10,000 to $14,000 cotton picker involved in this $20,000 "net farm income" in the delta. This is not labor return only, as I understand the figures. So the returns on capital for the Piedmont farm might be only $1,000, the return on capital on a Mississippi Delta farm could be $15,000. The return per man-year of labor could be maybe $1,000 in the Piedmont and $5,000 or so in the delta. It could be less than $5,000 in the delta, of course. I am sure there are people working on delta plantations who are getting a good deal less than $5,000 a year.

Senator SPARKMAN. I call your attention to the fact that the table on page 88 refers to total farm income, whereas on page 90 there is another table, "Average Return to Operator and Family Labor." In other words, it is net farm income minus allowance for return on net capital investment. You will see a very high variation. I believe they are proportionate to the others, much in line.

Mr. KALDOR. This, I think, is one of the difficulties of trying to solve all of our income problems in agriculture via prices. If we find a price that would give comparable returns to capital and labor on an efficient farm unit, this same price would not give comparable returns on a farm that has high costs because of outmoded technology and the use of too much labor in relation to land and capital. The price that that second farm would have to have would be much higher.

Even in a State like Iowa, where we have a relatively efficient agriculture, we have a wide variation in production costs on different units. A price for corn, for example, of a dollar and a quarter may be high enough for comparable income opportunities on the best organized farms. This price is not high enough to give a comparable return on farms that are small and otherwise poorly organized.

Senator SPARKMAN. And I think you would accept this statement, too, that an acre of land in the Mississippi Delta might very well produce three bales of cotton with relatively light fertilization whereas this black prairie in Texas probably would yield half a bale.

I might compare land in my area that would probably produce one bale with fairly heavy fertilization.

Mr. KALDOR. That is right. For example, the average farm in Iowa has a land input in value terms that is not greatly different from the average farm in Wyoming. But the average farm in Wyoming, as I recall, has something like 14 to 16 times the number of acres. The value of the land input per farm is not much different in the two areas. So, with some kinds of land, you have to have a much larger area to get the some value input.

Mr. FOX. I would like to emphasize one of Dr. Kaldor's points, the futility of trying to handle certain apparent income inequities through the price mechanism. For example, what will you do to raise the Southern Piedmont farmer's income here to, say, $4,000 a year like a good many manufacturing workers? It means raising the price of cotton 2 or 3 times or more. Then does this mean that you are going to guarantee $50,000 a year to the Delta operator who is now getting $11,000?

Out of the same price situation in the automobile market a couple of firms can go bankrupt, and another automobile firm can make 30 percent or so on its capital stock.

So I would just like to emphasize the difficulty of handling income problems through price.

Senator SPARKMAN. Well, suggestions have been made from time to time and I believe legislation has been introduced in favor of a parity-income formula. You gentlemen have made reference quite frequently this morning to parity of income. We frequently hear the criticism made that what ought to be computed is parity income rather than mere parity of price in individual commodities.

Mr. Wells, in your paper you said something about the Department of Agriculture not being able to bring statistical meaning to parity income as defined in the 1948 act.

I wonder if you would review again what that definition calls for. Tell us why it is hard to measure.

Mr. WELLS. Yes. The Agricultural Act of 1948 simply says that parity of income for farmers should be that income which will give farm people the same standard of living as is enjoyed by other comparable groups in the American economy.

Now, this involves first a measurement of the overall standard of living which is fairly simple in terms of logic and language and fairly difficult in terms of statistics and specific content for some of the reasons that you people discussed this morning. It also involves the question of what are the comparable groups, farm and nonfarm, that you are trying to equate.

I do not think this is an impossible problem but it would be a major research problem and it would take, I think, several years of intense research. And when finished the answer would, I suspect, still be controversial.

We have some estimates now which indicate that the average per capita income of farm people has increased at the same rate from 1910 to 1914 as nonfarm income into the present time. Some people say this is our ideal parity income.

We have the same estimates on a dollar base which indicate that the average per capita income of farm people today is about one half, even after various adjustments not more than two-thirds, that of nonfarm people.

Such estimates lead into the argument, you see, as to how we shall value the product which the farmer grows and consumes in his own home. For example, let us suppose the farm family has a fried chicken for dinner. We value the chicken in our farm income estimates as what the farmer could have sold the chicken for. Other people say, "No, we should value the chicken at what the farmer would have had to pay for it had he driven to his nearest chainstore and bought an eviscerated, ready-to-cook chicken for his wife." That gets us into the whole question of what is income and what is not income, and generally in the United States we define income as those things that flow through the exchange system; we value the chicken as what the farmer would have sold it for on the ground that actually he had to kill it and dress it and his wife had to go through a lot of maneuvers which the nonfarm wife did not have to go through.

We are told, for example, it costs less to live on the farm because farmers spend less for education, or spend less for medical service. This is true but what is the quality of education and the medical service and how can you value it?

In any event, we have before us the evidence that a large number of low-income farm people are making the shift from farm to nonfarm employment, whatever the relative standard of living may be, which would indicate that there are large blocks of farm people who seem to feel that the standard of nonfarm living is higher.

We have had for the last 20 years in the agricultural legislation either ratio or equality definitions of parity income.

However, as I said at the beginning, I cast my paper in the framework of the price system because I am assuming that farmers, whatever the income they ought to get, will actually continue to get most of it through our price system by raising and selling farm products.

Further, whether a farmer produces at high or low cost, under conditions of drought or favorable market, he usually has to sell into the same market, allowing of course, for geographic, seasonal and grade differentials. Price, once you have produced something, becomes a most important income determinant.

We are very much interested in this income argument. Our small section that we have in the Agricultural Marketing Service is devoted to estimating farm population and studying farm levels of living and related matters to measure farm standards of living and their improvement, but when you ask us what would be equality between farmers and nonfarmers or between selected groups of farmers and selected groups of nonfarmers, we simply have not had the resources, nor have I been able to immediately see the techniques that would give a satisfactory answer, certainly an answer which I believe Congressmen would accept as a legislative standard.

Senator SPARKMAN. Thank you, Mr. Wells.

Mr. Fox. I think I would agree with Mr. Wells on that.

The theory of how you would go about determining parity incomes in this economic efficiency model, equal returns to equal qualities of labor and other resources in agriculture and in other occupations—I think the theory is very simple. And I believe that as a research project continuing over a number of years a lot of progress could be made in measuring equality of returns.

I would agree with Mr. Wells that it is going to be awfully hard to convince our own colleagues—economists—and even harder to convince Congressmen and farm organizations, that we have come up with the right answers. But as a research program to help guide some of our thinking, and some of our Government programs, particularly those with a good deal of administrative latitude, I would like to see a good deal more research in this field.

Mr. WELLS. I certainly agree with what Karl has said.

Let me point out the second part of this problem.

Assuming when we talk about parity we are talking about something that is rather widely used at least as a partial operating standard. Even if you determine the net farm income which you consider as an equal income, you still have the problem of deciding which farm families get which income, what allowance you make for nonfarm income, how you add back the operating expenses for the farm operation, and how you translate this into some kind of actual operating standard. There is a problem not only of deciding what net income should be, but there is also the problem of deciding how you get it.

Mr. KALDOR. I might say I agree with much of what has been said. Statistically, we can put more research resources into it and we can do a better job.

Basically, the only real test of comparability or equality of returns is to observe what kind of choices people make when they are fully aware of the implications of their decisions.

If they are essentially indifferent between two alternatives, we may say they are roughly comparable.

Still in the absence of this, we can develop better approximations then we now have. But we cannot expect a perfect answer to this question.

Mr. Fox. I think even within the Government that we could refrain from leaning so very, very heavily on some of the crudest income

comparisons. I am sure Mr. Wells knows the whole range of problems in the comparison of farm income, or farm labor return per hour, with nonfarm income in greater depth and detail than I do myself.

Possibly someone in your earlier panels has said that if you take this ratio, which usually shows farm income per person as maybe 45 or 50 percent of that in the nonfarm economy, I think you will probably find your equilibrium, where equivalent resources in farming would be compensated fairly in comparison with those in other parts of the economy, if this particular indicator came up to 60 or 65. It is a thermometer, but I do not think it is calibrated correctly.

Mr. WELLS. I think I should make one comment.

Karl is leading me into a field which has some budgetary implications, so I speak personally once again.

The fact of the matter is that we would, of course, like to develop and hope in the long run to develop more detailed income statistics to describe the different classes or different types of farms in agriculture.

Over the last 2 or 3 censuses, working with the Bureau of the Census, we have been able to break farms into 7 or 8 different classes, and 1 of the problems we would like to tackle, if and when resources may become available, is to try to get current annual estimates for those same classes of farms, but this would not altogether solve the problem.

It is often pointed out that our farm-income estimates cover all farmers, whereas commercial farmers obviously get much higher incomes. However, if we are to throw a large block of low-income farmers out of our comparisons and concentrate on those farmers who own most of the capital and supply much of the skilled management, then we are faced with the problem of selecting a comparable group in the nonfarm world who own most of the capital and supply most of the skilled management.

I do not know if this simplifies the problem whatever.

Mr. KALDOR. It seems to me that, for purposes of measurement, the real problem is to have a consistent set of inputs and outputs. In other words, you evaluate the agricultural outputs in relation to the inputs. Insofar as the farmer, for example, works part-time off the farm, you eliminate this labor input in determining labor returns in agriculture.

Mr. WELLS. And we do have some rough estimates of this kind, Mr. Kaldor, which take the current value of farm property and assume that farmers deserve the same rate of interest as the long-term farm mortgage rates. This is not an exorbitantly high rate by business standard, and calculating the hours of labor that at standard farm management rates it would take to produce our farm output, we come out with an estimate that farmers currently are realizing about 75 cents an hour for their labor. This is a relatively low figure compared to most nonfarm wage standards.

If, on the other hand, you assume farmers should realize a considerably higher figure for their labor, then your relative return to capital goes down.

This includes all farms, but it does, however, in the case of labor, estimate the labor at standard farm management work rates of doing the job rather than just taking the number of people on the farms and multiplying the days they might work at farm labor.

Mr. FOX. I would like to come back again to this table on page 90.

I assume that the operator of a delta cotton farm, at least of the sort that is included in the table here, is probably getting as much or more per hour than he could get in another occupation, at least another occupation that he would like to be engaged in.

Now, you could say that it is costing the cotton farmer in the southern Piedmont $1.50 an hour to raise his cotton—maybe it costs him $3,000 a year to grow it, if he values his own labor in terms of what he could get for it maybe 50 miles away—working for somebody else, most likely. But if he chooses to sell his labor in the form of cotton he gets only $768 a year out of the same cotton price that yields the delta operator $11,038 for his labor.

I think that is about as far as I want to go with the comparison.

Senator SPARKMAN. Well, we could carry this discussion on for a long, long time. It has been most interesting.

Any further questions?

If not, thank you, gentlemen, on behalf of the entire subcommittee. We extend our very greatest appreciation to you. You have been most helpful.

The subcommittee stands in recess until 2:30.

(Whereupon, at 12:15 p. m., a recess was taken until 2:30 p. m.)

AFTERNOON SESSION

Senator SPARKMAN. Let the subcommittee come to order, please.

This afternoon, our hearings on policy for commercial agriculture turn to a discussion of programs intended to raise farm income by changing the demand side of the market.

One possibility along this line is to subsidize the food consumption of low-income consumers. Another is to sell abroad at a lower price than at home—the so-called multiple-price or domestic-parity approach. A third is to develop new uses for farm products, and a fourth is to expand the market by advertising.

I am glad to see that our panel of experts this afternoon contains a lady—Mrs. Farnsworth, from Stanford University. This is a pleasant departure from the other panels we have had, and I wish our staff had thought of it more often.

But, gentlemen, do not think we are not glad to see you too. We wish to welcome you all here today and to congratulate you on the excellent papers you have prepared for our discussion.

I am sorry to note that Professor DeGraff, of Cornell University, could not be with us this afternoon. We have his paper, of course, and we can discuss it if anyone wishes to do so.

We will follow our usual procedure of beginning with a 5-minute summary of each paper. Members of the subcommittee will then question the panelists. I hope each of you will feel free to discuss all of the topics before the panel and that we can have a lively discussion.

I regret that our subcommittee will be limited in attendance this afternoon. I believe Congressman Mills probably will not be here because of the death of the chairman of his committee, Congressman Jere Cooper, and Congressman Curtis told me upon leaving at noon today that he would not be able to be back. I believe he will not be with us tomorrow, also.

But what we are lacking in numbers, perhaps we can make up in the number of questions we ask between us, Dr. Talle. At any rate, I do invite a full and lively discussion.

We will start the discussion by taking up the summary of the paper by Prof. Vernon L. Sorenson of Michigan State University.

We are glad to have you with us, Mr. Sorenson.

STATEMENT OF VERNON L. SORENSON, DEPARTMENT OF AGRICULTURAL ECONOMICS, MICHIGAN STATE UNIVERSITY

Mr. SORENSON. Thank you, Senator Sparkman.

Several important questions must be answered in evaluating the possibilities of expanding demand for food through subsidies. These questions are: (1) how much can consumption be increased and what will be the Government cost, (2) what will be the impact on agriculture if a significant expansion is achieved, and (3) how will society react to a broad-scale food subsidy program?

Under present circumstances a nutrition program for the poor will not move many farm commodities. If a program is broadened to include upgrading of diets and if persons in successively higher income levels are included, some demand expansion will take place.

A recent estimate indicates that if all consumers who cannot buy the USDA low-cost diet with 40 percent of their income are subsidized, a potential of 25 million persons could be included and annual Government expenditures totaling $2.5 billion would be needed.

The increase in value of food consumed, however, would be something less than this amount due to leakages which would occur.

Census estimates show that nearly 68 million persons in the United States are living individually or in families with per capita income of less than $1,000 per year. At retail prices an annual increase of about $4.9 billion in the value of food consumed could be attained if the diets for these persons could be raised to the average level achieved in the $4,000 to $4,999 family income class.

Several factors would keep program accomplishments below their potential level. Not all persons in lower income categories would be both eligible and willing to participate. Further, some who fulfill both requirements could not be included.

In any program there will not be a one-to-one relationship between the subsidy provided and the value of additional food used. Improvement of diets is not given full priority over other wants even at low incomes. Even where freedom of choice is not intended—as where food stamps are distributed or direct food allotments are made—subsidized consumers will seek ways of diverting part of the subsidy to purchases other than food.

This means that to get any projected increase in expenditure, subsidies and hence the taxes required to provide them must exceed the additional value of food consumed. The extent to which such diversion can be prevented through regulation cannot be easily evaluated in advance. At best it would be a problem of major importance.

Considering leakages, large numbers of individuals must be included, and substantial governmental costs must be incurred to attain an adjustment of even 5 percent.

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But since recent increases in food requirements due largely to population growth have been roughly 2 percent per year this could not be viewed as a spectacular change.

With existing price relationships the additional return to agriculture from a food-subsidy program would amount to approximately 40 percent of the increase in expenditure obtained at the retail level. Farmers would not, however, share equally. The most important effect of higher level food consumption is to cause a shift from lower quality to higher quality intake.

In the absence of major price changes a redistribution in the returns which farmers receive from the market would occur roughly in accordance with the increases or decreases in use of specific commodities. Greatest benefits would go to livestock producers, dairy farmers, fruit and vegetable growers, and poultry producers.

The return to food grain producers would tend to decline. Secondary benefits would accure to feed grain producers because of the generally expanded use of livestock products.

If a subsidy program causes or is associated with price changes both producers and consumers will respond in ways which cannot be predicted precisely. Retail price changes may influence the overall quantity taken from the market and cause shifts in the relative amounts taken of different commodities.

The net impact on consumption will depend on the combined effect which subsidies provided to lower income groups have on their food buying decisions and the extent to which price changes influence the buying decisions of both subsidized and nonsubsidized consumers.

Farm level price changes would result in some adjustment in the use of agricultural resources, thereby causing supply shifts for most commodities. Even in the absence of production controls these changes would be of some import—and since temporary price rises would likely occur for some commodities.

Since the adjustment would be toward higher resource using commodities this would help absorb some of the excess producing capacity now existing in agriculture.

I think it is safe to conclude that the value systems which Americans hold, permit many Government programs today which would have been unacceptable 3 to 4 decades ago. Included among these are such programs as low cost credit, drought and disaster relief, and business subsidy programs of which farm price and income support are a part.

For the most part these programs are oriented toward producers and the improvement of income from production or business activity. Subsidies are used to help provide incomes over and above minimum disaster relief levels. Evidence does not, however, indicate that this same degree of generosity exists in providing consumer subsidies.

When looked at from the viewpoint of consumers the basic causes of low income can be classified into two broad categories: (1) Low productivity and low wages due to personal characteristics such as low native intelligence, physical impairment, lack of education and training, and so forth, and (2) low income associated with structural conditions within the economy.

Important elements of this latter picture are unemployment due to cyclical conditions in business depression, and irregular employment due to variations in market or seasonal production.

Generally speaking, whether the cause of low income is personal or structural the American value system probably will accept consumer subsidies which avoid personal disaster. Widespread distribution of food during the 1930's and the continued maintenance of direct welfare facilities for the poor at the national, State, and local levels is evidence of a social value system committed to this end. Whether subsidies designed to promote higher level food intake by large numbers of consumers are socially acceptable is doubtful.

If subsidies are valid in their own right from the viewpoint of consumer welfare, a modest expansion in the demand for farm products can be attained. This does not mean that programs to adjust agricultural production will no longer be needed. The problem of adjusting the growth of agricultural output will be temporarily mitigated but not resolved.

A major task in farm policy will continue to be finding ways of adjusting output to a level and rate of increase which will provide farmers with a satisfactory return from the market.

Senator SPARKMAN. Thank you very much.

Mr. Parker, the legislative consultant to the National Grange, will be the next speaker. We are very glad to have you with us.

STATEMENT OF JOSEPH PARKER, LEGISLATIVE CONSULTANT TO THE NATIONAL GRANGE

Mr. PARKER. Thank you.

Throughout the period since the close of World War II, the National Grange has urged the adoption of the domestic parity concept as the foundation upon which to build long-run agricultural programs for our basic export crops. In order to keep our consideration of the Grange position reasonably specific, I shall discuss the domestic parity concept, often, but inaccurately, referred to as the two-price or multiple-price plan, as it applies to wheat.

There can no longer by any reasonable doubt of the failure of the present program to meet the needs of wheatgrowers. It adversely affects producers of corn and livestock as well as agriculture as a whole. It restricts market opportunities, and it is incompatible with an agricultural policy aimed at greater freedom from Government controls and increased reliance on individual initiative and private enterprise.

So long as we pursue the policy of fixing prices as we do under the present wheat-support program, we will be caught on the horns of a dilemma. We will either have to fix prices so high as to price wheat out of many of its natural markets and make the Government itself the principal market, or we will have to fix prices low enough to permit entry of wheat into the feed and export markets of the world.

If the first course is followed, massive subsidization of exports will have to remain a permanent feature of the program. This will also require extensive involvement of government into the business of buying, storing, and merchandising of wheat in competition and interference with the marketing functions of the private trade.

This involvement has already reached such great proportions as to challenge the very principle of freedom of private enterprise. If the latter course is followed, wheat farmers will be compelled to sacrifice a fair return on that portion of the crop which is used domestically for food in order that they might have access to the world markets.

The problems and difficulties that attend programs of supporting wheat prices without sacrificing the basic income protection or without sacrificing markets can be resolved by a method of price support which gives producers access to the markets where demand responds to price while limiting the parity price objective to the market in which consumption cannot be increased through price incentives. The only effective means that we know of to accomplish that objective is the domestic parity plan.

The essentials of the domestic parity plan are:

First: At the beginning of each marketing year, the Secretary of Agriculture would determine the portion of the wheat crop which would go into consumption for human food. This amount, which for years has been a little less than 500 million bushels, would be domestic food quota.

This amount would then be allotted among wheat farmers of the Nation substantially on the same basis as acreage allotments are now made, except that in this case the acreage would be translated into bushels and the share of each farm would be in bushels.

Second: Each farmer would receive a certificate stating in bushels his share of the estimated domestic consumption of wheat for food.

Third: This certificate would have a value in dollars and cents representing the difference between the average market price of wheat (as estimated in advance by the Secretary of Agriculture) and 100 percent of parity.

The marketing certificates would be negotiable drafts on the Commodity Credit Corporation. They could be issued to farmers ahead of harvesting time, thereby helping them to finance farm operations during the high expense season.

The certificates could also serve to some extent as insurance against low crop yields.

Fourth: The domestic parity plan is self-financing. Each miller or processor of wheat into human food would have to purchase (from growers or from the Government) certificates covering the total amount of wheat processed for domestic consumption as human food. It would not be necessary for farmers to deal directly with millers because the Commodity Credit Corporation would act as the clearing house.

Fifth: The value of the certificate plus the price received in the market place will return to growers the equivalent of full parity on that portion of the crop consumed domestically as food. For the portion of the crop used for feed or export, growers would receive whatever the wheat sold for in the market place.

The domestic parity plan would result in the following advantages to wheat farmers, other agricultural producers, the private grain trade, the Government, and the general public.

(1) Wheat farmers would regain their historic right to compete fairly and on a quality basis in the markets of the world without being compelled to sacrifice their income protection in the domestic market; they would be relieved of the unavoidable pressure for future curtailment of acreage production, and, at the same time, the declining trend of their incomes would be halted; they would no longer have to rely upon appropriations of public funds for subsidizing exports, whether under international agreements or otherwise; abolishment of marketing quotas would restore greater freedom and initiative in the

planning of farm operations in accordance with changing production and market conditions and the dictates of their own judgment; there would be greater rewards for quality production than under present programs, and the resulting incentives toward raising the overall quality of the United States wheat crop would put the United States back in international wheat trade as a historic competitor on a quality basis.

(2) Other agricultural producers would be relieved of the pressure of acreage diversions of wheatland to other crops for which price supports are available for unlimited production thereby tending to reduce feed grain production and imparting greater stability to all segments of agriculture.

(3) The grain trade would directly benefit from the large scale withdrawal of the Government from the marketing functions it now performs in buying, warehousing, and merchandising an increasing portion of the wheat crop in direct competition and interference with private enterprise; and the reestablishment of competitive market prices and the unrestricted movement of all wheat in all stages of marketing, domestic and export, would restore to the grain trade its traditional marketing function on a free competitive basis.

(4) The Government would be relieved of appropriating large public funds for operating a two-price marketing system under Government auspices as it is now doing, under which the entire wheat crop is supported domestically at prices substantially above export prices with supplies in excess of domestic requirements subsidized into export channels or placed in storage; marketing quotas could be dispensed with, thus obviating the need for large sums of money to administer such quotas or to enforce special legislation exempting from marketing quotas producers who feed the entire wheat crop on the farm where produced.

(5) The general public would be relieved of the burden of the cost of wheat export subsidies, and of the cost of aimless, excessive, and wasteful storage operations amounting to several hundred million dollars a year.

Senator SPARKMAN. Thank you, Mr. Parker.

The next panelist is Prof. Helen C. Farnsworth of the food research institute, Stanford University.

STATEMENT OF MRS. HELEN C. FARNSWORTH OF THE FOOD RESEARCH INSTITUTE, STANFORD UNIVERSITY

Mrs. FARNSWORTH. My paper deals specifically with wheat under multiple pricing—first, as reflected in the present program, second, as it would be under the currently proposed marketing certificate plan.

For the past 6 years wheat production in the Western World and in the United States in particular, has persistently outrun the commercial demand at prevailing prices. Carryovers in the major exporting countries have stood at record heights despite restrictive acreage and marketing controls and despite huge American expenditures on surplus-disposal operations.

In the United States chronically excessive wheat production has been primarily due to three interrelated factors: High support prices, the limited effectiveness of direct production controls, and revolutionary improvements in technology and methods of cultivation.

Our price-support level for wheat warrants special attention. For the sixth successive year American producers are now receiving subsidized prices far above those received by leading foreign competitors and still farther above the average effective export price of American wheat.

Last year the margin over comparable producers' prices in Canada and Australia averaged about 80 cents a bushel or 50 percent, the margin over our own effective average export price exceeded $1 a bushel, something over 80 percent. Even these large noncommercial differentials—paid for by American taxpayers and consumers—represented only part of the total national cost of our current price-maintenance program for wheat.

Dissatisfaction with this expensive, self-defeating program has become widespread. Wheat producers reasonably complain about the restrictive acreage and marketing controls. Corn Belt farmers bewail the diversion of wheatland to the growing of excess feed grains. American taxpayers are alarmed by the huge drafts on Federal funds. Competing exporting nations reasonably protest against our export dumping and unfair trade competition.

Finally, commodity experts point out that the heavy subsidization of American wheat has not only discouraged needed production adjustments in this country, but has also influenced other countries to adopt and increase wheat subsidies, to negotiate bilateral trade agreements, and to promote restrictive regional common markets.

A magical new formula is now sought to meet such objections while simultaneously holding wheat prices artificially high to American producers. The point that most needs to be stressed is that these joint goals are incompatible and unattainable.

Although recent all-embracing claims have been made for a marketing certificate plan for wheat, detailed analysis indicates that such a plan would contribute little, if anything, to the desired goals, and that it would bring new distortions into our wheat-pricing system.

The precise effects of any given certificate program would depend mainly on the price-support levels established, the production controls adopted, and the prices and production controls prevailing for competing crops.

Sponsors of recent legislative proposals for a wheat certificate plan appear to favor a *primary* support rate of 90 to 100 percent of parity on domestic millings, a *secondary* market support of around 60 percent, and substantial relaxation of present acreage and marketing restrictions.

Under present world surplus conditions such a program could be expected to increase our production and surplus stockpile of wheat, put additional pressure on world wheat prices, only moderately increase domestic feed use, and provide little, if any, stimulus to unsubsidized commercial exports, thus leaving both the volume and average price of American wheat exports heavily dependent on Federal subsidies and official decisions.

It is true that such a certificate plan would reduce wheat-subsidy drafts on the Federal Treasury, but only by shifting the burden to domestic consumers through what is tantamount to a regressive tax on bread.

The national average wheat price received by producers might at first be raised moderately under the envisaged certificate program,

but the failure of the program to contribute to needed supply-demand adjustments would presumably soon result in lower wheat-support rates and/or more restrictive production controls. Moreover, the higher the fixed value of the marketing certificates, the more vigorously would producers of soft Red Winter and Hard Spring wheats probably protest against the regional inequities of the program.

Finally, the governments of competing exporting countries would presumably find an American wheat-certificate program even more objectionable from the standpoints of price disruption and export dumping than our present more flexible pricing system. The present program at least makes possible limited administrative adjustments in the price, direction, and volume of our competitive wheat exports.

The conclusion is that we would do better to attempt to bring our present pricing program into line with current economic forces of adjustment rather than to pursue the illusion that a marketing certificate plan would permit us to reach incompatible, unattainable goals. This suggests the desirability of gradual reduction of our existing single wheat-support price to a disaster-prevention level that would normally be below world market prices—a level of perhaps something like 50 percent of "modernized" parity.

Senator SPARKMAN. Thank you, Mrs. Farnsworth.

Prof. Lawrence W. Witt, of the department of agricultural economics of the Michigan State University.

STATEMENT OF LAWRENCE W. WITT, DEPARTMENT OF AGRICULTURAL ECONOMICS OF THE MICHIGAN STATE UNIVERSITY

Mr. WITT. As a nation, we have edged into a major international agricultural trade program without a full comprehension of its implications. This is in commodities much beyond wheat, which we have just been discussing.

It probably is inevitable that some effects are known only after the fact. However, we now should know the impact of such programs. Actually, we do not know whether to apologize diplomatically to countries such as Australia, Canada, and Burma for limiting their export markets, or to boast to the underdeveloped areas that we have discovered a technique for feeding hungry people and converting surplus food into productive capital.

Price guaranties, accumulated surpluses, and the running out of postwar aid programs have moved us step by step into the present export program. About $1 billion per year is spent to finance the sale of surpluses, largely in exchange for local currencies.

There is evidence that some of the exports are being put to useful purposes. Still, the manner by which we have approached the program—from the side of disposing of burdensome surpluses—does not provide assurance that we are attaining an integrated set of objectives. In some cases, the program is leading to serious international tensions and conflicts.

We know something about possible future sales and about the effect of foreign disposal on our internal economy. We do not truly understand how sales for foreign currency affect other countries. In what way have they assisted in economic development? To what extent are foodstuffs converted into capital? Do they help increase world population? Do they depress the markets and, hence, the earnings

of competing export countries? Which countries and which economic sectors are benefiting and which ones are being injured by the program?

A comprehensive, systematic, and longtime study of these effects is very much needed if we are to know what we are doing.

Other countries are vitally concerned with our disposal programs. Changes in United States Government policies which influence production, imports, or export prices have important effects on other countries.

Countries dependent up 1 or 2 commodities for their earnings of foreign exchange are more deeply affected than countries with a variety of exports. Since the majority of countries depend on a relatively few exports, they are very vulnerable to policy changes.

Heightened competition faces American agriculture. Export markets constitute an important outlet for United States farm products. Yet only a small proportion are moving under normal sales procedures. Approximately 40 percent are sold under direct export aid programs and a substantial part of the rest is sold at special prices negotiated with the CCC or under international agreement.

Agricultural products face export difficulties for several reasons. The first is that farm products meet severe competition in contending with American industry for the dollars which other nations earn selling goods and services to the United States. The export branches of United States industry are increasing productivity and efficiency about as fast as most branches of export agriculture.

Secondly, in other countries, it often is far cheaper to expand local farm production than to establish the industrial organization to provide desired nonfarm commodities. Hence, they expand agriculture and purchase industrial goods.

Thirdly, many countries are actively involved in economic development programs and are determined to make them effective. Implementing these programs require the purchase of additional industrial tools and equipment, while maintaining most of the present purchases until the new production is established. Both agricultural goods and consumer goods tend to be squeezed out.

Finally, domestic price-support programs have raised United States farm prices over world levels. They have encouraged overseas production and discouraged purchases from the United States. It is not easy to reverse this process.

Conflicts arise under any trade policy.

Three trade policies were compared in the paper I presented: The present multiple-price policy of negotiated sales, gifts, loans, and sales for local currencies; a multiple-price plan involving only dollar sales; and the traditional one-price, commercial sales program.

Each of these sales policies leads to conflicts of interest and conflicts of values. To the extent that foreign dollar earnings are more available, American industry benefits from sales of farm products for local currency.

Commercial farmers also gain, so long as price-support programs thereby are maintained. Those who pay the taxes find the present tax burden somewhat larger than it would be under either dollar sales program.

On the other hand, sales for local currency stimulate economic development and provide larger food supplies in dollar-short, food-deficit nations. The American-owned supplies of local currency are

a potential asset which may reduce Government dollar expenditures and tax rates later.

The repayment of the local currency in the future will reduce the market for American industrial and agricultural products. Economic development, effectively attained, however, will expand the market for both agricultural and nonagricultural goods. In some cases, economic development would be further stimulated if dollars and other foreign currencies were made available so that a combination of food and nonfood items could be expanded simultaneously.

Under Public Law 480, Congress is asked periodically to increase the overall authorization. There is little basis for determining how much is needed and desirable.

The present program of special export sales has met with criticism from competing countries. Its elimination would lead to complaints and problems from other countries, including the danger of unrest where the food supplies are vital.

There probably would be less international criticism if a traditional dollar sales policy were followed, coupled with fairly large-scale loans to finance the purchase of farm products. Such a program might be more costly, and probably would be more difficult to tie to farm products and humanitarian values with respect to food and hunger than the present Public Law 480. In other respects, it would have substantial advantages.

Information is needed to resolve conflicts. It is for the American people and their representatives in Congress to decide whose interests are paramount. The opposing values and objectives need to be studied, the goals clearly defined, and needed compromises deliberately selected.

The assets which surplus food represents in a hungry world should be used to implement the human values and social objectives which America represents, and not frittered away in bungling attempts to protect a price-support program.

If we are to continue to spend $1 billion or $2 billion per year on foreign surplus disposal, we must not do so blindly. We should know the impacts upon the countries receiving the commodities and upon affected third countries. Such effects must be interrelated with our overall international policies.

Such evaluations, however, should not be made solely in reference to an outmoded shibboleth of free-world prices—a condition which existed only rarely and for brief periods. Rather, our trading policies must be related to our aims and desires for people in other countries—interrelated to the economic and social objectives of our own people—and the best possible compromise drawn.

The values which many Americans hold with respect to income levels and freedom from want for all peoples suggests that something beyond a laissez faire, world pricing system is desirable. International negotiation can facilitate attaining objectives of expanded world consumption, increased human and physical capital creation, and expanding human productivity.

Our long-run interests can be served only through informed action which recognizes the goals, values, and problems of other nations. Such action must take full cognizance of the broad framework of international relations and power conflicts. Stanch allies with increasing scientific and economic strength are absolutely essential now and in the years ahead.

The list of witnesses to these hearings indicates that many people are giving attention to the effects of public programs in American agriculture and the changing character of this agriculture. It would not be possible to bring together nearly as large or competent a group of public and private research workers to deal with the international aspects of our agricultural programs.

It is urged that Congress press for effective and continuing studies in this area, using both public and private research organizations, and making available both dollars and local currencies. Congress and the American people should know a great deal more about the effects on other economies of our agricultural, military, and economic aid programs.

Both the immediate and the longer time impacts are important. I need not emphasize that statesmanship and the art of the possible cannot be performed in a near vacuum.

Senator SPARKMAN. Thank you, Mr. Witt.

Next we will hear from Dr. Kenneth Hood, assistant secretary and director of commodity division, American Farm Bureau Federation.

STATEMENT OF KENNETH HOOD, ASSISTANT SECRETARY AND DIRECTOR OF COMMODITY DIVISION, AMERICAN FARM BUREAU FEDERATION

Mr. HOOD. Thank you, Senator Sparkman.

In this summary of my fuller paper, I will make six points. One is that the many multiple-price plans now proposed have never been tried. Multiple-price plans for agricultural commodities are not new. The McNary-Haugen proposals of the 1920's were two-price plans. There has been a long series of related bills dating back for at least 15 years.

Elements of multiple pricing are evident in classified price plans for milk, the International Wheat Agreement, Public Law 480, export subsidies, market agreements, the compliance, noncompliance and noncommercial loans on corn, and others.

Despite the fact that many price programs in operation today have multiple-pricing aspects, there is not one in existence that even remotely resembles the current multiple-price proposals for wheat, rice, dairy products, and other agricultural commodities.

I am sure we all agree that this in itself should not condemn any of the current proposals. I believe that we are also in agreement that a very careful examination of these untried proposals is necessary before we think seriously of adopting them.

2. Export markets will be hurt: These programs are designed to expand exports. Will they do it? Certainly they will not solve the foreign exchange problems which limit our sales in many areas. They will not change the fact that our products are not always competitive in terms of quality. Increased quantities of our products may be available for export markets at world prices if we subsidize foreign shipments by giving United States producers additional income for the domestically consumed portion of production.

If foreign countries, however, impose restrictions against the importation of our products, what have we gained?

We have made it a point in our organization to discuss multiple-price proposals with the many foreign agricultural visitors who come

to our offices almost weekly. We have explored these plans in conversations with foreign traders and government officials in our visits abroad.

We have brought these plans to the attention of importers and exporters in our conferences on trade development and international affairs. We discussed these proposals at a number of important gatherings, including the recent world conference of the International Federation of Agricultural Producers.

After these inquiries and discussions, we are forced to conclude that a permanent program of maintaining high prices in a protected domestic market, in order to produce more for export, would be considered dumping by other countries. We can expect these countries to retaliate if we engage in such practices.

Some contend that the dumping argument is "sheer misunderstanding." Could it be that these folks have never taken the time to discuss this with our foreign customers?

3. Home markets will suffer: Since multiple-price plans generally incorporate high levels of domestic price support, it is necessary to consider the effect of this pricing policy on consumption. We all know that prices have a marked effect on domestic consumption of dairy products, cotton, meat, and a host of other agricultural commodities. Even for wheat and rice, prolonged periods of high prices may induce important shifts in consumer habits.

High domestic prices will encourage a further increase in the consumption of synthetics and other substitutes. How is the cotton grower going to benefit from this? Or the butter producer?

4. Producers of other crops will be adversely affected: Any plan established for one commodity may have serious implications for producers of other products. When devising a multiple-price plan for a commodity such as wheat, we need to consider the effects of this plan on feed-grain producers, livestock growers, and others.

Some dismiss this statement with the observation that it is a "feed bin" argument without validity. But corn producers don't think so. They say it would be unfair competition.

Feed-grain producers, no doubt, are perfectly willing to compete for the feed market provided the power of Government doesn't stack the rules of the game against them. If the wheat farmers will accept support prices on their entire crop, based on the feed value of their product in relation to the support price on corn, and not just the feed portion of it, corn farmers and producers of other feed grains cannot complain that wheat is being fed on an unfair competitive basis.

5. Administration will be difficult: Administration of multiple-price systems will be difficult and complicated. These programs will be added to what we have and not substituted for what we have. There is little evidence that these plans could work without a multiplicity of certificates, allotments, loan programs, and elaborate machinery to enforce requirements of the law.

Conceivably, the Government would dictate wage rates and other provisions as a condition of eligibility for certificates as is now incorporated in the sugar program. Moreover, the end result of this approach could be a complete system of Government-administered prices and a collateral Government control over every aspect of American agriculture.

6. Farm incomes will not be helped: Overproduction is one of the big problems in agriculture today. There appears to be nothing in any of the proposed multiple-price plans that will help solve this problem.

In fact, production could be expected to increase. If higher prices are achieved at the beginning of the program, this would stimulate output. Moreover, farmers would feel impelled to expand production in order to maintain or increase base histories. If the value of the certificates, plus the going market price of the product, results in a favorable blend price, producers may, in the absence of controls, continue to expand output to the point where blend prices would be no higher than what market prices would have been without any program whatsoever. Under such conditions, the average producer would get no benefit from the proposed program and incomes will not be increased.

In conclusion, many will agree that we need something that will work better than the farm programs that we have had in the past. Fortunately, we are not faced with a choice between present plans and the multiple-price approach. There are other plans that offer better possibilities for dealing realistically with the perplexing problems of agriculture. Plans that will build markets at home and abroad—help balance production and demand—minimize the role of Government—preserve and enlarge opportunity—and improve the net income position of farmers.

Senator SPARKMAN. Thank you, Mr. Hood.

Next is Mr. Wheeler McMillen, vice president of the Farm Journal, Inc., Philadelphia, Pa. We are glad to have you with us.

STATEMENT OF WHEELER McMILLEN, VICE PRESIDENT, FARM JOURNAL, INC., PHILADELPHIA, PA.

Mr. MCMILLEN. Agriculture's urgent need for expanded markets emphasizes the necessity to look for nonfood as well as for food outlets.

Agriculture produces cellulose, starch, sugar, oils, proteins, and other compounds which are available raw materials for chemical industries. While the food market has limits imposed by nature, consumption of industrial products appears to be limited only by buying power. Industrial uses therefore offer an especially attractive area for agricultural expansion.

Industry has needs for better sources of pulp and paper materials, for vegetable tannins, for hard and soft fibers, for pharmaceutical raw materials, for waxes, gums, and antioxidants, for certain types of vegetable oils, and for various others.

Vigorous research effort can develop new crops to supply some of these needs, or adapt for them some of the currently grown crops. Within the United States about 150 plant species are cultivated commercially, most of them having been selected for agricultural crops in prehistoric times.

Modern scientific technology is equipped to examine the 250,000 known species of higher plants in search of new sources for industrial raw material and new crops for farmers to cultivate. New crops can prevent surplus production by occupying acres which now have no alternatives to the older established crops.

Starch is the major element in the crops in largest surplus, such as corn, grain sorghums, and wheat, and also in potatoes. Scientists have indicated that a comprehensive research program might well open for starch enormous new markets for such large-use purposes as in ore flotation processes, pelletizing iron ore, soil stabilizing materials in highway roadbeds and embankments, for sewage, water treatment and silt prevention, for rubber synthetics, detergents, antioxidants, industrial acids, and others.

The recent report of the Commission on Increased Industrial Use of Agricultural Products, published as Senate Document No. 45, contains many examples of what an expanded research program might accomplish.

The Commission recommended that Congress appropriate $50 million for new uses and new crops research, and an equal amount to provide training for new scientific manpower, facilities, large-scale trial commercialization of promising processes, and incentives to bridge over "awkward stages" of new crop and new uses developments. Fully economic uses are emphasized.

Attention is called to the fact that while mineral materials when once consumed are irreplaceable, a nation which makes maximum use of its crop potentials will be depending upon resources which are annually renewable.

Senator SPARKMAN. Thank you, Mr. McMillen.

I also want to thank all members of the panel for their most interesting statements.

Dr. Talle, do you wish to proceed?

Representative TALLE. Thank you, Mr. Chairman. Let me start with the subject concerning which I think there is pretty general agreement.

Am I right in believing that all of you are in favor of encouraging new profitable uses of farm products?

Why do you think we have not pushed that faster than we have? Or have we made good progress? May I ask you that, Mr. McMillen?

Mr. MCMILLEN. We have made some progress in some directions, but those of us who have been advocates of this type of program just haven't done a good enough job of promoting it.

Representative TALLE. The fault may not be yours. The fault may lie elsewhere.

You mentioned starch. In my congressional district, the processing of corn is very important. One firm grinds as high as 65,000 bushels of corn per day. Another one grinds around 47,000 bushels of corn per day. That, of course, is large production. The products they turn out are very good.

We have a similar situation, do we not, in the paper field? The base of paper is cellulose, isn't it?

Mr. MCMILLEN. That is right.

Representative TALLE. That can be obtained from many sources, not only wood but grasses and a great many other products. I like what you say about the plants in our country. That is one of the things George Washington promoted that many people probably have not given him credit for. But he was very busy at the outset of the formation of our Government in bringing in new plants.

While so many people think of the Department of Agriculture as starting in 1889, that was the year it got cabinet status. But the

Department was actually begun when President Lincoln signed a bill in 1862. I have read the organic act, and certainly the purpose was to encourage the growing of new plants, research and improvement in agriculture.

I am interested in hearing from members of the panel on profitable new uses for agricultural products.

Mr. HOOD. I first want to say that our organization has been very much interested in this approach, among many others, to find new and additional markets. We have encouraged greater support of this effort. We recognize, however, that we will not find a vast new market immediately for any large volume of agricultural products. But as we view the development so far, we find that we have made some important discoveries of new industrial uses for agricultural products. We recognize as Mr. McMillen has pointed out that crops are readily reproducible annually and many of the raw materials we use for fuel, paper building materials and so forth come from the earth where they cannot be reproduced.

Certainly, this is a part of the agricultural program that we believe should have additional encouragement.

Representative TALLE. Mr. Witt, do you care to comment on that?

Mr. WITT. I have not given very much attention to this general problem. We have had other people who have commented on it and I don't think that I care to comment on it here.

Representative TALLE. I believe in your State, there was a leader in the field, was there not?

Mr. WITT. You are thinking of the deceased Henry Ford. Certainly he has been very much interested in many of these products. We find, however, that they have been cutting back a little bit on this, at least in some respects.

Representative TALLE. What do you think, Mrs. Farnsworth?

Mrs. FARNSWORTH. I don't think I have anything to add to this.

Representative TALLE. Mr. Parker, do you have any comments?

Mr. PARKER. The National Grange supports very strongly the recommendations that have been made for increased research to find new and industrial uses for agricultural products.

Our research in agriculture today has in the main stopped at the level of new and better ways of producing agricultural crops and new and better ways perhaps of using them in their normal manner. But there is a great barrier that we need to break with more intensive research and research that I think will need a lot more initiative than our agricultural research has had in the past.

Representative TALLE. Mr. Sorenson, do you have any comments?

Mr. SORENSON. I think the key element here is the word, "profitable." It may be possible technologically to develop a wide variety of uses, but to make these profitable is another thing. The only reference I can made from my own experience or acquaintance is the situation on potato alcohol as it occured during and after the war. I believe it reached the point shortly after the war that potatoes almost had to be provided for nothing before processors would use them very extensively for the production of alcohol. So I think that I would be inclined to suggest that the problem has to be looked at from the viewpoint of technology and economics.

Representative TALLE. The same difficulty applies to corn. Alcohol for tractor fuel can be made from corn but under present technology, costs are too high to make it profitable.

But, as I see the thing, agriculture will be forced to do something along this line, because if research is not done in agriculture then research will be done in other industries which/will result in the development of products which will compete with products from the farm. I refer to synthetics. I think it is a matter of survival. I think that we should bestir ourselves.

I want to pay a tribute to the American farmer for his tremendous capacity to produce. He is doing it under a system of private enterprise. Now, in contrast, the Russian people ever since World War II have been restless because they have not been able to improve their standard of living. They are finding out what is done in many other countries, but they have not been able to improve their own standard of living in comparable degree. So one commissar of agriculture after another has been removed from office, because he didn't succeed.

They are trying, and failing, to do under a collectivized system of economics, that which we are doing so very successfully under private enterprise.

We produce too much under our system. They do not produce enough. I think we should bestir ourselves to see if we cannot develop some new, profitable uses for farm products.

I think now I should let you have the witnesses, Mr. Chairman.

Senator SPARKMAN. I would be very glad for you to go right along. Mr. Sorenson, I was interested in your presentation of the possibility of stepping up the consumption of farm goods by our people. Personally, I hate to think that we have a farm problem so long as we still have undernourished people in this country. I just wonder how well fed our people are, on the basis of nutritional requirements. I wonder if you could elaborate on that. If we were able in this country to attain an adequate diet for all of our people, how much would that add to food consumption?

Mr. SORENSON. Well, the first point that has to be made here, or the first thing we have to tie down is: What is an adequate diet? If you start talking about adequate diet purely in terms of nutrition, you can have a fairly low level of consumption in terms of what I would think of as a division between low consumption and high consumption, bringing in the factor of quality. I think the only realistic way to look at it, possibly, is not strictly in terms of nutrition, but in terms of level of consumption, including both nutrition and the quality of the diet. It might be true, you see, that, if we thought strictly in terms of nutrition and took into account both those who are undernourished, if this can be determined, and those who are overeating, we might even end up with a lower level if everyone were adjusted to a nutritionally adequate diet. It is very hard to answer your question as to what the level of consumption would be in terms of nutrition alone. No doubt there is some lack of adequate nutrition.

Some of it is caused by lack of adequate income. But there appears to be poor nutrition at all income levels, and, so, we cannot always tie it in with the income criteria. In general, the answer to your question is that, with present relatively full employment, people are pretty well fed, and that attaining better nutrition through subsidies will not increase the demand for farm commodities very much.

Senator SPARKMAN. I want to ask a question about this two-price system or domestic-price system or multiple-price system, whatever it is. Were all of you talking about the same thing? The reason I

ask that question is because Mr. Parker started out by saying it was sometimes erroneously referred to as a multiple-price plan. First, would we be able to keep a high price for cotton in this country without eventually losing out to synthetic fibers?

Mr. HOOD. Senator, I discussed this at some length in my original paper. Because of the lack of time for my summary, I limited my comments to the basic points made generally concerning all crops. In the section dealing with cotton in my full paper, I gave some figures on the declining per capita consumption of cotton and the very rapid growth of synthetics during recent years. It would seem to me that a high domestic price for cotton would make the situation infinitely worse than it is now.

Senator SPARKMAN. Mr. Parker, you limited your discussion to the two-price plan as it applies to wheat.

Mr. PARKER. Yes, sir.

Senator SPARKMAN. Would you advocate applying it to all of the basic commodities?

Mr. PARKER. No, Mr. Chairman. We have discussed the proposal in connection with wheat. I limited it to that precise purpose. The Grange is on record as being, perhaps, the strongest advocate of a commodity-by-commodity approach to these farm problems, and I believe there will be a representative tomorrow before you on that very subject. We do not believe that you could establish and maintain, as we would on wheat, a high price domestically for cotton, primarily for one reason, and there are many others, but the principal reason is the competition with synthetics. That is the real determining price factor, I think, today in cotton for normal domestic uses. So, we would advocate a different plan on cotton. We have a cotton committee that is very actively at work at the present time developing a special program for cotton.

Senator SPARKMAN. You mentioned the effect of this price on competing synthetics. What about the effect on the textile manufacturing industry? We have some kind of arrangement now whereby we subsidize the textile industry on export of textiles, do we not?

Mr. PARKER. Yes, sir.

Senator SPARKMAN. How well is that working?

Mr. PARKER. It has been in effect only a very short time.

Senator SPARKMAN. Just 1 year; just this year?

Mr. PARKER. That is right, 1 complete year. I imagine it is a little difficult to tell, but it is another example of this patchwork type of approach that we have used to our farm program instead of trying to tailor a program on a commodity basis that will fit the requirements of that commodity. The reason you have to have this export payment on textiles is because we have a cotton program that compels the domestic manufacturer to pay a domestic price and then, when he sells in export, he is competing with foreign buyers who are able to buy cotton at a subsidized price.

Senator SPARKMAN. Our cotton?

Mr. PARKER. Our cotton; yes.

Senator SPARKMAN. Let me see if I understand you correctly. You think there might be worked out a multiple-price system—I will use that term, even meaning domestic parity—for the different basic commodities, but each one on a plan of its own?

Mr. PARKER. Yes; in general, I would say "Yes." The reason I object to calling this a two-price or multiple-price plan is because, actually, in the market place under the domestic parity plan, there will be only one price and that price will be determined competitively. So that, if you had a plan on cotton where the price of cotton was fixed in the market place on the basis of competitive factors, the domestic mills would be in there buying and able to buy on the same basis as the foreign mills.

Now, the principal difference that you would have to develop for a domestic parity program for cotton is to find some means of financing it.

Now, we are able to finance the domestic parity program on wheat by virtue of the peculiar character of wheat. Wheat does not have much competition for bread use and it is not a very great factor in the price of bread. So it is a relatively simple matter to provide some machinery whereby you can have the consumer pay a fair price for what he gets for the use he is going to make of it.

The only difference between the domestic parity plan and some of these other approaches is the fact it enables the producer to market his product and get a price based more nearly on the end use.

If it has a high utility or high value end use, as wheat has in bread, you give the farmer the mechanics whereby he can obtain properly and fairly from the consumer a fair price according to its use.

Instead of under a complete free price with no protection at all, as apparently the Secretary of Agriculture would urge, you are fixing the price of all wheat on the basis of its lowest value use, the export value.

That is the real fundamental difference between our approach and these other plans, that we are providing machinery to enable the producer, American farmer, to get a price depending on the ultimate end use.

Senator SPARKMAN. Did you start to say something, Mrs. Farnsworth?

Mrs. FARNSWORTH. I am surprised to hear Mr. Parker talk as if the secondary or market price, as he calls it, is not going to be a supported price, because in a number of earlier bills the secondary price support was specifically put at 60 percent, and current bills leave the question of whether the secondary price should be supported to the discretion of the Secretary of Agriculture.

May I just ask Mr. Parker if he is thinking of an unsupported, free-market price as the secondary price?

Mr. PARKER. In th first place, Mr. Chairman, the bill that passed both Houses and was vetoed by the President granted discretion to the Secretary of Agriculture to fix or support all wheat at some lower or secondary level after taking into consideration a number of factors, the price of corn, the price of other supported commodities if they are supported, any international commitments, and things of that character.

The reason that that provision was in the bill and the reason that it would be necessary today is because of the tremendous surplus stocks we have on hand.

Any plan will have to have some transition period or some modification at the outset in order to cope with the surplus problem. That is no different than what is happening under our existing programs today.

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They are being confronted with the same surplus situation. So it is making it difficult for any program to work.

Senator SPARKMAN. Mrs. Farnsworth, do you want to add something else?

Mrs. FARNSWORTH. I just want to say that I think some of the claims that are made for this program rest upon the market price being free and those claims would not hold if the market price were not free. On the other hand, the claims that would hold if you had a 60 percent of parity support would not hold if the price were free.

However, I quite agree it would be impossible today to have a really free wheat market because of the huge Canadian surplus stocks as well as our own. The Canadian stocks are just as important to the international wheat position as our stocks—a fact that seems to have been rather neglected in some of our recent export programs.

Mr. WITT. We have been dealing here for the last few minutes with wheat and wheat has many special problems. If we look at wheat in terms of consumption in the United States on a per capita basis, we find this is a commodity which tends to be used less and less as our levels of living rise, as income rises.

If we were to have substantially higher incomes, we would probably see less wheat per capita used in the future than we do now.

As we look around the world, with economic development occurring in other countries, we probably will see much of this same sort of thinking going on elsewhere, though probably not at the same rate as in the United States.

This means that the world as well as the United States and Canada probably is facing up to a situation where the capacity to produce wheat is just larger than people are going to consume.

We need to find another way in which to get an adequate price for wheat by encouraging the transfer of resources from wheat production into other commodities, so that agriculture in the United States and elsewhere is producing those kinds of things which people use more of when the level of living rises.

Senator SPARKMAN. Mr. Witt, I never have thought of the consumption of wheat decreasing as the income level rises.

Mr. WITT. People will upgrade their diets as income levels rise. Of course, wheat can be used to produce animal products. This is one of the secondary uses. Really, what we are saying here is that our capacity to produce wheat has expanded at a rapid rate, population has expanded but not rapidly enough and the surplus-producing capacity is becoming larger.

Senator SPARKMAN. Mr. McMillen?

Mr. MCMILLEN. One new crop that would do for wheat something comparable to what soybeans have done for the Corn Belt will certainly offer considerable relief for wheat and several other crops. It is not impossible.

Representative TALLE. I did not complete my statement when I was talking about the corn processing in my district.

On the 22d of last June, a company in Clinton, Iowa, dedicated a new research center, costing a million dollars. That is a lot of money in Iowa. Private industry is doing very good research work. We do not have to rely on Government altogether for research because private industry is doing a lot of remarkable research work.

Mr. McMillen. Might I remark on that point, sir, that a group of scientists who work in the wheat-milling industry—such as in your country plant--estimate that they could use fifteen-fold more corn, provided new uses were developed, some of which I mentioned in my brief statement.

Representative Talle. That is right. There is one aspect that I cannot go into here but it has to do with our foreign-trade situation. If that were ironed out properly, there would be a tremendous outlet for such a product.

Mr. Witt, you touched on something that interests me a good deal. I think you said something about foreign statistics and research done in foreign countries, that we do not know what they are doing. Did you say something like that?

Mr. Witt. I said we did not know a great deal about what the overall effects of our disposal programs are upon the economies of the other countries.

Representative Talle. I think you are entirely right.

I may say that for some time I have been trying to interest an international organization——

Mr. Witt. I do not want to give an impression here that we know nothing about it. What I am trying to say is that there are many implications of this that we really have not looked into in the detail that is necessary to fully understand the impacts and the implications, and I am not trying to say here that because our disposal programs have led to dissatisfaction and criticism by some countries that this is necessarily a reason why we should give them up.

It may be exactly the reason why we should continue them in some cases, but we ought to know why we are doing it and how it fits into our total national programs and policies.

Representative Talle. This particular international organization, Mr. Chairman, I am speaking of is the Inter-Parliamentary Union which now has a membership of 57 nations. I am trying to get on the agenda for discussion the improvement of economic statistics. By persistence, I have gotten to the point where it may be on the agenda for the next annual conference. But if we could do something constructive in that field, we would know more about a number of things in addition to trade.

Mr. Hood. Mr. Talle, in connection with Mr. Witt's comment, I am wondering, while we are at this problem of trying to find out what the reaction of foreigners is to our various programs of surplus disposal, if we could include in this investigation a detailed analysis of the probable reaction of these foreign customers of ours if we embark upon a permanent enlarged program of multiple pricing, if we want to call it this, or the domestic parity plan if we want to call it that? Any plan that holds the home price high in order to finance large exports abroad will have some effect on foreign people and we ought to know how they feel about it. As I pointed out in my paper and also later in my summary, the people to whom we have talked in all circles of foreign trade have taken a very dim view of any domestic parity or multiple-price plan.

I want to make the point that before we take the very great risk of destroying the foreign trade we have that we study, before we take any steps in this direction, the probable retaliation of these foreign countries in case we should adopt a plan of holding our own price high in order to subsidize large exports on a permanent basis abroad.

Representative TALLE. I note what you say in your concluding statement:

Fortunately we are not faced—

I am quoting now—

with a choice between present plans under the multiple price approach. There are other plans that offer better possibilities for dealing realistically with the perplexing problems in agriculture, plans which will build markets at home and abroad, help balance production and demand, minimize the role of Government, preserve and enlarge opportunity, and improve the net income position of farmers.

I am ready to ask you about those plans but before you say anything about them——

Senator SPARKMAN. That is the question I have been holding, too.

Representative TALLE. You can be thinking about it while I open up an opportunity for Mr. Parker's comment.

Mr. PARKER. Mr. Hood stated the domestic parity plan maintains a high domestic price in order to subsidize the exports. It does no such thing. It merely enables the American farmer to get from the American consumer a fair price for that portion of the commodity that he consumes as food. I think the consumer is willing to pay it, just like the farmer and everybody else is willing to pay the industrial worker a fair wage.

Now, with respect to the comments that Mr. Hood and his organization apparently have had from other people with whom they have talked. The National Grange has had some conversation with other people in foreign lands, too, about the domestic parity approach.

Apparently the reaction we get is exactly the reverse of the response that Mr. Hood has received.

To put it in a nutshell, the most precise response that we have received is that the foreign producer, and we have talked with foreign producers, would rather compete with the American farmer than with the United States Treasury as the present program is being conducted.

Representative TALLE. Mrs. Farnsworth, do you choose to comment?

Mrs. FARNSWORTH. I would like to say one thing about the consumer. If we had a parity price on the domestic food part of our marketed wheat, the price would be raised so that a 5-member low-income family would have to pay for flour and bread about $10 a year more than under our present system and $25 a year more than what the same family would pay at the so-called world price of wheat.

Representative TALLE. I note that you represent the food research institute of a very fine university. I would like to ask you a question which you may feel disinclined to answer. If you choose, you may answer it on or off the record.

Is there any substance to the claims that are made for such a thing as enriched bread?

Mrs. FARNSWORTH. I am not a nutritionist. I can speak only as an economist who reads some of the nutrition literature. Personally I am convinced that the enriched bread is better for many people who have inadequate diets in other respects. I am very glad to see it in the American diet because of such groups of people.

But we have a person here who maybe can answer this better than I can.

Representative TALLE. I was wondering if we were breaking wheat up into shorts, middlings, and bran, and then proceeding to restore properties lost to the flour in the process.

May I hear from Mr. Sorenson?

Mr. SORENSON. I will have to state also that I am an economist and know very little about nutrition, but I believe the nutritionists do place a considerable emphasis on enriched bread. It might be well to point out that low income people tend to buy a lot of flour and make their products. Whether the enrichment goes into flour as well, I do not know.

Representative TALLE. You are distinguishing between bread bought over the counter and bread baked at home?

Mr. SORENSON. Yes.

Representative TALLE. What effect on the purchase of food does advertising for slimming have?

Mrs. FARNSWORTH. Are you asking me?

Representative TALLE. Yes.

Mr. MCMILLEN. May I comment on that, sir?

Senator SPARKMAN. The lady is slimmer than you.

Mr. MCMILLEN. My comment was to the effect that my medical advisers insist that I take off a few pounds, but it has not very much affected my purchase of food. I still seem to consume more than I should.

Representative TALLE. You look hale and hearty, Mr. McMillen.

Mrs. FARNSWORTH. I think one of the really important things is the medical urging of people not to eat too much. I think advertising and medical advice of this sort is generally good and also effective.

Representative TALLE. Thank you, Mrs. Farnsworth.

Senator SPARKMAN. When you speak of enriched bread I think of dark bread. Did we lose something when we got away from the dark bread? Of course, we do have different grades of bread now, wholewheat, cracked wheat, and so forth. Do they add to the nutritional value?

Mrs. FARNSWORTH. Again I am not speaking as a nutritionist. But certainly the ordinary milling process before enrichment was introduced resulted in the loss of many elements of the vitamin B complex, and the enrichment process has put some of these back.

Senator SPARKMAN. A couple of years ago, my wife and I were visiting in Russia. One of the surprising things to me over there was to find that the people apparently were well nourished. Some time or another I thought they had great agricultural shortages and I expected to find them undernourished.

One day I saw on the menu "Ukrainian borsch." I ordered some Ukrainian borsch. It had me thinking of the kind of borsch we get in restaurants around here.

When it came it did not look the same. It was a big bowl of cabbage soup with some meat in it. Of course, I got this dark soft bread. When I ate the bread and the Ukrainian borsch, I said to my wife, "I know the secret of the apparently well-nourished people that we have here. They don't need anything else."

And there is plenty there. They can get all of this Ukrainian borsch soup—soup and a small amount of meat. It seems to me that they had a nutritional meal.

Mrs. FARNSWORTH. I would agree. But in this country such a basic diet would make solution of the farm problem more difficult. When our resources are used for foods that people like a little better, we find this also gives a little higher income to our farmers.

Senator SPARKMAN. On the other hand, I think it is something for us to keep in mind, when we speak about the living conditions on the farm and the need of pushing these groups of farmers off because their income is not high enough, that if they are getting that good food it is real value that a great many people in the cities with even higher income do not get. Would you agree with that?

Mrs. FARNSWORTH. I would.

Senator SPARKMAN. Those of you who do not believe in domestic parity or the multiple price system, do you believe that we need to keep price supports?

Mr. Witt, I believe you said you felt that wheat, for instance, ought to have a support level only at the disaster level, probably 50 percent.

Mr. WITT. I believe it was Dr. Farnsworth who made this statement.

My own position would be that the kinds of things that have been happening in agriculture in recent years certainly do not make it look as if we can just withdraw; we do not push people out of agriculture, we pull them out. We do not force readjustments, we get adjustments by inducing people to change.

Senator SPARKMAN. Creating positive programs elsewhere that look more attractive.

Mr. WITT. Right. And I know you have been very much interested when dealing with the low income section of agriculture in many of these problems. This is generally my own position. But Mrs. Farnsworth, I think, is the one that mentioned 50 percent.

Senator SPARKMAN. By the way, I just happened to think of something that we missed a while ago in all of this discussion about bread. I want to put in a plug for corn bread to use some of this Iowa corn.

Does anybody else care to comment on that support price?

Mr. HOOD. You mean on the support prices or this speech you asked me to make?

Senator SPARKMAN. I ask this question right now, if those who oppose the multiple parity system will say that we ought to retain a support program of some kind.

Mr. HOOD. I think our position is this. With all the surpluses we have on hand and the expanding agricultural plant which was discussed yesterday, we certainly cannot start out right now and take the props out from under the entire system. When we talk about adjustments we have to think of ways of adjusting from where we are to where we want to go.

I believe while we are making this adjustment that we would favor a chance for farmers to vote on whether they wanted a high level support with fairly limited acreage allotments or more acres and a much lower level of support. We favor a continuation of supports at levels which will permit market prices to operate above supports most of the time.

As long as we have surpluses and a large plant we do not have all of the choices we might have if we were starting from scratch.

Senator SPARKMAN. What would you say, Mr. McMillen?

Mr. McMillen. I tend to agree. As long as we have the current situation without an adequate solution, we should continue some degree of protection for the prices that farmers receive.

But I cannot convice myself that we ought to maintain that protection at public expense at levels which tend to perpetuate the problems with which we are dealing. It is a little like trying to keep farmers in the buggy whip business—in a world which no longer has an adequate demand for what we are producing in those fields.

I recognize that the program I propose on new crops and new uses must take considerable time. I agree that the transition must be made carefully. But we should start now toward producing things for the modern world.

Senator Sparkman. By the way, Mr. McMillen, I want to say to you that I agree wholeheartedly with your approach.

I think we have done entirely too little in the field of research, seeking new uses and industrial uses for things that can be produced on the farm.

I am very glad that you sent us the paper which you did.

I would also like to comment that I read the Farm Journal.

Mr. McMillen. I should like to add, too, that most of us who are vigorous advocates of this type of research program, do not claim that it will provide all the answers. We do say that it is one sound answer on the positive side, therefore we believe it is a good program to pursue.

Senator Sparkman. I never felt that any one individual program is going to do the whole job. I have often said I thought one of the mistakes that we have made in past years has been the overemphasis on the level of price supports. I think we have developed a psychology in this country among a great many people that the whole farm program just involves this question of what level of support prices.

Mr. McMillen. I should like, while we are again on this subject, to refer to a comment Mr. Sorenson made earlier. He referred to the experience during the war with the manufacture of alcohol from potatoes. It was also made from corn. It was then a very costly program.

Rather careful study of that situation indicates that no one really knows today what alcohol could be produced from our farm crops. Some of us would like to see an effort sufficiently comprehensive to find out whether agriculture can compete at all in the alcohol market.

I agree wholly with Mr. Sorenson that we want to make these developments as fully economic as possible. However, in this temporary period—if it is a temporary period—it could be that a little subsidy for some of the new uses would be considerably less uneconomic than some of our disposal programs.

I should like also to point to the frozen concentrate citrus juice business—which is a new use which has been fully economic. It is evidence that some dramatic new uses can be achieved with adequate research. Some of it can be done—not all.

Senator Sparkman. Now, Mr. Hood, I wonder if you can enumerate the measures that you would propose?

Mr. Hood. I think if you read my conclusions very carefully you will find somewhere in there the word "help" to do these things.

As I said just a minute ago, we are starting out with a big agricultural plant which has expanded very rapidly, with surpluses and with

technological revolution in agriculture that has kept us increasing our production per acre and per animal at a very rapid rate. Recognizing where we are we will have to take many approaches to expand our markets and adjust production.

Certainly this one discussed by Mr. McMillen, new uses, particularly industrial uses, is one long-term solution. We recognize that chemists are also working on the discovery of synthetics that may take away part of our farm market and they are working about as fast on this as we are able to find new uses for agricultural products.

But certainly over the years this effort offers a number of possibilities for enlarging our markets.

I wish Dr. DeGraff had been here, because in reading his paper I get considerable light on what we might expect from promotion, particularly the educational phase of promotion where we can encourage people over a long period of time to upgrade their diets with not more total food but a greater consumption of the animal products, those products high in proteins, minerals, and vitamins

Mr. DeGraff, I believe, in his paper, at least I have heard him say many times, stated that it takes seven times as many acres to feed people on an animal diet as it does to feed people on a cereal diet.

Even recognizing the size of our diet, Mr. DeGraff points out that a 2-percent increase in the per capita consumption of animal products would go a long way toward using our present surplus of commodity credit stocks and some of the other surpluses that we have.

We feel that most of the promotion that is going to have a lasting effect is the kind that will help people to change dietary habits. Of course, this again also comes slowly.

We will have in Washington, on the 24th of February, a big National Food Day with the theme, "Food Comes First." All over the country, in the States, counties, and communities, farmers and businessmen including those in the distributive trades, will be joining in. Emphasis will be given to a program that puts food in a little higher priority position than we normally have given it when we are deciding on how to spend our dollars.

We will emphasize food, not only for health and energy, but also food for enjoyment.

I believe over a period of time we can get discriminating consumers to put a little more emphasis on the kind and quality of food they buy and maybe, too, put a little more of their budget toward the purchase of food.

Government distribution, particularly to low-income groups, insofar as it affects the quality of the diet, can have some minor good effects, although as Mr. Sorenson says probably not over a 5-percent increase at the most. Moreover, this method is very expensive.

The growth of population will help some, although at the present time, we are moving up too fast in technology to balance it this way.

We have had some results from the soil bank. We could have better results if we had more acreage in, kept them in longer, and had a tighter control over the land that goes into the soil bank. We do not want to give up on trying to improve this.

Then it would seem to me over the years, if we put more emphasis on acres and volume and a little less on price per unit and give farmers a choice between high support prices and low volume or lower support

prices and larger volume, there will be opportunities for the efficient farmers to expand.

Support prices should be at a level which allows market prices to operate. For many commodities, no supports will be the best program.

One thing that would make it rather difficult in the future to achieve a balance of supply and demand and to have satisfactory incomes for commercial farmers that we are studying today would be a program designed to freeze everybody we have on the farm by dividing up the right to produce so that everybody would have a little of something and nobody would have enough to be efficient.

All the programs I have mentioned will help. The purpose of the hearings we have had here, I think, is to delve into the significance of these various proposals.

Senator SPARKMAN. Mr. Witt?

Mr. WITT. With Mr. DeGraff not here to defend himself, it may be a little inappropriate to comment here. I should like to point out here, however, to Mr. Hood, that he is talking about 2 percent more livestock over a 35-year period and you are averaging in some years in which there were considerable wartime demands for these farm products and the period in the last years that the gap has become wider.

So I think you are perfectly right when you emphasize help. I am just trying to say that certainly in terms of the present situation of 5 or 6 percent, a 2-percent increase in livestock production is not going to do more than help, it is not one of these overall solutions.

Senator SPARKMAN. Thank you.

Mr. SORENSON. Could I make a point on this same subject of 2-percent increase in livestock consumption?

I think it is fair to say 2 percent more livestock is consumed, that not more than 2 percent more resources would go into the production of livestock. This would not necessarily involve the use of any additional land.

If more land were used for livestock production this probably would require encroachment upon the food-grain land, but I believe it is true that most of the increase in production that has come about in agriculture in recent years has come about not through greater use of land, more acres, but by the application of more capital and better management techniques. I doubt that the position which emphasizes greater land use in livestock production provides any solution to the problem of excess crop production. Land has not been the important variable contributing to recent increases in output. Wheat production has, of course, been maintained with greatly reduced quantities of land.

I have one more comment. I believe there is probably excess producing capacity in the livestock economy right now to take care of a 2 percent increase in consumption.

Senator SPARKMAN. Mr. Brandow, do you have some questions?

Mr. BRANDOW. I have a couple of questions, Senator. Each, I am afraid, might take a little time.

I would like to have the panel give a little consideration to what our foreign-trade policy in wheat might be for the immediate future and maybe for longer than that.

First, is it conceivably a wise foreign-trade policy in wheat for us to support wheat at 75 percent, 90 percent of parity—in that area—if this is the only price at which we can sell wheat? What would that do to your foreign trade in wheat? Would this be a desirable policy?

Mr. HOOD. I think we have had some good results from the International Wheat Agreement. Probably we should continue this because here is a method whereby we effect these lower prices abroad by agreement. Probably a continuation on a temporary basis of wheat disposal through Public Law 480 is desirable. As Dr. Witt said and Mrs. Farnsworth has said, this is not a long-term solution.

We feel world trade in wheat is associated with what we do here at home with our supports on wheat.

We cannot continue to have a program of exporting wheat where we pay up to as much as 97 cents a bushel as we did on some of the wheat that was exported under the subsidy program in the past year.

It is impossible to have a high level of prices for wheat at home over an extended long period of time and hope to continue to compete successfully in world markets.

Mr. BRANDOW. May I ask a more limited question, then? The average farm price of wheat in November was $1.93 a bushel. Supposing this were the price of wheat offered on the foreign market, how many bushels of wheat would we sell at that price?

Mr. HOOD. Probably not too much.

Mr. BRANDOW. Is there any disagreement with the general idea that we just do not have any export market for wheat at the equivalent of $1.93 a bushel?

Mr. WITT. I am just going to say that even with the low price that we had difficulty in disposing of more than a small part of the crop.

Mr. BRANDOW. Exports being so important for this commodity, obviously this is not a sensible policy in reducing our wheat surplus.

Suppose we took the price supports entirely off wheat, and controls entirely off wheat, could we live with the consequence of that in terms of international trade and international relations?

Mrs. Farnsworth, what do you think?

Mrs. FARNSWORTH. If we took the support prices completely off and removed controls, and what do we do about stocks?

Mr. BRANDOW. We isolate stocks that the Commodity Credit Corporation now has.

Mrs. FARNSWORTH. We do what?

Mr. BRANDOW. We isolate, we hold.

Mrs. FARNSWORTH. I have a great deal of faith in the efficiency of the American wheat producer and I think there would be a great many American wheat producers who could get along very well and with very reasonable incomes to them at this price if you also assumed that the Canadians isolated their existing stocks.

Mr. BRANDOW. Well, your answer, though, is in terms of how the wheat farmer might be able to get along.

What I had in mind, which I may not have expressed too well, is what would it do to the world market for wheat and would this consequence be one that we could live with in terms of international relations?

Mr. WITT. I do not think we would live with it given the excess productive capacity in wheat that the world now has. We could not

live with the kind of free-market prices that would occur in the case of wheat.

Now, wheat, I think, is a special problem. I think this should not necessarily be generalized to all agricultural commodities, but in the case of wheat I just think we have other countries imposing protective devices for their wheat producers and insisting on some kind of international commodity agreement; or they get into bargaining, bilateral bargaining, or something like this, in order to prevent the disaster to the incomes of their wheat farmers that such a program would lead to.

Mr. BRANDOW. What do you think the attitude of our State Department would be toward this program?

Mr. WITT. I think they would be under a lot of pressure also, once this actually came into effect. It might take a little while for the pressure to mount, but they certainly would have delegations calling upon them asking them to go to the Department of Agriculture and the United States Government to participate in programs that will help protect the world wheat market from disaster levels.

Mr. BRANDOW. Mr. Parker, do you agree with this?

Mr. PARKER. I think we need to look at some of the other factors that are involved in the picture right now because we have had the consequences, both domestically and internationally, of our existing program for a number of years where we in effect have held a price umbrella over the world market. Since 1953 to 1956 we have made some real efforts at restricting our acreage in this country and we have actually cut our acreage about 29 percent where the rest of the wheat-producing acreage in the world has increased.

I think any change in a program is going to have to be cushioned with some type of transition period. We have an international wheat agreement that I do not believe any one should say that we should scrap immediately; but, basically in that agreement initially, you had consuming nations on one side and producing nations on the other.

At the time of that agreement, when first entered into, it was merely one of getting the price of wheat down. There was a market for all the wheat that there was in the world but the question was to get the price down, they could not pay the price. The price was, in the export field, reduced but since that time many of those nations that were consuming nations at that time, by virtue of the price umbrella have become producing nations, in fact they are exporting some wheat at times.

Mr. BRANDOW. What you are saying is that due to certain reasons—which you do not think are particularly good reasons—we find ourselves in this situation that does exist, and looking at next year and the year after that you are really in agreement with Professor Witt, I think. Is that correct?

Mr. PARKER. Substantially. I think we need to change directions. I think we need to start on the road whereby producers throughout the world will realize that there will be some competition between them and that there is no longer going to be a price umbrella held over their heads.

Now, I do not mean to say in that process the producing nations, exporting nations, will not have to perhaps resort to some type of international agreements to keep their competition within some type of bounds.

Mr. BRANDOW. Now, Mrs. Farnsworth.

Mrs. FARNSWORTH. I just want to say that I think nobody knows today what would happen to the world price of wheat if we did have a free market because we have been so far away from the free market.

However, the Canadians are now producing and taking what is around $1.70 base market price. If we would cut down to 60 percent of parity we would be giving our farmers about that same price.

We have been holding our farm price way above this. If we cut down either to 50 percent, or to zero, I think our farmers would greatly reduce the amount of surplus wheat they would produce. I think this is really the difference between my view and Mr. Witt's.

Mr. BRANDOW. Your difference is on the supply side?

Mr. FARNSWORTH. Yes.

Mr. BRANDOW. I believe that this year's acreage of wheat is something like 36 percent below the 1953 acreage, before controls started.

A critical question is how long would it take farmers under the impact of a low market price to reduce the volume of wheat made available to the foreign market to a point where we would not have all these competing exporters and many of the importing nations (for the sake of protecting their own domestic producers) beating on our doors and expressing the views that Professor Witt has? How long would this take?

Mrs. FARNSWORTH. Well, I think the adjustments in agriculture take place pretty quickly. It depends on what happens to the prices of other crops and the marketing opportunities there are for other crops. The flexibility of agricultural production adjustments within agriculture, I think, are very great. If you also have this extended by actual Government efforts to adjust people off the farm and give a lot of the young farm people more opportunities in the way of education and to become trained people in fields where we need trained people instead of staying in agriculture where we do not need so many, it would help the income of the people who do remain in agriculture.

Mr. BRANDOW. It seems to me you are saying, "as long as it takes to reduce the farm population by migration outward." Would not this take a rather long time?

Mrs. FARNSWORTH. I would say it might take a few years but why should we not spend some of our money in giving them direct adjustment payments?

Mr. BRANDOW. I know people who favor that. I think in your summary you said something about the need for supports at perhaps 60 percent of parity, or 50 percent. But when we press for a response on the results next year and the year after that, it seems to me that you are agreeing that the consequences would be pretty rough in a short period.

Mrs. FARNSWORTH. Yes. I would not take them all off immediately.

Mr. BRANDOW. Then this leads to the conclusion, it seems to me, that we cannot maintain present supports and do nothing about our foreign sales price without losing all of our exports.

On the other hand, we cannot just let all the stuff go to the export market without any restriction whatever. It seems to me it is going to be necessary for us in the next few years at least to have some kind of Government export policy with respect to wheat, and very possibly some other commodities—but we are using wheat as a

particularly important example—for the next year, the next 2 years, very likely longer. We need to have some policy with respect to export of wheat other than just maintaining a support price on all the production or letting everything flow to the market that would flow if we did not interfere with it.

Now, what might that policy be?

Mr. WITT. It seems to me with respect to your general statement here that this is a difficult problem and one that we cannot go completely in the direction of free markets any place, I think each of these is equally unrealistic for the near future and in fact I would wonder whether even a multiple price or a domestic market—foreign market division here some way would actually sell as much wheat as we are now selling. I have the feeling that we are selling abroad for local currency that which would not move if we were not accepting local currency under any conceivable kind of program.

It seems to me that in the kind of circumstances that we are in today, the United States position in the world as a leader of the free world, we have to be equally concerned with the sale of Canadian wheat, Australian wheat, Turkish wheat, and the United States wheat.

Obviously we have a more selfish interest in the United States wheat and American farmers are interested in this, but our role in international relations, our whole involvement in international relationships with countries which we want as our allies, which we need as allies, means that we have to be concerned with their problems, too, not only for wheat but for cotton and for many other products.

It seems to me that we need to look at these problems on a world basis, area by area, to determine how output adjustments can be obtained.

Mr. BRANDOW. Can we put in a domestic parity program for wheat next year or in the immediate future, without acreage control or any kind of control on production and also without any restraint on either what we do to the foreign price or the quantity exported? Or must we have some restraints under current conditions?

Mr. WITT. It seems to me we must have restraints and we must be willing to discuss these restraints with other countries and expect them to, within the limits of their capabilities, also exercise restraint.

Mr. BRANDOW. Mr. Parker, do you agree?

Mr. PARKER. Yes, very definitely. I think we can put the domestic parity plan into effect next year or the year after but I think you need some restraints. I think you need to maintain acreage controls, acreage allotments, that you have in effect. I think you would still continue to maintain the International Wheat Agreement, I think you would still maintain Public Law 480 and find markets that are not available as dollar markets and we would also have some type of secondary price-support level in the neighborhood of maybe 60 percent of parity or something like that in order to give you a transition period and to finally remove the surplus before you could ever go to the full application, you might say, of the domestic parity concept.

Mr. BRANDOW. Senator Sparkman, I have another question.

Senator SPARKMAN. Go right ahead.

Mr. BRANDOW. Mr. McMillen, when you were tending to deprecate the dexterity with which you had gotten the people's attention for new uses and so on, I think you were being unduly modest. I think this

program has had a very enthusiastic reception. I have not heard anything that has been so favorably discussed. In fact, I am a little concerned that the rather modest claims you make for it here this afternoon are not quite the expectations that some people have for it.

As I read this report of the Commission on Increased Industrial Use of Agricultural Products—I may be doing it an injustice, I do not have it with me—I believe I remember that it starts out by asking, can we solve the farm problem this way, and ends up pretty much saying "yes."

Is my interpretation of that report right; and, second, in any event, do you agree with it?

What is your feeling as to how much we should rely on this as a solution to the farm problem?

Mr. McMillen. I think I can best answer that, Mr. Brandow, by saying that taking into account the time that is inevitably to be consumed in carrying through research programs and their application, that we should rely on it to the utmost degree that our information indicates would be feasible.

In other words, we should do the biggest possible job that seems practical and probable in that direction.

I take it part of this question and perhaps your next one is: Will it answer the whole agricultural situation? I would hesitate to make that claim and I believe that what the Commission said—I should know because I think I wrote that paragraph—is "yes," if we do a maximum job of research and development of new uses and new crops.

Mr. Brandow. In how long a term context is this conclusion you have reached? Is this a conclusion that applies in the next 5 years?

Mr. McMillen. You would have to look forward to rather longer than that. We do have indications of agricultural technology moving faster than the growth in population for maybe a decade to come. All other things being equal we might have a surplus problem 10 years from now in somewhat the same proportions that we have it now. Five or 10 years should permit considerable achievement in the fields of new uses, some in the field of new crops.

There are some processes that are now pretty well through the laboratory stages that could be applied within a year or so, and I think would be applied by our industry with a little more development.

In some cases, of course, industry does this development itself, but in order to hasten it, the Commission suggested we might finance some trial commercialization.

Mr. Brandow. I suppose it is rather uncertain to try to predict precisely where one might find results in this area. We are hopeful that we will find useful results, but it is hard to predict precisely what ones.

Now, we have been talking about agricultural adjustment a great deal here. It is conceivable, it seems to me, that we might find some really wonderful things through research and new uses or new crops but we cannot tell what these might be. We might find something that turned out to be a very good crop in the South, in the area where cotton is now growing, but there might be some things about this that would imply considerable agricultural adjustment. One is that it might do nothing for wheat. The wheat problem would still remain.

Second, this new crop might be one where the methods of farming are such that you had to go at it on a large scale, with big machinery, so that it would pretty much revolutionize the agricultural economy of the South although it would leave the South with a strong agricultural economy.

Both of these would imply, it seems to me, that even with very fruitful results from research, we would still need considerable agricultural adjustment. Do you agree?

Mr. McMillen. Yes, I think that is likely. Take what is possibly the greatest potential in sight in the South: Bamboo, which is an important source of cellulose and certain other products. We consumed in 1956, I believe, 418 pounds of paper products per capita. To those of us for whom paper is an important ingredient in our business, we regard it as a fairly high-priced product.

It takes from 7 to 10 years for a bamboo crop to mature, not taking into account the period it takes to get it established. How it would affect the farming pattern of the South is a matter of speculation. It does require—where it is more economically handled—some large machinery; but I rather expect such machinery will be provided by the consumers of bamboo pulp. There is no reason why it could not be grown by small farmers as part of their operation.

Mr. Brandow. Thank you. That is all.

Senator Sparkman. Mr. Talle.

Representative Talle. Mr. Chairman, may I ask the panel one more question?

Are you in agreement that there does not lie much hope for increasing the demand for farm products through the use of food-stamp plans as mentioned by Mr. Sorenson?

Mr. Sorenson. I have expressed my view.

Mr. Witt. I do not know whether we are all in agreement on this. Based on the point that Mr. Sorenson made, I agree that there is some potential for expanding food consumption. It probably would be possible, it would have some benefits from the standpoint of income distribution if you are in favor of improving the relative position of low-income people, and at the same time it is possible for the supply response in agriculture to be sufficient that there would be a little loosening up on the restraints, a slightly more favorable price situation, and in a year or two we would find ourselves with much of the same kind of surplus problem as existed before we started the program.

Mr. Hood. I just want to say that I think I am in agreement with with what Mr. Witt has said and also Mr. Sorenson, that at best this is a small outlet at a time when our supply is pretty big.

Representative Talle. Do you agree with that, Mrs. Farnsworth?

Mrs. Farnsworth. Yes, I agree, and in addition to that I think it would not help the crops, for example, wheat, which is perhaps in the worst distress.

Representative Talle. Do you agree, Mr. Parker?

Mr. Parker. I would agree substantially with what has been said. I think plans like that are more effective over a short period of time and at times when you have much lower income potentialities than we have now in the economy.

Mr. SORENSON. This conclusion is based on the present relatively full employment we have. If we got to a heavy unemployment period again then consumption programs would have a quite greater impact.

Mr. WITT. I think this is a point we all agree to.

Representative TALLE. Thank you, Mr. Chairman.

Senator SPARKMAN. Thank you.

On behalf of the subcommittee let me thank the panelists this afternoon for the very fine thoughts you have brought to us and the outstanding contribution you have made to this hearing.

The subcommittee will stand in recess until 10 o'clock tomorrow morning.

(Whereupon, at 4:45 p. m., the hearing was recessed until 10 a. m., Friday, December 20, 1957.)

POLICY FOR COMMERCIAL AGRICULTURE

ITS RELATION TO ECONOMIC GROWTH AND STABILITY

FRIDAY, DECEMBER 20, 1957

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON AGRICULTURAL POLICY OF THE
JOINT ECONOMIC COMMITTEE,
Washington, D. C.

The subcommittee met at 10 a. m., pursuant to recess, in the Old Supreme Court Chamber of the Capitol, Senator John Sparkman (chairman of the subcommittee) presiding.

Present: Senator John Sparkman, Alabama; Representative Henry O. Talle, Iowa.

Also present: John W. Lehman, acting executive director; George E. Brandow, economist; Dr. Reed L. Frischknecht, legislative assistant to Senator Arthur V. Watkins.

Senator SPARKMAN. Let the subcommittee come to order, please.

This morning we resume hearings on policy for commercial agriculture.

Yesterday we began discussion of means by which farm income might be increased. In this session, we continue this discussion by taking up direct payments to producers and the commodity-by-commodity approach.

By direct payment programs, we mean programs under which the Government pays money directly to farmers to compensate for low prices or incomes.

By the commodity-by-commodity approach, we mean separate programs for each commodity, with each commodity group adopting whatever program seems most feasible.

Our only reason for putting these two topics on the same panel is that we do not have time to devote a separate session to each. We do not mean to imply that there is any special relation between them.

We have five papers on these topics in the compendium, and, I should say, they are excellent papers, too. The authors are here this morning.

Gentlemen, we welcome you and express our thanks for your assistance in carrying out our study.

Following our usual procedure, we will have a 5-minute summary by each panelist. When the summaries have been completed, members of the subcommittee will ask questions of the panelists. We hope each panelist will enter the discussion of any topic that comes up and will feel free to ask questions of other panelists. Just indicate that you wish to speak, and you will be recognized.

We will begin the summaries with Mr. Lauren Soth, of the Des Moines Register and Tribune.

Mr. Soth, we are glad to have you with us.

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STATEMENT OF LAUREN SOTH, EDITORIAL STAFF, DES MOINES REGISTER AND TRIBUNE

Mr. SOTH. Thank you, Mr. Chairman. As a newspaperman I feel I should be on the questioning end instead of answering questions here.

Senator SPARKMAN. Sometimes we like to get it turned around.

Mr. SOTH. As I understand my assignment, I am to talk about methods of providing assistance to agriculture and not get into reasons why or anything like that.

Protecting farmers' incomes by means of Government buying of farm commodities to support prices has these serious drawbacks:

1. Such price supports are practical only for a limited number of storable commodities.

2. Such price supports concentrated on a few commodities, tend to distort the pattern of agricultural production. Despite acreage controls price supports plainly have stimulated output of several of the basic commodities in recent years.

Allotments and quotas based on farm-cropping history tend to hold crops in traditional areas and limit desirable changes which would otherwise come about through new technology and changing markets.

3. Supporting prices by buying commodities leads to serious problems of storage and disposal, as Mr. Benson knows very well.

4. Price supports interfere with our national policy of establishing freer trade in the world. When United States prices are fixed above world levels, import quotas and high tariffs are necessary to prevent the American market from being flooded from abroad, and export subsidies become inevitable as a means of disposing of our surpluses.

In light of these shortcomings more consideration might well be given to the direct-payment method of supporting farm income.

Since 1933 the Government has been making payments to farmers in connection with acreage control and conservation practices, and, during World War II, with price subsidies on livestock.

The most recent application of the direct-payment method is in the soil-bank program.

Soil-bank payments could be increased to partially replace price supports as a means of supporting farm income.

For this purpose, it would be advisable to expand the "conservation reserve" part of the present soil-bank program. In this part of the program, payments are unrelated to individual commodities or acreage controls based on history. Payments would support farm income without interfering with markets or farmers' decisions on crop plantings.

Under this program, the general taxpaying public would be paying individual landowners for performing a task in the public interest, keeping land out of use when it is not needed and preserving it for future generations.

Payments under this program could be made adjustable according to some general index of business activity or prices of farm products. That is, payments could be made to take up the slack in farm income from a sag in the market. They would be justified as part of the Nation's general economic stabilization machinery.

If general income support for farmers were provided through soil-bank payments, then price stabilization operations could be conducted wholly for the purpose of leveling out prices and production. The authority for adjusting price supports, within wide limits, should be lodged in an independent price stabilization board with a status something like that of the Federal Reserve Board in monetary policy.

Direct payments have a role to play in this job of price stabilization also. Loan and purchase methods of price stabilization have been fairly successful for the basic crops. But these methods are impractical in the case of perishable livestock products, fruits and vegetables.

Farmers might be given a compensatory payment in lieu of direct price support on such commodities. That is, if the market price fell below the guaranteed price, the farmer would be paid the difference in cash.

The objective of such a program would be to give farmers a more stable price target, and to thereby minimize the ups and downs in production caused by wrong guesses on prices.

There is an obvious need for greater stability in agricultural markets, particularly in the markets for livestock and livestock products.

And I don't think we have paid enough attention to this problem in our farm programs in the past.

Under the free market system, farmers tend to overshoot the mark on production both on upswings and downswings. The result is large and wasteful price and production cycles. The problem is so great that some experimentation in the use of direct payments to stabilize production and prices of the perishable commodities is urgently needed.

Ever since Secretary Brannan came out with his plan several years ago, I think this idea has been discredited and has not been given adequate consideration.

I think farmers are not as opposed to this idea as is sometimes indicated. A number of studies, opinion surveys, have shown that contrary to statements by some farm organizations, farmers are not opposed to the direct payment method as a means of stabilizing prices of perishable commodities.

Senator SPARKMAN. Next, Prof. George K. Brinegar, department of agricultural economics and farm management, University of Connecticut.

Mr. Brinegar, we are glad to have you with us.

STATEMENT OF GEORGE K. BRINEGAR, DEPARTMENT OF AGRICULTURAL ECONOMICS AND FARM MANAGEMENT, UNIVERSITY OF CONNECTICUT

Mr. BRINEGAR. Mr. Chairman, in my assignment on direct payments I chose to treat direct payments as a technique of implementing policy rather than as a means of comparing different programs. I did this because the technique of direct payments has in some sense become a political issue associated with the specific programs that it was to be used for.

I was trying to draw a sharp distinction between direct payments as a tool of implementing programs and the programs themselves.

So that is implicit to this summary which is as follows:

My thoughts on the use of direct or compensatory payments are summarized below in nine points. Let me hasten to add that more

meaningful, precise and useful statements could be made if, in the past, more research had been devoted to quantification of the relevant relationships involved; this, though, is a problem for another time.

1. The total cost to the public, paid in the form of taxes and changed consumer prices, of implementing the usual types of agricultural programs would be less under direct payments than under price supports, assuming that a given amount of income is to be transferred to agriculture.

2. However, United States Treasury disbursements would be about three times as great under direct payments as under price supports, again supposing that a given amount of income is to be transferred to agriculture.

3. The long-term trend in the cost of agricultural programs employing direct payments, or, alternatively, price supports, would depend on the details of the specific programs rather than on the choice to use direct payments or price supports.

4. The gains accruing from a more extensive use of direct payments in place of price supports would be largely realized in the nonagricultural sectors of the economy, and would be reflected in a lowering of the Bureau of Labor Statistics Consumers Price Index and the Wholesale Price Index.

5. More extensive use of direct payments as replacements for price supports, while benefiting all consumers in the aggregate, would aid low income groups relatively more than high income groups.

6. Under a direct payments technique, the accumulation of surpluses and of consequent surplus disposal problems, would be avoided.

7. The extent to which an agricultural program tended to "cure" or to make "worse" the long-run "agricultural problem" would depend largely on the specific contents of the program rather than the choice made between the use of direct payments and/or price supports.

8. The administrative problems of employing price supports and direct payments are different in nature, but similar in magnitude.

9. Agricultural economists writing on agricultural policy appear to think that the direct payments technique has been underused in comparison to price supports. This attitude largely reflects the fact that the direct payments technique is a more powerful and flexible tool of program administration than is the price support technique.

Senator SPARKMAN. Thank you, Mr. Brinegar.

Now, Mr. Gordon K. Zimmerman, research director of the National Grange.

STATEMENT OF GORDON K. ZIMMERMAN, RESEARCH DIRECTOR, THE NATIONAL GRANGE

Mr. ZIMMERMAN. Mr. Chairman, a major part of the agricultural problem confronting us today has been the prolonged, common oversimplification that farmers in all parts of the country are somehow alike, with common problems and common aspirations. It simply isn't so.

Farmers are not necessarily alike and their problems are more often diverse than similar.

If it can be said that there is any single farm problem, it would have to be reckoned as the aggregate of a multitude of separate problems. Dissimilarity is the fact and the common characteristic of American agriculture.

The commodities of agriculture, and the circumstances surrounding their production, marketing, and value, are the most diverse of all. These diversities underscore the need for a commodity by commodity approach to farm programing.

The differences between perishable and nonperishable crops have been recognized, of course, for a long time, and there has been recognition of the different program needs for deficit crops such as wool and sugar, and commodities in almost chronic oversupply, such as cotton and wheat.

These represent the more obvious distinctions. There is an almost endless range in the varying circumstances affecting the production and marketing of farm commodities.

Capital investment, for example, varies widely, not only between commodities, but within commodities.

There is a difference in markets. Some commodities such as wheat and cotton, have traditionally depended on export markets to absorb a substantial share of annual production. Others, such as wool and sugar, face competition from importations.

Dissimilarities in labor needs and labor supply also argue for a commodity-by-commodity approach. Fruit and some other crops often require a considerable, but seasonal labor force. Large dairy farms often hire year-round help.

Some commodities go to market; others, such as the feed grains, are largely consumed on the farm.

Competition for consumer favor exists unevenly among the commodities. Some, such as wheat and potatoes, compete with each other. Others, such as cotton and wool, face competition from nonfarm commodities, such as rayon and nylon.

Geographic and climatic differences are also involved. The wheat-growers of Texas, for example, deal with different market and weather conditions than the dairymen of New England, or of Minnesota or Wisconsin.

Farmers have not expanded their plant and production capacity evenly in all commodity fields. The relative severity of the problems faced is not the same in all parts of the country and for all commodities.

In turn, this probably explains in part, at least, why the attitudes of farmers themselves toward farm programs vary so widely.

It is also worth noting that farmers themselves are accustomed to thinking in terms of commodities. They traditionally measure supply and estimate demand in terms of individual commodities. They sell individual commodities; not aggregate farm production. They continue to recognize the existence of the cash crop.

Each of the basic commodities is unique in its production and marketing characteristics, its background and future requirements. And the same applies to most of the nonbasic crops.

To improve the position of the producers of these commodities, then, individual programs should be designed to deal with the distinctive features of each. Within this selective approach there is ample latitude for every degree of Government intervention, from much to little or none, as the individual commodity situation may warrant.

Marketing quotas, direct payments, and self-help might be used, for example, as well as such devices as grade labeling and loan and

purchase operations, one or the other, or any number of combinations.

By any analysis, American agriculture is an aggregate. It has no entity or unity separate from the commodities which are its ingredients. Any effective program for agriculture, therefore, should properly be the sum and blending of component commodity programs.

We have already in operation some elements of a commodity-by-commodity farm program. Our present task is to take the most useful features of what we have, devise such new adaptations as promise to serve individual commodities best, and anticipate future requirements rather that repatch past mistakes.

Thank you, sir.

Senator SPARKMAN. Thank you, Mr. Zimmerman.

Next we have Prof. John D. Black, of Harvard University.

Mr. Black, we are glad to have you with us again.

STATEMENT OF JOHN D. BLACK, PROFESSOR EMERITUS, HARVARD UNIVERSITY

Mr. BLACK. Mr. Chairman, I should explain that after reading over these reports and listening to the testimony yesterday, I feel that my summary statement needs to be supplemented and revised a little. I hope that is acceptable.

Senator SPARKMAN. That will be very satisfactory.

Mr. BLACK. First of all, I should explain that my summary statement needs some background introduction.

First of all, I was asked to report on both the direct payment and the commodity by commodity approaches.

It should also be clear that I was not to think of either of these as complete programs within themselves, but instead as having a place or not having a place, in the complete program.

Also, I should indicate at the outset that I am thinking of these 2 procedures in 2 different settings.

First, in a continuing long-run program, and, second, in the period of transition to such a long-run program that we must go through with in the immediate situation.

This second is very important now because of the difficulty and involved situation in which our agriculture now is.

Now, first, as to the direct payment approach, analyzed by both Mr. Soth and Mr. Brinegar. I am using direct payments in a narrower sense than Soth does. He includes any operation in which a farmer gets a check directly from the Government, such as conservation payments, soil-bank payments, and the payments we have had from the beginning of the AAA for taking acreages of cotton or wheat out of production. These are direct payments in one sense of the word, but they are not the kind of direct payments we are talking about here and that you, Senator Sparkman, defined in your opening statement. You are thinking of the wool payments as an example of direct payments.

I want to say here that I don't think that the wool use of direct payments was a particularly good selection for a test case.

What I have written about direct payments in my summary statement applies to their use either in the long run or in the short run but not in the transition period between, except as I shall bring out.

I shall now start reading my summary statement, except as I have

revised it considerably. First, direct payments in my judgment should have an important place in a complete farm program. They can have their greatest usefulness with nonstorable commodities and those costly to store, and in stabilizing their net returns from year to year. It will often be best to sell a large supply of these for what they will bring in a free market and make up the serious deficiencies of income by direct payments.

But there should be one important qualification; namely, that if an outlet can be found for some of the surpluses of these in foreign countries that will be helpful to them as well-conceived foreign aid, or at home outside the usual channels of home trade, at a cost less per unit than the amount of the direct payments, such outlets should surely be utilized. This will raise the level of prices in the free home market and reduce the volume of direct payments.

What I have just said is in effect that disposal outside the usual channels of trade at home or abroad under well-conceived operations, should come first and direct payments used only to take care of the remaining deficiencies in price or income.

Now there are two other requirements of a direct-payment program if it is to be successful. First, the level of total income, that is, free market receipts plus direct payments, set up as a standard, must not be so high that it will cause output to expand faster than the free market demand. The standard set up in the Brannan plan was far too high. For most products, also is the 90 percent of parity specified in the dairy product, wheat, and cotton legislative proposals. In general the standard should be what will call forth the supply that will move into the uses just named. The direct payments should be pretty much limited to periods of surplus due to production cycles, to depressed market demand, and the like.

I should state here that this has reference to a long-run continuing program. In the transition from where we now are there may well be need for a gradual reduction to the long-run standard over a 5-year period. To be more explicit, take the dairy situation. The present proposals are to reduce dairy price supports from 82 percent to 75 percent of parity all at one fell swoop. I think we should seriously consider a transition from one to the other so as to give the dairy industry a chance to adjust and everything that goes with this.

Second, the standard should vary with the total volume of output in such a way that the total net return from the year's output should be no higher with a large output than a normal year's output. Otherwise the producers will have a strong inducement to produce more each succeeding year. To be still more explicit, let us assume a particular group of farmers. The Government came forward and guaranteed you and paid you a set of total payments, that is, market price plus direct payments, and you produced a big crop because of the weather or for other reasons. A fixed payment program means for the Government to come along and say "Go ahead this next year and we will pay you the same price no matter how much you produce." Can you think of anything better intended or designed to stimulate expanding production year after year?

Any direct-payment program must be worked out so that the producer does not get a larger net return for a large crop than for a normal crop. This is not provided for in Mr. Brinegar's statement. I cannot make this statement too strong. We now do have, of

course, in present programs a schedule of price supports varying with supply for two groups of products, the "A" and the "B" groups, the basic and the mandatory lists, excluding tobacco. This needs to be preserved but improved and perhaps fitted to transition needs better.

There is also a question as to whether the adjustment should be in terms of the supply on hand or the output in any year. This is a very serious question. I am inclined to think the latter.

Now as to the commodity approach, Surely one cannot say that the present farm program is not a commodity-by-commodity program. Differentiation by commodities has increased ever since the Emergency Tariff Act of 1921 set up different rates for different commodities. Part of this differentiation has been spelled out in acts of Congress. Part of it has been left to decision by administrators in accordance with rules and principles stated in the successive agriculture acts.

The demands of the commodity groups pressing for new legislation today are really for more uniformity rather than less of it. Thus several of them are all asking for a price support level of 90 percent of parity on a domestic market quota, and if you give that to one commodity group, every other commodity group will say, "Why shouldn't we have 90 percent of parity?", and this will introduce more uniformity than we have now so far as the level of price supports is concerned. What is needed is more differentiation and better adaptation to products. In this matter I agree entirely with Gordon Zimmerman that we need more differentiation. But the commodity programs proposed would give us less rather than more in the most vital of all features of a commodity program, that is, the level of price supports.

The facts are that what we are really being asked for is not more differentiation in programs, but more separateness in administration; and, second, a larger participation of producer representatives in such administration. This is the essence of the so-called commodity-by-commodity approach.

My general conclusion is that the second of these, that is, producer representation, but not the first, is in the right direction; but that the specific proposals that I have been able to review carry this second objective too far.

Let us take the proposed dairy program as an example. I would not recommend one board of producers only and then a separate board in the Department of Agriculture in which other dairy interests and the producers are represented, but would combine these into one dairy board. Then there would need to be an overall advisory board in the Department of Agriculture to keep different commodity programs integrated with each other. This board would replace the present CCC committee and cover production as well as marketing decisions.

You see, I agree entirely with Lauren Soth with respect to the need of this kind of board.

Again, I would not have a separate congressional reference committee for each commodity set up by Congress. I would hate to think of Congress having to function with separate congressional committees representing each commodity. How much time would they have to spend in Washington after Congress had adjourned? I would have, instead, one overall committee so that the overall national interests would be represented and also the different commodity programs would be integrated with each other.

Next, if such a program is authorized by Congress, the legislation should state carefully a general set of principles and rules that are to guide the decisions just as is done for the ICC and the Federal Trade Commission. This matter is highly important. I propose to illustrate it right now with respect to the situation in dairy products. Secretary Benson is right that the controlling legislation says, "a price between 75 and 90 percent of parity" that "will assure an adequate supply."

Back in 1952–53, a surplus of dairy products began to build up, and the Department of Agriculture did not lower the support price as it should have done under these instructions. The result was a very large accumulation in dairy products in the period following. All of you know how, in order to get out of that jam, the Department of Agriculture decided to pay the holders of these dairy products in cash for their losses in place of letting them sell at the support price and buy back at a lower price. The case arising from this, is now before the courts. I think, it is still being tried in Minneapolis.

What really happened in this case is that Agriculture did lower its support price, but did it a year too late, and this permitted large surpluses to build up.

We now have a dairy situation like that in 1952–53. But, this time the Secretary has made the announcement he is instructed to make under congressional mandate. But what are we hearing? Tremendous objections from certain Members of Congress. All right. If these instructions are wrong, they should be changed; Congress should change them. All this means is that we must be certain that the principles and rules that are laid out are the ones that do fit the situation and the needs of the industry. Maybe the present rules are the right ones. Maybe what the procedure should be, instead, is a direct-payment procedure with gradual transition to 75 percent of parity, lowering support prices all at once, but making up by direct payments to the dairy industry the difference between these and a declining level of total returns to the dairy farmer.

There is strong emphasis in my report on the need for recognizing intercommodity relations and larger interests than individual producer groups will represent. To illustrate the importance of the foregoing conclusions, I have in my report reviewed two of the commodity proposals that are in their most advanced stage, those for dairy products and for wheat. I have concluded that the dairy plan proposed will not work out well, that it will pile up larger surpluses, and have faintly suggested, instead, a transition program of modest direct payments combined with programs of disposal outside of the usual channels of domestic and foreign trade, and that these latter both can be expanded somewhat.

My conclusion with respect to the wheat proposal is that it will also make the situation worse rather than better.

I should add one thing about the domestic parity proposed for wheat; namely, contrary to Mr. Parker's statement yesterday, it does subsidize exports. It does not do this as much as does our present export dumping, but it still does it in a large way, and it will expand output. It will also expand the production of wheat for feed use.

Now, I am not opposed to domestic parity, as such. It has a place in the total farm-program setup, but it must be rightly used, and I would prefer to call it by its original name in a book I published in

1929, Agricultural Reform in the United States, where it was called the domestic-allotment plan. This name was used in the Agricultural Act of 1936, the Soil Conservation and Domestic Allotment Act. But there was really no domestic-allotment provision in that act. So we really have never had it tried. It does not fit wool, because we export no wool.

In spite of my conclusions as to these two proposals, I am still in favor of more differentiation in programs among commodities. The classification A, B, and C that we have now, plus the sugar and wool programs, is not enough.

Also, we need better adaptation of these programs. But I doubt very much that we will get the adaptation needed by the types of commodity setups that are being proposed.

The level of supports is what is principally needed to be differentiated, and I have pointed out that the proposals go in the other direction. We will get less, rather than more, under the setups proposed.

My final conclusion is that both direct payments and commodity programs have a place in a complete farm program, but that their place needs to be carefully considered and spelled out specifically, and that the commodity-by-commodity approach needs first to be tested out with a few products, very carefully chosen.

Senator SPARKMAN. Thank you, Dr. Black.

The next will be Mr. W. E. Hamilton, director of research, American Farm Bureau Federation.

STATEMENT OF W. E. HAMILTON, DIRECTOR OF RESEARCH, AMERICAN FARM BUREAU FEDERATION

Mr. HAMILTON. Thank you, Mr. Chairman. I shall use the term "direct payments" in the restricted sense referred to by Dr. Black.

The idea that direct, or compensatory, payments to farmers are a simple cure-all for the difficulties encountered under present farm programs is a delusion for two reasons: (1) The economic consequences of payments are more serious than statements of the proponents indicate; and (2) the political implications of going the payment route can be expected to prevent realization of the alleged economic advantages.

Economists often have advocated the limited use of payments to implement low-level supports, to cushion an expected postwar readjustment, or to inject income into agriculture in periods of general depression. There is, however, no evidence that it is politically possible to use payments in such a manner.

The real controversy over the payment approach began with the presentation of the Brannan plan on April 7, 1949. The Brannan plan was not a proposal to provide temporary aid to agriculture during the postwar readjustment or periods of general depression. It was a plan to raise support levels, extend support to additional commodities, and limit the amount of Government aid that could be extended to any one producer. It would have made net farm income dependent on Government in good times and bad. The apparent objective was to forge a farmer-labor alliance by promising high supports to farmers and cheap food to labor. Since the Brannan plan was proposed, there has been no serious attempt to obtain congressional

approval of direct payments except as a device for implementing 90 or 100 percent of parity supports. Thus, in the political arena, payments have come to be associated with high-level supports.

In the case of most farm commodities, a guaranty of 90 or 100 percent of parity would insure an operating profit for many producers and materially reduce the risk of loss for all. Such a guaranty would be a powerful stimulus to increased production. It is generally contended by economists that the demand for most farm products is inelastic—at least in the short run. This means that a payment program which stimulated production would result in a more-than-proportionate decline in farm prices. Since it appears that farmers' capacity to increase production is greater in the long run than in the short run, the cost of the payments necessary to maintain a fixed level of support would tend to rise over time.

Contrary to the argument that has been made by some of its proponents, the payment approach would not permit market prices to perform their normal functions. While a payment program would permit prices to clear the market, it would seriously impair their capacity to allocate resources. As a result, additional resources would be drawn into agriculture—an industry which already is suffering from overcapacity.

Payments based on a flat percentage of parity for all commodities would tend to unbalance farm production. The Government would be forced to try to guide production by adjusting payment rates or imposing restrictions. Thus, an ever-increasing amount of Government planning and regulation would become necessary.

Payments would be capitalized into land values, just as the value of some existing price-support and production-control programs has been capitalized.

Direct payments would interfere with foreign trade by encouraging United States producers to produce for export without regard to world price trends. Regardless of the method used, exports are subsidized whenever a commodity is exported at a price less than that which the producer received for it.

The direct-payment approach eventually would lead to limitations on the amount that may be paid to any one producer, and the politics of numbers is on the side of low limitations. Farmers are only 12 percent of our total population and many people who are classed as farmers produce very little. Census reports indicate that only 27 percent of all farms had gross sales of $5,000 or more, and that only 43.9 percent had gross sales of $2,500 or more, in 1954. If payments to individuals were limited, the more efficient farm operators—that is those with a high production per unit of input—would be squeezed between low market prices, resulting from heavy production induced by guaranteed returns for qualifying producers and the payment limitations. Thus, payment limitations would place a ceiling on opportunity in agriculture, impair efficiency, and lead to a leveling of per farm production and income.

The payment approach would make farmers dependent on congressional appropriations for their net income and possibly for part of their costs. The recent vote in the House to deny funds for the 1958 acreage-reserve program and the eventual restoration of two-thirds of the funds authorized for this program illustrate what could happen. Since a payment program which promised producers a

profit would induce a high level of production and thereby depress market prices, any congressional cut in the funds needed for payments would subject farmers to a real squeeze.

A payment program would teach consumers to expect to buy farm products for less than their true value. This would create real consumer resistance to the increase in farm prices that would be needed if the payments should be terminated or reduced in scope. We could expect to have great political campaigns fought over the issue of lower payments to farmers and reduced taxes versus an increase in the workers' cost of living.

The people who advocate direct payments are not all primarily interested in high, per family net farm incomes for commercial farmers. Some businessmen apparently think that payments would enable them to sell more goods to farmers, or that payments would reduce Government interference with the marketing system. Neither group appears to have considered the long-run consequences of going the payment route. Unions that favor payments apparently are interested in getting cheaper food by shifting a part of the cost to the taxpayers. It may also be that they would like to keep a maximum number of people on the farm—and out of the industrial labor market. It may also be that they would like to destroy the traditional independence of farmers by making them dependent on the Government for their net income. If this could be brought about, and the continuation of payments were dependent on union support, the political power of the unions obviously would be enhanced.

The wool and sugar programs do not provide evidence that payments will work. Both wool and sugar are deficit commodities that must be imported in substantial quantities. The really effective feature of the sugar program is not payments, but a quota system which limits marketings. There is little basis for considering the wool program a success. In the 1956–57 marketing year 29 percent of gross income from shorn wool came from Government payments. On a comparable basis payments for all agricultural commodities would have cost $8.8 billion in 1956, or approximately 73 percent of net farm income. Agriculture would indeed be a political pawn if any such percentage of net farm income were dependent on Government payments.

The economic consequences at rigid high-level supports are not entirely dependent upon the method used to make supports effective. If we are going to guarantee producers of any commodity a profitable return, we must be prepared for serious economic consequences, regardless of the method used. While the consequences of the payment approach could be moderated by setting support goals at low, stop-loss levels, the political history of the controversy over payments provides little basis for believing that this is likely to be done.

Direct payments cannot be justified by pointing out the undeniable fact that existing farm programs have had serious economic consequences. We are not forced to choose between present programs and payments. We still have the opportunity to review the whole agricultural situation, to decide what can and what cannot be done, and to develop programs that will meet the legitimate needs of agriculture without creating more problems than they solve.

Thank you, Mr. Chairman.

Senator SPARKMAN. Thank you, Mr. Hamilton.

Dr. Talle, I am going to call on you to question the panel.

Representative TALLE. Thank you, Mr. Chairman. It is easier to ask questions than to answer them.

I want to say, Mr. Hamilton, that your last sentence states pretty well what we are after in this committee. I hope we can do it.

First of all, I want to express my appreciation to all of you for being here this morning and helping us on what certainly is a vital problem. It is a very complex problem, very important, and extremely difficult.

As I said to Mr. Soth privately, I think he did a very fine job in writing his book that was published this year, and I think he chose a good title. He called it Farm Trouble.

I do not think the problem is singular; it is plural. Calling it Farm Trouble is a very good title.

I notice in your discussion of direct payments, Mr. Soth, that you believe they can be used in ironing out the hog cycle. I am much interested in how we can reduce the up and down extremes of hog prices. If hog prices go as low next year as some people fear, I think many farmers will be very much interested, too.

What do you think will happen in our State with heavy snow falling at the wrong time of the year and the prospect for a lot of soft corn? Is that not going into feed and probably into hogs?

Mr. SOTH. Yes; I would think it would intensify both hog and cattle feeding. A lot of this corn will have to be fed pretty soon.

Representative TALLE. As I understand your statement, when hog prices are at the low point, if you were then to announce a price for the following year, a forward price and high enough, farmers would not overdo cutting back hog production as they do when prices are very low. Do I understand correctly?

Mr. SOTH. Yes, I think a stabilizing direct-payment program should be on a forward-price basis to give the farmer a target to shoot at. I think it is essential that if you are going to start out to do that, that you distinguish between a stabilization objective and an objective of raising income over a period of years.

Now my friend, Gene Hamilton, it seems to me, sets up a strawman when he discusses compensatory payments, because he puts it totally in terms of a very high level of support, a Brannan plan type of program. I do not think it is impossible for Congress and proper administration to get up a program that would not attempt to raise income over a period of years but would attempt to stabilize, and leave whatever income transfer is needed, for a transitional period anyway, for some other type of program.

Mr. Hamilton thinks this is politically impossible, but I would at least like to see it tried.

Representative TALLE. A common proposal is that we try to stabilize the hog cycle by stabilizing the supply and price of corn through a corn-storage program. How well might this work? Should we still use direct payments in connection with a forward price?

Mr. SOTH. I did not understand that question.

Representative TALLE. I will repeat it

A common proposal is that we try to stabilize the hog cycle by stabilizing the supply and price of corn through a corn-storage program. Then I was wondering, would you still use direct payments in connection with a forward price?

Mr. SOTH. Yes. It seems to me that stabilizing the supply and price of corn does tend to stabilize the production of hogs and feeding

cattle to some extent. But we have had a good deal of experience in recent years when we had fairly stable corn prices and a stable supply of corn and we still had enormous ups and downs in hog prices, apparently caused simply by farmers underestimating or overestimating the market.

It seems to me that proper Government action in this field could do a great deal to stabilize the price level.

Representative TALLE. I remember getting a letter from a farmer early this year in which he said that the practice of spring pigs and fall pigs could be improved by having pigs produced throughout the year instead of, say, massed at two different times in the year.

Do you see anything practical in that?

Mr. SOTH. I think that is going on constantly because of better methods and new technology, that they are tending to level out the production of hogs a little more, but I think here again that a forward price system with payment provisions would tend to further that and stabilize production.

What I was thinking of mainly was not the seasonal swings in production so much as the annual variations from year to year.

Representative TALLE. It was about 2 years ago or so that Professor Schultz, whom you know very well, mentioned this possibility of the forward price at a House Banking and Currency Committee hearing but at that time there was no opportunity for him to expand the point he was making because he had to dash off to catch an airplane.

Last Monday, I asked him about it again and he seems to feel that there is something pretty good in a forward price announced a year in advance.

Do you have some comment?

Mr. HAMILTON. I would like to raise a flag before we go too far in accepting this idea of stabilizing hog production.

As I look at the situation, it seems to me that livestock is the balance wheel of American agriculture. We can always adjust what we produce to the capacity of our markets by passing more or less of our crops through livestock.

If you try to stabilize the balance wheel you are going to throw other things out of gear.

Mr. SOTH. It is pretty tough on the livestock producer, though.

Mr. HAMILTON. Well, the livestock producer has to average good years and bad.

In my opinion, if you stabilize livestock prices and do it in such a way that you avoid transferring income from the taxpayers—in other words, conduct the program so that you stabilize prices at the average level that would prevail over a period of, say, 2 to 5 years—livestock producers will get less income than they would get on a fluctuating basis.

Of course, the in and out producer can't average out, but for the regular commercial producer, who produces about the same amount every year, and who operates his books as some of them do on an accrual basis, the ups and downs of the fluctuating cycle average out very well.

Representative TALLE. Maybe Dr. Black would like to comment on this.

Mr. BLACK. With respect to this point raised by Mr. Hamilton, all that would be necessary would be to include a trend, indicating the general direction that the livestock industry was moving in our forward pricing.

We really need to do that anyway in order to make it work, and this would meet his problem.

Now, with respect to Professor Schultz, I think it might be interesting at this point to say that he was asked at Harvard a week or two ago at what level he would set his forward prices for hogs, and this is very pertinent at this particular time. He said, "about 10 percent under what the market price would be." It therefore would be when the prices went down because of the large supply, they would not use direct payments, for example, to make up all of that deficit, but it would still be 10 percent under that would not be made up.

Now, that still would be forward pricing but it would be using direct payments as a supplementary source of income in periods when the farmers' returns were very low but it would not guarantee them the same returns in years under or years above.

I think that is a very important consideration in trying to use direct payments in this connection.

What do you think about that, Lauren?

Mr. SOTH. That is in line with what I was thinking entirely, to use payments in that way. If your objective is to raise farm income over a period of years, and I think that is an objective that needs attention, too, I would do it with some other kind of payment that is not related to any individual commodity.

As I pointed out in my paper, soil-bank payments based on a conservation reserve or something of that kind would support income in general to agriculture without tying it to particular commodities.

Representative TALLE. I suppose it would throw a considerable burden on the Secretary of Agriculture or whoever was assigned the job of establishing the forward price but that is something we do not need to discuss at the moment.

Now let me turn to Professor Brinegar about another matter.

Some people say that a direct-payment plan is cheaper to consumers than the programs we now have because consumers only pay the cost once through taxes for the direct payments but if production is controlled and prices supported, then the consumers pay twice, the argument goes; once in the form of higher prices, and again in the form of taxes.

It seems reasonable to many people that paying in 1 way ought to be cheaper for consumers than paying 2 ways.

Is there substance to this argument?

Mr. BRINEGAR. Yes; there certainly is. Now I would usually put it a little different way and point out that if you use direct payments, all of the commodities that are produced go into consumption and they are not wasted or used in inferior uses as commonly occurs when price supports are used.

It is quite true that fewer products are wasted and that real cost to consumers is less under direct payments than under price supports.

Representative TALLE. If I may turn to you, Mr. Zimmerman; we discussed yesterday the domestic parity proposal for wheat. We spent quite a little time on that.

I take it that this program is an example of the commodity by commodity approach.

Mr. ZIMMERMAN. Yes, sir; I would think so.

Representative TALLE. I hope you will excuse me if I raise questions about whether we can look only at the effects of such a program on wheat. Corn is our big crop in Iowa.

Mr. ZIMMERMAN. Let me say that I do not believe we are in a position of indicating the principles or the methods involved in a domestic parity program for wheat would apply to corn or tobacco or hardly any other crop than wheat and perhaps rice.

Representative TALLE. I think I probably should expand my question a little bit. I can visualize that the domestic parity program for wheat might do two things that would worry the corn grower. It might put some cheap wheat in the feed market and it might divert some acreage out of wheat into grain sorghums and into the feed grain market again.

Should not the commodity program stand on its own feet and would a program of the kind I am imagining really do this?

Mr. ZIMMERMAN. Yes; I think so. I think it is evident that every commodity program probably would have in some degree a relationship and an effect on every other commodity and its actions. We would not indicate otherwise.

I would certainly agree with Dr. Black's position that there is an inevitable interrelationship here that has to be considered. We would agree that some tests are advisable at the beginning. The fact, though, that the movement of wheat back into the feed market would have some effect on corn is probably not an insoluble problem or reason not to attempt it. Some adjustment can be made, I am sure.

Representative TALLE. I will move on to another point which I would like the panel to discuss.

We have heard quite a little about self-help programs, especially in the dairy industry.

In my particular district, I have important dairy counties, the center of the finest beef in the world, and hog production is extensive. Eggs and poultry, too. Now, the dairy people have done quite a little in what is called a self-help program.

I would like to have a discussion on what you gentlemen believe can be done in the way of self-help in other than dairy farming.

Mr. ZIMMERMAN. May I answer, Doctor?

Representative TALLE. I will be delighted to have you, sir.

Mr. ZIMMERMAN. I think I would like to preface my remarks on self-help by going back to what we would regard as the basic intentions or purposes of farm program development. What we are trying to do in perhaps to reconcile the irreconcilables, which is to get some income for farmers without too great a penalty on consumers or without doing violence to their interests. Farmers being inadequately organized have no other place to turn for help in achieving their purposes but to the Government, and this is proper, for the Government is the tool and servant and representative of all of us.

Representative TALLE. The Federal Government is a club we all belong to.

Mr. ZIMMERMAN. Indeed so. Now, our general position is that dairy income is too low. Dairy farmers would like to have more income and this is a natural thing, we would all like to have more income.

The probabilities are, we believe, that dairy production can, for the foreseeable future, exceed the probable demand—the effective commercial demand in the country to consume what we can produce.

Our feeling is that reckoning dairy income in terms of price, leads us into a dead-end street. We like to think of parity in terms of income instead of in terms of price.

We have in mind returns for farm labor and for capital investment and for risk, which is enormous in agriculture, and for the increasing responsibilities of farm management, that are somewhat comparable to nonfarm activities.

Now, I do not think that you can go to Government and get, tomorrow or next year, this kind of return in agriculture. We feel that to the extent that programs can begin to move in the direction of management by the farmers themselves, of their own commodities and particularly their surplus inventories, and to finance these inventories themselves, as most businesses attempt to do—to that extent we can begin to approach the point where farmers can, in the market place, by the management of their commodities, have a much larger influence on the price they get from the consumer.

After all, there are only two places that farmers can get money, either from the consumer or from the Government, and we vastly prefer to get it from the consumer.

Now, I do not know whether I have even begun to answer your question except I felt it was important to explain, in our view at least, the basic reasoning behind having a self-help program.

Farmers are willing to finance a commodity program. Then we feel they should have in return certain additional responsibilities and opportunities to manage their own commodities vis-a-vis consumers, with the Government, if necessary, being the referee in the case, although we would hope that we would not have too much refereeing.

Representative TALLE. Dr. Black?

Mr. BLACK. I am wondering if we are willing to let firms outside of agriculture, groups of manufacturers, get together and say, "We are going to produce only so much this year so as to hold our price up."

Mr. ZIMMERMAN. They do.

Mr. BLACK. I am afraid that would run into some various legislation we have with respect to control of monopolies and trusts. We would have to make a special exemption in the case of farmers to do this.

Mr. ZIMMERMAN. I would like to comment on that, Dr. Talle.

I think agriculture is a unique operation in our total economy. Nowhere else is there anything like four-million-odd, unorganized, business entities on which the entire population depends absolutely for its food and survival. I think you can make an excellent case for agriculture as an absolutely unique operation. You cannot consider it in the same sense that you would consider General Motors or Du Pont or even the hardware store around the corner.

I can get along perhaps without a hammer or a keg of nails or saw and I can get along without an automobile, but I cannot get along without food.

Mr. BLACK. Is there any danger we are not going to get food enough?

Mr. ZIMMERMAN. There is no danger we are not going to get food enough but in my opinion, Dr. Black, the consumers of the Nation

have been perfectly willing to let the farmers produce food in abundance, and always with a very fine safety margin, so that we never run any risk of running short. But it is the farmer who takes the pocketbook loss for providing the safety margin. The consumers are not paying for their own safety margin.

What I am saying is that the consumers should share in the cost of providing safety in food supply at all times. They should bear part of the burden. It is only equitable.

Representative TALLE. Would you like to comment on that, Mr. Hamilton?

Mr. HAMILTON. I was thinking of a number of other points I would rather comment on.

Representative TALLE. All right. Mr. Soth, would you like to comment?

Mr. SOTH. I do not see anything morally wrong with agriculture running a monopoly to control production and control prices, but I just do not think it works.

We do have monopolies, we do have a great deal of selfhelp, if you want to call it that kind of program, in industry and labor to manage supply and control prices, and I do not see anything morally against agriculture doing it where it can and, of course, in certain milksheds, the dairymen can do it fairly successfully.

Bur for agriculture as a whole, in this continental agriculture, with all its diversity and many farms and so on, I do not see any workable way of doing it.

Mr. BLACK. I would like to have Mr. Soth tell me about a milk producers' cooperative which is prescribing quotas and enforcing them for its individual members. They may be in existence but I do not know of them.

Mr. SOTH. I do not know of any complete control system but they manage to maintain prices pretty well under the milk marketing agreements and to dispose of their surpluses.

Mr. BLACK. They engage in collective bargaining with the milk dealers and, of course, some 60 or 70 markets are under Federal orders where this is all very carefully supervised and regulated.

Representative TALLE. Mr. Hamilton?

Mr. HAMILTON. I would comment on this point. It seems to me that if you set up a situation where people can sell part of their product for a high price and another part for a lower price, there is a likelihood that farmers' production plans will be influenced by the blend price and that unless you bring in production controls and tell each farmer what he can produce, the blend price will operate like a free-market price so that in the long run you will get little, if any benefit to the individual farmer under such a plan—perhaps some more stability but no higher price unless you have production controls.

Mr. SOTH. The freedom of entry into some of these milksheds is a sort of production control, is it not? I mean the limitations on entry into the market?

Mr. HAMILTON. As I understand the Federal milk market orders—there may be some limitations due to sanitary requirements, the requirement, for example, that you must have a farm inspected by a city inspector who will not go beyond a certain distance—but the Federal orders themselves are not supposed to have any restrictions on entry. They do have certain clauses which provide that if you are

going to participate in a market and receive premium prices in a short season you must be a regular supplier, that you cannot come in with surplus milk just a part of the year and get a premium price and then pull out when the market actually needs the milk.

Senator SPARKMAN. May I ask a question there?

Is it not true, though, that a new producer in this field would have difficulty getting in? A man cannot just start up new production of milk and know that he can sell in that milkshed, can he?

Mr. HAMILTON. I am not an expert on milk marketing orders, but I believe that in general he can.

Mr. ZIMMERMAN. It depends on the State you are in, Senator.

Mr. BRINEGAR. I would like to make a couple of comments, if I may, on that.

You have both State control and Federal control and the degrees of restriction they have on entry varies among State control and Federal control orders. Entry is normally easier in federally controlled markets than State controlled markets.

Under Federal controls they frequently will have quota systems that affect entry as a seasonal matter, though not on a year-round basis.

There is also another problem that comes in here. Whenever you have a classified pricing system, the farmer gets a blend price, so he produces milk in response to that blend price which is always higher than extra milk is worth when it is sold as class III or at the manufacturing price. Therefore, the farmer always, in milk markets, has the incentive to produce more milk at a higher price than the market is willing to pay for it. So we have our pricing system stacked so that we inevitably give farmers an incentive to produce more milk than the market will buy at cost covering prices. So we cannot help but have these "short run gains" dissipated by increased production.

Mr. BLACK. Look at the actual situation in markets. Take New York. About 50 percent of the milk is in excess of what is consumed there as fluid milk and sells at class II or lower prices.

In the Boston market, it is between 40 and 45 percent.

It is pretty hard to make a case in these markets that anybody is excluded from producing more milk or any producer from getting started. He has to establish a quota on the basis of past production.

There are always charges out in the Midwest that our eastern markets are excluding some of their milk. The facts are that we already have a big surplus in our eastern milksheds and if the situation arose where we did not, why, Boston would push over into the New York milkshed and the New York milkshed would push into the Buffalo and Cleveland milksheds and in the Detroit milksheds and they would just push out and it would work out the same way.

Representative TALLE. I think, Mr. Zimmerman, that I can point up the unique aspect of agriculture which you referred to by using a familiar illustration. When the farmer brings produce to the market, he asks, "What will you give? " and when he buys, "How much do you want?" That puts him in a peculiar position as to price return and his costs.

Now, I hope there will be time—I do not want to take it now, Mr. Chairman—but I think we should analyze the principal costs of the farmer with the view to asking why they are as they are as well as

what they are. Why are they so high? Are they strongly affected by controls? Is there special protection?

Now, Dr. Black, we have one very practical matter to deal with as Members of Congress, you know, and that is finding money to do certain things.

What do you think the direct payments would cost?

The Department of Agriculture published some estimates fairly recently suggesting that it might cost as much as $10 billion annually to use a direct payment plan.

What do you think of that, Dr. Black?

Mr. BLACK. I think those estimates are grossly exaggerated. First of all, what level of prices were they assuming? One hundred percent of parity? Ninety percent of parity, or what? Do you happen to know that?

Representative TALLE. I am sorry, Dr. Black; I am not certain as to that.

Mr. BLACK. Does anyone around here know?

Mr. SOTH. Ninety percent.

Mr. BLACK. I consider that across the board altogether too high a level to set at 90 percent of parity. We just cannot maintain 90 percent of parity for farm products without much more rigorous and effective control of farm output than we now have.

Acreage allotments won't do it at all. We have to have marketing quotas.

Now, we could considerably extend those to other feeds so that grain sorghum and oats and barley, all the other feeds, will come in.

But we have to go beyond that. We have to do it with respect to livestock, dairy products, and so forth. We have to have that kind of control in order to make 90 percent of parity stick without having much larger surpluses than we can possibly dispose of by methods that we are now using.

So I think that estimate assumes altogether too high a figure.

There are some other details of it that I don't have too well in mind. Back in 1950 Professor Mehren, of the University of California, undertook to estimate the cost of the Brannan plan if it were put into effect. He came out with a figure, assuming the kind of production controls we then had, of somewhere around $3 billion, but he said, without production controls it would soon amount to 8 or 10 billion dollars.

Now, I expect that Professor Mehren's analysis was more rigorously made than those made in the Department of Agriculture, but I don't know.

Mr. TALLE. Thank you, Dr. Black.

Mr. SOTH. I would like to point out that the department study included 26 major commodities, I think it was 95 or more percent of the commercial gross income of agricultural in these 26 commodities, at 90 percent of parity. It was not any study of direct payments at all. It was a study of how much it would cost for Government to support prices of farm products at 90 percent of parity.

In other words, it was a strawman type of thing, setting up a proposal that nobody had ever made—not even Brannan in his plan—that extensive, and that said that it would cost $10 billion.

What they ought to do over in the Department of Agriculture is make a study of some particular perishable commodity and what the

cost would be for stabilizing operations on, we will say, the dairy industry or hogs. I do not consider that study the Department put out any study of direct payments at all.

Mr. BRINEGAR. I think Mr. Soth has made an important point. I think any of us could design a direct payments program that would cost anywhere from $20 billion down to half a billion dollars a year, but the important factor determining the magnitude would be the content of the particular program that was proposed, not the method used to transfer benefits to agriculture.

Now, one way to make valid comparisons is to ask how much more would Treasury disbursements be for a dollar of income transferred to agriculture with direct payments than with price supports.

Now, my personal estimates on that were about three times as much, though, here again, that needs to be taken as an approximation.

Representative TALLE. The Ways and Means Committee, of course, would be very much interested in whatever that amount is.

Mr. Zimmerman?

Mr. ZIMMERMAN. I would like to comment that, insofar as the subject is agriculture policy and its relations to economic growth and stability, the obvious goal here is to devise that kind of policy with which agriculture can grow and prosper with the rest of the Nation.

To that extent, it seems to me any time that agriculture becomes wholly or even very largely dependent upon the Government itself for the source of its income we inhibit or put a ceiling on the extent to which agriculture can grow with the rest of the economy.

On the other hand, we do feel that it is good agricultural policy to give agriculture those tools in the form of legislation, perhaps comparable to the kind of legislation that Congress gave labor for its collective bargaining, so that it can operate and function in the market place in a better bargaining position than it has today. It has no bargaining position today, except in a few specialized crops where cooperatives have been able to be effective.

The question of direct payments, I think I would agree with the other members of the panel here, are a tool, but only one of the possible tools and probably a much smaller tool in its longtime effectiveness than the machinery that could be given to farmers in the form of permissive legislation that would get them into a better bargaining position with consumers.

As far as production controls are concerned, I think it is basically impossible to control production, because you just can't control the weather. We cannot legislate the weather, but we can manage our marketing if we have the tools and the machinery to do it with.

From our point of view, we would much rather put the emphasis on managed marketing by the farmers, through whatever organization they may be able to have, than upon any attempt to control production.

Representative TALLE. Our farmers, certainly, have the capacity to produce. The job is to sell what is produced at a profit.

Mr. ZIMMERMAN. That is true, and today I would just like to underscore what you said, Congressman, a little while ago. The farmers have, from the beginning of time, gone to market and said, "Here it is; what will you give me?" and they just can't win that way.

Representative TALLE. Mr. Chairman, if there is time, later, I would like to inquire into the nature of farmers' costs and devote some discussion to cost analysis.

Senator SPARKMAN. I want to go back and ask this question of Professor Brinegar: You said that to make direct payments you estimate it would cost the Treasury three times as much as production control, figured on the basis of the amount of income transferred to the farmers?

Mr. BRINEGAR. Yes; for each dollar of income transferred to farmers, given the types of programs that are proposed for the usual types of commodities, the usual prices, Treasury disbursements would be about three times as much under a direct-payments plan as under a price-support plan. However, real costs to the consumers are less under the direct-payments plan than under the price-support plan.

Mr. BLACK. Counting all the taxes they pay.

Mr. BRINEGAR. That is right; counting all costs completely, leaving out nothing.

Senator SPARKMAN. Mr. Brinegar, I believe you made this statement:

> More extensive use of direct payments as replacements for price support, while benefiting all consumers in the aggregate, would aid low-income groups relatively more than high-income groups.

Do you mean it would lower the price on food, the products that people with low incomes buy?

Mr. BRINEGAR. Low-income groups spend a higher percentage of their income on food than do high-income groups. Therefore, they would gain most by decreases in food prices. The other side of the coin is: Where do you get the money to pay the direct payments? That comes from taxes, sooner or later.

Senator SPARKMAN. And taxes which are higher in the higher income group.

Mr. BRINEGAR. That is right, if it is an income tax.

Mr. BLACK. From the standpoint of reducing our surpluses when you lower the prices, it is this lower income group that expands their consumption the most and that goes further in disposing of our surpluses and improving nutrition. That is an aspect of it that is frequently overlooked.

Senator SPARKMAN. When you first read your statement, Mr. Brinegar, I think I misunderstood it. I was thinking of the benefit payments made as between low income and high income farmers, but you are not talking of that at all; you are really talking about the ultimate consumers.

Mr. BRINEGAR. That is correct.

Senator SPARKMAN. I want to ask you about the direct payments. I will use cotton as an example, partly because I am interested in cotton, and partly to bring out the strong and weak points of the direct-payments approach. Just how would it operate in the case of cotton?

Mr. BRINEGAR. There are, of course, many ways in which a specific program could operate. I would in no sense want to try to suggest what I thought was the best way a particular program would operate during the time now available. But, in general terms, you would let cotton be placed on the market to sell at whatever price it would bring. Then the Government would compensate the farmer by the amount of difference between the market clearing price and the guaranteed price, which I would also hope would be a forward price.

You would also need to make the payment to the farmer in such a way he would not lose incentive to get the maximum possible price for cotton. That is, base it on the average of all market prices.

Senator SPARKMAN. I am glad you brought out that point. I wanted to ask if the direct-payments system might not take away the incentive for maintaining a vigorous market price. The buyer, it seems to me, would want to buy at the lowest possible cost, and there would be little incentive on the part of the seller to hold out for a high price through this system.

Mr. BRINEGAR. In calculating the direct payment the farmer would receive, you would base it not on the price he personally received for his cotton, or whatever commodity he was selling, but on the market average. Therefore, he would always have as much incentive as he now has to get the maximum possible price for his commodity.

Senator SPARKMAN. Yesterday, when we were talking about parity-price programs, you will recall we spent some time on looking at income statistics for cotton farmers. You will remember we referred to a table on page 88 in the compendium, that shows "The average net farm income for high-production farms by type and location."

We particularly referred to cotton, to the great variation from the lowest figure of $974 for a farm in the Texas upland area, up to $21,000 in the Mississippi Delta, or to $12,800 on the Texas irrigated lands.

Now, if direct payments to producers were used in a cotton program, would you limit payments to individual producers?

As you know, that has been one of our recurring problems each time we have any kind of agriculture program involving payments, whether or not there should be a limitation. Should there be?

Mr. BRINEGAR. That is dependent on the congressional group's objective in designing a program. I think it is perfectly valid to say that if you place limits on the amount any one farm or a farmer owning a group of farms may receive, that you may well cause production to by less efficient than it otherwise would have been.

However, if you don't place limits on a maximum amount a farmer may receive, you will meet considerable objection on the part of people who notice someone receiving checks that run into large numbers. That is an "efficiency-equity" conflict that may well appear.

One thing that I think is important, though, in thinking of most of these things, is that the use of direct payments in place of price support is not really going to contribute anything to a "permanent solution" of the agricultural problem.

I think of them as a way of buying time and we should direct major efforts toward maintaining full employment, toward increasing the rate at which people can move out of agriculture, and toward increasing the efficiency of the farmers remaining in agriculture. I think many other programs are necessary parts of buying time to enable these measures to take effect and they should also be consistent with the long-run objectives.

Senator SPARKMAN. Let me ask this:

I am not sure if there is unanimity on the panel as to whether or not if we have direct payments we also would need marketing quotas or acreage allotments. I believe, Dr. Black, you had something to say about that.

Mr. BLACK. I think that we would need to continue our marketing quotas on cotton and a good many other products in the transition period.

Senator SPARKMAN. In other words, you would work it gradually into what we might call a free economic system?

Mr. BLACK. Yes, I think we should aim at working toward a point where prices will call forth the production that will move freely through the market except for certain periods.

Take cotton. Exports fall way down and prices drop because of that and any other reason. When we have a period of that sort, I think we should step into the picture with what has been referred to as forward pricing, that is a stable price.

Now, that is the way I would look at it.

Senator SPARKMAN. Did you want to say something, Mr. Hamilton?

Mr. HAMILTON. Yes, along that line I want to point out that the marketing quotas we have had have not been very effective in adjusting the supply. We have not had really tight quotas in terms of putting an absolute limit on what a producer could sell. He has the opportunity, in fact an incentive, to increase production per acre because he is allowed to sell the increase under the quota; he can adopt various practices, use more fertilizer, use more supplemental irrigation, and do various other things to increase production.

Then we allow him to take his diverted acreage and put it into the production of another commodity.

So we have not had very effective quotas and you also have the fact that whenever quotas have begun to really pinch, various groups, including, I must say, the Farm Bureau, have been down here seeking minimum allotments. We have a 55 million acre minimum national allotment on wheat. We have three separate minimum national allotments on cotton, and we take the higher of the three.

So there is no evidence that it is politically possible to put these controls on tight enough to make payments or any other program at a high incentive level of support would work smoothly and efficiently.

Senator SPARKMAN. Let me bring in something there. First, I have had cotton producers, those who owned good land, getting good production, say that they could actually afford to disregard the quotas and take the penalty and make money by reason of the extra cotton that they produce.

Is there much of that being done in any of the commodities in which there are controls?

Mr. HAMILTON. I don't believe there is too much payment of the penalty on cotton. There is considerable overseeding of wheat acreage, brought about by a number of factors, including the fact that the controls on these commodities are enforced on a harvested acreage basis and the fact that, particularly in wheat, people have been encouraged to overproduce and to store against the year of a short crop.

Then, also, in wheat, you have a 15-acre and a 200-bushel exemption from marketing quotas.

I heard someone say the other day there were 100 million bushels of overquota wheat produced last year, but it is difficult, because of these exemptions, to say just how much of that was really in violation of the program and how much was due to the fact that the growers can store excess production under bond and avoid paying the penalty.

I would doubt very much that very many producers actually paid the penalty.

Senator SPARKMAN. I am not so much concerned with whether or not the penalty was paid, but whether or not the excess of production was brought about that would call for penalty.

Now the second point I want to make is this: Down in my section of the country where cotton has historically been the principal cash crop, the complaints that come to me most frequently are that there have been repeated acreage reductions until a great part of the farming has become nonprofitable; acreage has been reduced to the extent that growers cannot conduct profitable farming.

I am not talking about the marginal farmer who has been virtually squeezed out, but I am talking about some of our biggest cotton farmers who maybe had 100 acres and have found themselves with 40 or 50 acres. They say they get down to the point that it is just not economical to farm.

Mr. HAMILTON. At our recent Farm Bureau convention we adopted a resolution which says that the emphasis should be on increasing acreage rather than raising price support when the surpluses are eliminated.

Senator SPARKMAN. Say that a little more distinctly, please.

Mr. HAMILTON. The emphasis should be on increasing acreage allotments rather than on raising price supports when surplus stocks are reduced.

The more efficient operators have had their costs increased by the curtailment of acreage even though the controls have not been tight enough to avoid accumulating supplies and many of them realize now that it would be to their advantage to get more acreage even with a considerably lower price-support guaranty.

Now, of course, there are some people who are not particularly interested in more acreage. If you have a cotton farm that is too small to permit mechanization you may very well think that continuing the present support program is to your advantage.

I understand that some of the cottongrowers last year came in for their minimum allotments—the minimum is four acres or the highest acreage planted in the preceding 3 years—then they put their allotments in the soil bank.

Since the soil-bank payments have been based on the price-support level I can see why a small grower might like to have the program continued about as it is.

But for the man who has a future in cotton and who has an opportunity to lower his costs by increasing volume and who wants to preserve the opportunity for American cotton to compete with synthetics at home and both synthetics and foreign cotton abroad, the program we have had in recent years does not seem to me to make very much sense.

Senator SPARKMAN. By the way, you bring in this soil-bank proposition. I want to put this question up to the entire panel:

I have long felt that the soil bank was based on a good principle, if it could be worked out, but I have been greatly disturbed by the working of the soil bank. Now, yesterday, I believe it was, some of our panelists made reference to the program that is going to be tried out in four States, in which they are inviting the entire farm to be placed in the soil-bank program.

Some of you may want to comment on it. What is going to happen to that farm if the entire farm is put in the soil bank? I am not so much concerned about what will happen to the soil; it is what will happen to the people who are living there.

Mr. HAMILTON. Senator, the man who puts his entire farm in the soil bank will have some time on his hands and certainly the opportunity to seek off-farm employment or perhaps move to a better farm.

Senator SPARKMAN. I do not know whether you were in here yesterday, but one time I made reference to this. I have 1 family on my farm, young people, a World War II veteran and his wife who have 11 children, the oldest of whom is 16. It is not a case of the farmer having some time on his hands; there are 13 mouths to feed with time on their hands. There is no place where they can get work.

Always through these discussions we have had this off-farm employment. It is fine in theory, but there are areas in this country where it simply is not practicable.

What is going to happen to them? I think that is true in many areas. I am not talking about a State like Connecticut—that is full of industry—or some highly industrialized State, but I am talking about the average agricultural State. Off-farm employment is simply not available.

Now, what are they going to do? What are those 13 mouths on my little cotton farm going to do?

Mr. ZIMMERMAN. Senator, I think a person under those circumstances would have to resist getting into that kind of program.

Senator SPARKMAN. May I say something there. The resistance is pretty hard. Now, let me again talk about my farm. We had only a fair production—and this applies to all my State, the whole State of Alabama—the farmers had a rough year in 1957.

The production of cotton was not too good, and during the harvest season we had an unusual climate in which it just rained day after day after day so that instead of getting 36 cents a pound for cotton the farmer was lucky to get from 20 to 25 cents a pound.

The result was the income was cut at least 50 percent.

Now, the soil-conservation agent comes around—this happened to me while I was at home—and he said, "Look here, you can get $59.40 for each acre of your cotton land that you put into the soil bank."

Now, neither my tenant nor I made anything like $59.40 on that last year. In fact, we lost money on it.

Now, I tell my tenant, "Look here, you can collect a whole lot more clear profit by putting your land in the soil bank, at least your cotton land. I leave it up to you, what do you want to do about it?"

It is pretty hard to resist after a bad year like that, with an income that certainly was not realized last year and probably represents a pretty good average of what the profit on it would be. This disturbs me about the soil bank, about any of these programs that continue to take acreage out of production.

What is going to happen to the people who are living there and at least are making a good living? Even though their incomes may not stack up high in a year like this year has been, at least they are making a good living.

Mr. ZIMMERMAN. I would like to make a couple of comments.

First, an overall comment: I think a man or a department would have to work long hours to think up a program better designed to give

agriculture a black eye in the public mind than this one. The notion of a fat farmer in Miami lolling in the sun and getting his soil-bank checks while his entire farm back in Iowa or somewhere was laying in grass is repugnant to the average person, I would think. It certainly is to me.

Senator SPARKMAN. It is to me. I think the farmland is something that ought to be in constant production. I will say this: I do not know what the solution is; I wish I did know. I think it gives us a psychology in this country that is not good. If we do produce and happen to pile up surpluses we think of it as a great scourge or curse.

It seems to me it ought to be one of the great blessings that we should appreciate, and some way ought to be found to make use of it.

Now, if somebody will come up with an answer for that, I will be made happy.

Mr. ZIMMERMAN. I think as far as we are concerned a much greater degree of selectivity would be a desirable trait in respect to the soil bank. Certainly the conservation reserve part of the soil bank has great promise. It ought to be expanded.

Senator SPARKMAN. The conservation reserve; that is, taking land out completely over a period of years?

Mr. ZIMMERMAN. Yes.

Senator SPARKMAN. Is that not the one that I saw in the press might be done away with, or is that the one that will be expanded and the other done away with?

Mr. ZIMMERMAN. I hope the conservation reserve will be expanded. However, we thought, and still do, that the amount of money a farmer could earn under the acreage reserve part of the soil bank, as it has been operated, has been so proscribed that any gambling man, and every farmer has to be a gambler, would have to bet that he was going to have a poor year in order to find the soil bank advantageous.

Senator SPARKMAN. Or he would have to bet that he would have a good year before turning it down.

Mr. ZIMMERMAN. That is right.

Senator SPARKMAN. I am not an expert on these programs, but I feel pretty much the way you do, again looking at the change that must be made.

For instance, in my section of the country, cotton acreage has been reduced probably by 60 percent over the last 10 years. It is more than that. I think in my State we used to plant 2½ to 3 million acres. Now we probably plant 750,000 acres, and yet we produce almost as much cotton as we produced on the 2½ to 3 million acres in earlier years.

So there are changes that must be made. It seems to me something might be done by taking areas out and putting them in trees, for instance. I think the growing of trees, pines particularly, and hardwoods, too, for pulp production—and Mr. McMillen suggested yesterday the growing of bamboo down there, things of that kind—might offer a long-range opportunity provided that an easy transition into a more diversified agriculture could be made.

Mr. BLACK. This last phrase, a more diversified agriculture, is pretty important. When you talk about cotton at one extreme and trees in another, those are extremes.

Senator SPARKMAN. I grow both on my farm.

Mr. BLACK. In between is grassland farming.

Senator SPARKMAN. I do that, too.

Mr. BLACK. And livestock.

Senator SPARKMAN. And I milk cows.

Mr. BLACK. And I look forward to the time, Senator Sparkman, when a farmer down South will have an enterprise with enough land so that he can combine cotton as a special cash crop with livestock and diversified farming so that he is just as prosperous a farmer as the Corn Belt farmer is. All he needs is more land and diversified farming and he can be just as prosperous. And we need to work in that direction.

Senator SPARKMAN. Of course, I hope you do not overlook something else he needs badly, and it is not in adequate supply, and that is credit, resources to help him make that diversification.

Mr. BLACK. You are not any more insistent on that than I have been over the years, Senator Sparkman. Even take this rural development program that we have now, the emphasis seems to be all in getting industry in your county, these pilot counties, that will give a job in the county off the farm.

Now, in my judgment, it is equally important and probably more important to provide credit so that farmers, that are reasonably good farmers and have a prospect, can get the additional land they need in order to have the kind of farming operation that I have described.

Now, how are we going to get it?

I received the other day from the American Bankers Association a new report called, Intermediate Credit for Agriculture, in which they cite three case studies of loans that had been made by commercial banks to enable farmers to expand their enterprises in that way. And statisticians indicated great expansion of intermediate credit by commercial banks. But these three case studies are all sizable operations. One of them is poultry. You know how much money you can put in a new poultry enterprise. Now, we have got to have credit that will reach ordinary sized farms and enable them to do this.

Now, I think that the rehabilitation loan program of the latter years of the thirties was a pretty good program and the tenant purchase program and the modification of that to permit the loans to a farmer to enable him to buy more land, and the present farm ownership program is a desirable thing, but I think the Congress of the United States has to take seriously the expanding of the Farmers' Home Administration so as to provide the credit needed to implement the farm and home development program so that the farm and home development program, which, by the way, is moving altogether too slowly——

Senator SPARKMAN. A hundred counties.

Mr. BLACK. You are talking about rural development.

Senator SPARKMAN. I thought that was what you said.

Mr. BLACK. I am talking about the farm and home development program which is supposedly in all the counties.

Up in Mr. Brandow's State, I talked with a county agent when I was out there a few weeks ago, who has 300 farms planned, but in the whole State of Pennsylvania only about 1,500.

Why can we not have more counties like this county agent's?

Now, with that program to help plan these larger, more diversified units and with credit available to finance it, we can make the progress that we need, but we need to take hold of it much more earnestly and much more seriously than now.

I think you folks down South need to work just as hard as you can in the direction of making your individual farms just as prosperous.

Now, I illustrated this quite some years ago by taking a rich county in Illinois, Douglas County, with the best prairie soils there are, and two counties away in the poor, clay, hardpan soils where the farms are larger. They were larger on the good soils, smaller on the other soils.

The gross output of the rich soil one was 7 or 8 times the other one. Yet, analysis of the soils and their potentials and farm plans indicated that you could set up a farm of 380 acres on the clay-pan soils, depending upon livestock and grass and small grain, much less on corn, that would yield just as good an income as the 180 acres in the better soils. You just need more land farmed the right way.

Now, you could compare the situation down in your State with the situation up in Douglas County and the comparison would be just as valid. You just need to change that system of farming over to one that fits that situation.

All these programs we are talking about should assist in that direction.

Now, I am afraid I will have to say that with this increase in production per acre for cotton and tobacco, and lowering the quota, but with the price supports, on the one hand we have tended to perpetuate this small farmer, to have an assured income on this quota which they have, and they can make a living out of it and they stick it out. On the other hand, it has meant, as you indicated, that some of them, when faced by this prospect of being able to grow no more than 4 acres of cotton, have looked around harder for something else to do. However, once a farmer gets to be 50 years of age and over, he is not likely to move.

I do not need to tell you that there are among your farmers in the South, as in other low-income areas, a lot of them that just do not have the energy to get up and go to make the change and they will stay there. So you cannot expect this to take place overnight.

But, Senator, statistics show that in the last year the farm population of the United States fell off 1,800,000 people, There are special reasons why it fell so much. Putting farmers on social security had something to do with it. But the average for the last 8 years has been 800,000 a year. Now, if you continue that until 1970, then only 5 percent of the population of the United States will be on farms.

We have to ask ourselves seriously whether, in the aggregate, this shift is not taking place somewhere nearly as fast as it should in the aggregate.

However, there are all kinds of special situations like the one you have described where there is not some off-farm employment nearby, and to shift 100 miles away or 200 miles away to find a job in Knoxville, Tenn., or some other place like that, where industry is expanding, is a pretty difficult undertaking.

We have a local problem there to deal with that is not simple.

Now, the rural development program was conceived as a way of helping but it is not taking hold of this thing broadly enough and particularly it is not helping with the credit aspect of this thing.

Pardon me for talking so long but you introduced the subject.

Senator SPARKMAN. Well, it was very good.

Mr. ZIMMERMAN. Can I get one short comment in regard to Senator Douglas' bill for area development—assistance to areas of chronic rural underemployment? I think it would cope much more effectively than our current rural development program with this problem we are talking about.

Senator SPARKMAN. You may be interested to know that the rural part of that bill was lifted from the bill which I introduced previously. So the bill really represents a combination of his bill for depressed industrial areas and mine for depressed rural areas.

Mr. ZIMMERMAN. I hope the bill is enacted.

Senator SPARKMAN. As you will recall in my bill, originally introduced, I provided for a rural development program before the Congress adopted this one. The only difference was that I suggested a thousand counties. We started out with 50. I think my bill called for a more adequate use of techniques and skills to assist lower income farmers in the depressed areas.

Well, we could carry this on for a long time. If anybody else wants to say something, all right.

Dr. Talle, do you have any more questions?

Representative TALLE. No, thank you, Mr. Chairman.

Senator SPARKMAN. Mr. Brandow?

Mr. BRANDOW. No, thank you.

Senator SPARKMAN. It has been a most helpful discussion. Whether we have solved the problems or not, we certainly have pointed up the need for a solution.

You have done a good job.

Thank you, gentlemen.

The subcommittee stands in recess until 2:30.

(Whereupon, at 12:15 p. m., a recess was taken until 2:30 p. m., this same day.)

AFTERNOON SESSION

Senator SPARKMAN. Let the subcommittee come to order.

This afternoon we conclude hearings on policy for commercial agriculture. Our topic is the last of a series relating to programs designed to improve income for commercial farmers—production control. I may remind you that this is the 10th in the complete series.

We certainly have had preparation for this topic, because production control has come up in one way or another in most of the earlier sessions. I look forward to a lively discussion.

Gentlemen, it is close enough to Christmas that I think you deserve our very special appreciation for being here today. I hope you successfully contend with the holiday travelers on your way back home. I may say that when we set up these hearings there was some doubt in our minds as to just how good cooperation we might be able to get this near Christmas, but we decided to try anyhow. I know the other members of this subcommittee and the staff members are grateful to all who have participated in these hearings.

The papers you have written for the compendium are excellent ones and clearly bring out the issues we are to discuss this afternoon. We thank you for your time and effort in preparing these papers.

I suppose all of you are acquainted with our procedure. We will have a 5-minute summary of each paper; then the members of the subcommittee will ask questions. We hope the panelists will feel free to discuss any topic brought up and will question each other. If you have a question or comment, please so indicate and you will be recognized.

We will begin this afternoon with the summary by Dr. O. C. Stine who was for many years an outstanding price economist in the United States Department of Agriculture, and is now retired.

I understand, Dr. Stine, you at one time had a farm in West Virginia, and you may have one, I do not know. If you still have such a farm—have you been able to figure out in these hearings whether you are a commercial farmer or not? We will be glad to hear from you.

Mr. Stine is from Shepherdstown, W. Va.

STATEMENT OF O. C. STINE, SHEPHERDSTOWN, W. VA.

Mr. STINE. Answering your question, I have a small livestock farm. In gross sales it ranks in class II.

Mr. Chairman, I have examined the record of experience with the use of acreage allotments, marketing quotas, conservation payments and reserve acreage payments to control production.

(1) Allotments without marketing quotas have been effective to some extent in controlling planting when accompanied by substantial payment incentives or the privilege of obtaining nonrecourse loans substantially above market prices.

(2) Marketing quotas and allotments with penalties for noncompliance have been effective generally in obtaining compliance with acreage allotments. They fail to control production, however, on account of variations in seasonal weather conditions and the ability of the grower to increase the yields per acre.

The effectiveness of market control over production is also limited by the extent to which a crop may be grown for home use as food or feed.

It is practically impossible to administer the controls except through market channels. It is on this account that marketing quotas have not been extended to feed crops.

(3) The conservation allotments with payments offered in 1936 and subsequently as inducements to reduce or shift acreage from the basic soil depleting crops to soil conserving and improvement crops failed to hold in check or to reduce production to any significant extent. The most significant result of the soil-conservation program has been to increase yields and thus to maintain production on reduced acreage.

(4) The soil reserve bank has been effective to some extent in reducing the acreage planted and production below allotments and marketing quotas in the last 2 years. The experience with the soil bank to date indicates that significant results may be obtained by this program through substantial payments.

The most significant result has been this year in the reduction in cotton acreage harvested. Mr. Bottum will deal with this program later.

1. How do acreage controls affect efficiency in production?

Acreage allotments and marketing quotas are to some extent impediments in efficient production. Control imposed on the basis of past

records tends to prevent or slow up adjustments in the direction of more efficient production.

They retard or prevent shifts in acreage to more productive land and the application of more efficient methods of production requiring more land or a shift in areas.

2. What important changes would make the control programs more effective?

Production control could be made more effective by placing all marketing quotas on a quantity basis.

Transferable quotas would permit and in fact encourage adjustments in production among growers. This would greatly reduce the basis for one of the most significant criticisms of the use of controls.

Legislative and administrative provisions with reference to minimum allotments and marketing quotas, levels of price supports and conservation should be revised to coordinate the several programs more closely toward common objectives.

I will be glad to comment on that latter sentence, if time permits.

Senator SPARKMAN. Thank you, sir.

Prof. J. Carroll Bottum, department of agricultural economics of Purdue University. We are glad to have you with us.

STATEMENT OF J. CARROLL BOTTUM, DEPARTMENT OF AGRICULTURAL ECONOMICS, PURDUE UNIVERSITY

Mr. BOTTUM. Thank you, Senator Sparkman and members of the committee. My subject is the soil bank as a solution to the farm price and income problem.

A properly conceived and administered soil-bank program can be used to bring current agricultural supply and demand into balance at more acceptable prices if this approach to the solution of the farm problem is desired.

The American agricultural plant is geared to produce more total farm products than the market will take at generally acceptable prices. This situation is further aggravated by some $7 billion worth of products accumulated in storage in an effort to maintain more acceptable prices. This excessive production has resulted from the rapid adoption of new technologies in agriculture and from the demands and price policies associated with World War II.

Since 1940 output per worker in agriculture has increased the standard of living of all American citizens. However, since 1950, agricultural people have not benefited as much as the rest of society from this great advancement.

For various reasons, the necessary adjustments in agricultural resources have not taken place, that must accompany such an advancement if agricultural people are to share in the gains.

If markets cannot be found for our expanding farm production, then an adjustment in output must come. If an adjustment in agricultural output is necessary and we believe in economic progress, it would appear inevitable that under either free prices or a controlled economy some shifts of people out of agriculture into other industries with greater opportunities would continue to take place.

However, a shift of more people out of farming alone is not the solution to the price and income problem on the commercial family farms. It is acres times yields that gives us our production and thus

if the additional acreage released by one farm is taken on by another, it does not necessarily give us reduced production.

Some marginal cropland must be shifted to less intensive use. These adjustments would take place under the free price approach, rigid controls, or a soil bank.

We have approximately 450 million acres of plowland in this country. Three hundred million acres of this land are in grain crops, cotton, and tobacco. One hundred fifty million acres are in hay, pasture, fallow, and idle. If we use the soil-bank approach and make it effective, we need to shift from 30 to 50 million acres from grain crops, cotton, and tobacco into grass, fallow, and timber.

A voluntary soil-bank program to accomplish this objective must meet certain requirements:

(1) Payments must be large enough to attract the necessary participation.

(2) A soil-bank base must be established for each farm so that if some land is shifted out of grain crops, other crops are not substituted on additional land.

(3) The program must be announced and explained sufficiently ahead of planting time for farmers to make their decisions.

(4) The program should be directed toward bringing about the major adjustments in the high unit cost crop areas.

(5) The program should provide for taking out or shifting entire farm units in certain areas.

A soil bank which would meet these requirements would cost between $1¼ billion and $2 billion depending on how it was set up. A soil bank of a smaller magnitude than this may assist in bringing about desirable land use, but carried on under a small scale it will not accomplish the objective of reducing supplies.

A program of the magnitude indicated can, in the shorter run, adjust supplies and raise the per capita income of farm operators. However, too much should not be expected of a soil-bank program over the longer period.

It should be recognized that any of the proposals which have been made, and I am including any that I have seen so far, over the long run, which tend to raise farm prices and gross income in agriculture above the longtime free price level, tend to be self-defeating in their goal of raising the per capita income of farm people.

Either the income tends to be capitalized into land values or it tends to result in more people staying on the land. If it goes into land values, it is lost to the farm operator except for the first gain. If more people stay in agriculture, it means dividing the income up among more people. I do not mean by this to imply that farm-price programs cannot be of value to farmers.

They may level out incomes and may be very beneficial during periods when agricultural incomes are depressed. They may speed up needed economic adjustments. However, we should recognize that there is a limit to how far we can go in increasing farm incomes and retaining the gains for the operators.

While the long-run situation with a soil bank might not be greatly different than with free prices, a soil bank under the current situation can speed the necessary agricultural adjustment while protecting the farm income.

Senator SPARKMAN. Thank you, Mr. Bottum.

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Prof. Willard W. Cochrane, department of agricultural economics of the University of Minnesota. We are glad to have you, Mr. Cochrane. Proceed in your own way, sir.

STATEMENT OF WILLARD W. COCHRANE, DEPARTMENT OF AGRICULTURAL ECONOMICS, UNIVERSITY OF MINNESOTA

Mr. COCHRANE. Thank you, Senator and members of the subcommittee.

The average farmer, the representative farmer, lacks the capacity to command good and stable prices and good and stable incomes in the market—his position in the market is weak. This weak market position grows out of three related circumstances:

(1) The high value that society attaches to technological advance generally in the United States and the generous financing of technological development in agriculture by society, guarantee a continuous outpouring of cost-reducing, output-increasing technologies in agriculture.

(2) In the competitive organization in which farmers find themselves, each farmer has a strong incentive to get his costs down and thereby increase his net returns. This he can do by adopting new technologies, and this he does do. But this action on the part of all farmers increases aggregate output.

(3) This increase in aggregate output would increase the total returns to agriculture, if the overall demand for food were elastic. But it isn't; it is extremely inelastic. Thus, a little too much in the way of total farm production causes farm prices to fall sharply and gross returns to farmers as well.

This point came up this morning. I am arguing that agriculture is a unique industry. The above characteristics give rise to great extremes in farm returns.

The aggregate demand for food is so inelastic, and becoming more so, that a little too much in the way of total output wrecks farm prices and incomes, and a little too little causes consumers to panic. But, outside of wartime, Government-sponsored technological development, and the widespread adoption of new technologies on farms, keep average farmers, not consumers, in trouble—keep farmers on the income treadmill.

Given this situation what is society to do?

(1) One thing it might do is place in operation an industrywide compensatory payments plan such as your staff economist has proposed:

(*a*) To help farmers get off the income treadmill.

(*b*) To help hold down the wage-cost spiral in a full employment economy by holding down the cost of living.

(2) But I suspect that society will not do this; I gather that nonfarm people are getting tired of the farm problem and want to get out of the costly business of price and income support in agriculture.

If this is the case it is then my belief that society, acting through the Congress, should grant agriculture the market power, the monopoly power, to adjust supplies to demand, commodity by commodity year after year, to yield good and stable prices and incomes to farmers.

It will be said by some (for example, Secretary Benson and his supporters) that farmers generally do not want this power, that farmers generally dislike controls over supply, and they will never accept them.

These people may be right, but I don't think so. These people do not really appreciate the fix that agriculture is in. These people do not seem to understand that the current rate of farm surplus would in a free market drive farm prices down by 30 to 40 percent, and drive net incomes down by even more.

If farm leaders understood these hard facts of agriculture and made them clear to farmers, farmers might not take such a dim view of supply controls.

If farm people want to develop effective controls over supply—for example, if the will to control supplies develops (and I would be the first one to admit that I don't think the will now exists, but I think it is developing) and the rest of us agree to this approach—the means, the know-how, are available. The steps in a successful control program are as follows:

First the determination of a fair price—fair to consumers and producers—by the Congress.

The establishment of national sales quotas (in quantity terms) for each commodity each year that will move the quota amounts through the market at the defined fair prices. By this I mean bushels and pounds—that sort of quota.

In my general paper, I made it clear that these quotas would only be applied on commodities as they move to market. They would not be applied on feed grain or feeder cattle, because you cannot administer these things in interfarm exchanges.

The initial distribution of those quotas among producers and the limitation on each producer to market only his quota amount.

The making of individual quotas negotiable to facilitate exit, entry, and production adjustment at the local level within a controlled agriculture at the aggregate level.

In other words, I, too, like many economists, fear controls where they force rigidities in production planning and you cannot get adjustments. I think the trick in developing controls, if we are going to move in this direction, is to develop them at the aggregate level so that we get a total quantity that will move into consumption at prices which have been determined as fair, and to have an instrumentality at the producer level that facilitates production changes within individual farms, between farms, and among areas.

Thank you.

Senator SPARKMAN. Thank you, Mr. Cochrane.

Next is Prof. L. H. Simerl, department of agricultural economics, University of Illinois. We are glad to have you with us.

STATEMENT OF L. H. SIMERL, DEPARTMENT OF AGRICULTURAL ECONOMICS, UNIVERSITY OF ILLINOIS

Mr. SIMERL. Thank you, Senator Sparkman.

Congress, at the urging of many farmers and others, established production controls for farm products nearly 25 years ago. The results have not been satisfactory to farmers, to Congress, or to the public, even though the programs have been revised many times since the original act of 1933.

This committee, the Congress, farmers, and the public want to know why production controls have not been more effective in raising farmers' incomes. They want to know how such programs are likely

to work in the future. It is hoped that the following statements will contribute to a better understanding of the possibilities and limitations of production controls in American agriculture.

1. The use of production control for American agriculture has been based upon a false premise. This false premise is that a small cut in in supply will bring a high rise in prices, and consequently in farm income.

Many of the economists who advocate production controls for a farm product cite quotations and show charts to show that a small change in supply makes a big change in price. When such a market situation exists, economists say that the demand for the product is inelastic.

The false premise, or basic fallacy, upon which production control is based is that this short-run condition will persist over a period of several years. The facts are that in the long run, such as a period of 5 years or more, changes in United States production of farm products make very little change in prices. This is true largely because prices of most of our farm products are influenced more by domestic and foreign economic conditions than by production trends in our own country.

You can go commodity by commodity and notice that a great many of them are influenced by international price levels, and are not dependent upon the demand for food in the United States. Thus in the long run even a comparatively large change in United States production makes only a small change in price. And a production-control program is usually a long-run program, not a 1-year deal.

A large number of cotton growers now understand the principle that restricting production loses markets. Many producers of other crops apparently have not yet attained the same degree of understanding.

2. The usual attempts to control production, by restricting the acreage that can be used for certain crops, are not very effective, especially when they are accompanied by high price supports as in recent years.

What we have called production control has been merely an incomplete rationing of land, one of the resources of production. No attempt has been made to ration the other resources, such as fertilizer, water for irrigation, seed, and chemicals for the control of insects and plant diseases.

Take cotton as an illustration. In the 10 years 1924–33, before acreage controls, we grew an average of 42 million acres and harvested an average of about 14 million bales. This year our acreage is 65 percent less, but production is down only 15 percent.

Attempts to disguise production controls as soil conservation will not make them more effective, though they will bring real soil-conservation work into disrepute.

3. Production control puts our farm industries at a disadvantage with their competitors. Their competitors are agricultural and industrial producers in both other countries and in the United States.

Largely as a result of production controls and price supports, our exports of cotton declined about 50 percent while the exports of cotton from other countries doubled. In our own country limitations on the supply of cotton greatly encouraged the production of synthetic fibers and other substitutes for cotton.

The point is that there are substitutes, actual and potential, for every farm product, and restricting the output of our farm products encourages the development of these substitutes.

4. Production control does not eliminate, or even materially reduce the competition, the competitive squeeze, among farmers within agriculture. This competitive squeeze among farmers in agriculture is likely to continue for many years. Some people seem to be looking for a program that would end this competitive squeeze, and I doubt if they find this.

Limited acreages of wheat often encourage one farmer to operate what formerly was two or more farms. Similarly one farmer often raises tobacco on the tobacco bases of several different farms. There is some evidence that production control raises land prices and increases the competitive pressure upon farmers to leave the farm for industrial jobs.

5. This point is on the constructive side. The major farm problem in the United States today is that many hundreds of thousands of families are trying to earn a living on farms that are too small to provide enough profitable work for one man and, thus, are too small to provide a modern income. The problems of these families, a large share of whom live on so-called commercial farms, and I am not talking about the subsistence farms, cannot be solved by any overall approach, such as production control, price supports, or direct payments. They can be solved only by a program that will help these families to make more profitable use of their labor and other resources.

Senator SPARKMAN. Thank you, Mr. Simerl.

Next is Mr. Robert K. Buck, a farmer of Waukee, Iowa. Mr. Buck, we are glad to have you with us.

STATEMENT OF ROBERT K. BUCK, FARMER, WAUKEE, IOWA

Mr. BUCK. Thank you, Senator Sparkman.

There is general agreement that agricultural production, unless checked, will continue to expand faster than demand for the next several years. This can only mean downward pressure on farm income.

In the Midwest, we are especially concerned with the feed grain-livestock situation. The total feed supply for the year beginning October 1957 will be up 5 or 6 percent from last year and nearly one-third larger than 1952. This is literally an explosion in production.

Some people talk as if our major problem is the stock of accumulated surplus farm products now in Commodity Credit Corporation storage. If these Government-held stocks were suddenly to vanish, it is my opinion that the heart of the problem would remain—farm production expanding every year faster than our markets are growing.

This situation causes farmers to face the future with a great deal of apprehension. They are hearing a wide variety of suggestions as to what direction our farm policy should take. I should like to discuss breifly a few of the approaches that are being considered.

1. NO PROGRAMS; CONTROL BY THE FREE COMPETITIVE MARKET

Some argue for "letting nature take its course," abandoning farm programs, and letting prices fall in the market place to a level that will bring about the necessary adjustments.

In view of the high fixed-cost overhead in modern farming, I believe that such a policy would be disastrous to American farmers. Those

who press this argument do not, in my opinion, consider sufficiently the consequences. I wonder if they consider what would happen to farm prices and farm income if the $3 billion to $4 billion worth of farm commodities now being taken over each year by the Commodity Credit Corporation were forced through the commercial market.

What this no-program policy really means is that farmers would sell their products in a free, competitive market, but buy their operating supplies and goods, as well as much of their family living requirements, in a predominantly administered and controlled market. Moving further in this direction would surely worsen farmers' already weak bargaining power.

2. REVISION OF THE SOIL BANK

Better programs may emerge in the years ahead, but we need one right now. The soil bank is on the books. It is a useful tool, and it can be made more effective. I would suggest these revisions:

(*a*) Drop acreage allotments entirely, substituting a soil-conserving base for each farm as a percentage of total cropland.

(*b*) Set price-support loans at moderate levels. Corn should be included as one of the feed grains. Eligibility to receive price-support loans should require maintenance of the required base acres in soil-conserving crops.

(*c*) Reduce annual production of surplus crops by much greater use of the soil-bank program. Increase incentive payments to farmers for retiring additional cropland to soil-conserving crops—over and above their regular soil-conserving base.

A substantial acreage of cropland could thus be taken out of production. Incentives should be made more attractive for farmers to leave the land in the bank several years and for whole farms to be put in the bank. In the latter, rights of tenants should be protected.

For the United States, we should aim at retiring an additional 40 million to 50 million acres of cropland to the soil bank over and above the soil-conserving base acreage mentioned earlier. Allowing for more intensive cultivation of remaining acres and for poorer land being placed in the bank, such a shift should result in as much as 5- or 6-percent reduction in feed grain production.

As suggested here, the support level on grain would be kept at a moderate level so as not to offer an inducement for excessive grain production and to avoid large supplies going into Government storage, already filled to overflowing. The key to the success of such an approach would depend on the effectiveness of the soil-bank program.

Lowering the levels of price supports alone, if not accompanied by substantial soil-bank payments and actual reduction in feed-grain production, would, in my opinion, lower farm income substantially and cause it to fluctuate more widely from year to year.

We are thinking in the Midwest that acreage allotments are not particularly useful, as a production-control device.

3. TAKE A HARD LOOK AT PROGRAMS THAT INTENSIFY THE SURPLUS PROBLEMS

Among the major reasons for our disappointing record in holding farm production in line during recent years are the numerous Govern-

ment policies and programs which have the direct effect, if not the basic objective, of expanding farm production.

Following are two examples of programs which I would urge the Congress to reappraise in view of the crisis facing American farmers in their chronic overproduction:

1. Agricultural conservation program: Since 1951 over $1 billion of Government funds have been invested in the ACP program, and approximately another billion has been matched by individuals. Roughly $2 billion have been spent on these production-increasing practices.

Under the present circumstances, much of these ACP funds are doing more harm than good, and should, in my opinion, be shifted to an expanded and revised soil-bank program to hold land out of production.

2. Government programs of reclamation and irrigation: These large Government investments intensify and enlarge the income and price problems of American farmers. According to the Bureau of Reclamation, over 1 million acres of newly irrigated cropland was brought into production from 1950 through 1955. Does it make sense at this time for the Government to create new farms in one region with huge investments in reclamation and irrigation and thereby add to income depressing surpluses and, worse still, force farmers off the land in another region? I should like to see the Congress reexamine all Government projects for reclamation and large-scale hydroelectric dams. Where possible, the irrigation and new farm development aspects should be postponed until a time in the future when such added production will be needed.

4. FOR THE LONGER PULL

Some farmers and farm leaders argue for very tight production and marketing control programs with mandatory participation. I am fairly sure that the farmers in my area would not accept such a program now. But, if production continues to outrun markets, and if farm income gets considerably lower, then I wouldn't be so sure. We ought to be thinking now on what kinds of programs would make sense if production gets clear out of hand and if farmers faced economic ruin from their overabundant production.

So much of our thinking is based on experience with the recent past. The situation 2 years from now may be completely different and much more like the situation of the 1930's. This should be kept in mind when we say so confidently what farmers will or will not accept.

The research programs of the land-grant college experiment stations and the USDA must be reoriented and directed toward the critical problems of agricultural adjustment. We have never had adequate fact finding and analysis and testing as a foundation for our farm policies and programs.

In my opinion the vital issue for the long pull is this: What kind of production and marketing controls must commercial farmers have in order to earn wages for their labor and returns on their capital comparable with that earned in the rest of our economy. Our primary problem is how to acquire and maintain essential bargaining power in the sale of our products—bargaining power similar to that

achieved by corporate business when basic corporate legislation was passed many years ago and by organized labor under the various labor laws of the last 25 years.

I urge you to examine possibilities for a basic enabling act authorizing producer groups to apply production, quality, and marketing controls as feasible; to raise funds for administrative expenses by such means as checkoff or processing tax; to set sharply lower prices for that part of production which is in excess of market outlets at stable prices; and to develop foreign markets for their products.

Such a basic enabling act should set limits and safeguard the interests of other producer and the public. Insofar as possible the framework should be set so that it is a producer program, not a Government program.

Senator SPARKMAN. Thank you, Mr. Buck.

The last member of our panel is Mr. Glenn J. Talbott, president of the North Dakota Farmers Union. Mr. Talbott, I believe you have been here all week, at every session?

Mr. TALBOTT. Yes, sir; I haven't missed a thing.

Senator SPARKMAN. We are very glad to have so many members of your North Dakota Farmers Union visiting us during these meetings. We are very glad to hear from you at this time.

Mr. TALBOTT. I hope they have enjoyed it. These men, Senator, are county legislative directors, and they are down here to see these processes and to get all of the information they can, because they are not payrollers; they are operating farmers and trying to make a living under these circumstances.

Senator SPARKMAN. They are the ones we are talking about; is that right?

STATEMENT OF GLENN J. TALBOTT, CHAIRMAN OF THE EXECUTIVE COMMITTEE OF THE NATIONAL FARMERS UNION AND PRESIDENT OF THE NORTH DAKOTA FARMERS UNION

Mr. TALBOTT. That is right. Mr. Chairman, in years past you have been chairman of several subcommittees dealing with the problems of particularly low-income farmers in chronically depressed rural areas; you have rendered an outstanding service in focusing attention on these problems.

You have now earned our thanks and commendation for your leadership in organizing this subcommittee and hearings to focus attention on the increasingly serious income problems of the normally adequate commercial family farmer.

I appreciate greatly being invited to participate on this panel, and I should like to say that I shall read only brief excerpts from my summary statement.

In my prepared statement I have indicated that the needed farm-market proration program is only part of a many-phased farm-income program; in the prepared statement I have gone into considerable detail concerning specific application of farm-market proration. or supply-adjustment programs.

I have done so to demonstrate that a fully workable market proration system can be developed for all farm commodities. I am firmly convinced farmers would not only accept but would welcome

the opportunity, right, and authorization to utilize such a system as part of the total farm program.

Farmers suffer from a chronically low disparity of income and income-earning opportunities. This is bad for farmers, of course, and for the Nation as a whole. The fundamental factor in farmers' lack of parity income is their weak bargaining position, which farmers by themselves, without the aid of Government, cannot strengthen in a completely competitive farm market, operating in an otherwise administered-production and administered-price economy.

In fact, if it were not for farmers' weak bargaining position there would be no need for these hearings. If farmers historically had had equal bargaining power, farm income would not be so low and Congress would not have to be concerned about the farm-income problem of the economically adequate farmer commercial-family type farm.

The situation and need calls for a complete logical set of tools to enable farmers to put their bargaining power in the market on a par with the buyers of farm commodities. This can be done with a combination of tools, each specifically designed for its particular purpose and for specific commodities to work together as a whole in connection with domestic consumption and export-expanding programs to make a 100 percent of parity farm-income protection program economically workable, administratively feasible, and politically acceptable.

To accomplish this objective effectively we need authorizations, enabling acts, and governmental aids to enable farmers to obtain greater control over the market supply and price of their commodities; farmers can then effectively adjust market supply to augmented effective demand.

In summary, the market-supply adjustment, or proration, devices I suggest, which are described in greater detail in my prepared statement, are:

(1) A nationwide REA-type loan and technical assistance program to assist farmer owned and controlled business enterprises to acquire, or build, and operate facilities to assemble, process, market, and store farm commodities and their products;

(2) A compulsory national all-commodity farm market goal and a voluntary conservation acreage reserve program to keep total market supply of all farm commodities as a whole in balance with increasing total domestic and export demand for all food and fiber;

(3) Marketing premium payments on hogs and cattle marketed at desirable weights;

(4) Extension, to producers of all farm commodities who wish to use them, of the protection of cooperative bargaining as provided by marketing agreement and marketing order legislation;

(5) Improved marketing quotas for basic commodities and new national single-commodity farm marketing goal programs for all farm commodities when needed; and

(6) The proposed system to be operated by a Federal Farm Income Improvement Board composed mainly of democratically elected farmers; as, for example, a system such as the following:

Eleven members, 6 officials of the United States Department of Agriculture, appointed by the President, by and with the advice and consent of the Senate, and 5 members elected from their own number by farmer-elected members of the State farmer committees,

5 member on State farmer committees, 2 including the Chairman, appointed by the Secretary and 3 elected from their own number by the county farmer committeemen; and county and local farmer committees elected by farmers.

The REA-type storage and processing loans to farmer owned and controlled business enterprises would enable farmers to set up their own yardstick operations to measure and regulate the ever-increasing marketing margin or spread between the prices received by farmers and those paid by consumers. Even if such operations did not reduce the spread, at least the middleman's profit from such operations would go to the farmer-owners of the enterprises.

The basic principle of my proposal is that the farmers will be enabled to tailor the supply of farm commodities that is put on the market to equal the volume that the market will take, with such domestic and export demand expanding programs as are in operation at approximately parity-income equivalent prices, assuming that the total national economy is operating at relatively full employment level of prosperity.

The basic principle could be carried out by means of a series of tailored and matched programs as follows:

(*a*) The all-commodity farm marketing goal and conservation acreage reserve program to set up a nationwide all-commodity market supply adjustment program.

Each year on November 15 the Secretary of Agriculture, on advice and recommendation of the Federal Farm Income Improvement Board, would determine:

(1) The total volume of farm commodities that will move at parity-income prices in the next calendar year, based upon the assumption that not more than 3 percent of the civilian labor force will be unemployed. He would then value this full employment volume of farm supply at parity-income prices and proclaim the total figure as the following year's national all-commodity farm marketing goal.

(2) Simultaneously with determining and proclaiming the all-commodity marketing goal, the Secretary, with advice and upon recommendation of the Federal Farm Income Improvement Board, would determine and proclaim the national conservation acreage reserve. To determine the national conservation acreage reserve, a calculation will be made as to the number of acres available for commercial production of farm commodities including hay, pasture, and grazing lands. From this total will be subtracted the number of acres expected to be required to produce the national farm marketing goal volume of farm commodities. The resulting figure—the number of acres of farmland not needed in the year ahead for commercial production—will be proclaimed as the national conservation acreage reserve for this year.

(3) The Secretary would offer to make rental payments to farmers on annual contract to keep their conservation acreage reserve out of commercial production and to make payments required to cover the cost of putting the land into optimum conservation condition for that year.

(4) Both the national all-commodity farm marketing goal and the national conservation acreage reserve would be apportioned by the Federal Farm Income Improvement Board, according to standards established by law, to State; from States to counties; and from

counties to farms. By this process each farm family would be awarded an all-commodity farm marketing goal (evidenced by a farm marketing goal certificate) and a conservation acreage reserve eligibility figure.

(5) The all-commodity farm marketing goal certificate would show in terms of dollar value at parity income equivalent prices the volume of sales for which the family could obtain goal certificates of sale free of charge from the county farmer committee. If the family wished to sell a larger volume than is covered by the all-commodity farm marketing goal certificate, it could do so by purchasing overgoal certificates of sale from the country farmer committee by paying a farm income stabilization fee equal to 75 percent of the parity-income equivalent price of the commodities covered. The Secretary of Agriculture would be directed to confiscate any farm commodity or product thereof found to be unaccompanied by a goal certificate of sale or an overgoal certificate of sale in the ownership of anyone except the farm family that produced it.

(6) The family would be eligible to place any acres it desired in the conservation acreage reserve, except, if there was not enough to go around, no family could put in more than its pro rata share.

With total farm output and market supply as a whole kept in reasonable balance with total domestic and export market demand by means of the all-commodity farm marketing goal and conservation acreage reserve, we must then provide for a series of individual farm commodity and commodity-group market supply adjustment programs.

First, the producers of all farm commodities should be made eligible where they so desire to make use of the marketing order device now used by city fluid milk producers and for some fruits, vegetables, and nuts. As a protection to consumers, such producers should not be allowed to use marketing orders, or similar devices, to raise the prices of their commodities above the parity-income equivalent price. For each farm commodity not already protected by a marketing order program, a single-commodity farm marketing goal program would be established.

On advice and recommendation of the Farm Income Stabilization Board, the Secretary of Agriculture would determine for each such commodity whether in the marketing year ahead the expected total supply of the commodity will exceed "normal supply." The normal supply would be defined as the volume of the commodity that will sell at parity-income equivalent prices in a full employment economy.

If total supply is expected to exceed normal supply, the Secretary would be required to proclaim a national single-commodity marketing goal for that commodity, apportion it out to the States, counties, and farm families, and then hold a referendum.

If two-thirds or more of the producers voting in the referendum approve the marketing goals expressed in bushelage and poundage terms, a producer could obtain single-commodity goal certificates of sale for up to his goal volume of sales and could buy overgoal single-commodity certificates of sale for any volume of the commodity he wished to sell in excess of his goal. He would be able to purchase the overgoal certificates of sale by paying a farm-income stabilization fee equal to 75 percent of the parity-income equivalent price of the commodity. The Secretary of Agriculture would be required to confiscate any such commodity moving in channels of trade if unaccompanied

by an all-commodity certificate of sale and individual-commodity certificate of sale.

These are the principles. Their specific detailed application and the terminology used to describe them can, of course, be varied from these that I have used. The degree or extent of application of the different phases would vary with the situation of each individual commodity. However, the basic fundamental proposition I have stated is that farmers' bargaining power should be strengthened by the United States Congress to the extent that farmers are allowed and enabled to place on the market only the volume of each and all farm commodities that will enable them to earn a parity of income under whatever circumstances may exist from year to year.

There is nothing unusual about a group of basic producers requesting this of Congress. Historically it has been customary for industries important in our national life to seek and obtain Government aid to stronger bargaining for solution of their price and income problems. This is not something extraordinary or special for the farming industry alone.

Certainly the public interest requires the maintenance of a strong and healthy farm productive plant and preservation of the family farm pattern. The family farm is our Nation's best export of hope, example, and inspiration to the world's over 2 billion of uncommitted peoples, most of whom are farmers.

Senator SPARKMAN. Most people live in countries where they are trying to expand production of food to take care of their needs.

Dr. Talle, do you have any questions?

Representative TALLE. Thank you, Mr. Chairman.

I want to say thank you, first of all to all members of the panel We appreciate your help

Mr. Buck, I believe you are the sixth witness from Iowa to appear here, and we are very glad to have you. I think some of the other witnesses also stem from Iowa originally.

May I ask you something about the soil bank? What do you think will be the extent of participation in the corn acreage reserve in Iowa next year?

That is, not the conservation reserve, but the corn acreage reserve.

Mr. BUCK. Dr. Talle, I do not believe my opinion would be particularly valuable, but I think if the payments were adjusted upwards some, and the administrators could start early in getting the program explained and if a good educational program can be carried along in conjunction with it, the participation will be fairly good, considerably better than it has been this past year.

Representative TALLE. There was a late start last year which, of course, was a disadvantage. May I ask you about a clipping that appeared in the Evening Star, Professor Bottum? (It is not attributed to you.) We were discussing wheat in large degree yesterday, and from the clipping I think the reader would get two distinct impressions: First, that controls are tight; and, second, that we will have more wheat than ever.

It does not make the control program look good, the way it is put. Does this mean that the soil bank is going to be regarded as a failure and discontinued?

Mr. BOTTUM. Well, of course, the estimate of the crop is based on the condition at the present time, and that may be changed considably before harvest. I think we have to recognize that. But should

conditions continue favorable, then we will have this larger crop and it would indicate that the acreage control and the soil bank were not as effective as it was expected.

I would like to add to what Mr. Buck has said, that we have made studies in the wheat, cotton, and tobacco and corn areas, and all of these studies would indicate that it would take payments about 25 percent higher on the acreage reserve to get two-thirds to three-fourths percent of the farmers to participate. Therefore, I would not expect a high participation with this present rate of payment.

Whether the soil bank succeeds or not in obtaining participation on the part of the farmers depends upon the corn allotment in the Corn Belt because now farmers start at a very low base. That is an important item. It is also tied very closely to what the payment is. If the payment is below the competitive price of what farmers are willing to take, they do not cooperate in a large measure. If the payment is high enough, then you will get cooperation.

Representative TALLE. I note in your summary, if my memory serves me right, that you compared the kind of soil-bank program we now have with one in which the soil-bank land could be put in grass and used for grazing.

Would you elaborate on how the grass program would compare with the present acreage reserve plan?

Mr. BOTTUM. In our study we compared four programs. One program compared what would be the cost if you paid for shifting grain and cotton and tobacco land into grass, and then allowed farmers to use the grass, as compared to a program where the grass was not used. The payment per acre under the grass-used program was sufficiently less so that you could get about the same shift in total production, with the same dollars of payment.

You would have to shift more acres. If such a program is effective and carried on over a period of time it would, of course, increase the roughage-consuming livestock. We figure it would increase beef cattle about 10 million head. It would reduce the total meat supply but it would increase beef cattle at the expense of poultry and hogs and probably would result in a little increase in dairy.

The cost of each of the programs would be somewhat comparable. You do run into the problem that you expand the beef-cattle business and lower their prices. Our study would indicate that if you expanded the beef-cattle herds 10 percent, you would lower the price something like 12½ percent.

This would be true of beef prices relative to other meats. But all meats should be higher if the soil bank is effective in reducing total agricultural output.

Representative TALLE. It is true, is it not, that we have record feed grains supplies this year?

Mr. BOTTUM. We do, and not of the best quality—much of it is high moisture content.

Representative TALLE. We are suffering from that in Iowa and Minnesota because of the early heavy snow that came.

Mr. BOTTUM. We are in Indiana, likewise.

Representative TALLE. Now, much of the extra production came from feed grains grown on land diverted from wheat and cotton; is that right?

Mr. BOTTUM. That is right.

Representative TALLE. Am I correct in thinking that those diverted acres may represent a large part of the surplus producing land in farming today?

Mr. BOTTUM. I think that is right. We have so much substitutability in the resources of agriculture or the possibility to shift them from one crop to the other that we really have to control total crop acreage if we are going to control or adjust production in the aggregate rather than one crop at a time.

If we shift one crop as we have here in the past, it goes into another and it does not change our aggregate situation very much.

I would like to add that if a soil bank is to be effective, it must get up into the magnitude of above 30 million acres, because up to this point it does not change output. It may be used to distribute funds, but it does not adjust production until you get up to something beyond 25 million or 30 million acres, as our studies would indicate.

Representative TALLE. You think a special soil bank could be fixed up for those acres?

Mr. BOTTUM. Of that magnitude, you mean?

Representative TALLE. Yes.

Mr. BOTTUM. I think——

Representative TALLE. Where you have a shift, let us say, from wheat and cotton, to something else?

Mr. BOTTUM. I think you could have a soil bank in which you paid for shifting the grainlands and the cottonlands. I would leave out tobacco, I think. You could put that into grass, and you would have a total base on the farm for all grain crops, and you would make a payment for shifting a certain percentage into grass, which might be used or not used depending upon what kind of a program you desired.

Representative TALLE. I know that you are familiar with the fear that we entertain in the corn area that other grains may cut into us. I was wondering if some such plan as you have in mind would be a solution and if we could escape that fear and realization of the fear?

Mr. BOTTUM. I think we could, in the short run. If we curtail wheat and cotton, and then allow that acreage to be put into feed crops, we dump the surplus problem into the feed area. We raise a problem there, of course.

The soil bank, if the land were shifted into grass, either used or not used, would avoid this type of thing, at least in the short run.

Representative TALLE. I would think that there would be a good deal of advantage to be gained from using grass. I also think that we have quite a little land that is not really good for anything except a little pasture and some beautiful scenery, but it would be excellent for trees.

I have some of that in my district along the Mississippi River and some farmers are going about scientific forestry pretty well. Woodlands can yield crops too.

Mr. BOTTUM. I think this kind of a shift is inevitable, if we cannot find outlets for our farm markets. If we could have a program to encourage this shift, to pulpwood in the South, and grass, and eventually use this grass, this is the kind of a shift that is going to come anyway.

If we could speed it up and protect farm incomes while it is taking place, this would be my argument for the soil bank to fit into this.

Representative TALLE. I think that you will agree with me that this change in technology would have come anyway over a period of years, but it would have come over a much longer period, and adjustments could have been made more easily. The fact that these changes came so rapidly because of war demands is the fact that gives us a lot of trouble right now, because there are such harsh adjustments to make.

Mr. BOTTUM. I would agree with you.

Representative TALLE. I would like to mention one other thing that was discussed the other day when Dr. Davis of Harvard University was here. We discussed the matter of quality and I said to him that when I look at the meat counters here in Washington I am distressed to see pork chops that I just do not want to buy, although I like pork chops.

There is too much fat and sinew, and too much bone. The swine growers in the State of Iowa have for some time attempted to encourage quality production. Farmers will respond to incentive.

Would production control make it possible to encourage a lean hog? I am thinking of a farmer who would sell only so many pounds of hogs, and if he could get even a little better price for a lean hog than for a fat one, he would have a strong incentive to produce the leaner animal.

But I think the farmer could not afford to do that unless he got cooperation all along the line. If in going to market, the buyers at the meatpacking plants did not recognize that quality, he would be discouraged. You would have to get recognition of quality all along the line from the farmer to the housewife's kitchen.

Mr. BOTTUM. I think that we are making some progress in that direction, and I believe the studies would indicate that if a farmer could get the breeding stock, he can produce the lean-type hog with less feed, slightly, than the fat hog. But this is a rather slow process, of getting the breeding stock to make this progress, and it cannot be done quickly, it seems to me.

Representative TALLE. It take scientific feeding to produce quality products.

Mr. BOTTUM. Plus proper feeding; yes, sir.

Representative TALLE. Certainly a lot can be done through scientific feeding, which has been proved in the case of turkeys and other poultry—production of more white meat, for instance.

Mr. BOTTUM. I think we are going to see these changes in the pork business that you indicate, in the next few years, either under free agricultural livestock prices or under controlled prices. We are going to make progress.

Representative TALLE. That is encouraging. Thank you, Mr. Chairman.

Senator SPARKMAN. I was interested in the question that Dr. Talle asked about the hogs. Am I correct in my understanding that the tendency now is toward a leaner hog?

Mr. BOTTUM. I believe so. We have studies going on in our State in which we are cooperating with the packers and the stores and trying to test how much more will be paid, and I know this is going on all over the Corn Belt.

Mr. COCHRANE. I have heard it suggested by people in Minnesota, however, who get out in the country a lot, that with all of the high moisture corn that we have this year, a lot of soft corn is now going

into, and will continue to go into, heavier feeding of hogs this winter and next year.

Because of the very big corn crop, and the fact much of it will not store well, you may get a kind of a regression here and get a lot of fat 300-pound hogs next year.

Mr. BUCK. May I comment with respect to hogs? It has been suggested that when the time comes that we go through the bottom of the hog cycle and hog prices get down to what farmers consider totally unacceptable levels, some method of paying a premium on lightweights or requiring a wider price differential by weights would have the effect of reducing volume fairly effectively.

For every 10 pounds of reduction in average weight of butcher hogs marketed, it is claimed that the price per hundredweight would be $1 higher. It seems to me that we ought to be doing research and testing on that now when hogs are moving along at a decent price. The results might be very useful if we do get into serious trouble later on.

Mr. TALBOTT. I would like to comment, Mr. Chairman, on one thing Dr. Bottum said in connection with what Mr. Buck has just said.

As I understood Dr. Bottum, there is a good deal of scientific research and I am sure that is accurate in a great many of the experiment stations, on breeding of lighter types of hogs, which certainly would be all to the benefit of the consumer, I think, from the standpoint of quality.

I would raise this question, which as I understood it is the same question that Mr. Buck raised, that if everybody gets to raising lighter hogs and if the thing we have listened to all through the week in terms of agriculture's excessive capacity and the effect it has on prices, then we need something in addition to that because if we have no marketing supply adjustments designed to affect prices, then it seems to me that the consumer would be the sole one to benefit and we would just breed more numbers of light hogs and still have a very adverse and depressive weight on the market prices of hogs.

Mr. BOTTUM. I would like to add that I would agree with this, and it seems to me it would make our hog production more efficient and we would have a greater total poundage with the same amount of feed than we had before. This would make a greater problem from the production standpoint than without such a program even though we would have a better product which might be consumed more readily.

Representative TALLE. It is true, is it not, that there is a close relationship between the price of lard and the price of pork? If you would cut down on the quantity of lard, would that not help your pork price?

Mr. BOTTUM. Yes; it would help the pork price, but it would also make more lean pork from the same amount of feed.

Representative TALLE. Do you agree with that, Mr. Buck?

Mr. BUCK. I think so, Dr. Talle. Farmers are going to be pressing toward better quality products. It is a long-range program, but it seems to me that that alone is not adequate because if we flooded the market with very choice meat-type pork chops, you would resist that as you went to the meat market and you would take them, but at a greatly reduced price.

Moreover, if we keep increasing grain production, it is just inevitable that it will get into hogs. Even if we have the most desirable type hog in the world, we would be in serious trouble pricewise if we let feed-grain production get clear out of hand.

Representative TALLE. The old slogan is: Do your Christmas shopping early. Now, if that were followed 100 percent you would get the same rush early that you get later, would you not? So we will just have to hope that not everybody will do that.

Senator SPARKMAN. I am so intrigued with this question on hog raising, I hardly know how to move to another subject.

I was born 58 years ago today——

Representative TALLE. Happy birthday, Mr. Chairman.

Senator SPARKMAN. I was born on the farm, and we raised hogs, but only for our own use. But I am wondering if we did not really get a very efficient and effective use out of them. From the hams and shoulders we trimmed the fat and made lard and cracklings, and we had crackling bread and lard of our own making. My mother used to save the hardwood ashes and put it in the ash hopper and later run water through, and make lye. We would make our own lye soap and use lye for making hominy.

We did not have to bother very much with the market. That was not commercial hog farming, but it was very profitable hog raising on a small farm.

Representative TALLE. Those were the days when you could get good pickled pigs feet and headcheese.

Senator SPARKMAN. Yes, and you could get hominy, and it was real hominy, too. But I am intrigued by the whole discussion, and I know that it does play a great part in our farm economy.

I want to take you to a little more prosaic subject for a little bit, and that is the matter of production control. I gather from some of the things that have been said here this afternoon that all members of the panel are not in complete agreement on this subject.

Some have said or have assumed that farm prices and incomes can be raised by effective production controls. Professor Simerl, I think you were the one who voiced a rather strong objection to that attitude and I want to be sure that I understand this correctly.

Let us assume that production control is effective over a long period of years. Would this increase both farm prices and net farm income?

Mr. SIMERL. There are 2 or 3 different stages at which we could measure the effectiveness of production controls. One would be the volume of output, and the other would be a level of income that the farmers have or receive.

I think they might be quite different. In other words, we might be effective in controlling the output and still not in the long run be effective in raising farmers' incomes.

The reason that I have less faith in the use of production controls for raising farm incomes is that I think American agriculture, and the American farmers, do not have a monopoly market. We attended the national outlook conference here a month ago, and we were told that one-fifth of the acres of American farms, the produce of one-fifth of the acres, goes into foreign markets, the export markets.

I think this is true, although not that large a percentage of the total output. Inasmuch as such a large share of our output of farms

does go into foreign markets, it seems that we have a very heavy load trying to raise these worldwide price levels by production controls.

Some of the commodities that depend on world markets for their outlets are wheat, cotton, soybeans, and all of the fats and oils, and soybean and cottonseed oil, and lard and tallow.

Even prices of butter and milk depend much upon world price levels and conditions.

I remember attending a national agricultural outlook conference down here a few years ago when they told us that the milk prices would hold up because consumer demand was going to hold up, and there was no increase in milk production in sight. Yet, within 30 to 60 days, or something like that, the whole milk price structure began to fall.

I inquired at the outlook conference the next year, and as near as I could find out, the main reason for the price decline was that the worldwide price level for fats and oils had tumbled, bringing down the prices of cottonseed oil and soybean oil, and consequently the price of margarine and the price of butter. The drop in the price of butter brought down the price of milk.

Other commodities depending on worldwide markets are fruits, tobacco, rice, and, to a considerable extent, even the feed grains, corn and sorghum grains. It is for these reasons that I do not have as much faith as I might in the ability of production controls to be effective like they would if we really had a monopoly market for our farm products.

Senator SPARKMAN. Let me ask you this: One of the early panelists, I believe it was perhaps Mr. Bottum, suggested that what we needed to do was to take some 45 million to 50 million acres out of production, just on an overall basis, and do it through a soil-bank system. What would you think of that?

Mr. SIMERL. I have never been able to find out from Mr. Bottum just exactly where this would leave us. It would still leave us with a great deal of products which would have to be sold on foreign markets. If one-fifth of our exports now go to foreign markets, we would have to take out probably at least 25 percent of the total acreage to eliminate these exports.

Senator SPARKMAN. Wait a minute. Mr. Bottum, you did not intend to eliminate exports, did you?

Mr. BOTTUM. No; I would expect that exports would continue the same as they had been.

Senator SPARKMAN. That was my understanding, and that was not involved at all. In other words, as I understand it, his purpose was to cut down the production in order to make it possible to have an orderly disposal of what we actually produce, and use the soil-bank payments as compensation for that lost production. Isn't that right?

Mr. BOTTUM. That is right.

Senator SPARKMAN. You still expect to sell on the basis of a world market.

Mr. SIMERL. Then we would have to subsidize the exports of cotton and wheat and a great many of our farm products and we would be about where we are now. It would leave us in the same position, and we would have to subsidize the export of wheat by 70 cents a bushel; I think that is what we pay today.

Senator SPARKMAN. Do you accept that?

Mr. BOTTUM. No; I would first like to raise a question about exporting one-fifth of our products. This is not normal percentage of our export, and I think it is nearer 10 percent as a level. That is point No. 1.

Senator SPARKMAN. You mean across the board? We export a great deal more than that of certain commodities.

Mr. BOTTUM. But in the aggregate, it is 10 or 12 percent.

Senator SPARKMAN. We used to say we depended on exports for 40 percent of our cotton crop, and in recent years, except this year, that has been, of course, a high figure; it has been less.

Mr. BOTTUM. I think we can establish 10 to 12 percent as a fact. Mr. Brandow, do you have those figures there?

Mr. SIMERL. There is no argument here, and this is about 8 or 9 percent of the total product.

Senator SPARKMAN. There is a table on page 860 of the compendium showing that from 1950 to 1954 the overall export percentage was 7.4. That is of all farm products.

Mr. BOTTUM. I wanted to get it down to its relative magnitude. I would like to make it clear that in taking out this 30 million or 40 million or 50 million acres that I am speaking of, I would anticipate it might raise prices 5 or 10 percent, and I am not talking about 100 percent of parity. I am talking about prices 5 to 10 percent higher.

The farmer would receive this much higher price plus his receiving the soil bank payments. Now, to the extent that prices are raised 5 to 10 percent more, I grant that this would discourage exports. They would be less than they would be under free prices. But it would be at a lower level than our supports have recently been set.

Do I make myself clear?

Mr. COCHRANE. I would like to ask a question.

Is this soil bank that you are talking about one with no programs at all, or a soil bank superimposed upon essentially what we have right now? If you had a soil bank of the magnitude you have talked of, perhaps 40 million acres, and no other programs at all, I am not sure, but I think that the net effect of this would be prices considerably lower than what they are now but higher than what a free market would generate.

Or are you talking about a soil bank on top of what we have now, so that in essence you are going to pull prices up 5 or 10 percent from essentially the level where they are now? If it is the latter thing, why, of course, we are going to have to continue with various types of export programs—which is what I assumed in the first place.

But if it is the former, no other programs besides the soil bank, and a 40-million-acre program, would you not agree that the level of farm prices would be considerably below what they are now, and the only thing is that they would be somewhat higher than a free market level?

Mr. BOTTUM. I would assume under a soil bank that we would continue to vigorously push the use of farm products in industry, as we talked about earlier, and we would try to expand our domestic consumption and try to expand our foreign consumption.

But we probably would not put as much subsidy into our foreign exports as we are now doing, and would not need to. This would make the cost less there. I would envision, too, that we might have price supports at some low level, disaster or a little above, with the soil bank.

Senator SPARKMAN. I notice, Mr. Bottum. you say that we need to

shift 30 to 50 million acres from grain crops, cotton, and tobacco, into grass, fallow, and timber. I believe that you added that the grass might be grazed or not.

Mr. BOTTUM. Yes, sir.

Senator SPARKMAN. What do you mean by that? Under the present soil-bank arrangement, they do not allow you to graze it, do they?

Mr. BOTTUM. Our studies would show, and I think there would be reasonable agreement in this, that in the Corn Belt, if you shift land out of grain crops into grass, and let the farmer use it, and he uses his present technology on the grass and his present technology on the corn, it will reduce the number of calories produced per acre—and that is the way we measure what we eat—about two-thirds if we use the grass, and shift from corn and hogs into grass and beef cattle.

You will come up with about two-thirds reduction in total calories per acre. Now, if you do not use the grass, then you come up with 100 percent. This is true in the Great Plains, and I think it would be true in the South.

Senator SPARKMAN. Does that mean that the farm economy could stand the increase in beef production, or perhaps fluid milk or something like that?

Mr. BOTTUM. I think that it could. For example, I might illustrate by the extreme. If we had all of this country back into grass, we could not raise enough food and calories to feed our population. If we had it all in grain, and had no animal agriculture, we would have enough to feed 400 million or 500 million.

Now, I am saying that roughage-consuming livestock can be the balance wheel and we ought to shift more in that direction. Do I make my point clear?

Senator SPARKMAN. I think that you do. I was just thinking of my own situation. You perhaps were in here this morning when I said that we had a very bad crop year last year, and that was generally true over my whole State.

I could put my little farm, and it is a small farm, 160 acres, into the soil bank and make a great deal more out of it than I get out of it now. But there are 16 people living on it. I do not know what would become of them.

I would like very much to shift the farm completely from cotton into small grains and milk.

I could do it very easily if I could use that diverted acreage in grass or other feed for cows. As I understand it, I am not allowed to do that. Therefore, I come up with this question, which puzzles me: How are they going to continue to make a living?

I think this certainly applies to millions of small farms throughout the country. And, in fact, one of the great complaints that has come to me from my State has been that in a great many of the smaller counties where the small family farm is the characteristic farm, a great part of them are actually going into the soil bank. So there is a problem of the people moving off the farm into town, and they have left other problems with the small stores.

The man who sells fertilizer and the man who sells plows and plow points and barbed wire, and a thousand other things that the farmer buys, for him there is a problem. There is such a shrinkage of farm

population as a result of the soil-bank operations that it is having an adverse effect on the economy of the whole country.

Those are some of the things that disturb me. I said this morning that I have always felt there is a good thought in the soil-bank idea, but it does not seem to me it has been worked out yet.

Mr. BOTTUM. Might I add that I think it ought to be voluntary; this is No. 1. In your particular case, if it were not to the advantage——

Senator SPARKMAN. And I think mine may be fairly typical of the small family farm. It has someone on it doing the work.

Mr. BOTTUM. I would like to point out the other side.

In studies we made in Indiana, and Dr. Penn in Wisconsin, we found that the ones who actually did participate heavily were people who had reached retirement, and some who had jobs in town.

Now, it seems to me that that kind of a land can be taken out without much social and economic adjustment.

Senator SPARKMAN. Let me tell you, the other family on my farm is a man who is 66 years old. He and his wife are there. They have one boy. They have virtually retired, and they are on social security. When I went to him, I said, "Now, I want to find out if you want to go into this soil bank and here is the proposition." He said, "Oh, no, I think with my few acres of cotton, I had better continue to operate so my boy will have work to do."

I thought it was a wise decision. But I can see that had the old couple been by themselves, they might very well have gone into that. That is the point you make.

Mr. BOTTUM. That is why it should be voluntary and not compulsory.

Senator SPARKMAN. I must say that I do not like the idea of a land lying completely idle. I wish something could be done with it.

Mr. BOTTUM. Neither do I, and I think that we would make the shift. This only raises a question with the roughage-consuming livestock men, that it would expand their supply. But I think this is the natural thing that would take place, with the free economic forces, if we had no program.

Senator SPARKMAN. Are there any other questions?

Mr. TALBOTT. I did not want to interrupt. I would like to make a few comments leading into this, if I may.

Senator SPARKMAN. We are very glad to have you do so.

Mr. TALBOTT. As you know, I have been here all week and I am not sure any of the other panel members have been here and had the opportunity to hear the summaries and cross-examinations of somewhere near 60 witnesses.

I must confess, and I am not an economist, but I am a farmer, but I must confess there have been times that I have had a slight feeling of unreality about this whole thing as to whether or not we still had the same objectives that I thought we had.

I understand that these panel hearings are on farm policy, for commercial agriculture. It has been my impression throughout this week that many of the witnesses have displayed an unfortunate time lag concerning their knowledge of what is happening to farmers currently and farm income in our moving national economy.

Most of the witnesses seemed unaware that we are this week in the midst of one of the sharpest economic declines in history. Much

more sudden and severe than in 1949 or 1954. Of course, the papers were prepared before this developing recession was fully apparent.

Most of the witnesses seemed unaware of the threat of vertical integration to the income and bargaining power of normally adequate farm farmers, and I have also felt that most of the witnesses up to this panel were unaware of the growing impatience of commercial farmers with the situation in which they find themselves.

As these hearings have progressed, I have been saddened that so few of the witnesses seemed to be aware of the fact that all organizations representing farmers, save only one, are developing an organized front to improve farm income through measures that will give farmers greater control over the price and supply of their commodities, thus overcoming to some extent the persistent weakness of farmers' bargaining power relative to administered prices throughout the rest of the economy.

This timelag in the awareness of many witnesses has given these discussions an unreal quality to me. At times this week I have felt that some of the statements reflected a lag in social-science research.

We seemed to focus too little attention in our discussions on the key problem that caused you, as I understand it, Mr. Chairman, to organize these hearings. The key problem in the current setting is how economically adequate commercial farmers can be aided by Government to acquire and use countervailing bargaining power in our commodity and monetary markets.

I have also been impressed that economic efficiency alone should not be the sole criterion of policy. The Nation is fortunate that there are other values including human values, in addition to sheer efficiency that can be and indeed are, in fact, brought to bear on the democratic policymaking process. There have been 1 or 2 points—and I am leading up to this; I want to comment on the discussion of Dr. Bottum on the soil bank—at times during the week when a statement was made, if I understood it correctly, the intent of which was to say that our objective, and I assume that meant the objective of these hearings, was to have plenty of food at the lowest possible cost to the consumers.

With that statement, I would wholly disagree. I think that our objectives, if this is farm policy, is to have plenty of food at the lowest possible cost which will yield a parity of income to the producers of that food, and I call to your attention, for the purposes of the record, the fact that in the 1938 Farm Act, and that still has not yet been repealed insofar as I know it is still objective of farm policy insofar as the Government has anything to do with it, it says, and I quote:

> It is hereby declared to be the policy of Congress to assist farmers to obtain parity of income.

And further on it defines parity as applied to income—

> shall be that gross income from agriculture which will provide the farm operator and his family with a standard of living equivalent to those afforded persons dependent upon other gainful occupation.

If that is the objective, I think that I feel reasonably competent to discuss it from that standpoint.

But, if we talk about foreign policy on the basis that farm prices to all farmers have got to be low enough so that we can maintain exports at that basis, then I raise the question, Mr. Chairman, what kind of values to farmers is that kind of a foreign policy?

If it has values to the country as a whole, then I have no hesitation in saying that the country as a whole—meaning all of the people, the taxpayers—out of the United States Treasury ought to unhesitatingly, whenever a volume of an export commodity is determined by the Congress, to implement our foreign policy as needed, then I completely am uninhibited about saying that I am for Federal subsidy to finance the difference between the price farmers have to have and whatever volume of exports the Congress shall determine is needed in the conduct of our foreign policy.

The same thing, it seems to me, is true in terms of objectives. What is the objective of the soil bank? If the objective was in terms of the needed soil conservation to meet the things that we heard here all during this week, Mr Chairman, while we have a problem of excess productive capacity now bearing down in terms of the outlets on our prices and incomes, everything I heard during the week indicated that nobody believed that would be true in 10 or 15 or 20 years.

So, if our objective is soil conservation, and resting the wornout soil and rebuilding it, that is one thing in the way of national policy. But it has seemed to me the acreage reserve phases of the soil bank, Dr. Bottum, had thus far been administered for no other purpose than to reduce the existing so-called surplus stocks of certain commodities in the possession of the Government almost without regard to the effect on the income of farmers or to the long-range implications.

All of those things, Mr. Chairman—and I conclude then, at this point—the whole business of falling farm income, if our purpose is how do we get income to farmers, and the increasing consumer food costs and they have gone up during the same period that farm prices have been going down as well as farm gross and net income, and the increased objections, apparently, from everything we can hear, to high appropriations by the Congress to support farm income, and the appropriations getting higher as farm income gets lower, all of those factors together cause us in our organization over a long period of time to believe that we had to come to some kind of a supply adjustment program.

With all high regard to my very good personal friend, Willard Cochrane, if I understood you, you said you did not believe we could do anything about feed grains and livestock.

With that I disagree. I believe we can, within the framework of all individual and group commodities goals, as are necessary within that.

We can use these farm prices in elasticity of demand to bring the price up. I don't want to go further, but I have had a sort of feeling of unreality. We are talking about the past and we had not recognized the trend and the current problems. If the problem is one of falling farm income and bad farm prices for commercial farmers, if that is our objective, then perhaps this thing comes into a little better perpective by me.

If the objective is just how do we deal with surpluses, then the answer is lower farm prices and I just could not fit in this particular place, I can assure you.

Mr. COCHRANE. I agree 100 percent with Mr. Talbott that the farm problem is chronically low incomes in every peacetime situation since World War I. I don't visualize this as any emergency or peculiar situation.

It is not anything that efficient marketing or flexible prices or advertising is going to get us out of. You can't deal with this thing with mirrors. We have a sort of built-in dynamo, as I see it, with regard to technological advance that we are all paying for. All farmers want to adopt these new things, and the product goes to market against an inelastic demand. And this drives farm prices and incomes down. So if the problem is as often said, surpluses, the solution is simple. Get rid of the farm programs and you have solved the farm problem—all the product goes to market. But as I see it, falling prices and incomes are the problem, and their propensity to remain low for a long time.

Now, just in answer to you, Mr. Talbott, with regard to feed grains and livestock, I would like to be specific and clear on this. The minute you get into controls and you get into one major commodity, you have to get into them all because if you don't you just chase your tail around and around and around—shifting resources from one product to another.

However, I would suggest this: When you are administering controls you administer them on the commodities that are directly going to market, whether it be overseas or for processing or so on, and you stay out of controls on resources that are going into the production of those commodities.

So, therefore, I would, insofar as I could, stay away from controls on feed grain. I just don't see how you can administer them. It seems to me the place for your quota controls is on pork, on beef, on poultry and on turkeys, on a poundage measure, as they are moving to markets, and you let the producer himself develop the resource mix.

He may want many acres or he may want only a few acres. You let him develop the resource mix which is best suited to his conditions. The minute you start putting controls on any resource—and feed grains are a resource—you are going to complicate and force rigidities into his production that I think are going to cause you trouble that you will later regret.

So I would suggest if you are thinking of a control program, you have to think of it in terms of 25 to 40 principal agricultural commodities and since this is a chronic thing, you have to think of it in terms of a long-term program.

I would conclude by saying that if the rest of us, that is the nonfarm people—and I am a nonfarm person—won't pick up the check for soil banks and what-not, then it seems to me that farm people have no alternative but to move in this direction.

When farmers see the alternatives in terms of either a free market and what that will generate for them in terms of prices and income, or controls, there is no question in my mind which they will choose.

However, I would argue further, they have been living by and for a myth for many generations, a myth perpetuated by politicians and farm leaders and college professors, to the effect that agriculture is basically sound and it is just a little out of balance, and give it just a little help today and it will be all right tomorrow.

But this is a myth; agriculture is always out of balance, one way or another. In wartime it is one way and in peacetime it is another.

Mr. TALBOTT. Wouldn't you agree that maybe it is just a matter of terminology? Wouldn't you agree that production controls actually are not what you and I are talking about? We are talking about

marketing controls of which production adjustments later follow, and they do not precede; they follow marketing adjustments.

I would raise one question as to the feed grain and livestock and it may also be that we are talking about the same thing and need to talk more about it. But there is a rather wide area in feed production that is not processed by the producer thereof, but it goes to market. It is fed by some other producer and I do think that you have to relate the production of all of the secondary feed grains, oats and barley and grain sorghums and your high-protein feeds with corn.

Corn alone will not adjust or relate itself to a proper adjustment of livestock. I think that can be done.

Mr. COCHRANE. You may be right and I think we will find out when we get into it, but I would call your attention to the fact that 90 percent of the feed grain in the United States is fed on the farms where it is produced.

I think we set forth our first problems first, and then if we have to get some kind of a control on feed grains we move to that second. I just do not like to get myself bound up in too many controls at once.

I am not afraid of them, as you well know, but I just want to use them where I think they will work best.

Mr. TALBOTT. I agree with you. The central point, as far as I am concerned, is that we need market supply adjustment and market proration for an equitable distribution among farmers of the available market, whatever it is, that will yield the prices farmers have to have, and the administrative mechanics obviously, I am sure, can be worked out.

I am sure we have the intelligence to work them out, from year to year or by commodities within the total framework if our objective is set. I do not personally have very much patience with people who say they agree with the objective, but say it can't be done. I think anything that ought to be done and needs to be done, the mathematics can be figured out to do it if people can figure out what they want to do.

Senator SPARKMAN. Of course, the job that this subcommittee has, is trying to figure out those mathematics after you fellows have gone. We have had many suggestions, and a great many excellent suggestions. There have been opposing views, and I suppose that would be true among any half a dozen people that you got together.

Representative TALLE. Mr. Chairman, I thought that I saw a gleam in Mr. Stine's eye. I think he has something to say.

Mr. STINE. I thought I was going to get by without any participation in this argument. I quite agree that the real problem lies in the control and the best means of dealing with the problems is in the control of market supplies rather than the control of production.

In this acreage reserve program, there is still a problem of controlling the supply while you control acreage, because that program is a voluntary program. It is designed to take acreage out, but you can develop the same sort of a problem with reference to that program that you have with reference to allotments.

That is, that resources will be piled on the acreage remaining and the supply in time—this year it has been significantly reduced, taking cotton as an example—but in time you may pile resources, more fertilizer and labor, on the acreage so that the same acreage that you have this year will produce a surplus of cotton again.

I think the control should be definitely and finally placed upon quantity produced. I think it might be practicable to eliminate the old-type allotment and marketing-quota program and make the allotments in quantity rather than acres.

You can control production more closely and get a better quality of product out of resources by doing so.

Senator SPARKMAN. I am going to call on Mr. Brandow for a question.

Mr. BRANDOW. Dr. Stine has gotten into something that I am interested in. I think as Mr. Buck said, that it would take a little while, even in the face of dire circumstances, to convince farmers in the Corn Belt that they should have an interest in the kind of things Professor Cochrane and Mr. Talbott are talking about.

I would assume that Professor Cochrane and Mr. Talbott might agree that even though their program may be in their view an excellent one, they are not going to impose it next year. None of these things that we have discussed here will be—they all seem to be things that we would like to work toward in the future. It seems to me that Dr. Stine now has raised a topic that is very important and closer at hand.

That is, How can we improve the present kind of controls?

Did I understand you, Dr. Stine, that your suggestion was tied up with what Professor Cochrane and Mr. Talbott and the others are talking about, that if we continue with controls on production of individual crops we should conceive of these as controls on the marketing of the crop and not on the land?

Would you like to elaborate, Dr. Stine?

Mr. STINE. At the moment, it does not occur to me what I might add that might be considered significant. I would be glad to hear from others on this.

Mr. BRANDOW. Professor Cochrane?

Mr. COCHRANE. Well, although I think if you are wise, the minute you begin talking about controls you know you are going to move to all commodities sooner or later, it is also the case that you probably would not begin with one great program covering all commodities at the same time.

For example, I am aware, and this came up this morning, that the Pure Milk Producers who sell milk in Chicago are concerned with the fact that the blend price is going down and down and down due to the fact that farmers keep overproducing and more and more goes into manufacturing purposes.

Now, the Pure Milk Producers who bargain with distributors in Chicago are trying to get the Federal order reviewed, and they want to put in specific quotas on what each farmer can produce and sell. They, however, can't get a hearing and when or how it will go into effect, I don't know. But the point I am trying to make is this:

In the realm of practicality, you don't expect everybody to move at the same speed and the same direction. Now, I think that the wheat farmers in the Great Plains are very close in their thinking to a quota program. With some help from the Congress they might be very close to accepting just about what Mr. Talbott and I are talking about.

There are some dairy groups in the Midwest who are in a position, such as the Pure Milk Producers, who would like to adopt tough controls over market supplies.

Now, the minute you do, and you don't have controls elsewhere, of course you are going to chase resources over into some other commodity. If we are wise about it, we should recognize this.

However, I still do not think that we should wait to begin moving in this direction until we have all farmers and every commodity group ready to go. So where you do have a commodity group that is ready to go, providing the legislators understand that it means that you are going to chase resources over to another commodity and that is going to force them to come to some effective marketing control, then it seems to me that as one commodity group gets ready to go—and I have named two specific groups that I think are very close to moving in this direction—then we ought to see what we can do about helping them develop market controls that work.

Mr. BRANDOW. It seems that we are back where I thought I was when I was asked the question: How will we do this? What means are available to do it? It seems to me that Dr. Stine has said a good deal in the 2 or 3 sentences that he presumably thinks are clear to everybody, but I am pretty sure it isn't clear to me and I don't think it is clear to everybody, Dr. Stine.

You went over it too fast. Maybe we ought to back up and ask, How much is this panel in agreement with what Dr. Stine said about production controls to date? As I understand him, he said that the acreage controls we have had to date have not been very effective. They have had some effect on individual crops, but we have substituted other inputs for land and we have diverted acres into other crops. We have not done very much about the total output.

So the control we have had so far seems not to be very effective. So, let us first consider, is there any disagreement with that?

Mr. TALBOTT. I do not disagree. I think the problem became apparent first out on the high risk area, Dr. Brandow, where an acreage based marketing quota just is about as unworkable as anything could be because my marketing quota on my farm is whatever number of bushels I can raise on my acreage allotment.

If I have a bad crop, that can be 2 bushels to the acre, and this year I happen to have a good crop and I raised 40 bushels to the acre. That is a very clumsy way it seems to me, either for the Government, in trying to help on income, or from my standpoint.

Then, another one of the difficulties in acreage based allotments as it relates to wheat is that you can't put what you need away and keep it and put it under loan the next year. You have to get the whole thing under loan unless you overseed and then there are a lot of gadgets on that. I would like to know what my marketing goal of wheat is and what my share of the wheat market is that will yield me a price and then, if I want to put more acres in wheat, I have 25,000 bushels of granaries on my farm and I would like to be able to put some wheat against next year when I am hailed out and I don't have any wheat.

Mr. BUCK. I agree that an acreage allotment is a very unrealistic means of trying to control production. An acre of land is much less important as a resource now, with increased fertilizers, machines, irrigation, etc. If we really mean business in adjusting production, we have to adjust quantities and not acres.

Mr. BRANDOW. Now, it seems to me that there are at least four suggesting that. Professor Bottum, can we include you in that? I think that you are No. 5.

Mr. BOTTUM. I would agree that it was not effective, but I would like to have Dr. Cochrane and Dr. Stine say how they would control corn. How are we saying that we would control corn?

Mr. STINE. I cannot see any practical way of controlling corn production or corn marketing unless you devise a certificate system, which is related to what is to be marketed or processed in one way or another. So, what I would consider doing would be placing some sort of a loan program in operation on all feed grains with the loan levels related to the feed values and consider the possibility of using certificates for marketing related to what ordinarily moves through market channels with exemptions for feed sales.

Mr. COCHRANE. I think that I have already said that at least until we have some experience with a general control program, I would not try to put controls on corn. I would put my quotas on hogs and beef, and on milk and on turkeys and broilers.

This is where I would put my quotas. It may be that I am wrong about this and it may be that you have eventually got to get into something that controls feed grains, but I don't see very easily how it is going to be done.

Quotas on commodities moving to market can be policed and if there is general acceptance this is the place to do your controlling. Let each individual farmer, just as Mr. Talbott wants to do with regard to his wheat, figure out how much corn he wants to grow and other feed grains.

It may be that sooner or later if we go in this direction we have to figure out some way to handle these feed grains. But at the beginning, I would not try, with the exception of whatever is hanging over the market. I would resort to something such as President Eisenhower resorted to 3 or 4 years ago when he impounded current stocks in the CCC, and try to feed the grain stocks into the world market or back into our own market if we get into trouble, and so on.

But that would be a temporary device to get over the current really tough situation. Is that an answer to your question?

Mr. BOTTUM. Yes.

Mr. BRANDOW. I would like to hear a little more discussion about the negotiability of these marketing allotments, which has been suggested several times.

Mr. STINE. Well, the most significant point is to facilitate readjustments within agriculture among producers. The present cotton situation may be a good subject to discuss in this connection. Production is down to about the level of current consumption in foreign and domestic markets without any aid to exports.

To meet current market requirements it is not necessary to reduce further cotton production but there remains some surplus stocks in the carryover. Holding production near the present level and continuing the special export programs through 2 more years probably would result in reducing stocks to about a normal level while maintaining price supports at about the current level. Cottongrowers, however, are developing an interest in making price adjustment that will place cotton in a better position to meet the competition of synthetic fibers and foreign production. Many growers seem to prefer the opportunity to sell more cotton for both foreign and domestic consumption at lower prices to the continuance of the maintenance

of high level supports of production for requirements at the higher price level.

Can a program be developed to produce more cotton to be sold at lower prices and yield satisfactory returns to growers? Reducing the market price of American cotton to 25 cents a pound probably would continue to check the expansion of foreign cotton production, check the inroads of manmade fibers upon the cotton market and possibly expand the domestic market for cotton. But there are growers selling cotton at present support levels who would be pinched severely by reducing the support price or the market price to 25 cents per pound. Even if their allotments are increased and they are freed from acreage controls, they could hardly afford to use their land for growing cotton at the reduced price level. Many other growers, however, would be in a position to gain by the opportunity to expand production even at the lower price level. Relaxation or abandonment of acreage controls with the freedom to make the best use of their resources to grow more cotton could materially reduce their cost of production per pound.

The significant difference between the high-cost and low-cost producers points to the possibility of shifting production among the growers so that the cotton crop can be produced profitably at a lower average cost level. Let the present cottongrowers who cannot afford to take lower prices transfer their allotments to neighbors or to the Secretary of Agriculture for transfer to other growers who are in a position to produce profitably an increased volume to be sold at the lower price level.

Mr. BRANDOW. I have heard you argue, Dr. Stine, that let us say a man is going to have a 20-bale marketing allotment on cotton. You might either squeeze him down on acreage until he can only produce 20 bales, or you might just give him the 20 bales and say "It is up to you as to how to produce this." I think I know which way you argue on it, but I would like to hear you argue again.

Mr. STINE. If he has a 20-bale allotment, a quota, without any restriction as to how he produces it, then he can make the best use of the resources that he has to produce it. If he can produce it at a level that gives him a satisfactory return or the best return he can get out of his resources, then he does it.

On the other hand, if it does not seem to him that it is a profitable use of his resources, he may sell it to a neighbor who can make better use of it and who had resources where he can produce it at a lower cost.

Mr. BRANDOW. We heard some discussion this morning from Dr. Black, I believe, about getting some of the cotton land into grasslands, and so on.

If these were negotiable, a fellow that had a little cotton and had some possibilities of going into dairy could sell this allotment to someone in the delta who could really stay in the cotton business; and this gives the first man a little capital to go into the dairy business.

Mr. STINE. The result would be a sounder and more stable cotton economy.

Mr. BRANDOW. We might end up with less cotton and more dairy farmers in Alabama.

Mr. COCHRANE. There is an idea coming in here just recently that these allotments are going to become worth something, and I am sure that they would. The value of the program would get capitalized into them.

Now, this is very often argued as a basis for doing nothing. I do not accept this argument in the least, because I think that no matter what happens in agriculture, higher incomes—if you have good incomes in agriculture resulting from a war—get capitalized in land values.

If you have good incomes resulting from the type of marketing controls we are talking about, those returns are going to get capitalized into the fixed assets of agriculture.

So, I don't think anybody here should get excited about the idea that some value would get capitalized into marketing certificates. The value of marketing certificates, I would argue, would become the value of doing business in a stable market.

I think that there is considerable value in this. There is value from two points of view. There is value from the point of view of long-range planning, in terms of reasonably stable prices and I think that there is the much greater value to farmers that over the long run they lose the gnawing fear that through a general price decline, they are going to lose their equity in their farms.

I don't think that we should reach the conclusion that market controls of the type that Mr. Talbott and I are talking about are supposed to bring the millenium. Just speaking for myself, I don't think they will solve all of our problems, but they can be used, I believe, to stabilize the market. The inelastic demands for foods assures this, when supplies are controlled. I think this is of considerable value. It is what all businessmen seek in their businesses.

I would like to illustrate by this: If you go into a small town and buy a Chevrolet agency, you may pay $200,000 for this agency. You may pay $20,000 for the building and $180,000 for the goodwill of that agency.

What you are buying in part is a stabilized market which this man created, and this is of value to you. This is why you buy it. Businessmen commonly buy goodwill; this is essentially a good market. So the fact that these certificates may get a value capitalized into them is not strange or bad. It is always going to occur in agriculture, if you get good returns.

I hope we are not going to argue the other way that we should always seek just as low returns as we can, so that nothing can get capitalized into a fixed asset.

Senator SPARKMAN. Are there any additional comments?

Mr. BOTTUM. Might I ask one short question of Dr. Cochrane? It is on this last point. Do I understand that you are implying over the long run then, with complete market controls, the income to agriculture per capita might not be much different than what the free price would be?

Mr. COCHRANE. No; I don't think so. If we move to a free market from our present situation, the people who are operating forms now are going to have to pay the price of living in an economy where output is expanding and prices declining and they lose their asset values.

This I think, is what we seek to avoid. But with market controls we can expect that in the long run the value of farm assets would acquire the value of this good market, just as the value of any asset in any business acquires the value of the good market. When these assets become transferred to somebody else, this becomes their cost.

I don't know whether I have answered you or not.

Senator SPARKMAN. Well, gentlemen, it has been a lively discussion. It has been helpful to us. As I said in the beginning, this concludes our panel discussions, this being the tenth in a series.

I want to read to you in closing a paragraph that I used in my opening statement on Monday morning:

> Our present study looks toward an understanding of the basic problems of commercial agriculture, the economic factors and principles that will bear upon solutions and the strengths and limitations of alternative means of dealing with the problems. In our study of these questions, we wish to have particular regard for their relation to growth and stability of the total economy, an area in which the Joint Economic Committee is given special responsibilities by the Employment Act of 1946. While the study is focused upon commercial agriculture, we have found such overlapping and merging of problems of farms that the study touches on all types.

I think the different discussions that we have had and the different panel presentations since I made that statement have well demonstrated that there is considerable overlapping and all types of agriculture should be touched upon; you simply cannot consider one type by itself.

I think the hearings have been most interesting and I know they have been helpful to the members of this subcommittee. Now we will undertake the task of bringing out some kind of report and recommendations to both Houses of Congress.

This is a joint committee. We are all hopeful, I know, that something can be done to bring about a better condition for agriculture in America. I do not like to think of agriculture as being sick. I do not like to think that it is something that we cannot do anything about. I believe we can.

I do not think that we need to take a negative approach. I think that there is a positive approach if we can find out just what it is. That is what we are going to do our best to do. This subcommittee, in making its report to the full committee and to both Houses of Congress, will be trying to do that.

I want to express my appreciation and that of the subcommittee to you gentlemen who have contributed so much to this discussion. Dr. Talle, do you have anything to add?

Representative TALLE. Yes. I would like to speak for the other members of the subcommittee and express appreciation to Senator Sparkman for excellent service as chairman and to Mr. Brandow for his leadership and Mr. Lehman and the other members of the staff for their assistance.

It seems to me that all of the machinery in this program has operated very smoothly. To the members of the panel here this afternoon as well as to all of the other panels that have appeared during these 5 days, morning and afternoon, I say thank you for your significant cooperation.

Agriculture has always been classed as an honorable occupation by philosophers who have attempted to classify occupations and to evaluate them. We have been dealing with an honorable occupation and one that deserves our utmost attention. May I express the hope that the Congress will be as interested, fair-minded and objective in dealing with farm legislative measures as this subcommittee has been in dealing with farm problems throughout these hearings.

Senator SPARKMAN. The subcommittee will now stand in adjournment and may I wish all of you a very happy holiday season.

(Whereupon, at 4:45 p. m., the hearing in the above-entitled matter was adjourned.)

APPENDIX

SOUTHERN MINNESOTA VEGETABLE GROWERS ASSOCIATION,
Albert Lea, Minn., December 16, 1957.

Representative HENRY O. TALLE,
House Office Building, Washington, D. C.

HONORABLE SIR: There are now 70 onion growers in the southern Minnesota onion area. These men are located in Faribault County, Freeborn County, Mower County, and Steele County. Of these 70 farmers and their wives, 67 families are wholeheartedly opposed to onion futures trading on the Chicago Mercantile Exchange. There were more onion farmers in this area, but because of this future trading on onions a number of the farmers went broke.

Most of the growers in this area have been raising onions for over 20 years. They are experienced in the raising of onions, in the packaging and the handling of them in any form. Also, of course, it has been necessary for the farmer producing onions to own a considerable amount of specialized equipment. Most every onion farmer in the State of Minnesota owns an onion warehouse. A warehouse equipped properly to store onions costs approximately $25,000 which is a considerable investment.

In other words, a family depending on their livelihood in onions considers it a specialized business and must be equipped in that manner. That is, his equipment cannot, except in rare instances, be used for any other farm commodity. Also his warehouse is a single-purpose building. The Department of Agriculture considers the cost of producing an acre of onions one of the most expensive farm crops to raise. We figure on an average in the southern Minnesota area to plant, weed, cultivate, spray, harvest, field bags, hauling, grading, and new shipping bags that this cost totals approximately $500 per acre.

Producing a crop costing $500 is quite an undertaking and also somewhat hazardous weather considered and all. You can readily understand our concern when manipulators from Chicago, New York, and Boston step in with huge sums of money year after year on the Chicago Mercantile Exchange and sell the market down to less than the cost of production. The reason they can sell it down is that there is only a limited amount of onions produced in the United States and it is a highly perishable crop. Only about 20 percent of the onions produced can be delivered to Chicago to apply on this contract. But, they can so depress and so control the prices on this 20 percent that everyone in the business is forced to watch this price and then the entire onion-marketing procedure is disrupted.

The Chicago Mercantile Exchange rules call for delivery to Chicago in refrigerated freight rail cars only. There is an exception—truck delivery will be accepted but at a discount of 15 cents per 50-pound bag, or 30 cents per hundredweight. Now the catch is: 85 percent or approximately 85 out of 100 loads of onions shipped are by truck. Years ago Chicago was a distribution point for onions around 1930 to 1937. However, marketing procedure, the same as everything else, has changed. Chicago is no longer a distribution center. So onions shipped there, not necessarily ordered by jobbers, upsets the market by disastrously lower prices.

We are not opposed to grain, cotton, cocoa, or other future trading. These commodities are great in volume and are not perishable; they are also basic to certain industries. Grain, for example, we assume is purchased 6 months ahead by milling companies. However, the onion fits none of these characteristics. Processors are not interested in buying onions on the futures market as the grade and size requirements for the futures market does not fit their needs.

Many of our onion farmers in Hollandale and other southern Minnesota points used to sell to jobbers, for example, for October, November, or January delivery. However, these jobbers will no longer purchase any requirements in advance from us. They tell us they are afraid to because of the extreme fluctuation and manipulation of the onion futures, that the risk is too great. They feel it is impossible to determine what the true onion market might be—as these experts run

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the market at will and so force a grower, shipper, or jobber out of business; a business that he formerly was able to earn his living.

The big traders finance large farming operations. They then sell 100 carloads for example for January delivery. They have their farm operator grade and load 50 carloads and hold them in his community until all 50 cars are graded. Then in 1 day ship them all to Chicago and glut the market. The whole United States from all shipping points uses around 150 carloads of onions per day and these mostly are shipped by truck—so you can well understand what this one operator can do in destroying the market.

We are not asking for any money from the Government. We are only asking for an opportunity to farm onions. To farm a crop that we are trained for, that we have the equipment and warehouses for. We want a chance to solve our own problems in the production and distribution of onions.

We sincerely pray that you vote for and urgently request your support in the eliminating of onion futures trading. Vote for S. 778 or H. R. 376.

Respectfully,

SOUTHERN MINNESOTA VEGETABLE GROWERS ASSOCIATION.

DECEMBER 24, 1957.

Hon. HENRY O. TALLE,
House Office Building, Washington, D. C.

DEAR MR. TALLE: Thank you for your courtesy in sending the copy of the letter you recently received from the Southern Minnesota Vegetable Growers Association.

It is true that bills are pending in Congress to prohibit futures trading in onions. We feel strongly that the facts, objectively examined, do not warrant legislation to destroy the onion futures market. The facts show that the market serves a useful and constructive purpose today and can serve an even more constructive purpose in the future.

Perhaps it might be helpful if I reviewed for a moment the legislative history of attempts to do away with futures trading in all agricultural commodities. The feeling that organized futures markets contribute to price declines in farm products is not a new one. That feeling appeared with the appearance of futures trading in the latter part of the last century. Since the 1880's more than 200 bills to kill futures trading in one or more agricultural commodities have been introduced in Congress. The arguments in almost every case were similar to the arguments advanced against onion futures trading—that speculators and gamblers controlled and manipulated prices at the expense of the producers. The role of the speculator in the market was misunderstood; many farmers and farm organizations went on record against the markets and wanted them done away with. As late as the 1930's a Senate committee reported a bill to end futures trading in cotton and grain. It failed of passage, as did other bills of a similar character. After a lot of consideration and discussion the Congress decided that regulation of the markets to end any abuses upon them, and not their death, was in the interests of the industries involved and the public as well. In 1922 the Grain Futures Act became law, and as time went on other legislation broadened the scope of this act.

So far as I know, nothing has happened meanwhile which would lead to the conclusion that the policy of supervising the exchanges was wrong. I had thought that almost everyone acknowledged that the commodity exchanges do serve a most useful purpose. They enable producers and processors to obtain price insurance through hedging and they furnish valuable price and statistical information. By lessening the risk, they reduce the costs of marketing agricultural commodities and help consumers without injuring the producers.

But, we are told, onions are different. They are a perishable commodity. And a perishable commodity simply cannot be traded in successfully on a futures market.

I propose to discuss perishability at some length later on, but first let us look at the reasons for the agitation against the onion futures market. This agitation for the death of the market follows comparatively low prices for onions in the 1953–56 period. The opponents of onion trading charge that manipulation and abuses on the Chicago Mercantile Exchange were responsible in large part for the low prices. The CEA has issued a complaint against two individuals and a corporation, charging manipulation of the market during the period from November 1955 to March 1956. Yes; this complaint has been contested very vigorously

and has not been decided. The other charges of manipulation are vague in character and simply voice the suspicion of some onion growers and others that the markets are used as a vehicle to bring about low prices.

On the other hand, there are some very pertinent and stubborn facts about this entire onion situation. For 20 or 30 years the average per capita consumption of onions has remained about the same. It has averaged about 20½ pounds of onions per person annually. And, of this 20½ pounds, only about 10 pounds comes from commercial production. In the 1930–39 period, home gardens supplied only about 46 percent of the onions consumed, but now these gardens provide about 52 percent of the onions. The commercial producers of onions then have lost 6 percent of their market, and this loss cannot be attributable to the futures market.

New developments in seeds and production techniques not only have increased the output of onions but they have enabled the lower Texas valley to send onions to market much earlier. A volume of onions from this area is moving in March. Texas also is becoming a more significant factor in the summer period. All these developments mean increased competition for northern onions, and they are not developments which can be related to the futures market.

I realize that many producers blame the futures market for increasing production. They feel the ability to hedge results in some firms producing under contract; that is, they pay the producers a satisfactory price which, in turn, is based on the ability to hedge in the market.

Growing onions on a contract basis, however, was well established before there was any futures market, and the practice will continue if the futures market is killed. It costs around $200 an acre to grow onions according to testimony before congressional committees. Many producers with land adapted to onion growing simply are not in a position to finance themselves. They will be financed, all right, if there is no onion market, and guaranteed a price for what they raise. Only, with no market available to take some of the risks out of onion growing, the price agreed upon in advance is going to have to be very low. A producer who wants to hedge and to pass the risks along to speculators will not be able to do so.

In early 1957 sharp price fluctuations in onions caused renewed demands for the abolition of the futures market. The CEA studied these price fluctuations and made a report in April 1957 which said there was no evidence that abuses on the Chicago Mercantile Exchange, where most of the onion trading takes place, caused the price fluctuations. This was gone into in some detail at hearings before a House Agricultural Subcommittee early in May. The fact that the onion futures market went under supervision as late as September 1955 also was emphasized at the hearings. Obviously sufficient time had not elapsed at the time of the hearings last May to judge the effects of CEA supervision or of the changes made in the CEA regulations.

We had then this situation:

1. The House Agriculture Subcommittee which held hearings on an onion futures bill in 1956 did not approve the measure, but instead recommended changes in exchange regulations in an effort to improve the operations of the market. The changes were made.

2. Fluctuations in onion prices in February 1957 caused renewed demands for the abolition of futures trading. The CEA studied these price changes and said that abuses on the exchange were not responsible for them.

3. The onion market went under CEA supervision in September 1955 and most of the changes in an attempt to improve the operations of the market were not made until after the hearings in 1956. The CEA is on record as stating that sufficient time has not elapsed to test the results of the new regulation affecting the onion futures.

If the House Agriculture Subcommittee felt in 1956 that the evidence against the onion futures market did not warrant approval of a bill to kill the market, it would seem that there would be little likelihood of such a bill being reported in 1957.

Nevertheless, a bill to destroy the onion futures market was reported by a House Agriculture Subcommittee, and later by the House Agriculture Committee itself. Also a Senate Agricultural Subcommittee reported a bill to destroy the onion market, and, in an action later rescinded, the Senate Agriculture Committee approved such a measure.

How does one account for these developments? Offhand it would seem that such a drastic step as legislation to destroy a futures contract market would not be taken without overwhelming evidence that such a market not only serves no useful purpose but actually hurts the producers and others involved.

Did new evidence reach the producers and others opposed to the market after the hearings in 1956? The answer is clearly in the negative. The only new evidence uncovered favored the market. How then does one account for the progress toward destruction by legislation of a futures contract market?

I do not intend to try to answer my question. I can only offer some theories. For one thing, the producers have been told over and over that they are hurt by the onion futures market and that the market is responsible for a large part of their troubles. I am afraid that the exchange has not answered these charges as fully as it should. I am afraid the exchange has become a symbol to many dissatisfied onion growers. I grew up on a farm and know the tendency of farmers, and others also, to seek a scapegoat.

The Agricultural Economics Division of the United States Department of Agriculture made a study of onion price fluctuations in the 1922–55 period. One of the economists who helped make this study presented it before the House Agriculture Subcommittee in 1957. The study said that price fluctuations on a month-to-month basis were significantly greater in a 10-year period before futures trading than in a 10-year period during futures trading. The study said:

"Price variability is best measured in short-time periods, such as month-to-month, or, if feasible, on a week-to-week basis. Of price variability data herein measured, the month-to-month changes in cash prices of onions in the 1930–40 period and 1947–55 period are probably the most valuable. This analysis showed that a significantly greater average month-to-month variation occurred in the 1930–40 period than in the 1947–55 period."

As a whole, the report indicated that futures trading has had a stabilizing effect on onion trading. It is, as I interpret it, sharply at variance with the CEA testimony and with other testimony that futures trading is responsible for lower onion prices. So far as I can determine, no attempt has been made to refute the study by the Department's economists. It is simply ignored while the chant goes on for the death of the onion market.

Now let us return to the claim that futures trading in onions will not work satisfactorily because onions are a perishable commodity. Well, perishability is a characteristic of almost all agricultural commodities. Cotton is an exception perhaps, but even cotton deteriorates with the passage of time.

Actually, onions are a semiperishable commodity like potatoes, soybeans, wheat, corn, rye, eggs, butter, etc. Although onion supplies are not carried over from year to year, onions are in storage for weeks and months, and are drawn on for supplies from the end of harvesting in the northern areas to the beginning of harvesting and marketing in the southernmost areas.

In his testimony before a House agriculture subcommittee, T. A. Hieronymus, associate professor of agricultural marketing at the University of Illinois, testified as follows:

"There are four steps in the process of development of a futures market. First, risks, as evidenced by supplies in storage and fluctuating prices, exist. Second, a system of forward pricing develops and is refined. Third, existing trade practices are codified into formal futures markets. And fourth, trading is brought under public supervision. At their full development futures markets are open public markets about which there is a maximum of information and over which there is a minimum of control by market traders who seek to further their own particular selfish interests."

He concludes that the onion market has gone through the evolutionary process and fulfills all the requirements for a genuine futures market.

Dr. Hieronymus has been employed by the United States Department of Agriculture on several occasions as a consultant. He is a well-known expert in his field. His conclusions also are sharply at variance with those who say that the perishability of onions means the commodity should have no organized futures market.

We appreciate your kind offer to permit insertion of this material along with the letter from the Southern Minnesota Vegetable Growers Association into the appendix of the report. We shall be happy to have it so recorded. I am grateful to you for your patience and understanding in listening to my testimony relative to farm prices.

With the seasons greetings and every good wish for the new year, I am,

Sincerely yours,

EVERETT B. HARRIS,
President, Chicago Mercantile Exchange.

Federal Marketing Research Funds—A Barrier to a Balanced Agricultural Economic Research Program at Southern Agricultural Experiment Stations

William H. Nicholls, professor of agricultural economics, Vanderbilt University

In comparing the current programs of agricultural economic research in southern agricultural experiment stations with what I consider an ideal program, a high degree of imbalance is evident. The current programs are usually heavily weighted with marketing studies. Research in production economics is very limited, and most of the work which is directly related to the low-income problem in agriculture is relegated to 1 or 2 rural sociologists in each experiment station. The usual lack of balance is particularly striking in view of the fact that the agricultural problem in the Southern States is largely one of low productivity of human resources, centering around farm units which are too small to return adequate incomes to operators.

This is not to say that the work of the southern departments of agricultural economics (and for that matter other departments of the station), which is applicable primarily to the larger commercial farmers, is not worthwhile. Research for this segment of agriculture is necessary. The point is that production problems in the Southern States probably are more important than marketing, particularly for those whose output is so small that they have but little to market. The deficiency in research on the land, labor, and capital problems of these people is a serious gap which should be filled by the obtaining of additional resources if possible. To the extent that new funds are not available, some consideration of at least a limited reallocation of existing resources is to be recommended.

The agricultural economics staffs at most southern experiment stations are well aware that the research program is overweighted with marketing studies, and that the low-income problem is receiving inadequate attention. They are also aware of the causes and difficulties in the way of coping with them. By far the most important factor is the existence of the marketing requirement in the Hatch Act as amended. The necessity for meeting this requirement has forced many southern departments of agricultural economics to become primarily marketing departments. In a further effort to obtain funds, such departments usually participate in a large number of regional, especially marketing, studies. The overall direction of these rests with the technical committee, and participation by an individual State may require the undertaking of lines of work which are not necessarily of greatest importance to that State, but rather are of major concern to the region as a whole. This is no criticism of the philosophy or practice of regional research since its purpose is to implement the undertaking of problems of concern to two or more States. Matters which are of peculiar interest to the individual State should be financed with other than regional funds. In the case of the departments of agricultural economics at many southern experiment stations, however, adequate financing from nonregional sources is not available. Thus, there is a strong tendency to force departments of agricultural economics toward lines of work which may not be of first priority to their particular State.

A number of southern experiment station directors are quite willing to consider changes which might be made in the financing of their departments of agricultural economics, with a view to permitting a better balance between marketing and nonmarketing studies and particularly with a view to permitting increased attention to the low-income problem. However, there are serious obstacles to making major changes in emphasis as long as the existing fiscal framework is maintained. In some Southern States, the pressure on the department of agricultural economics to place a disproportionate amount of resources in marketing has been relieved by activating technological studies which qualify for marketing in other departments of the experiment stations. Such a policy means that these other departments assist in fulfilling the marketing requirement, and within any given allocation of total resources among departments, agricultural economics is placed in a more flexible position. However, this policy may involve a conflict with priorities established in these other areas. Furthermore, there may be conflicts with the interests, training, and experience of personnel in departments other than agricultural economics. Such difficulties are likely to be more important at the smaller stations, and they are very serious in most southern experiment stations.

Withdrawal from some of the regional work in both production and marketing would not necessarily contribute to a better balance between marketing and nonmarketing studies, but it would permit more of a concentration on the pressing problems within each Southern State. However, assuming no countervailing

changes in allocations of money from other sources, a withdrawal from regional studies would mean the loss of this present source of financing. Regional funds are presently used to provide operating expenses in connection with these projects. With this support withdrawn, the total financial resources of the departments of agricultural economics would decline correspondingly, and it would be necessary either to reduce the professional staff or decrease the present level of travel and clerical assistance. A view of the problem from all angles indicates that major adjustments in the nature and direction of the research program in the departments of agricultural economics would require allocations to this department of funds now being used or which might be used, assuming fund increases, by other departments of the experiment station.

It should be strongly emphasized that the final responsibility for the allocation of financial resources available to an agricultural experiment station must rest with the director, who in turn must base his decisions as to priorities on the claims of the various department heads and his broad knowledge of the overall situation. However, given the current emphasis in Congress and elsewhere on production adjustments and the low-income problem and its very great importance in the Southern States, the problem of low incomes and approaches to its solution are being relatively neglected by most of the southern experiment stations.

To sum up, the marketing requirement in the Hatch Act as amended is having highly pernicious effects upon the achievement of a balanced program of agricultural economic research to Southern States. Most southern agricultural experiment stations lack the generous State financial support of research enjoyed by the richer midwestern stations. Hence, they lack the budgetary flexibility needed to preserve a balanced program of economic research in the face of present restrictions imposed by Congress on the uses of Federal funds. This follows because station directors tend to concentrate the Federal marketing funds in the departments of agricultural economics, while diverting virtually all Federal funds for production research to other departments of the college of agriculture.

As a result, because they are so heavily dependent upon earmarked Federal marketing funds, the agricultural economic departments are too frequently forced out of financial necessity to contrive all sorts of peripheral and submarginal marketing projects, State and regional—many of which could be done as well or better by noneconomists and which benefit few if any farmers. At the same time, they are largely neglecting the low-income farm problem, which I believe should currently be receiving most of their research attention.

Statement Submitted By Carl H. Wilken, Economic Analyst, Raw Materials National Council

Since January 1937 I have devoted almost all of my time to a study of our economy under the title of economic analyst for the Raw Materials National Council, which was incorporated in March 1936 at Sioux City, Iowa.

In the past 20 years I have appeared before various congressional committees analyzing the specific operation of our economy, with especial reference to raw material production and income as the primary source of earned income and markets for the sale of manufactured products.

Based on this experience, I would say that the key factor for our economic confusion is the failure of economists for industry and Government to recognize the simple dogmatic fact that our economy starts with raw material production as a foundation for jobs and earned income.

In the period 1951–55 I was employed by the Joint Committee on Defense and had the opportunity to observe very carefully the economic factors which have brought about the most serious dislocation in history between raw material production and the income of rural America and the balance of our economy. This dislocation will force the United States into economic collapse unless corrected by a complete reversal of current policies toward the production of new wealth from our farms and mines.

WE CANNOT AFFORD CHEAP RAW MATERIALS

My purpose in presenting this statement to the committee is to point up specifically that society cannot underpay the producer of raw materials without suffering a direct economic loss in proportion. Further, that parity prices for farm production are not and cannot be subsidies. Farm prices below parity

really mean that society is asking rural America to subsidize the consumers' food costs and other items processed from farm products. When farm prices are below parity society is forced into a position of either accepting a loss in income or mortgaging its future income by excessive increases in the total debt, public and private, against the income of the United States.

ANNUAL LOSS OF $50 BILLION

Strange as it may seem, the United States at the present time is losing $50 billion of income on an annual basis because of our failure to maintain farm prices at parity with the 1946–50 or the 1947–49 period as 100, the last normal period of which approximates a peacetime economy.

To prove this loss of $50 billion, I am going to use the statistical material published monthly by the Economic Committee under the title "Economic Indicators" and the annual publications known as the President's Economic Report.

Our economy is large in scope but there is nothing which cannot be accurately analyzed with the use of the same arithmetic used by a public accountant in preparing an audit for a corporation regardless of its size. The record is available to provide actuarial tables with which to measure future production and income and to approximately determine the share of each segment in the whole.

PAST RECORD

Using the period 1929–53, a period upset by depression and war, the record proves that the dollar value of our farm production was approximately 70 percent of all raw materials used in the economy and the balance or 30 percent was primarily mineral raw materials—coal, petroleum, metals, etc.

In the 5-year period 1946–50 in our return to a peacetime economy, after 12 years of depression and a costly war, the ratio which existed as a 25-year average was resumed. At this point we were producing $32.2 billion of gross value of farm products and $12.8 billion mineral production. During the 5-year 1946–50 period we averaged $211 billion of national income.

During the 25-year period 1929–53, we approximated $5 of national income for each $1 of raw materials utilized. In this period agriculture, used alone, had a ratio in which the gross value of our farm production approximated roughly one-seventh of the national income. This was in almost direct accord with the capital investment in agriculture, approximately one-seventh of the total capital worth of the United States.

A further study of the record will reveal that in the 25-year period, 1929–53, approximately 80 percent of the national income was spent for quickly and almost totally consumed goods and services. The balance of 20 percent, after spending for the primary needs, became savings and profits. The savings and profits were in direct ratio to the newly created dollars of new wealth in the form of raw materials.

The 20 percent of the national income represented by savings and profits was utilized to buy consumer capital goods such as cars, household equipment, etc., and used for investment in new plants, producers' equipment, and construction of homes, roads, schools, etc.

The important fact which has been missed by our economists is that if and when raw material prices drop below parity the volume of newly created dollars is not sufficient to create the needed primary markets for our total output and the underpayment translates in direct ratio into losses in national income and investment capital. If we attempt to operate the economy at full capacity with raw material prices below parity we will be forced to borrow from future income in an expansion of the total debt, public or private or a combination of both. The most important factor in our economy is the five times average turn of the newly created income from raw material production.

PROOF IN THE RECORD

The proof of the above conclusions is found in the record, and I will give the committee a detailed record of what has taken place in the period 1951–57.

In 1951 the raw-material production approximated $54 billion or a generating force to create on an earned basis $270 billion of national income. Our income in 1951 was $277 billion.

Congress in September, 1950 passed the Defense Act which included a section for an Office of Price Stabilization to prevent inflation. This part of the act was

used starting in March 1951. The administrators of the act established price ceilings on the basis of an 85 percent of normal operating margins for industry and with no provisions to hold back wages in ratio to delivered efficiency.

Price ceilings, too low a level of operating margins, and increased wages resulted in a sharp downward pressure on farm prices of about 20 percent, thus starting the dislocation which still exists and has been permitted to increase since 1951.

With a cutback of 20 percent in farm prices and income a proportionate loss of buying power for consumer goods took place in rural America. Normally, rural America as a result of the raw material income and turnover represents about one-half the market for goods in the United States. Therefore a 20-percent drop in farm prices forced a loss in consumer goods sales on a national basis of approximately 10 percent. This drop seems to have passed unnoticed by businessmen and their economists.

PROOF

Here is the proof from the record. In the 5-year period, 1946–50, consumer goods sales as recorded by the Economic Indicators averaged 55.3 percent of the national income. In the second quarter of 1957, with a national income rate of $358.1 billion (Economic Indicators) November 1957, consumer goods sales totaled $174.1 billion or 48.6 percent of the national income. With farm prices and other raw materials in balance a normal of 55.3 percent of national income in consumer goods sales would have totaled $198 billion or $24 billion more than was actually recorded. Stated bluntly, the farm price dislocation in the second quarter of 1957 was forcing industry and the Nation to lose $24 billion of consumer goods sales.

The question naturally arises, if this is true, how did we keep our economy operating at a level that appeared to represent prosperity? The answer is debt. Expansion in the total debt in the 3 years, 1951–53, averaged approximately $39 billion.

Going back to 1925–29 the total debt expanded in a ratio of about 9 percent of the national income per year. For example, our total expanded approximately 9 percent of 82 billion, the average national income in that period. The depression following 1929 indicates that this ratio may have been excessive. But, applying it to the rate in 1951–53 it means that the debt increase of $39 billion was equivalent to spending the profit from $430 billion of annual income even though we averaged less than $300 billion.

The important factor to remember is that this excessive increase in debt although it offset the loss of markets resulting from low farm prices did not bring about a recovery of farm prices.

CHANGE OF ADMINISTRATION

In 1953 a new administration took over and proceeded to first, start a move to reduce farm price supports thus setting the stage to reduce farm prices and increase the dislocation, and second, to cut back spending from a level of $39 billion of debt expansion in 1951–53 to a level of $24.5 billion in 1954. The result was a recession or a cutback in total output in our economy. Our production index which had reached 137 percent of 1947–49 as 100 in July 1953 dropped to 124 percent in 1954, a cutback representing approximately $30 billion in national income. In other words forced a loss of $30 billion.

Instead of correcting the farm price situation, thus restoring the primary earned income, the Nation was embarked on a vast spending program. In 1955 we added $61 billion to the total debt. Most of this was an increase at the private level by increasing for example the installment debt on cars about $4 billion, and easy credit for home building, tax amortized funds for plant expansion, etc.

This rate of spending, using the 1925–29 ratio, was equivalent to the use of profits from $677 billion of national income even though our income in 1954 was only $299 billion. The spending of this money obtained by a mortgage against future income again offset the loss of income from low farm prices and our economy expanded its production to an index of 147 percent of 1947–49 levels in December 1956.

But in 1956 an economy minded Congress plus the fact that earned profits from an earned income of $270 billion and in turn loanable funds were not sufficient to support the rate of investment capital our expansion in the total debt dropped back to $30 billion. This again has forced a cutback in total output and our production index in November 1957 dropped to 139 percent of 1947–49 as 100 or about 1 percent above the rate in July 1953.

Our current rate of national income on the basis of earned income from new wealth production would approximate $260 billion or $98 billion below the rate of $358 billion recorded in the second quarter of 1957.

Unless farm prices are restored to parity along with other raw materials the present rate of production and income cannot be maintained except through further additions to excessive debt or mortgage against future income.

A point that needs to be driven home is that the Nation as a whole sets the stage for losing $5 of earned national income and $1 of earned investment capital for every dollar that raw material producers are paid below parity levels.

There is no way in which to offset this loss other than placing a mortgage against the future income at private or public levels or both. It is impossible for either political party to operate a sound and solvent economy without an average of 100 percent of parity at the marketplace for raw materials.

SURPLUS OF FARM PRODUCTS

Throughout the land most economists are blaming the low farm prices on overproduction. The real reason is underusage of farm products directly traceable to low farm prices. The current loss in ratio of consumer goods sales to national income which I have pointed out amounted to $24 billion in the second quarter of 1957 was mostly a loss of nondurable goods sales most of which are processed from farm products. Our farm production to properly support the current level of productive capacity should be about 125 percent of 1947–49 as 100 instead of 106 percent and should be moving into the market place at parity with 1947–49 price relationships.

AGRICULTURE UNDERPAID $20 BILLION IN 1957

The price dislocation is shortchanging the agricultural industry and rural America about $20 billion. To this extent rural America is being exploited and forced to subsidize the rest of the Nation. Instead of prosperity we are headed for national bankruptcy by using income borrowed from the expected income of the future.

The record reveals that for 47 years our annual production increased at an average rate of 4 percent per year. Using the long-term average of 4 percent per year as the rate of expansion from July 1953 to date, our production index in November 1957 should have been 159 percent of 1947–49 as 100. At current prices this production, which could be sold if farm prices and other raw materials were at 1947–49 parity, would create a national income of $406 billion.

With raw material prices at parity, this rate of income would be on an earned basis. Our current rate of production 139 percent of 1947–49 is creating a national income rate of $354 billion of which about $260 billion is being earned through raw material production at the current price level.

Even the rate of $354 billion of national income, part of which is being created by debt, is $52 billion below the income we could and should have had with farm prices and other raw materials at parity and without an excessive debt increase.

MORE CREDIT

It is very doubtful that credit expansion will solve the present crisis. Our farm operations and small business, representing about 9 million capital operations, represent roughly one-half of our economy directly and indirectly.

The combined income of these 2 groups since 1946–50 has advanced approximately 18 percent while payrolls and income from capital in the form of interest, rentals, and capital profits have advanced 80 percent. Theoretically, the increase of 80 percent in the income of 55 million workers and capital earnings should have increased the income of farm operators and small business in direct proportion. The facts prove that raw material prices are about 85 percent of 1947–49 averages.

Industrial payrolls and industry have already overexpanded and have borrowed up to a safe limit of their capacity based on current wages and business profits. The low level of income for farm operators and small business is not a good base for credit extension. It will not be possible to expand this segment of our economy without a restoration of farm income and the consumer goods sales now being lost, much of which is by small businesses in rural areas.

The loss of $52 billion of income resulting from low farm prices also represents about that amount of loss in consumer goods sales. For example, a 55.3-percent rate of $406 billion of income, which we could have with farm prices at parity, would result in consumer goods sales amounting to $224 billion as compared to a rate of $174 billion in the second quarter of 1957.

REAL REASON FOR FARM SURPLUS

The so-called farm surplus is due entirely to underconsumption at home and abroad as the result of low farm prices. American agriculture is being underpaid approximately $20 billion. We produce about 10 percent of the world's production and the underpayment on a world basis is approximately $200 billion. The loss of this primary income of $200 billion on a world basis is at the root of the economic problem. Over 1 billion people in the world have an income of about $100 per year and their income cannot be raised without a proper return for raw material production. They are underfed and underclothed. They represent the market that can exist with a restoration of farm prices on a world basis to the American level. The United States, with only 6 percent of the world's population, cannot subsidize a low food cost at home and abroad with credit.

Parity prices for farm products would make it possible for us to expand our farm production instead of rather foolishly attempting to reduce production and thus setting the stage for robbing ourselves and the Nation of newly earned raw material income to a greater extent than we are now doing.

In 1929–33 we had 40 million acres of cotton and our production averaged approximately 13 million bales of which we exported 8 million bales. Our cotton consumption in 1929 was approximately 7 million bales and dropped to about 4.5 million in 1933. With the recovery of 1929 prices in 1942 and with price supports our cotton consumption increased to an average of 9 million bales. Our exports through a realistic trade program should have expanded to about 12 million bales to maintain our historic ratio. But, instead of that, our exports of cotton in 1939–56 averaged only 3 million bales.

Cotton has been cut to less than 20 million acres and 20,000 acres have gone into other crops.

In the case of wheat, the record reveals that in 1947–49 we produced an average of 1,200 million bushels per year. Our carryover in 1952 was approximately 256 million bushels. In the 4 years 1953–56 we produced 200 million bushels less wheat per year than we did in 1947–49. This cutback in wheat production diverted another 10 million acres to other crops. In spite of the reduction in production of 200 million bushels of wheat per year the carryover of wheat was increased to over 1 billion bushels.

The 30 million acres taken from wheat and cotton were planted in other feed crops, especially soybeans. Soybeans, in turn, expanded our production of fats and oils over 2 billion pounds. This in turn forced down the price of cotton seed oil, lard, tallow, corn oil, and butterfat. As a result, the entire agricultural economy has been thrown into confusion.

WHY DID WE LOSE THE MARKET?

The important factor is why did we lose the export market? The answer lies in the loss of world income of approximately $180 billion from farm production as world farm prices followed the drop in farm prices in the United States.

Our farm production at the present time is about 106 percent of 1947–49 as 100 and we are trying to operate an economy with a physical output of 159 percent of 1947–49.

Arithmetic is a stern dictator and unless farm prices and the price of other raw materials are brought back to the 1947–49 parity level our economy will collapse because of a lack of earned markets to utilize our production.

Further extensions of credit will merely add to the total debt and will not restore the price of raw materials. With an intelligent use of about $3 billion per year and a realistic trade policy under which we will pay comparable prices for imports, we can lead the world into a new era with farm prices and other raw materials at the American parity level. Then the world can earn the income to use the production of the United States and the world. In fact, we could practically force the world to accept a program to stabilize 25 leading raw materials, including gold and silver and monetary metals at the American parity level.

In exchange for this expenditure we could recover the loss of about $50 billion in national income and consumer sales volume which we are blissfully enduring today as we charge the losses against future income.

The depression from 1930–41 forced the United States to lose over $500 billion of national income due entirely to the losses following low raw material prices. A lend-spend policy for WPA, etc., in the thirties did not restore farm prices. Since 1950 we have expanded the total debt against the United States $244 billion. This did not maintain farm prices at parity.

A free market in 1929 with the heavy spending of borrowed funds for economic expansion in 1925–29 did not prevent farm prices from collapsing.

Farm production is an annual cycle of crop production and at harvest time a 100 percent crop is met by 1 day of immediate demand. If we wish to have free markets for farm products then we must also expect periodic depressions to wipe out the savings and force a return to poverty. Free markets in all of world history have never given agriculture economic equality on a sustained basis. They never will.

If support prices are to be used 90 percent is the minimum if we are to gain the goal of parity on an average basis. To reduce price supports below 90 percent will force the Nation to lose income and stabilize the earned income of our economy at the lower level. Legislation to administer a firm 90-percent price-support program is still the law of the land if the Secretary of Agriculture decides to use it. The legislation worked successfully for 11 years, 1942–52. It can work in the future. If the public realized the stake we all have in a proper level of farm prices, there would be no more objection to parity prices for agriculture than there is to a fair wage for the worker and a fair operating margin for industry. All of these are a must if we wish to have an efficient and solvent economy.

The fundamental law of economics is found in the Bible, namely, "Every laborer is worthy of his hire." This means that agricultural production must be priced at parity if we are to enjoy the Lord's blessings. Pious statements of a spiritual revival and a program to support farm prices at 75 percent of parity ignore this basic law.

We all know that any businessman who trys to operate a business and sell his product for 75 percent of the cost of doing business will end up in the bankruptcy court.

For the same reason, if we try to operate the United States with 75 percent of parity for farm products and other raw materials, the United States will lead capitalism into an economic collapse throughout the world. If this is permitted to happen, the loss of prestige suffered by the United States with the launching of sputnik will be multiplied many times.

DECEMBER 1957.

STATEMENT PREPARED BY ARTHUR J. GUDE, PRESIDENT OF THE NATIONAL DAIRYMEN'S ASSOCIATION

The basic problem with which we are involved in seeking for a more successful agricultural policy is the development of the industrial revolution in the economy of our country. Our country's history runs parallel to the development of the industrial revolution, and our economy has, throughout our history, been strongly influenced by the economic changes made necessary as we changed from a handcraft economy to a highly developed industrial economy. The theories of free enterprise as first presented by Adam Smith in 1775 also have been changed by developments in our economy. If we look at the theories of David Ricardo, who is generally regarded as the principal developer of the free-enterprise theory, we find that in a capitalist economy the principal tension for profits is between agricultural capital and industrial capital. Ricardo made this quite clear using the accepted iron rule of wages of the period in which he wrote. He pointed out that the minimum wage was that amount which would maintain life. If the employer did not pay the minimum wage his working force would die off. Therefore, any increase in the price of food decreases the profits of nonagricultural capital because as the price of food was increased the employer had to increase the wages of his workmen. But he could not pass on that increase to the consumer because of competition. That type of competition no longer exists in the American economy. If we look at the development of our economy through the last half of the 19th century we will notice the development of what at the time were called trusts. These large accumulations of nonagricultural capital continued to grow throughout this period, and those who were most outspoken in their objection to the development of trusts were the American farmers. In fact, they did have success in controlling monopolistic enterprises such as railroads. This was brought about principally by the activity of the Grange. As we came to the turn of the century the Sherman Antitrust Act was also supported strongly by farmers, and their principal complaint was then, as it is now, that the prices they paid were administered by others and the prices they received were also administered by others. This problem is still with us.

When Teddy Roosevelt became famous for his trust-busting activities, John Pierpont Morgan expressed the opinion that "trying to break up trusts was like

trying to unscramble eggs." Mr. Morgan was right, for our economic structure continued to develop into the huge corporations which we have today. The principal economic progression which our corporations have developed is the ability to apply human intelligence to the law of supply and demand. For example, General Motors is able to plan, and with the economic knowledge of prospective markets, etc., which is now available, to calculate the number of automobiles they can sell in a given period. They set the price based on that volume, and begin to manufacture cars. If the demand for cars falls off, they are in a position to stop manufacturing. They do not take any price offered, but control the law of supply and demand by refusing to make any more cars than they can sell at a given price. At times they miscalculate, and must suffer a loss of profit. But they do not go on making all the cars they can, regardless of price. General Motors is, of course, not a monopoly. It is part of the automobile industry, which is an oligarchy. However, their pricing is administered on monopolistic pricing. Our large corporations no longer deny that they administer their prices. For example, Benjamin Fairless, during the Wall Street investigation several years ago, replied to a question by Senator Fulbright, as follows. (Mr. Fairless was at the time president of United States Steel): The question was: "Do you, meaning the steel industry, compete on prices?" Mr. Fairless answered: "No, we do not compete on prices. We have a profit object to maintain and we will not compete on price." Our corporations were doing very well through the first quarter of the century, but they were still relying upon Say's law, which states that production creates demand. This law is only true in a handicraft economy, and the highly industrialized economy of America could not any longer operate under this law. The result of their failure to consider the insufficiency of demand brought about a breakdown of the economy in the thirties. This breakdown was usually described as a depression of plenty. We could produce more than we could consume. We had, in short, a problem of overproduction and overpopulation or unemployment. These are the precise words that are used quite often to describe today's farm problem. During the thirties the United States Congress by the democratic process granted to labor the same right to build huge organizations for labor which would enable labor to apply human intelligence to the law of supply and demand for labor. Labor now administers the price of labor. They do not take what they are offered; they get what they ask. Both these segments of the American economy have adopted the rules necessary to make an industrialized economy operate successfully. We do, at present, have a tendency toward inflation brought about by the wartime structure of our present economy, but further accelerated by the fact that we have 92 percent of the economy operating on Keynesian principles, for it was John Maynard Keynes who dethroned Say's law and proved that demand creates production. The last figures I have seen have shown our agricultural population to have been reduced to 8 percent. The problem that we are dealing with is that within the last 10 or 15 years American agriculture has become highly industrialized. The changes in agriculture, which are described by Secretary Benson and others as an explosive technological revolution, have completely changed American agriculture. In spite of this industrialization of our agriculture, and it is the first and most efficient industrialized agriculture the world has ever known, we are producing more food than the American people can consume, and we are using only 8 percent of the population to produce this food. No other country has ever attained such efficiency in the production of its food and fiber.

Other industrialized countries are still using close to 30 percent of their population to produce their food. However, agriculture has as yet developed no structures similar to the structures of our corporate economy nor the structures of our labor unions. And, as a result, they have no means by which they are able to reflect their costs in their price, nor produce to meet the effective demand. We can see this very clearly if we look at the successful American economic system and see how it operates through a price change. Starting with the steelworkers' union, if the steelworkers' union asks for and receives a raise, the steel companies do not, particularly during the inflationary spiral of the last few years, absorb this increase. Instead they pass the increase in the costs of labor on to their consumers, along with an increase in profits for themselves. Even if they do not increase their percentage of profits, by continuing to take the same percentage of the increased costs, they receive a higher dollar profit. This increase is passed on to the consumer, and as one of their consumers, who is more directly influencing farmers, we will use the farm machine industry. The farm machinery manufacturers, when they are faced by an increase in the material cost of steel,

are usually faced also with an increase in their labor cost. For when one group of production workers gets an increase, it usually follows that other workers try to get a similar increase for themselves. So the farm machinery industry, faced with an increase in material costs and an increase in labor costs, increase their dollar profit and pass on these increases to the farmer by announcing what percentage increase in price we will have to pay. This is where the successful American economic system ends. Agriculture has no structure similar to the rest of the economy to pass these costs on in the price of its products. This is the cost price squeeze, for this is the farm problem. This is why our present farm policy is a failure, an admitted failure. No one any longer denies the existence of a very real farm problem. So what we actually have in our economy is a dual economic system. Industry and labor operate under the new economic laws of an industrial economy which makes monopolistic pricing and the control of the law of supply and demand by human intelligence. Agriculture, which has also become industrialized, is still operating under free market prices. The situation as described by Adam Smith, the father of free enterprise, is as follows. Smith said: "A monopolistic price is the highest price obtainable, whereas a free market price is the lowest price with which the seller can live." If we have these two pricing systems within the boundaries of our national economy, then we should have a situation in which 92 percent of the economy should be having an increase in price, and agriculture should have been having a decrease, and that is precisely what we have. The following figures by the Joint Economic Committee make it clear that as America has gone through an inflationary cycle between 1950 and 1955, agriculture has gone in the other direction.

	1946–50 average	1955	Percentage increase from 1946–50 average
	Billions	*Billions*	
National income	$211.0	$324.0	53.5
Total wages	136.5	223.2	63.7
Farm operator	14.2	11.7	[1] 17.6
Small business	21.4	27.3	27.5
Rentals	7.2	10.1	40.0
Interest	4.5	10.8	140.0
Corporate profit	26.9	40.9	52.0

[1] Decrease.

For those who would say that the reason for this paradoxical set of figures is that farm prices were too high in the 1946 to 1950 period, I would like to point out that, although this period was the highest period of farm income, American agriculture never received more than 55 percent of parity of income with the rest of the economy. We are now down to roughly one-third of parity of income. No matter what figures are used, it always ends up at one-third for agriculture. If, for example, we take the per capita income for 1956, farmers received a per capita income of $605 as against a per capita income of $1,900 for America. In some figures turned out in 1955 by Herschel Newsom, president of the Grange, we get the same result. In answer to a question by one of the President's Council of Economic Advisers, Herschel Newsom had professional economists put American wages, profits, and capital return into American agriculture. They are very conservative figures. Nevertheless, our income for 1955 on the basis of equality with the rest of the economy would have been something over $33 billion. We received $11 billion plus—again roughly one-third for agriculture. I would like to point out again here that the profits that agricultural capital does not receive do not go to the consumer although the consumer does gain a higher possession of material things produced by nonagricultural capital. The actual profits that do not go to agriculture go to nonagricultural capital. It is General Motors and General Electric who gain by a cheap food policy. The immensity of the destruction of the rights of capital on our farms is a point which is constantly neglected in our present farm policy. It is very seldom realized the tremendous amount of capital which American agriculture has invested in this country. Agriculture has an investment of $156 billion. All American manufacturing production industries have an investment of $159 billion.[1]

[1] August issue, U. S. News & World Report, statement of Hon. Harold Cooley, chairman, House Agriculture Committee.

Professor Schultz, in the first day of the hearings, came closest to touching on this point when he said that the tremendous educational system that has been built up for agriculture in this country—that is, the land-grant colleges, the Extension Service, etc.—are inclined to present policies by which the increases of efficiency in agriculture are passed on to the consumer. The consumer is the secondary gainer by our present cheap food policy. The profits that should go to agricultural capital still go primarily to nonagricultural capital. It is rather an amazing thing that in a country with a successful private enterprise capital and profit incentive economy there is no profit for the $156 billion invested in American agriculture. To deal with this point it is necessary to go into the sophistry of our agricultural economists and their theory of one-third for agriculture. Their arguments are very deceptive and one must look close to determine just how they are able to maintain that commercial farmers are doing very well. One expression commonly used by this school of thought is that the farmer with 40 acres and a mule is in bad shape but the man farming a section is doing very well. This is a sophism that has enabled them to deceive many people in the Congress. We must bear in mind that the returns to nonagricultural capital in America consists of three returns above costs. These three are capital return, management profit return, and labor return. In agriculture you can have 1 of the 3. You can call it what you wish but it will only be one-third of what other successful capitalists receive in America. It is this point which brings about the confusion in the argument that the large farmer or the man farming a section is getting a decent return for his labor, his risk and his investment. If we compare a small dairy farmer with a large dairy farmer, that is, a family-type dairy farm with a commercial family-type dairy farm, we will see that the larger farmer is not receiving any more for his money or his labor, it is just that he has a much larger business and his volume gives him a return which enables him to live. The fact that dairy farmers milking 100 cows with an investment of something above $100,000 are able to get a return of $6,000 or $7,000 a year is hardly equitable with the rest or our economy. A family farmer milking 30 cows with a $30,000 investment gets a return around $2,000 a year, and, therefore, it is said that he is too small—he should get out of business. Actually, dairy farmers require twice as much investment to create 1 job as does American industry, and this job pays a return on an average of something less than 50 cents an hour whereas the job created in American industry with 50 percent as much capital returns a labor income on an average of around $2 an hour. The injustice in this inequity is further proof and if we are to have a farm policy that is successful we must build structures in agriculture on the commodity level that will enable agriculture to reflect their costs and control the law of supply and demand. If we are to stay within the American private-enterprise system, these structures must be so build that the decisions in price making and in controlling production must be made by the people who own the capital. The building of such commodity structures would, of course, result in monopolies and it is within the American tradition that Government should stand between monopolies and the public in the public interest. If the Secretary were to be used instead of a commission as in other fields, he would become a referee, not a pricing agent as he is under the present laws. One can see how far we have gotten from the American system of private enterprise when one realizes that the Secretary has been given the power to increase or decrease the price of milk by supporting manufactured milk prices at different levels between 75 and 90 percent of parity according to the availability of supply when he knows that there is no method by which an individual farmer can affect the national supply of milk. This decision making by Government is far removed from the principles of private enterprise and would be eliminated if our farm policy was directed to building structures for the pricing of agricultural products on a commodity basis with the decisions in the hands of the farmers, large and small, who own the farms.

Farmers could, by using stabilization programs, take care of any miscalculations in their production by buying off the market any surpluses that arise. They could, by the democratic process, if they had the proper commodity structure set up, impose marketing quotas on themselves. Agricultural policy has been influenced for too many decades by the thinking of the Department of Agriculture, the land-grant colleges, and the extension service instead of by the people who own the farms, and the thinking of these nonfarmers has resulted in a farm problem. Incidentally, these land-grant college professors themselves are quite out of parity of income with other professional people. According to the President's report on education above the secondary school level, college professors are $800 million out of parity with other professions. This is due principally to the fact that college professors, unlike doctors and veterinarians, have built

no structures whereby they can control the law of supply and demand for college professors. Veterinarians and doctors have been controlling the supply for over 100 years. In the State of New Hampshire, for example, Cornell University will accept 2 graduates from the University of New Hampshire into their Veterinary School each year providing they can pick the 2 students.

I would like to point out that, in my opinion, many of the unsound programs presented by agricultural economists continuously turn the efficiency of agriculture into profits for nonagricultural capital. We have built up a system of sophistry in agricultural policy which results in the presentation of many sophisms which are unsound. By a sophism I mean an unsound argument or fallacious proof, especially one in which the fallacy is difficult to detect or one which is put forward with deliberate intent to deceive. The most common sophism being reiterated by nonfarmer policymakers today is that if you increase the price of food you will price food out of the market. You cannot price food out of the market; however, you can change one commodity for another. This is a far cry from pricing food out of the market. The consumption of food by the American people since records have been kept has remained the same on a per capita basis. Although there have been changes in the type of food consumed the amount remains the same.

Another common sophism and one which is all too often accepted is that there are too many farmers in American agriculture. This is based on the fallacious proof that in an industrialized agriculture we can produce more food than the people can consume. It is also true by the same kind of thinking that we have too many automobile workers for we can produce more automobiles than the demand will absorb. I maintain that there are far too few farmers on, for example, our dairy farms. If we were to apply the American economic system to dairy farming, we would have to have approximately three times as many dairy farm workers as we have today. I am, of course, talking about American work units of 40 hours per week, or 2,000 hours per year. On our dairy farms the operator usually works around 3,700 hours per year. Along with this he is forced by the low price of milk to employ his wife and children without paying them. The Department of Agriculture of the United States Government actually lists the wife and children of farmers as unpaid family workers. This is what is happening in a country which is paying an average of $2 per hour to nonfarmworkers and, under the Unemployment Act, is actually paying people for not working; whereas farm women and children receive no pay when they do work. The inequity of this situation is, I think, quite obvious. We do not have too many men on our dairy farms. Another inequity that develops from the fact that we are using children on the heavy machinery in agriculture—something which has been stopped in all other American industry—and this results in the fact that the age group most commonly killed in agriculture is from 10 to 14 years of age. There are no children killed in any other American industry. Our farm policy is such that we are killing our children to produce more food. The taxpayer has to support the present farm program to the tune of several billion dollars a year to buy up the surpluses that we produce by overworking our farm people, then the Government either gives away or throws away the surplus production. When, as farmers, we attempt to hire labor in the competitive market we are faced with the American work laws and we find it difficult to hire labor in competition with them. For example, a worker hired in industry is very often hired with the right to a 2-week vacation—that is, 14 days off. He is commonly allowed 8 paid holidays—that is, 22 days off. Of the remaining 50 weeks he has 2 days off each week which is a total of 122 days in which he does not even see his place of business. With 30 days in a month, that is 4 months of the year. The 8 months he does work he works 8 hours a day. We are asked to hire help for 25 percent of the average American hourly income and we are in a position where we have to ask our help on dairy farms to work from 300 to 365 days a year at around 11 hours per day. If we are to be allowed the benefits of an industrialized agriculture we must have a price for farm products that will allow us to pay competitive wages for American hours of work.

Another sophism often put forth by land-grant college professors is that by moving industry closer to the farm areas farmers can supplement their income by working in factories and receiving an income equitable with the American economic system. However, this is in no way solving the problem of farm prices; it is merely moving the American industrial system closer to the farms. What we have to do is move the American economic system onto the farms.

The Milwaukee Journal, several months ago, turned out a report by one of the State agencies that showed that 40 percent of Wisconsin's dairy farmers had off-the-farm jobs. Their labor rate for jobs off the farms ran around $2 an hour,

but as soon as they went to work on the farm they were only worth 50 cents an hour. This is the type of thing that continues to produce cheap food at the expense of the farm population. We are subsidizing the American economy to the tune of $22 billion a year. Under our present Government farm policy we have government for the benefit of the many at the expense of the few. This is, according to Aristotle, tyranny. It is certainly not democracy.

If these sophisms presented by the land-grant colleges constantly favor nonagricultural capital, I think it is time the Congress looked into the finances of the land-grant colleges to determine how much money they are receiving from nonagricultural capital. I have been told that Purdue at present is receiving more income from nonagricultural capital than it is receiving from the State legislature. If it should turn out that this is true and that it is true in other land-grant colleges, it is certainly not difficult to understand why our present farm policies coming out of the land-grant colleges, which are supposed to turn out policies that are good for farmers, are turning out policies which favor nonagricultural capital. The most disastrous thing that has happened, in my opinion, in American agriculture is the introduction of integration on our poultry farms. This method is the complete sterilization of capitalism. The way it works in my area is as follows: A farmer who invests $20,000 in a poultry house which will produce 40,000 broilers a year receives as income when he is integrated as little as $2,000 a year from the feed company, dressing plant, or hatchery which integrates him. This $50 a week for 40 weeks, although the farmer is employed 7 days a week 48 weeks of the year, is not even a decent labor income and his capital income is completely eliminated. It so happens that if there are any maintenance costs it is the farmer who has to pay them and it is not difficult in a plant of this size to eat up the income in maintaining the capital investment, so that the farmer can and often does end up the year with no income at all either for capital, labor, or for risking his capital, but it does produce a lot of cheap chickens.

The whole concept of agribusiness leaves the farmer without any return for his capital. It is a peculiar thing to see organizations like the National Association of Manufacturers and the chamber of commerce favoring an elimination of the capitalist system. It was Marx who wanted to turn the profits of capital over to the workers and, in American agricultural policy, the National Association of Manufacturers and the chamber of commerce, along with the Department of Agriculture and the land-grant colleges, are favoring policies which accomplish Marx's purpose. These indeed make strange bedfellows.

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