

POSTWAR ECONOMIC STUDIES

No. 2, October 1945

AGRICULTURAL ADJUSTMENT
AND INCOME

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OF THE FEDERAL RESERVE SYSTEM
WASHINGTON

Published October 1945

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OUR AGRICULTURAL POLICIES

by

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The farm population of the United States was approximately one quarter of the total before the war. The total net income from agriculture was about 8 per cent of the national income for the 1935 to 1939 period, and the average per capita income of persons on farms was less than half the average of all other groups. Programs to maintain full employment and a high level of purchasing power in the total economy, therefore, must include agricultural policies because of their implications to the total national income and the welfare of both the farm and nonfarm population. This essay presents a brief analysis of the problems that agriculture will face at the end of the war, the weaknesses of present agricultural programs, and the basic essentials of more constructive programs for the future.

SUMMARY

During the war agricultural production has been expanded one-third, although the number of persons engaged in agriculture has declined. This has been made possible by the technological changes which have taken place during the last 20 years. Higher prices, Government guarantees, and patriotism have also stimulated farmers to expand production rapidly to meet wartime requirements.

The major determinant of the level of agricultural production and income in the postwar period will be the level of domestic purchasing power. Even with a high level of employment and consumption in this country, however, production will exceed demand at "reasonable" prices unless our exports can be expanded above the prewar level.

At present the prices of agricultural products are guaranteed in terms of "parity" relationships that existed 30 years ago. In many cases costs of production have changed greatly during this period and will continue to change in the future. Parity prices that remain unchanged for long periods do not reflect economic changes; the retention of these rigid prices in the postwar period will tend to prevent needed production adjustments from taking place and they will also tend to limit both domestic and foreign consumption.

To solve the postwar problems of agriculture we must (1) maintain a high level of consumption in this country, (2) expand our agricultural exports on a permanent basis, and (3) assist agriculture to adjust its production pattern so that the benefits of low-cost mechanized production can be passed on to consumers while the level of living of our farmers is maintained or improved.

In order to attain these ends we need to maintain a high level of employment and income in this country and to develop means of maintaining or improving the food consumption of families whose incomes are not sufficient to provide an adequate diet. To expand our exports we should initiate and support agreements to reduce tariffs, cooperate in the development of flexible international agreements for those problem commodities where production adjustments must be made slowly if serious economic repercussions are to be avoided, and support policies designed to stabilize exchange rates and facilitate international lending on a sound basis.

To assist agriculture to adjust production and maintain a high level of income, we need greater flexibility of prices than exists under present laws. In addition to a system of flexible forward prices and price floors, other programs are needed (1) to help farmers on inefficient farm units to move into more productive employment, (2) to train remaining farmers to develop more diversified production, and (3) to assist farmers to adjust crop production from that required for war purposes to that required to meet peacetime needs and establish a sound soil conservation system.

THE NEED OF AGRICULTURE FOR SPECIAL POLICIES

During the present war agricultural production has expanded rapidly; not only have civilians been better fed, except for a very few items, but vast quantities of food have been supplied to our armed forces and to our Allies. This increased production occurred in spite of a reduction in manpower and reflects the cumulative effects of a technological revolution in agriculture. In the postwar period production can be expanded still further even with a smaller farm population. The problems that agriculture will face after this war are problems that have been intensified rather than created by the war and, for the reasons discussed below, the farm problem presents special features and requires special programs in addition to those applied to the rest of the economy.

Characteristics of Agricultural Production and Prices. Agricultural production expanded about 10 per cent during the First World War and

continued to expand a further 10 per cent during the 1920's. This was in the face of lower prices and a decline in foreign demand. The index of agricultural production for sale and use in the farm home (1910-14 base) showed remarkable stability all through the depression; at the depression prices of 1932 it was still 117 and the lowest point reached was 111 in 1935, in spite of the drought of 1934 and 1936 and all the efforts of the Government to reduce the "surpluses" through production controls. Actually production was cut in the two drought years much more than the index indicates because the index does not show the reduction in inventories. The index tends to obscure annual fluctuations in yields, although it presents an accurate picture of longer run trends. In contrast to agriculture, the prices of industrial products fell much less while production was cut drastically and serious unemployment resulted.

This disparity between agricultural and industrial production and price behavior is the result of several major influences. Production costs in agriculture are almost all fixed costs. Taxes, rent, capital, and family labor are all essentially fixed. The farmer cannot gain by "laying off" his own labor. The only variable costs are hired labor, power, fertilizer, and seed; these, in the aggregate, form a very small percentage of total costs. In industry, on the other hand, most labor, raw materials, and power are variable costs and form a large part of total costs; when prices fall it is possible and often cheaper for the individual firm to cut production rather than maintain it. Another important factor is that the total demand for agricultural products is relatively inelastic, compared to the demand for most manufactured products, and even large decreases in prices do not increase consumption greatly. In addition to these major factors, agriculture is extremely competitive; there are millions of farmers and each individual raises a crop regardless of the aggregate effect on farm prices. Compared to this condition, there is a large degree of monopoly and monopolistic competition in industry. Furthermore, since some major agricultural products are dependent on world markets the tariff is less effective in protecting prices in agriculture than it is in industry. Finally, production in industry is under human control and largely based upon forward orders while agricultural production is indeterminate because of the weather and cannot quickly or easily be controlled because of its biological nature.

Because agricultural production is so remarkably stable it is not a basic cause of cyclical fluctuations. Booms and depressions arise from factors existing in industrial organization; agricultural income reflects

and intensifies these cyclical changes. The maintenance of farm purchasing power in a depression may act as a cushion and modify the downward swing somewhat, but it cannot be a major factor in eliminating cycles. Agricultural policies, therefore, must be considered only as a supplement to general policies affecting the whole economy. Once fluctuations in the rest of the economy are controlled, the need for special agricultural policies will be reduced; until this is done, however, special policies are needed to prevent cyclical fluctuations from disorganizing and penalizing the most stable segment of the economy.

Protracted Agricultural Depression after First World War. After the boom that developed during the First World War, agricultural production did not decline but prices dropped 41 per cent by 1921, while the prices paid by farmers, including taxes and interest, dropped only 18 per cent. Agricultural prices remained low all through the 1920's while prices paid, taxes, and interest charges remained relatively high. This meant that net farm income remained low and, while industry was experiencing an expansion of almost boom proportions, agriculture was experiencing the pains of deflation that followed the collapse of the land boom. In the early thirties came the second blow; prices received by farmers fell to an index of 90 in 1931 and to 68 in 1932 while the index of prices paid, taxes, and interest declined only to 142 in 1931 and 124 in 1932. Moreover, the migration from farms to cities, which had absorbed some 6 million farm people in the decade of the twenties, was reversed because of widespread unemployment in industry.

Low Incomes of Farm Families. Reflecting the relatively low prices of agricultural products that continued after the last war and through the depression, the incomes received by many farm families were very low. The National Resources Board study of consumer incomes showed that in 1935-36, a year between depression and war prosperity, almost one-quarter of the 6½ million farm families received less than \$500 a year and about 38 per cent received less than \$750 a year. This income included the retail value of farm products consumed at home and the rental value of the farm home. Only 8 per cent received over \$2,500 a year. Of those in other occupations only 16 per cent received less than \$750 and 17 per cent received over \$2,500 a year.

In addition to its handicaps from low incomes, the rural population lacks many facilities available to urban dwellers. Only 25 per cent of farm homes have electricity and only 30 per cent have water piped into the house while 95 per cent of urban houses have both these facilities.

Medical and dental care is much less adequate. These disadvantages are, of course, partly offset by more fresh air, greater freedom, and lower living costs. On the other hand, we need to remember that the rural quarter of our population accounts for one-third of all the babies born in this country and that the maintenance of the city population depends upon migration from rural areas. Poverty, of course, is not confined to rural areas and it may be more endurable in a rural setting than in a city; but in both cases it should be eliminated by the most appropriate means. Rural poverty, however, does not respond quickly to generally improved conditions because of lack of mobility, lack of training, and lack of resources; at the same time farmers do not share proportionately in social security programs since they are largely designed for industrial workers.

It is because of their experience after the last war that farmers organized and became a more vocal and powerful force in politics. Farmers are now in a position to demand special consideration and, because of the implications that agricultural policies have to the well-being of all consumers, these policies are the concern of all parts of the economy.

POSTWAR PROBLEMS OF AGRICULTURE

There is a widespread fear that agricultural production after this war will be so large that prices will again collapse and surpluses pile up. Essentially there are three closely interrelated questions that need to be answered: (1) Will our total production be too large in view of our domestic requirements and probable foreign trade? (2) What specific adjustments will be required in the production of various commodities and how will they affect the farm organization in various areas? (3) What adjustments are required in order to increase the returns to low-income families engaged in agriculture? In this paper only the general problems of agricultural production and price policies are considered in detail. Adjustments in farm organization with respect to conservation are briefly mentioned while methods of raising the level of living of low-income farmers are considered in another essay.

Output of Agricultural Products. Agricultural production has expanded much more rapidly during the present war than it did during 1914-18. Compared to the prewar average (1935-39) production in 1944 showed the following percentage increases: food grains 48, feed grains and hay 57, oil-bearing crops 173, truck crops 35, vegetables 6, meat animals 55, poultry and poultry products 53, and dairy products 16. Sugar production decreased by 18 per cent and cotton and cottonseed decreased by 7 per

cent. Total production in 1944 was 36 per cent above the 1935-39 average and the indications are that production in 1945 will be equally high if good weather prevails.

The rapid increase in production has been due to several factors. Expansion in livestock has been aided by the fact that we entered the war period with large stocks of grains that could be rapidly drawn upon. Weather conditions have been exceptionally favorable and yields have been above normal. Mechanization had advanced to the point where acreages of crops could be expanded or maintained even in the face of a diminished labor supply and farm families worked longer hours in response to higher prices and appeals to patriotism. If we assume more normal weather conditions than those experienced in the war period and also assume that farmers and their families will want to work less intensively, it does not follow that total output will fall in the postwar period. Improved seed, fertilizers, insect and disease controls, and conservation practices can offset the effect of normal weather, while further improvements in machinery and techniques can maintain or expand our present output even though fewer hours are worked and fewer people are employed. In the past it has not been easy to shrink production once it has expanded and the tendency will be for agriculture to continue a high level of production or to expand it as more machinery, fertilizers, and improved techniques become available after the war.

Prices and Income. For 1944 the index of prices received by farmers showed an increase of 95 per cent over 1940; cash income from farm marketings was greater by 137 per cent; and net income from agriculture had increased about 160 per cent. In April 1945 the index of prices received was 103 per cent above 1940.

Notwithstanding the large increase in income resulting from higher prices and increased production, the problem of rural poverty has not been eliminated. In 1942 the average cash income from farm marketings was over \$5,000 per farm in seven States and less than \$900 per farm in three States. Within States the disparities are even greater and range from bare subsistence to very high cash returns. This unequal distribution reflects the fact that a large percentage of families living on farms produce only small commercial surpluses and, unless they receive other labor income, their labor is not effectively utilized.

A broad approach to the postwar problems of agriculture is through attempting to estimate what proportion of an estimated total of national income will be distributed to farmers. Such estimates depend upon as-

sumptions regarding the size of the national income, total agricultural production, domestic consumption, agricultural exports, and the relation of prices of farm products to prices of goods purchased by farmers for production and consumption. If prices of farm products drop from the 1944 level of 115 per cent of parity to 90 per cent of parity while over-all production and consumption remain at the present level, cash income from farm marketings would be about 14.5 billion dollars. This would be 25 per cent below the 1944 level but over 80 per cent above the 1935-39 average. This assumes constant 1944 prices for products purchased by farmers for production and consumption. To the extent that other prices fall or rise, parity prices and income would also vary. This estimate also assumes that, if necessary, the Government would purchase the amounts required to maintain these prices and does not indicate how large or small these purchases might have to be.

The Bureau of Agricultural Economics has shown that there was a close relationship between nonagricultural income payments and cash farm income from 1921 to 1943. The average relationship was such that a change of 10 billion dollars in nonagricultural income payments was associated with a change of 1.6 billion dollars in cash farm receipts. If the national income in the postwar period is assumed to be 140 billion and nonagricultural income payments to be approximately 124 billion, gross cash farm income will probably be about 18 billion dollars *if this relationship holds true*. This would mean that the index of all farm prices would be considerably above 90 per cent of parity if production remained at the 1943 level. While agricultural income is unquestionably closely related to nonagricultural income, certain dynamic factors make it difficult to use this historical relationship to forecast the future. During the war years food exports have been exceptionally high while imports have remained low. At the same time the absence of many consumer goods from the domestic market may have led people to buy more food than they normally would even with a high level of national income, and after the war people may prefer to buy other goods rather than spend as much on food as they have during the war. It is evident that the approach to agricultural problems by estimating national income, while valuable as an indication of national purchasing power, throws no light on the major problems of the relationships between the volume of production, domestic requirements, and foreign trade.

Domestic Food Requirements. The Department of Agriculture has published estimates of the quantities of various foods required for dif-

ferent levels of diet for the population of the United States. These quantities have been converted into acreages of harvested crop land. While all such estimates are subject to a wide margin of error they nevertheless indicate the approximate amount of crop land required to produce the food and fibre required for domestic consumption under different assumptions. With an estimated population of 137.4 million in 1945 and no change in the efficiency of production, the approximate acreage required for various levels of diet, plus allowances for nonfood products, may be summarized as follows:

	Millions of Acres
Consumption equal to the average for 1920-29 period.....	280
Moderate-cost good diet.....	310
Expensive good diet.....	340

If the decline in work stock continues at the present rate only about 33 million acres of crop land would be required to feed horses and mules. Added to the estimates given above for human consumption this brings the total acreage for domestic food and fibre needs for 1945 to about 313 million acres for the 1920-29 diet, 343 for the moderate-cost good diet, and 373 million acres for the expensive good diet.

A further factor to be considered is the increased productivity that has resulted from improved techniques. While agricultural production in 1944 was 33 per cent above the 1935-39 average, the acreage of crop land harvested had increased only 7 per cent. The difference was partly due to exceptional weather, but mechanization, improved seed, and better feeding methods and farm practices were also important. During the war we have benefited from the cumulative results of the technological revolution that increased in momentum after 1910. Estimates by the Bureau of Agricultural Economics show that the crop acreage harvested per worker increased 34 per cent from 1910 to 1944 and production per worker in agriculture almost doubled. Factors associated with these changes were a decline of about 17 per cent in the number of people engaged in agriculture, a drop of 50 per cent in the number of horses and mules, and an increase from one thousand to almost two million in the number of tractors. Each additional tractor, when used with the appropriate machinery, will save about 800 man-hours of labor per year. Estimates indicate that increased efficiency alone may already have raised production per acre 10 to 12 per cent above the prewar levels.

If we assume a minimum increase in productivity of 5 per cent between the prewar period and 1945, the corrected number of acres required

would approximate 297 million for the 1920–29 average diet, 326 million for the moderate-cost good diet, and 354 million for the expensive good diet.

In 1944 the per capita consumption of food was about 7 per cent higher than 1920–29 and its nutritive content had improved. It is improbable, and certainly not desirable, that we should go back to a lower level of diet in the postwar period. At the same time it is extremely doubtful if consumption will increase so that the high-cost good diet will become the average diet at any early date. Food habits change relatively slowly, and low- and middle-income groups may consider other commodities more important than a high-cost diet. To be realistic, therefore, we should aim at attaining a domestic consumption in terms of the moderate-cost good diet that would require about 326 million acres of crops.

In 1944 about 352 million acres of crops were harvested. The 1945 goals call for a further expansion of crops and the harvested acreage may reach about 356 million acres. If this level is maintained in the postwar period we will have about 30 million acres of crops that will not be required for domestic consumption even if the moderate-cost diet prevails. If domestic consumption shrinks to the 1920–29 level, there will be 60 million acres available for exports.

Agricultural Exports. The decade of the thirties saw large reductions in our exports of agricultural products. The index of the quantities of agricultural exports fell from 100 for the 1924–29 period to 60 for the 1935–39 period. In the early stages of the war, exports fell rapidly to an index of 40 for 1941. In 1942 and 1943 exports of agricultural products (including lend-lease) increased and in 1943 the index rose to 74. Food exports and shipments accounted for most of this rise; these increased 376 per cent above the 1935–39 average and took over 10 per cent of our total volume of production for sale and use in the farm home.

In the 1924–29 period our exports of 12 major crops (including feed turned into pork and lard) used about 57 million acres of crop land (including crop land used for work stock for these products); this was 16 per cent of the average acreage in crops for this period. The acreage required for our exports in the 1935–39 period averaged about 30 million acres because the volume of exports had dropped 40 per cent, efficiency had been increased, and fewer horses and mules had to be fed. This represents only 9 per cent of the average acreage in crops for that period.

During 1946 there will be a large demand for our agricultural products for export and relief shipments. This will tend to prevent production

from pressing heavily on demand. On the other hand, agricultural imports that have been dammed up during the war will become available, domestic purchasing power may drop during the period of readjustment of industrial production, and foreign demand may be drastically reduced in later years.

If our agricultural exports return to the level of 1935-39 and only use 30 million acres of our crop land, and if our domestic consumption attains a level between the 1920-29 diet and the moderate-cost good diet, then we will find our agriculture with at least 15 million acres of crop land in excess of that for which there are outlets. In the recent study, *What Peace Can Mean to American Farmers* (May 1945), the United States Department of Agriculture estimates that in 1950, with a national income of 150 billion dollars, our domestic and probable foreign needs can be produced on about 327 million acres, assuming improvements in technology continue. If all families receiving less than \$1,500 a year had their consumption supplemented so that they consumed a low-cost adequate diet, only an additional 5 million acres would be required. The 1944 crop acreage of 352 million acres, therefore, is 20 million acres above the estimated 332 million required in 1950 even with food supplements made available to low-income families.

These figures all indicate that in the United States agricultural production can continue to expand more rapidly than consumption. To solve the postwar problem of agricultural production and income, therefore, we must (1) maintain a high level of consumption in this country, (2) expand our exports on a permanent basis, (3) assist agriculture to adjust its production pattern so that the benefits of low-cost mechanized production can be passed on to consumers while the level of living of our farmers is maintained and improved, and (4) develop policies and programs which will modify the violent fluctuations in farm prices and income that have existed in the past. It is within this framework that the objectives of agricultural policy and the means used to attain them must be evaluated.

OBJECTIVES OF AGRICULTURAL POLICY

In order to appraise alternative policies which may be used to solve the problems of agriculture the basic objectives of agricultural policy must be stated at the outset. Policies which may be used to achieve one objective may prevent the attainment of another; only as various policies are analyzed in the light of all the objectives can conflicts be clarified

and those policies which supplement rather than negate one another be selected. The broad objectives of agricultural policy may be divided into those which apply to the economy as a whole and those which are more specifically limited to agriculture. The general objectives to which agricultural and all other phases of economic policy must be directed are:

- (1) An economic environment at home and abroad which will develop and maintain a high level of production, employment, and purchasing power.
- (2) International trade that will permit specialization and encourage the most efficient use of resources throughout the world, thereby raising the level of living at home and abroad and laying the economic foundations for a lasting peace.

Objectives which apply more specifically to agriculture are as follows:

- (3) Efficient production or such a combination of physical and human resources that the largest possible quantities of goods and services are produced at the lowest possible cost without exploiting either people or resources. This means balancing the people and resources employed in agriculture with those employed in other parts of the economy as well as attaining the optimum allocation within agriculture.
- (4) An income from efficient farming which will allow farm families a level of living consistent with a progressive economy.
- (5) Elimination of exploitation of our soil and water resources through the widespread adoption of conservation measures.
- (6) A reduction in, and sharing of, those risks which arise from fluctuations in weather and prices, which make for short-run fluctuations in the production and income of the individual farmer, and over which he has no control. This includes the maintenance of the stocks of nonperishable products needed for consumers' welfare in such a way that they will not exert a depressing effect upon farm prices.

In addition to these purely economic objectives are certain other objectives, some of which are partly social. They include improved marketing facilities for agricultural products, greater security of farm tenure, maintenance of family-sized farms, adequate medical care in rural areas, and better recreational facilities. The importance and economic implications of these objectives are undeniable, but limitation of space prevents any adequate discussion of them in this paper.

PRESENT AGRICULTURAL POLICIES

Present agricultural policies are the outgrowth of a long series of attempts to improve the economic condition of farmers after the First World War. The McNary-Haugen Bill, passed and vetoed in 1927 and again in 1928, sought to protect domestic agricultural prices from being depressed by low prices on the world market. This result was to be achieved through assuring a market for the domestic crop at the world price plus the tariff and selling the export quantity at a loss. The weak-

nesses of the bill were that by raising prices it tended to encourage production and that it could be construed as dumping by foreign nations.

The substitute farm legislation finally enacted was the Agricultural Marketing Act of 1929. This Act established the Federal Farm Board to assist in developing cooperative and orderly marketing and to purchase surpluses that were depressing prices. The Smoot-Hawley Tariff Act of 1930 raised tariffs to unprecedented levels and undoubtedly made it much more difficult for us to export our agricultural products by curtailing the imports which provided people in other countries with the funds to buy our exports. The accumulation of ever-rising surpluses and the pressure of supply on prices led to the financial collapse of the Board.

In 1933 the first Agricultural Adjustment Act was passed with provisions for establishing parity prices, adjustment of production, benefit payments to cooperating farmers, processing taxes, and marketing agreements. This Act was partly invalidated on January 6, 1936 by the Supreme Court. In February 1936 the Soil Erosion Act of 1935 was amended to form the Soil Conservation and Domestic Allotment Act; control over acreages was again restored without the processing tax provisions. The failure of these Acts to reduce agricultural production is indicated by the fact that the index of physical production reached a new high point of 128 in 1937. Even in the case of cotton, favorable yields made the quantity produced that year (almost 19 million bales) the largest crop ever harvested.

Continuation of these large surpluses led to the Agricultural Adjustment Act of 1938, with provisions for the regulation of interstate and foreign commerce. The new features of this Act were the establishment of marketing quotas, storage of crops associated with the idea of an ever-normal granary, crop insurance for wheat, and price support loans to be made by the Commodity Credit Corporation.

In an attempt to reverse the world trend toward economic nationalism, Congress enacted the Reciprocal Trade Agreements Act in 1934 following the devaluation of the dollar between 1933 and 1934. While the devaluation undoubtedly was an important factor in raising the price of cotton, progress in lowering tariffs was too slow to offset the decline in world trade and make other agricultural policies unnecessary. Actually there existed a basic conflict between objectives. On the one hand Government policies were directed toward expanding world trade, while on the other they were directed toward raising domestic prices above the world level. This basic conflict between domestic policy and foreign policy still exists

and may be one of the most difficult problems to solve in the postwar period.

Farm Credit agencies were expanded, the Farm Security Administration was developed, and the activities of the Soil Conservation Service were intensified. These programs were mainly directed toward improving the production facilities of farm families. The Federal Surplus Commodities Corporation bought up quantities of surplus commodities for distribution to relief families and the Government inaugurated the Food Stamp Plan and School Lunch Program in order to enlarge the markets for farm products as well as to improve diets.

The development of programs designed to aid agriculture has been exceedingly complex and further complications have been added by the measures introduced to encourage an expansion of production during the war. The most important legislation has been a series of acts which placed new price floors under agricultural products and extended parity price guarantees into the postwar period. Prices for cotton are guaranteed at 92½ per cent of parity; and prices of tobacco, rice, peanuts, wheat, and corn are guaranteed at 90 per cent of parity for two full years after January 1 of the year following the official termination of the war. In addition to these so-called basic commodities there is a long list of "proclamation" commodities on which price floors have been set to encourage increases in production; these commodities, which include almost all major agricultural products, also have their prices guaranteed at 90 per cent of parity for two full years after the war, provided funds are made available. The Secretary of Agriculture is also authorized to support the prices of other farm products if funds are available to do so. One of the major problems of the postwar period is to solve the difficulties inherent in any program committed to the support of rigid parity prices.

DIFFICULTIES INHERENT IN PARITY PRICE SUPPORT PROGRAMS

The disadvantages and difficulties of a system of price guarantees tied to the parity base period may be summarized under four points.

Production Adjustments. Rigid parity prices prevent desirable production adjustments from occurring in response to changes in demand and costs of production. Current costs of production vary greatly between areas and even between farmers in the same area. For example, a recent study by the Agricultural Experiment Station of Texas shows that the costs of producing cotton lint vary from less than 4 cents to over 19 cents a pound in that State. This reflects differences in the physical character-

istics of the land which determine the degree of mechanization possible. A reduction in the demand for cotton which is met by percentage reductions of acreages with the price maintained on a parity basis simply means that we are keeping high-cost areas in production and at the same time cutting production in the lower cost areas. This is a misallocation of resources and prevents basic adjustments in production from taking place—all at the expense of consumers and often at the expense of depleting our soil resources.

The parity base period for many products goes back to 1909–14 prices and therefore maintains the relationships between the prices of various products that existed 30 years ago regardless of changes in the costs of production. For example, the man-hours required to produce 100 bushels of wheat were 89 in the 1909–13 period and only 41 in the 1934–36 period. The reduction of 50 per cent in the labor requirements has lowered the costs of production because the savings on labor costs greatly exceed the increased machine costs. In the case of corn the introduction of hybrid varieties has increased yields about 15 to 20 per cent with only a small increase in costs. On the other hand, labor requirements and costs of production for vegetables have gone up. The relative position of prices as between products, therefore, should be kept flexible in order to reflect changes in the relative costs of production.

If resources are to be used efficiently, production must be flexible between different products within agriculture and also between agriculture and the rest of the economy. There is no absolute level of agricultural production that is most desirable. The desirable level depends upon whether we want an expensive diet or a cheap diet (assuming both are equally nutritious) and people should be permitted to choose between them; it also depends upon foreign demand and upon available alternative use of resources. At our present stage of technology it appears that we have too many people in agriculture in relation to the number in other services and productive enterprises. Within agriculture, adjustments between enterprises are also needed; for example, our production of oil crops and cotton (in high-cost areas) may need to be reduced while the production of milk, fruits, and fresh vegetables should be expanded. In order to direct resources to their most efficient use it is essential that price relations between different products be kept flexible over time.

Agricultural Exports. The maintenance of domestic prices on a parity basis makes it difficult to export at world prices without appearing to dump our surpluses on other nations. When subsidies on exports, as

authorized by Congress in 1944, are interpreted as dumping by other nations, they usually apply retaliatory measures which offset the benefits we expected to attain. At the same time an atmosphere of antagonism is created which may endanger other attempts to broaden and expand world trade. In the past we have attempted to help agriculture by raising domestic prices above world prices; this has made it impossible or difficult to export and, to the extent that pricing our commodities out of the market raised world prices, we encouraged the expansion of production in other countries. Attempts to establish a two-price system lead to retaliation and strangulation of trade. In the case of cotton, our unilateral action to raise domestic prices through loans and through production controls stimulated cotton production abroad and improved the competitive position of synthetics at home. From 1933 to 1940 Agricultural Adjustment Administration payments to cotton farmers amounted to 1.3 billion dollars, which was over 25 per cent of the value of the cotton lint produced in this country during the period. If the price had been allowed to remain low, high-cost cotton areas would have been forced to change to the production of other crops. This adjustment would have been slow and painful because of the high comparative advantage of cotton in the past; it would have meant larger farms with fewer people on the land and a diversified agriculture closely in line with conservation needs. To some extent the AAA program helped this adjustment, but if we had been willing to spend a billion dollars in adjusting the size of farms, training people to handle a more diversified agriculture, and providing them with the capital necessary to do this, we might have moved further toward a permanent solution of agriculture in the high-cost cotton areas. The AAA has gradually assumed the character of an adjustment and conservation program with acreage allotments related to soil conditions rather than to an historical base; this emphasis on physical resources should continue and should be expanded in the postwar years.

The cotton problem has not been solved. Prices, supported by Commodity Credit Corporation purchases and loans, have risen rapidly since 1940 and reached 20 cents in 1943. The November 1944 parity price was 21.20 cents and efforts to raise cotton goods price ceilings so that cotton lint will reach parity have been successful. After the war we will face the same problem again; our domestic price will be well above the world price. Brazilian cotton Type 5 at the Sao Paulo market averaged 0.53 cents above the American Middling 15-16 at New Orleans from 1923 to 1939. From December 1941 to July 1945 the American domestic price

has exceeded the Brazilian by from 6 to almost 12 cents per pound; a number of countries have shifted their purchases from American to Brazilian cotton partly because of relative prices and partly because of shortages of dollar exchange. While the United States was reducing the cotton acreage, Brazil almost tripled her acreage from the 1930-34 average of 2.4 million acres to 6.7 million in 1940.

Methods of Supporting Prices. Guarantees of parity prices can only be made effective as funds are made available for price supporting purchases or through other direct Government actions. If the quantity supplied at the guaranteed price is larger than the market will absorb at that price, the demand must be increased through subsidized consumption, or losses through resale at a lower price must be sustained by a Government purchasing agency, or production must be curtailed through direct Government action. The maintenance of parity prices, therefore, makes essential other programs to affect consumption and production; the desirability, complexity, and effectiveness of these programs must be considered in evaluating any rigid price support policy.

In the past we have attempted to control supply through imposing controls over acreages and through quota allotments. Many claim that we will have to follow this same policy in the postwar period. This, however, is not easy to do. Acreage controls in the past were effective in shifting the acreages of various crops but not in reducing total production. In the case of corn the average acreage from 1931 to 1933 was 108 million acres and production averaged 2.6 billion bushels; for the three years, 1939 to 1941, the acreage under the AAA averaged only 87 million acres but production still averaged 2.6 billion bushels. Essentially, therefore, acreage controls only prevented an expansion of production between these two periods. Production did not decline because hybrid corn and improved rotations increased yields: they averaged 25 per cent higher for the last five years when compared to the 10-year period 1923-32. In the case of cotton the yield increases have been even more dramatic and have averaged 50 per cent higher over the last five years compared to the decade preceding the AAA.

Actually to curtail the production of any given crop requires a much larger percentage cut in acreage than the desired percentage reduction in output because the land taken out of production is the less productive land. At the same time the increased use of grasses and legumes to replace crops tends to increase both the yields of the controlled crop and the output of the products of roughage consuming animals. As a result of

their fear of this tendency, for example, the dairy interests were successful in obtaining legislation designed to prevent any increase in the production of milk, which they felt might occur as the acreages of hay and pasture increased; this part of the law, however, was never enforced. Thus, when only a few basic crops were concerned, the AAA faced serious difficulties in trying to curtail the production of individual commodities even though there was no attempt to control total production. Also, the Commodity Credit Corporation had, in the expectation of war, accumulated the equivalent of a full crop of cotton, half a crop of wheat, and a quarter of a crop of corn by the autumn of 1941. Without the war much larger reductions of acreages would have been needed to maintain the loan rates and avoid the further accumulation of stocks above those needed to insure a continuous supply for consumer needs.

If all the commodities, the prices of which are now guaranteed for two years after the war, actually have their prices supported in the face of a shrinking domestic and foreign demand, the difficulties of attempting to curtail production will probably be much more serious than before the war. Almost all agricultural products would be involved and an actual reduction in total production would have to occur. Farmers do not like to leave resources idle; if they reduce some crops they grow others. To place quotas on all crops and livestock products would be extremely complex and difficult to enforce because of possible shifts in land use and feeding practices. Corn might be replaced by pasture and a quota on the numbers of livestock might mean that the stock would then be fed more grass and less corn and the pressure on corn prices would not be relieved greatly. If quotas were placed on a product such as milk it would be almost impossible to prevent shifts in feeding from concentrates to roughage. Only by rigid quotas for all crops *including pasture* and control over feeding practices could total production be reduced.

A further important problem may be the difficulty of maintaining participation in, and compliance with, production control programs. Unless the price guaranteed is considerably above the market price, farmers may find it more profitable to maintain production, and they may not approve marketing quotas, particularly if the production costs fall as a result of technological progress. Under these circumstances it would be difficult, and certainly not desirable, for the Government to fulfill the present commitments to support prices. This will become a much more important problem if the number of commodities brought under control is expanded and alternative uses of land and labor become more and more restricted.

Rural Poverty and the Objectives of Policy. Supported parity prices in conjunction with other programs have not been an effective means of increasing the income and efficiency of production of low-income farmers. AAA benefit payments flowed largely to the higher income farmers. Even in 1942 the 50 per cent of the farmers in the lower income groups received only 18 per cent of the total net cash income. These programs, therefore, while beneficial to the farmers in proportion to their production in the short run, do not solve the basic problem of rural poverty. As shown later, in "Low Income Groups in Southern Agriculture," quite different programs are needed to raise the productivity and incomes of low-income farmers. However, to the extent that high prices are maintained and production quotas allocated to high-cost areas, the shock of rapid economic adjustments is lessened. The danger is that a continuance of these programs may maintain inefficient production for too long a time by making it seem less imperative that more constructive policies be adopted.

Concerning the attainment of the basic objectives of agricultural policy suggested in the previous section, we may say that parity price support programs do not lead to an expansion of world trade nor to a higher level of living for the low-income farmers; and they lead only indirectly to conservation and more efficient production in the commercial areas. Parity price supports, on the other hand, do remove some risks of price fluctuations, and temporarily maintain farm income and purchasing power. Essentially, postwar agricultural policies must aim at achieving more of the desirable objectives and eliminating the conflicts which exist between the present policies and the attainment of these ends.

POSTWAR POLICIES FOR AGRICULTURE

Full Employment. If the objectives of agricultural policy are to be attained, the maintenance of a high level of national income and employment is essential. All agricultural groups and interests should support policies directed to this end. Other papers in this series deal with this general problem and it is only mentioned here to emphasize its importance to agriculture. Full employment alone, however, will not solve all of the problems of agriculture; it will only provide favorable conditions for their solution.

Expansion of World Trade. Agriculture will emerge from the war with an expanded over-all output above that required for our domestic needs even at an improved level of domestic consumption. Exports of food

products have risen from 2.1 per cent of our total food production in 1940 (including that used in the farm home) to 10.4 per cent in 1943. Imports of food, on the other hand, have been below the average for 1935-39 by 10 or more per cent every year since 1937 except in 1941. Net exports have therefore been abnormally high since 1939. Nevertheless, per capita civilian food consumption in this country has remained well above the 1935-39 average throughout the war period. After the war several factors will make it desirable to expand our exports. Food imports will increase, demobilized persons who return to less arduous work will probably consume less food, other civilian goods will become available, and people may decide to spend less of their income on food and more on other goods. Even if we maintain or increase our present level of civilian consumption of food, we must find foreign markets for agricultural products if we are to have a high level of production and avoid the accumulation of surpluses.

When particular commodities such as cotton, wheat, or lard are considered, the necessity of encouraging an expansion of world trade becomes clear. Unilateral action has failed to solve the cotton problem (many would argue that it has made it worse) and, since it is a world problem, we should attempt to solve it through international cooperation as well as national action. This would entail stabilization of the world price through a world cotton agreement and positive national measures to develop more diversified agriculture in high-cost cotton areas.

The alternative to a two-price system is to accept world prices for our export commodities and attempt to affect the world price by action along the following lines:

- (1) Initiate and support reciprocal reductions of tariffs.
- (2) Cooperate with other nations in adjusting production to a lower tariff structure. The adjustment may be particularly serious in the high-cost European grain areas and our high-cost cotton areas.
- (3) Develop and continue commodity agreements, in which both producing and consuming nations participate, for those problem commodities where production adjustments must be made slowly if serious economic repercussions are to be avoided. The most important agricultural commodities to which this action would apply are wheat, cotton, coffee, sugar, and rubber. Such commodity agreements should be sufficiently flexible so that both prices and quotas can be varied each year to encourage expansion of production in the low-cost areas and discourage it in the higher cost areas.
- (4) In addition to these specific actions directed to expanding world trade, agricultural interests should support international actions to stabilize exchange rates and stimulate capital investments.

Over the last two decades the value of our agricultural exports has declined steadily; this decline has been associated with strong nationalistic policies and high tariffs. Only if we reverse this trend, and abolish the fear of military aggression that inspired it, can we hope for a permanent expansion of international trade. Assurances of security are essential and, after this, a high level of industrial prosperity at home and abroad will be the most important factor in expanding both exports and imports.

Soil and Water Conservation. The need for the adoption of conservation farming will be greater after the war than it was before. Our expansion of intertilled crops has occurred without the needed increase in contouring, strip cropping, and terracing. We have drawn heavily on our soil fertility during the war and in some areas soil erosion has increased. In the past, conservation and production adjustment programs have overlapped; this has created a great deal of confusion and in many cases "conservation payments" have been concentrated in the areas where they were least needed from a conservation point of view. Conservation can be attained under a large variety of land-use patterns if different practices are applied. The crop production pattern, therefore, should vary in response to changes in demand and costs, and conservation plans suitable to that crop pattern should be applied. A sloping field may safely be used to grow a large amount of corn if it is terraced and strip cropped, or it may be kept entirely in grass. Both uses conform to conservation needs. It is essential, therefore, that conservation be separated from other aspects of agricultural planning. This may best be done by expanding the work in conservation districts under the State conservation district laws and developing unified regional plans in areas where flood control, irrigation, forestry, and conservation are interrelated. At the same time the States should develop tenure legislation which will give greater security of occupancy of farms because insecurity of tenure is one of the major factors making for exploitive agriculture.

Some enthusiasts have advocated large expenditures on conservation to maintain employment in the event of a business recession. The field of such expenditures, however, is limited to projects on which many workers can be used efficiently. This eliminates one of the most important parts of conservation—the planning of individual farms. For irrigation, drainage, reforestation, and flood-control projects the use of unemployed manpower is desirable. In the field of soil conservation on farms it may be limited to terracing and building retaining dams for

water storage and then only when this forms part of a complete plan for each farm. Apart from large public works programs, therefore, expenditures on soil conservation will be relatively small and probably absorb only a small quantity of local labor. If the AAA continues to make adjustment and conservation payments, the latter should be made on the basis of the physical conservation needs of the land and not on an historical crop basis.

Maintenance of Adequate Diets. While measures to improve the diets of the people of the United States are intended to improve health and efficiency, they also have important implications for agriculture. The National Food Allotment Plan introduced by Senator Aiken provides a method of allocating sufficient food purchasing power to all low-income families to enable them to obtain a low-cost adequate diet. The Food Stamp Plan and School Lunch programs are of a similar nature. To the extent that such programs can expand the total consumption of food products they will lessen the danger of agricultural surpluses. Preliminary estimates indicate, however, that if all families with incomes below \$1,500 a year (under conditions of full employment) were provided with adequate diets, the products of only about 5 million acres of crop land would be required. This would not be sufficient to absorb our increased production even when consumption in other income groups is at a high level. If national income and employment decline, programs to maintain food consumption will become increasingly important as measures to prevent food surpluses from piling up while people are inadequately fed. Ideally it would be better to have all people employed at wages sufficient to permit them to purchase an adequate diet; until that goal is reached, however, a national food allotment plan should have an important place in agricultural policies. Any such program, however, should be directed at improving the diet of low-income families and should not be used as a means of disposing of surpluses or raising prices; these should be only incidental results.

Alleviation of Rural Poverty. As was indicated previously, the high farm income received during the war has not eliminated the problem of low productivity and rural poverty in some agricultural groups and areas. More resources and alternative uses for their labor must be made available to the low-income groups. This calls for programs which will enlarge the size of farms, train the people to operate them efficiently, make the necessary capital available, and train those who will have to move out of agriculture to be proficient in other occupations. This problem is discussed

fully by Mr. Rauber in his paper on low-income groups and is mentioned here only because of its fundamental importance.

Crop Insurance. The development of crop insurance against climatic and biological hazards aids agriculture by reducing the risks inherent in farming. The program of crop insurance enacted by Congress early in 1945 lays the basis for experimentation in the coverage of many crops. This program might well be expanded in the postwar period to develop self-supporting systems for as many crops and regions as possible. This will remove one of the most important causes of fluctuations in the incomes of individual farmers.

Storage of Nonperishable Products. Fluctuations in yields not only create uncertainty for the individual farmer through varying the quantity for sale, but they also cause fluctuations in prices; a bumper crop tends to depress prices greatly and a short crop to raise them unduly. Insurance of the individuals' crops removes only one aspect of risk; the risk of low prices in a good year still remains.

This risk may be reduced in the case of nonperishable products through a Government program of purchase during periods of low prices with large crops and sale during periods of high prices and short crops. This would benefit both producers and consumers. Such a program, however, can be used to bolster prices and create even a larger carry-over, which tends to defeat the purpose of the program. This is particularly true when the purchase program is used to support parity price programs.

In order to avoid this it appears essential that Congress establish regulations regarding storage activities. These might include the following points:

- (1) A "normal" carry-over should be established for each product.
- (2) Whenever the amount in storage exceeds the normal by say 10 per cent, it should be mandatory for the Government authority to reduce its stocks.
- (3) Whenever there is a short crop the Government should release stocks in order to prevent rapid price increases.
- (4) When the amount in storage is below normal the Government should purchase stocks unless production is low and prices high.

Discretion in applying these principles is necessary. For example, the United States experienced severe drought conditions in 1934 and again in 1936; the amount in storage could not easily have been raised to normal in 1935, which was the year in which there was a shortage of feeds. Flexibility in applying these principles over a period of years, therefore, is essential.

Other Policies. In addition to the measures listed above, there should be provisions for more efficient marketing of farm products, for an adequate system of agricultural credit, and for measures to prevent any further inflation of land values. Government agencies are already established to improve marketing and provide credit but little has been done to control the rapid rise in land values. This latter problem is discussed by Mr. Fisher in a separate paper dealing with the implications of an inflation of land values to postwar conversion problems.

None of the programs discussed above would introduce rigidities between the prices of farm products or place a floor under farm income; they leave the farmer with no protection against a catastrophic fall in prices and income in the event of a business depression. The United States Department of Agriculture, in *What Peace Can Mean to the American Farmer*, indicates that in 1950 the index of all farm prices would be almost at parity *provided* that there was a national income of 150 billions of dollars, that there was a market for the estimated quantity of exports, and that production did not exceed the amount calculated. The study also assumed that no Government controls over prices or production were in operation. If this nation, therefore, could maintain a high level of employment and purchasing power, the problem of maintaining a high level of agricultural income would appear to be greatly reduced. Long-run adjustments involving larger farms and a smaller farm population would be stimulated because alternative jobs would be available; flexibility between the prices of farm products could be maintained and prices would direct production in response to changes in demands and costs; and, at the same time, total agricultural income would be maintained if the optimistic relationships reported above actually prevailed.

This essentially would meet the long-run objectives of agricultural policy and the programs outlined above would all facilitate this end. It is certain that farmers would not wish to relinquish their present parity price guarantees unless an acceptable method of supporting income in the event of a business recession were offered. The crux of the problem of price and income policy, therefore, is to develop a program which will restore flexibility between prices and yet provide assurances that farm income will not again be allowed to collapse. To attain this end several modifications of the present system of parity price supports have been suggested; alternative systems which relinquish parity prices altogether have also been proposed. These alternatives and some of their implications are discussed in the next section.

POLICIES TO MAINTAIN AGRICULTURAL INCOME

Freedom versus Control. There are many persons who advocate a return to a completely free market price structure; even in a depression they would not support the prices of the basic necessities of life. The arguments favoring this point of view may be summarized as follows:

(1) Low-income families, both urban and rural, who do not have a sufficient quantity of these necessities, will be better able to purchase them and thereby raise their level of living and improve their diet.

(2) Because the demand for necessities is relatively inelastic, a lower price is not fully offset by increased consumption, and purchasing power is set free to buy other goods (largely manufactured products); this stimulates employment and investment, and creates additional purchasing power. This might lead to an upward swing in the business cycle which would more than offset the loss of income resulting from the decline in prices.

(3) Lower prices will cause production to adjust by moving resources into other enterprises which will give higher returns.

(4) Exports will be increased and the benefits of low-cost production will be spread to other countries.

(5) The elimination of Government price controls permits the free play of competitive forces and moves the economy from one of Government control to one of free enterprise.

Opposed to those who advocate a free market are those who wish to retain Government support of parity prices and production controls. The arguments supporting this opinion may also be briefly summarized in parallel statements:

(1) Low-income families should have their consumption increased by higher incomes and not through the impoverishment of agriculture.

(2) Cutting the income of the producers of basic necessities curtails their purchasing power and brings an added downward pressure on the business cycle. Because there may be a lag before lower producers' prices are passed on to consumers, the initial impact will be to reduce the purchasing power of producers and increase the middlemen's margins of profit and probably savings. While it may be desirable to have lower prices for food products in a depression, this may be achieved by other means than by allowing prices to producers to fall. If the prices of manufactured goods fall together with wages, then agricultural prices should fall proportionately.

(3) Agriculture does not contract its production very greatly even in response to catastrophic falls in prices. The maintenance of production is a great social benefit and producers should not suffer because of it. In a depression there is no alternative use for agricultural resources and the problem should be attacked through increasing industrial employment.

(4) Lower prices might stimulate exports but a sudden fall in prices would disorganize both the domestic and the world market. To avoid this, production and price changes should be spread over time through cooperative international action.

(5) Competitive forces play an important part in determining agricultural prices but industrial prices are more rigid and production fluctuates more in industry than in agriculture. The competitive nature of agriculture leaves it at a grave disadvantage in an economy where industrial production is subject to rigidities. The alternative to maintaining Government controls in agriculture is to introduce flexibility in industrial wages, to renovate the patent laws, and to modify our corporation law and our policy toward corporations with a view to preventing monopoly practices, and to eliminate all tariffs.

These opposing positions are fundamentally based upon different concepts as to the type of economy we have and should develop. The first assumes that we have and can perpetuate a competitive economy. The second assumes that we do not have and cannot develop a competitive economy that will function effectively in the industrial segment of our economy and, therefore, extensive Government action is necessary. The challenge to industry and labor to give up all forms of protection is not based on any hope or expectation that this will be done; it is used purely as a form of justification for the maintenance of rigid controls in agriculture. It is outside the scope of this paper to discuss the validity of these two assumptions but the ability of private enterprise, in the absence of extensive Government controls, to maintain employment and a high level of productivity in the postwar period will probably determine the trend we will follow.

The validity of many of the claims and arguments on both sides cannot be evaluated by objective measurements and any theoretical analysis depends upon the assumptions made regarding the framework in which it is developed. If we assume that the export and domestic demand is not sufficient to maintain farm prices or incomes near parity levels with present expanded production, it is quite probable that farmers will demand support of prices and that the necessary measures and funds will be provided by Congress. The basic problem of agricultural policy, therefore, is to develop a practical program which will support farm income without resulting in curtailed consumption or a misallocation of resources such as may occur under the present rigid parity price formula.

In seeking a practical solution, we cannot ignore the institutional and political framework if the analysis is to have more than academic significance. At present it seems very unlikely that all countries will abandon national programs designed to protect or assist their farm people. The recent agreement in which Great Britain guarantees to purchase all the agricultural export products of New Zealand for a four-year period at prices determined for two years in advance is indicative of the kind of

world in which we will have to operate. This agreement reflects two basic factors—the need of New Zealand for an assured export market for her products and the shortage of foreign exchange in Great Britain. In the case of Russia, international trade will be completely controlled by the State and there can be no “free” market as we understand the term.

When we turn to Western Europe it seems highly improbable that the high-cost grain producers will immediately relinquish their protected market because it will take considerable time to change old established production patterns; no matter how desirable the change may be, it may only occur gradually unless drastic changes are made in the early postwar period.

One of the most important political factors in this country is the farmer's attitude toward parity prices. To him they have become what wage rates are to labor. Farmers have associated with “parity” the concepts of “fair” and “reasonable”; they do not think of support measures as a subsidy, no matter what form they take, any more than protected producers think of the tariff as a subsidy. On the other hand, subsidies or subsidy payments are not welcomed because these have the connotations of relief. At the same time the farmer believes that prices determine his income and that supported parity prices have been of benefit in the past.

A second important factor is the rather general antagonism in Congress to delegating the authority to make administrative decisions, especially when these may affect the incomes of large numbers of their constituents. Historically, the representatives of agricultural interests have always opposed revisions of the parity price formula which would lower prices; and they have supported revisions which would raise them. At the same time they have reduced the range of administrative decisions until almost none is left in the determination of support prices.

These factors appear to rule out the possibility of this country's returning to a free market; it also appears unlikely that a complete delegation of price determining powers to a board, as in New Zealand, will be acceptable. On the other hand, an attempt to maintain rigid parity prices through Government purchases and production controls may be so costly, because of the impossibility or extreme difficulty of reducing production, that the program will have to be modified to prevent collapse.

The cost of any price support program is a function of the prices supported, the control of production that is possible, and the demand situation. If production is maintained at its present high level and a business

recession occurs, the spread between market prices and support prices may become very wide. The cost of maintaining farm income will then become very large and the difficulty of disposing of accumulating stocks and supplies will increase. Thus as the need to maintain farm income increased, the cost and difficulty of doing it would also increase, and the necessity of more flexibility than exists under the present laws would become greater.

Modified Programs to Support Parity Prices or Income. Several programs that effect a compromise between free market prices and rigid parity prices have been suggested. These may be briefly summarized as follows:

(1) Guarantee to farmers a "parity income" for agriculture. This means retaining the same relationship between the net per capita income of persons on farms and persons not on farms that existed during a given base period. The fact that farm income is the result of the quantity produced as well as the price is basic to this concept. As production increases, prices may fall and parity income can still be maintained. Similarly, a reduction in the number of people on farms with constant production would also permit lower prices, while an increase in the incomes of persons not on farms would raise the amount of income that should flow to agriculture to maintain parity. Since the concept applies to net income, the costs of production are deducted and as costs fall, then prices could also fall while parity income would be maintained. Since parity income, according to this definition, is an aggregate magnitude, the prices between products could be varied freely. The main criticism of this proposal is the extreme difficulty of developing a practical program of action to implement it.

(2) Another method of maintaining parity income has been suggested which requires that basic quantities of each crop be established and the difference between the market price and the parity price be paid to all producers on this quantity. Thus all products would sell at free market prices and parity payments would be made only on the base quantity. This would limit the quantity on which payments would be made without restricting production. It would allow prices to reach a competitive level and clear the market so that more than the required carry-over would not be stored. Several alternative methods of determining the base quantity have been suggested but these are too detailed to be discussed here. Like all two-price systems this could be interpreted as dumping by other countries and retaliatory measures might be applied.

(3) A third method suggested is to establish a minimum income base for each commodity; this would represent the income that would result from selling the quantity the market would absorb at parity prices. This minimum income would be guaranteed and production controls removed. If more of a commodity were produced than could be sold at parity prices, market prices would be allowed to fall to the point where the quantity produced multiplied by the price would give parity income. The advantages of this system are that it would permit adjustments in both prices and production in line with changes in costs and demand. A major disadvantage is that the final level of prices cannot be determined until production is known; over the years, however, more accurate forecasts and fairly stable price relationships could develop.

Both the second and third approaches limit parity price supports to the quantity that would be sold at that price. Thus they escape the dilemma of either having to enforce rigid production controls or to purchase the quantities which could not be sold on the market.

(4) A simpler compromise would be to provide much greater flexibility in the law designating the parity loan rate for each commodity; this was achieved in the original Agricultural Adjustment Act of 1933 which set no limits on loan rates and merely authorized the Secretary of Agriculture to support agricultural prices. In the 1938 Act the loan rate on wheat, cotton, and corn was specified at between 52 and 75 per cent of parity; in 1941 the single rate of 85 per cent was used and a single rate at higher levels has been maintained ever since. This completely removes the possibility of making the needed adjustments between commodity prices and a return to a range of 60 to 110 per cent of parity for specific commodities would be a great improvement in the present law.

A System of Forward Price Floors. The suggested alternatives presented in the previous section may all be criticized because they either retain elements of rigidity inherent in any support of parity prices or they develop exceedingly complex methods of circumventing it. These difficulties may be overcome by continuing the system of forward price floors initiated during the war with the support prices separated from any relationship to parity.

To do this Congress would have to enact legislation appointing an Agricultural Price Board with authority to establish price floors extending over one production period (a year in the case of most products) for agricultural commodities. Such price floors would assure the farmer that prices would not collapse during a production period and he could plan

his production knowing what the relative prices of various products would be. This would encourage better production planning and remove a major uncertainty.

The basic objective of the Board would be to establish price floors at such a level that supply and demand would balance at that price. In order to attain this end and avoid pressure from special interest groups, Congress could establish a series of regulations which would limit the freedom of action of the Board. The following standards are suggested as being essential if the basic objective is to be attained:

(1) The price floor for export commodities should not exceed the world price expected to prevail over the next year.

(2) When a storage program for nonperishable commodities is in operation, the Board should lower the price floor of any commodity when the carry-over exceeds the established "normal" by 10 per cent. When the carry-over is below normal by 10 per cent the Board should raise the price floor for the following season.

(3) In the case of perishable commodities it should be mandatory for the Board to lower the price floor when the Government had been forced to purchase a commodity on the open market and dispose of the product at a loss.

(4) When the market price of a commodity exceeds the price floor by 10 per cent the price floor for the following season should be raised.

To make such a system of forward price floors effective the Board should have the authority to authorize the Commodity Credit Corporation to purchase any commodity on the open market and store it or dispose of it through resale at a loss. Since such actions would have to be followed by a lower price floor the next year the program could not be used to maintain prices and the cost would not become excessive either for perishable or nonperishable products.

Such a system of forward price floors appears preferable to any system of modified parity price supports because it allows complete flexibility between prices over the long run but removes the fear of a sudden drop in prices during a production period. A further advantage of this system is that it can be easily modified in such a way as to maintain agricultural prices and income in a depression without introducing rigidities which might again become entrenched and difficult to remove.

A Method of Supporting Agricultural Income. Any method of supporting agricultural income during a depression should conform to the following general principles:

(1) It should prevent agriculture from bearing more than its share of the burden of the depression.

(2) It should return the income to the farmers through the prices received for the commodities produced.

(3) It should retain flexibility between the prices of various products and not lay the foundations for postwar rigidities.

(4) It should be simple to operate and automatic in its application so that no declaration as to when it should be applied is required.

(5) It should permit lower prices to consumers and not restrict production.

(6) It should be financed in such a way that total purchasing power is increased rather than curtailed.

If a system of forward price floors is in operation these principles can all be attained through a Congressional mandate to the Price Board to control the rate of decline in prices over a period of years. It is suggested, therefore, that the regulations established by Congress direct the Board not to permit within one year a decline in the price of any commodity greater than 20 per cent of the average price of the preceding three years. In the event of a business recession, prices could decline to 80 per cent of the pre-depression level during the first year; in the second year they could be at 74 per cent, and in the third year they could be 68 per cent. It would take five years of depression before prices reached 54 per cent of the pre-depression level. It is unlikely that any future business recession will be permitted to last for more than two or three years and, if it did, Congress could authorize the Board to prevent further declines in the prices of agricultural products.

Between 1920 and 1921 the index of prices received by farmers fell from 211 to 124 or over 40 per cent in one year. From 149 in 1929 the index again fell rapidly to 68 in 1932; this was a decline of about 55 per cent in three years. If the system of control suggested here had been in force the initial postwar decline from 1920 to 1921 would have been only 20 per cent, and from 1929 to 1932 prices would have fallen only 32 per cent.

To make such a system effective the prices paid to farmers would have to be supported through purchases by the Commodity Credit Corporation; the commodities could then be sold on the open market at a loss. The annual deficits could be financed by Congress through measures which would be part of the national policy to maintain or expand purchasing power; at the same time lower prices for food and raw materials would reduce consumer expenditures for these items and permit an expansion of expenditures for nonagricultural products.

The conflict of opinions regarding agricultural price policies can only be resolved by accepting some form of compromise between a completely

free market system and the present system of rigid prices related to parity. From the long-run point of view, the prices of farm products must be made flexible in relationship to each other, in order that agriculture will adjust its production pattern to make full use of modern technology. On the other hand the violent short-run fluctuations in farm income must be moderated for the welfare of both agriculture and the rest of the economy. The fundamental issue is not whether Government programs are needed, but whether the programs followed create rigidities which prevent long-run adjustments from taking place, or whether they restore the necessary flexibility without leaving farm income subject to the violent fluctuations of the past. The policies presented here suggest means through which these long- and short-run objectives may be harmonized.

FARM LAND VALUES AND RECONSTRUCTION

by

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In the postwar period agriculture needs to adjust the pattern of production if it is to make full use of technological progress. In many areas the size of farms needs to be enlarged and inflated land values will act as a barrier to this adjustment. The pressures leading to inflation of land values and the methods of combating them are, therefore, major factors that must be considered in the development of postwar agricultural policies.

SUMMARY

All signs at the present (mid-year 1945) point to the rapid rise of farm land values for one or two years after the end of the war. Although this rise may not reach levels attained in 1920, there is no assurance of this fact, and there are many factors in the market which easily could lead to a repetition of that earlier boom. So far during World War II the financial position of farmers has been far sounder than at comparable periods of the last war. Mortgage debt has been reduced to a new low point, the formation of new debt has been below the World War I rate, and farmers have accumulated record holdings of liquid assets. There has, however, been an upswing in the formation of new debt, whether judged by total volume or the size of individual mortgages; speculative activities in the land markets are increasing; and the delayed demands of servicemen (with their easier access to mortgage credit) are beginning to be felt.

An inflation of land values can have serious repercussions on all phases of the economy and, especially if accompanied by a high level of farm debt, can seriously penalize the agricultural segment. Not only would such an inflation make the task of maintaining stability in the transition period much more difficult, but it would also seriously hinder any attempt to restore long-run prosperity to agriculture.

In some parts of the United States, particularly the cash crop regions of the South, prices of land have been related to the prices of certain high-cash-value crops for which future prospects are not very bright. In these regions, the dangers of a land boom are increased by the fact that its occurrence can result only in a prolongation of already serious maladjustments.

The ideal approach to the control of a potential land boom would be one which simultaneously reduced the number of prospective buyers, eliminated speculatively motivated purchases, and cut down on the supply of disposable liquid funds. In its perfection such a plan would be completely integrated with the controls applying to the rest of the economy, so that pressures turned away from one market would not be directed into another. At the present stage a perfect control is impossible; time is not available for working out all the interrelationships which should be observed.

There are, however, certain controls which if applied would do much to prevent further increases in land values. These may be summarized as education, taxation, capital gains taxes, credit controls, and permit systems. It is doubtful if any one can be effective under present conditions, and a combination of education with some form of a capital gains tax and credit control appears to be the minimum required to reduce the dangers of a serious inflation of land values.

FARM LAND VALUES IN THE NATIONAL ECONOMY

In order to evaluate the current farm real estate market, it is necessary to understand the part played by farm land values in both the wartime and the peacetime economy. Generally speaking, both these relationships grow out of the importance of farm land as a factor of total national production. Agriculture provides the raw materials for most of the food and fibre industries of the nation and for many lesser processes which aggregate to an important proportion of the total economy. Thus, land enters into almost every supply process, and the farm population constitutes one of the most important segments of the nation's labor force.

Land in the Total Economy. The fertility and value of farm land together comprise one of the most crucial portions of national capital. Land is the basic capital to agriculture, and like any other capital item its value influences national wealth and the distribution of national income. While land values reflect prices and net returns over the long run, the price of land is an apparent cost to the farmer, since it is reflected in payments on mortgage indebtedness and taxes. When a farmer buys land on a mortgage at a high value his payments will be high; to him this is a fixed cost of production which justifies pressure for high prices. It is these interrelationships of land values which make them a crucial problem in our economy during both peace and war.

Where farm land is monopolized and farmers cannot readily move to

other jobs, the returns from agriculture can be diverted largely to the landowners, thereby pushing the tenants' incomes down to a low level. In the United States this danger is met to some degree by widespread individual ownership of land, and in England and some other European countries it has been met through legislation controlling rents and giving tenants added security of tenure.

Rents and land values also reflect the social and economic conditions of an area. Where there is a dense rural population with few alternative employment opportunities, rents and values tend to be high relative to the farm level of living; where industrialization offers alternative jobs at good wages, farmers demand a higher level of living, and a smaller proportion of net agricultural returns is available to pay rent and to support high land values. The opening up of alternative opportunities, therefore, may increase the bargaining power of tenants and profoundly affect rents and land values, even with no change in prices.

Finally, land is an important part of the total base for alteration of the money supply through credit operations and for the financing of Government services through real property taxes. Thus, when sudden changes take place in the value of land, the inflationary or deflationary effects may continue to be felt long after the original situation has disappeared. In their effects on the tax structure, land values have similarly profound and long-delayed consequences. High values established during a land boom tend to become the basis for long-term assessments. Although these high tax assessments may temporarily benefit the Government, they tend to perpetuate improper land uses and, with high mortgage indebtedness, may cause the loss of many farms through foreclosure or seizure for taxes.

Land and the War Economy. In addition to their general economic influences, land values have further effects on the nation's wartime economy. War is an economic stimulant. High levels of employment, higher incomes, and almost insatiable demands for every type of product combine to produce inflationary pressures. If not curbed, the economic optimism and the cumulative forces of inflation thereby engendered may sweep the economy into an inflationary spiral. Land values play an important part in this sequence, and profoundly influence both efforts to control the wartime situation and subsequent readjustments to peacetime relationships. With relatively few exceptions it can be said that inflationary tendencies anywhere within the economy stimulate inflation elsewhere. During a war rapid increases in retail prices cause land values and rents to rise after an initial lag; and these in turn result in increasing

fixed costs of production which, to the individual producers, justify even higher retail prices. This mutual reinforcement can continue indefinitely until curbed by Government intervention or the final "bursting of the bubble."

At the same time, the higher values of farm land increase the amounts of credit which can be extended upon its security. To the degree to which this potential expansion of the money supply materializes, the owners of farm land are able to bid up the prices of scarce goods and services even further. Thus, farm land values are similar to other capital values in their tendency either to reinforce inflationary pressures arising in other parts of the economy or to set up inflationary forces and transmit them to the rest of the economy.

Even since the outbreak of the war, the Federal Government has attempted to restrain inflation. This program of economic stabilization has been an integral part of the war effort, since it had an important influence upon both the cost of the war and the ease with which necessary materials could be procured. In addition, the more completely inflation could be held in check, the easier would be the postwar transition to peace.

Hitherto, no direct effort has been made to control the values of many important capital items. Some forms of producers' capital (particularly the costs of new factories and machinery directly involved in war production) have been controlled; but the values of land, standing buildings, and share capital, to name some of the most important items, have not.

Land Values and Postwar Adjustments. During the transition period the level of land values can profoundly influence the ease with which this country returns to a more normal long-run economy. Generally speaking, these influences will be felt most keenly by agriculture, but they will have definite indirect effects on the entire economy.

High land values will be looked upon as a fixed cost, especially by those who have purchased land on a mortgage, and this will increase the pressure of farm groups to have postwar prices supported at a high level. If prices decline, as seems inevitable, fixed payments on mortgages will take a much larger proportion of the smaller net income, and the farm family will be forced to lower its level of living or to lose both the farm and its accumulated savings.

During wartime, scarcities of fertilizers and farm equipment usually prevent the maintenance or restoration of land fertility and farm capital other than land; consequently a considerable part of the abnormal incomes received from the sale of farm products represents the value of

“wear and tear” on productive capital. If this part of farm income is not placed in reserve against the future restoration of capital but is spent in the acquisition of high-priced land, it implies the permanent depletion of the total stock of farm productive capital. After the period of wartime flush prices is past, there is seldom opportunity to “plow back” this capital out of current income.

Finally, in those regions, especially in the Southeast, where present agricultural production is disproportionately centered on the intensive cultivation of cash crops, high land values will hinder the necessary shift to more extensive farm enterprises. For example, there are large marginal and submarginal areas of the cotton and tobacco South at present characterized by small farm units. The production of these two crops should be reduced and more of the land returned to grass or forests; at the same time farms should be consolidated into larger units.¹ If these lands are saddled with high values, such adjustments will be much more difficult to attain.

COMPARISON OF WORLD WARS I AND II

Basic Differences. One of the most important differences between the two wars is duration. World War I lasted four years, with the United States involved for only 18 months. In contrast, World War II has gone on for five years, and this country has been an active belligerent for more than three. Thus, during the latter conflict much stronger inflationary forces have been engendered and have had much longer to make themselves felt. If the nation's economy during this war had been as uncontrolled as in the former, the forces of inflation probably would have already reached unmanageable proportions.

Again, during the first war this country's contribution took place over such a short period that there were few occasions for manpower and capital to be greatly restricted, and shortages of farm labor and equipment had little dampening influence upon agricultural optimism. During World War II, on the other hand, rather acute shortages in these two factors have made it increasingly difficult for farmers to profit fully from rising prices; and their land purchases have been moderated by this deterrent.

The efforts which have been made to control inflation during World War II stand out in sharp contrast with those of the first. It is inevitable

¹ For an example of such a program, see the testimony of former Secretary of Agriculture Wickard at the Cotton Conference (*Cotton: Hearings before the Subcommittee of the House Committee on Agriculture*, Dec. 4, 1944, pp. 94-102).

that the educational and restrictive activities of agencies (both public and private) should make people more aware of the dangers of inflation and temper the activity even of uncontrolled markets. Another outstanding difference between the two wars is found in the greater promotional effort now given to the sale of Government bonds. This has brought about a sizeable flow of purchasing power into assets which may prove somewhat less liquid than others, especially if patriotic holding continues. Any reduction in average liquidity tends to reduce proportionately the danger of inflation and to retard the rise of *all* commodity prices.

During World War II, the psychological aspects of these factors were modified profoundly by memories of the boom and collapse following the last war. This is particularly true of the older generation, in whose minds the effects of the land boom are painfully clear, and of the sections of the country (the North Central area, especially) in which the highest rises occurred at that time.

Prewar Land Values. At the time World War I began, land values in this country had been advancing for more than a quarter of a century. Agricultural prices and incomes were going up; most of our tillable land had been settled while the demand for farms still increased; and there was no sign of any slow-down in the rate of increase of population or of demand for agricultural products. It is likely that by 1914 farm lands were already somewhat over-valued in terms of their longer run earning capacity. Against such a background the wartime rise of land values was looked on as a normal development. The disillusionment which followed 1920 was all the more severe because of its unexpectedness.

For the nation as a whole, farm values before the recent war tended to be stable at a level below the 1912-14 level. In only 12 States did the 1935-39 average equal or exceed 1912-14; none of these were interior States, and most were situated along the Atlantic seaboard.² For the rest of the country there was a considerable margin through which values could rise before reaching previous wartime levels. Furthermore, in 1939 both the farm population and the Government were well aware of the seamy side of high farm land values.

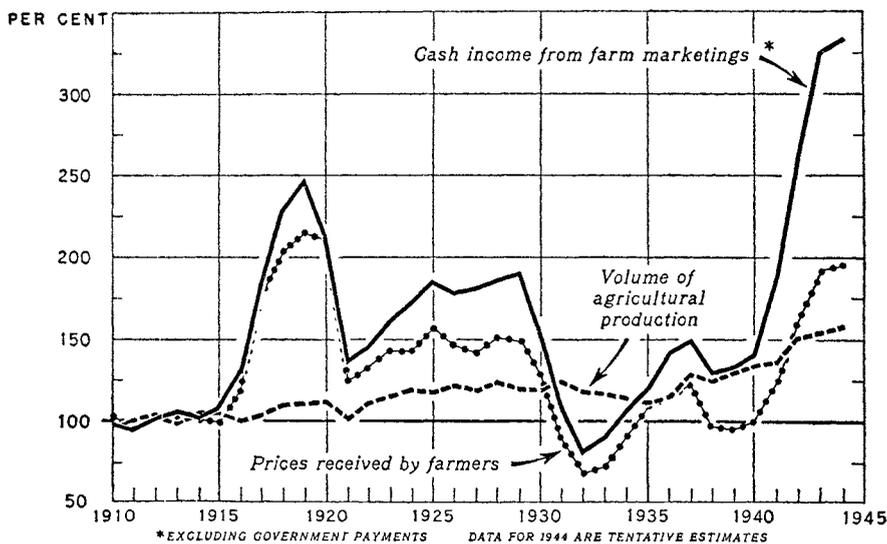
Farm Prices and Incomes. Prices received by farmers for their produce have not risen as high during this war as they did during the last war, but they have risen about as rapidly. The major price rise occurred before 1943, as indicated by the chart on page 38, but the movement is

² These States were: Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Maryland, Virginia, North Carolina, Florida, Alabama, Louisiana, and California.

still upward. When the higher level of Government payments and the greater volume of production are considered, it is easy to see why cash

AGRICULTURAL PRODUCTION, PRICES, AND INCOME, UNITED STATES, 1910-44

INDEX NUMBERS (1910-14=100)



NOTE. This chart and the one on p. 39 were provided by the Bureau of Agricultural Economics of the United States Department of Agriculture.

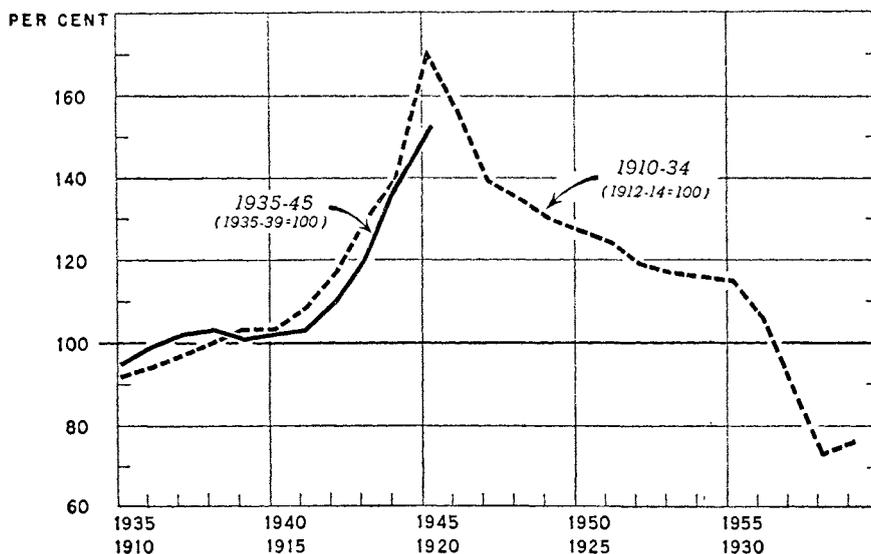
farm incomes (both gross and net) have exceeded those of any previous period. Furthermore, the farm population has been reduced to its lowest recent level, making per capita farm incomes also the highest on record.

The Farm Real Estate Market. Beginning at approximately the same relative levels, farm land values rose very slightly during the first two years of both wars, as indicated by the chart on page 39. During the second two-year period rapid upswings occurred in both instances. The fifth year (1919 and 1944 respectively) brought the two relative values almost exactly together after a total rise of almost 40 per cent over the prewar levels. Although World War I had ended the year before, the rise continued into 1919 to reach a peak almost 70 per cent above prewar. In World War II, on the other hand, the war was at its greatest intensity in 1944. As of March 1, 1945, land values were 52 per cent above prewar. But, should the general pattern of the last war be repeated, the greatest price rise may still be in the future. By 1944, values in four States had

reached or passed 1920 levels, the number doubling by 1945.³ During World War I, the central wheat area was the region of greatest inflation. At present this is one of the sections of the country where land values have risen less rapidly. Activity has been centered in other areas, particularly the Southeast.

The depression of the 1930's with its large volume of foreclosures forced a large number of farms into the hands of unwilling institutional owners,

FARM REAL ESTATE: COMPARISON OF INDICES OF AVERAGE VALUE PER ACRE, 1910-34 (1912-14=100) AND 1935-45 (1935-39=100)



a circumstance which has restrained the rise of farm land values during World War II. No such restraint existed before the depression. Much of the slowness of the rise in land values during the first years of the war may be ascribed to the fortunate, but fortuitous, presence of this abnormal supply. By 1943, however, most of these holdings had been liquidated, and their prior existence can have no effect on current or future value movements.

The volume of farm sales during the first war reached its peak in 1919, but this level was exceeded in 1943 when over 300,000 farms changed hands. The all-time high rate of transfer (about 6 per cent of the entire

³ States in which 1944 land values equaled or exceeded 1920 were: Rhode Island, Connecticut, New Jersey, and California. In addition, preliminary 1945 values were above 1920 in North Carolina, Florida, Alabama, and Oregon. Compare with footnote 2, p. 37. All comparisons are as of March 1.

country's farms) occurred during the year ending March 15, 1944. It is noteworthy that the highest rates of transfer during the present conflict are not taking place in those sections of the country where the greatest inflation previously occurred.

Between 1914 and 1920, farm buyers borrowed heavily to finance their purchases, causing agriculture to enter the interwar period burdened with the heaviest and most disastrous mortgage debt in our history. Since that time, the debt has been reduced greatly, by foreclosure in the early 1930's, and since then by repayment. This war has seen nothing like the rate of debt formation accompanying the last war: a much larger proportion of farms have been bought for cash, and more substantial down payments have been made on those for which credit is being extended. This means a much stronger financial position for farmers at the end of the war this time than was possible before.

Conclusions. The farm real estate market during World War II has not been characterized by a number of conditions which prevailed during the last war. Speculators have been less active; the supply of farms was relatively greater during the first part of the war; and credit has played a lesser part in the financing of farm land purchases. Further, land buyers have had the discouraging memories of the last boom to temper their optimism. On the other hand, this war has lasted longer than the last one; farm incomes have been higher, as have farmer holdings of liquid assets; the land market has been even more active; land prices have risen almost as rapidly; and the postwar spurt in demand and values has yet to begin. It would be dangerous then to consider the threat of inflation past. Although conditions are different, they are still ominous in many respects, as the next section will show.

CURRENT FORCES AND FUTURE DEVELOPMENTS IN THE FARM LAND MARKET

Present supply-demand relationships are by no means the only forces which are being and will be felt in the farm real estate market. In order to assess the future prospects of farm land values, it is necessary to consider both present and future developments.

The Present Situation. During the war, rising prices in general have tended to lower the value of money and to raise land values without any alteration of the basic supply and demand balance. Since the prices of land have not been subject to control, and since land is considered to be a safe asset, the demand for farm land by nonfarm persons has been increased from three different directions: purchase in anticipation of specu-

lative short-run profits (especially in the vicinity of the larger cities), purchase as a hedge against general inflation, and purchase by war workers who want something to fall back on when their present high incomes are reduced. The first two of these purchase motives will lead to heavy selling when prices turn downward, but the third will not.

The current occupational demand for farm land has been in part increased and in part decreased by the war situation. The drafting of farm youths into the armed services and the lure of war jobs have tended to defer a sizeable segment of demand until after demobilization is begun. But to offset this there has been an actual increase in the demand for farms by operators. The rise of farm incomes and the failure of taxation, bond purchases, debt reduction, etc., to absorb this increase completely have resulted in a rapid rise of farmer holdings of cash and demand deposits. Many farmers have expanded their land holdings either as an investment in a familiar asset or in preparation for the return of sons now in the service. Farmers displaced by Government land purchases have often re-entered the market. Many tenants, to whom the war has brought the first opportunity for the accumulation of funds, are now purchasing farms. There has been a further increase in the demand for farms and in the willingness to assume mortgages, because of present laws guaranteeing farm commodity prices for the first postwar years. Although their influence cannot be measured exactly, low interest and service charges on mortgages may be of considerable importance, especially to returning servicemen.

Finally, the demand for farms is increased by nonfarm persons who desire a "place in the country." These buyers fall into two classes: first, city people with a yearning for country life and the means of satisfying it; and second, nonfarm persons who enjoy country life and desire to enhance their incomes through part-time farming. A continued rise of urban incomes will probably enhance the first class of demand, while the threat of unemployment will add to the second, which may act to support the market in the event farm commodity prices fall.

The supply of farms for sale is relatively inelastic, especially since the same factors calling forth increased demand act to increase the reluctance of owner-operators to sell. Thus the supply of farms will probably continue to be provided by the death or retirement of operators plus offerings in the expectation of higher prices. But it must be remembered that many owners have heirs, and that many older owners are deferring retirement because of a sense of public duty, the desire to hold the farm

for an absent son, or the lure of high incomes. There is, therefore, small likelihood that the immediate postwar supply of farms can be greatly enlarged to meet the high level of demand.

But it is less a matter of possible expansion of supply, than the lesson of the last boom and the educational efforts of various interested agencies which has restrained farm real estate activity. One of the most effective instruments has been the National Agricultural Credit Committee, organized in 1941 through the leadership of the Farm Credit Administration. The membership of this committee was drawn from various representative farm organizations, banking groups, insurance companies, the Federal Reserve System, the Department of Agriculture, and other Federal agencies interested in farm credit problems. The Committee has done much to promote sounder agricultural credit conditions, to encourage the use of surplus farm funds for debt reduction, and to secure widespread publicity concerning the dangers of farm real estate inflation and means of combating it. The Committee has been aided by the research and publicity efforts of the Department of Agriculture, the land-grant colleges, and other State and Federal agencies.

The Immediate Postwar Period. For the year or two immediately following the war it is easy to see what the future holds for an uncontrolled land market. There is no evidence that the total demand for agricultural products will fall off during this period. Any reductions in military demand should be largely offset by increased civilian demands and the shipment of foods to devastated areas. Therefore, farm incomes should be maintained at a high level. At the same time there will be some lessening of the restraints which heretofore have prevented farmers from taking full advantage of high prices: quickening industrial reconversion will be accompanied by increased supplies of farm machinery, labor, etc. Returning servicemen desirous of becoming farmers will have easy access to credit. Finally, there will be an inevitable relaxation of psychological (and perhaps legal) restraints on the impulse to buy. Unless this is accompanied by a very rapid rise in the flow of civilian goods, it will greatly increase inflationary pressures throughout the economy.

All of this indicates the probability of a sharp rise in the occupational demand for farms, both by present farmers of all tenure classes and by persons returning from service or war industry. Since general prices and farm incomes will be high, purchases of farms for purposes of hedging and investment should continue at present levels or increase. Speculative activities probably will rise, also.

On the supply side of the market there is little likelihood of great change. Most farms held by institutional lenders have been sold. Farms absorbed into military or industrial sites will not be returned to agriculture until well after the close of hostilities, if at all. Retirement of operators is not likely to be greatly accelerated. Few investors will have decided to sell their holdings. Finally, there is little chance that farm subdivision and reclamations can ever add noticeably to the supply of farms. In fact, in the Southeast, it will become necessary to reduce the number of farms through consolidations in order to solve basic social and economic problems.

All in all, the most likely prospect for the farm land market appears to be a continued upward movement of prices and activity for some time after the war. If the general price level continues to rise, it will strengthen inflationary tendencies in the land market. Should the proportion of returning servicemen who desire farms be greater than now estimated, the increase in demand may take the form of an abrupt spurt accompanied by a dangerously rapid price rise. It is during this immediate postwar period that the gravest danger of a complete breakdown of market restraints is to be feared. Not only this, but there is reason to expect that farm purchases during this period will be accompanied by the formation of excessive new mortgage debts.

The Later Postwar Period. The evaluation of later developments in the market for farms is much more difficult. In the first place, if controls are soon placed on the market, early developments may be less inflationary than those outlined above. In the second place, much depends on the degree of success with which the rest of the economy makes a safe transition from war to peace. However, it must be remembered here that a high degree of interdependence exists between the future course of land values, on the one hand, and the general economic behavior of the nation, on the other. If the rest of the economy is able to maintain reasonably full employment and a high level of incomes, it will be much easier for the agricultural segment to make the transition, especially if rapid inflation of farm land values is avoided. However, if this inflation occurs, it will make the general economic transition much more difficult. Economic maladjustments cannot be confined behind bulkheads—they always spread beyond the area in which they begin.

During the transition period there may be some falling off in demands for and prices of farm products. A slight change may take place in the nature of farm sellers: investors, hedgers, and speculators will begin

gradually to sell their holdings and retire from the market. But it will not be until after the transition period that the forces of deflation will really become apparent. Then the time will come when demand (at existent high prices) suddenly will be saturated, and farm land values will turn sharply downward. Falling farm commodity prices and falling farm land values will reinforce each other. It is quite possible that both will drop well below the long-run normal; but, after the initial sharp decline, land prices are likely to lag increasingly behind falling farm prices and incomes. Eventually, if the rest of the economy is healthy and able to take up the slack, all three should return to stability at levels more in keeping with long-term prospects. On the other hand, if the rest of the economy is unable to absorb the shock of violent deflation, a situation similar to that of the 1930's may again develop.

METHODS OF PREVENTING A NEW LAND BOOM

It has been estimated that more than 2 million involuntary transfers of farms and tracts have occurred since 1920. This means that the equivalent of one-fourth to one-third of all land in farms has gone through forced sale in the last 25 years. Tragic and costly as this loss has been, it is by no means the only effect of a boom in farm lands. The whole agricultural fabric is penalized through the interruption of technological progress and by the stabilization of improper farm practices. In addition to all the suffering which it brings to the agricultural population, the collapse of a land boom saddles the nonfarm segments of the economy with the increased costs (through taxes and higher prices) which accompany a sick agriculture. It is still possible to apply curbs which would do much to restrain the development of a runaway boom; and the major methods of control are, therefore, discussed below.

Education. Machinery already exists to carry out an intensified campaign of public information. The potentialities of press and radio, of neighborhood discussion groups, etc., have yet to be exhausted. Among agencies which directly reach farmers, the State extension services, county agents, and land-grant colleges have done much, but still have not tapped all their resources. Likewise, it should also be possible to enlist more intensive efforts on the part of farm cooperatives, production credit associations, and similar rural organizations. In the areas where the greatest harm would result from a land boom, particularly in cash-crop regions, a last ditch attempt to create added awareness of the effects of high farm land prices might be implemented by the joint efforts of

these agencies plus schools, churches, and the like. The need is certainly great enough to justify the broadest approach. It is probable, however, that these methods, by themselves, cannot curb inflationary tendencies as strong as those now operating.

Since the greatest single factor in the present rise of land prices is the willingness of buyers to pay increasing amounts for their land, an effective curb on inflation would be a more skeptical attitude toward the value of specific properties. It is not enough to tell people that land is over-valued—*they must be shown that the specific property they desire is over-valued*. This can be accomplished through appraisal clinics to which potential buyers of farms could bring their problems and receive assistance in planning land purchases, in appraising the long-term value of specific properties, in budgeting their credit needs in terms of future income prospects, and in determining the alternative uses to which land could be put if bought at a given price per acre. This approach has not been utilized as fully as its potentialities merit. Such clinics also could act as central clearing points for the most authoritative information on prospective changes in prices, alternative opportunities, and competitive position, with respect to the specific farm enterprises of importance in the community. Finally, when the acquisition of more land is necessary for the achievement of a proper farm balance, the alternative local possibilities of leasing and buying could be explored.

Control of Demand through Allocation. In Australia, the farm land market (as well as that for urban real estate) has been controlled quite effectively through a permit system which operates upon prospective purchasers. The basic law has proved sound and land prices have been held to moderate increases. In this country, such an approach might be taken along the following lines. In order to purchase land, the individual would be required to prove need, ability to use it properly, and reasonableness of price. The priority of different classes of buyers could be so defined that it would not work undue hardship on legitimate purchasers (tenants desirous of buying farms, small owners who need to expand, etc.), while keeping speculators and other nonoperating buyers from the market. This would curtail or altogether eliminate some of the most inflationary present demands and tend to bring demand in line with the supply of farms without a rise of price.

Restrictions on Purchasing Power. Since excess purchasing power in the face of limited supply is a major cause of inflation, means of reducing or absorbing the free funds of potential buyers are an indirect curb on

inflation. This approach has two phases: (1) the elimination of excess liquidity in the hands of possible farm buyers, and (2) the control of credit extensions on farm mortgages.

The Control of Liquidity. In general the control of individual liquidity during World War II was left to voluntary methods. That these methods have at least partly failed is evidenced by the large volume of demand deposits now outstanding and the record amounts of currency in circulation; but partial success is demonstrated by sizeable individual holdings of Government securities and by the phenomenal reduction in outstanding debts of all sorts. So far as the farm land market is concerned, any further reduction of individual liquidity through voluntary methods will be worth while; but these methods can hardly prove sufficient to absorb *all* the cash and demand deposits which have accumulated.

There are two methods by which the several levels of government can restrain the future expansion of liquid funds. The first consists of simultaneously raising income taxes and reducing evasion and avoidance. The lack of farm business records and the difficulty of determining the taxable income of any farm enterprise is responsible for the failure of farmers to report all taxable income. Tighter collection of farm income taxes probably would take effect too slowly to affect present farm land prices. Still, it might restrain the farm land market—and it should be done in the interest of fair play in all events.

A different approach would be through local land taxes. In order to obtain maximum impact on farm land prices, it might be worth while to institute automatic reassessment of farm lands for tax purposes whenever resold, with the new price furnishing the assessment. In this manner, farm owners who held their land would pay prewar taxes, but buyers would know that higher bids would mean higher assessments. This might help to discourage speculation in addition to draining off purchasing power from those willing to bid up the price of land. Provision for a peacetime reassessment should be made.

Methods of Credit Control. Emergency powers possessed by the executive branch of the Government would permit the institution of credit controls for the period of transition. It would be a mistake, however, to think that curbing farm land credit can remove the threat of inflation: farm incomes are at record levels and there is too much liquid purchasing power in the hands of potential farm buyers. There would be no serious difficulty in raising barriers against easy institutional credit.

Generally speaking, lending institutions have followed a fairly con-

servative policy in appraising land and in extending credit; but individual lenders have accounted for almost half of the recently recorded farm mortgages. Thus, to be effective, credit controls must cover at least a major part of the individual lenders. This can be done under existing law, which permits individual lenders to be classified as "banking institutions." It appears, however, that any individual who makes just a single loan, and engages in no other lending transaction, could not be regulated under existing statutes. This limitation probably would not be serious, since "lending institutions" could be prohibited from participating in any transaction or taking over any loan in which an individual lends an excessive amount. Such a provision would make excessive loans less attractive to both individual lenders and borrowers.

The primary credit controls should act through appraisal and through the proportion of appraised value which could be encumbered. A further effective curb might be the raising of interest rates, service charges, etc., on all land-secured loans.

Credit control cannot be completely effective in halting the land price rise as long as potential buyers have large cash holdings. However, the controls outlined above could curb part of the rise and hold farm mortgage debts to a reasonable proportion of long-run value and income. This last is particularly pertinent, for one of the greatest dangers in the immediate future is an increasing mortgage debt on many farms.

An argument often advanced against credit controls is that they would be subject to wide evasion. Any law may be so criticized. In the final analysis, it is popular acceptance rather than power of enforcement which makes a law effective. A regulation of this sort, well publicized, would have a strong deterrent effect even if strict enforcement were impossible, especially if the regulations were so framed as to place no undue burden on legitimate extensions of credit.

Price Ceilings. Price ceilings have been placed on many goods (both consumption and capital) and services during the war. Some were imposed early in the conflict and have proved very effective in slowing down the rise of commodity prices. Others were delayed until after price rises were well under way and still have been effective.

There are several possibilities as to *how* land price ceilings could be determined (assuming the new legislation necessary to authorize them):

- (1) All farm land, whether or not for sale, could be appraised and therewith placed under ceiling. This would be extremely costly and time consuming, and can be ignored as a feasible possibility.

(2) No farm could be sold (other than, say, to heirs in settling an estate, or in some similar sale formality) without an official appraisal and the setting of a ceiling. Once set, this ceiling would apply to all resales during the period of control. The large proportion of credit-financed sales would make this method of determining ceilings a logical corollary to credit control, since one appraisal could serve both purposes.

(3) The price set in the first sale after a given date would be recognized as the ceiling. If different time intervals elapsed between the reference date and the first sales of similar pieces of property, this method would allow inequitable price differentials to develop.

The major effect of ceilings would be to discourage speculation and hedging by removing the possibility of pronounced price rises. Although the ceilings might still be so high as to penalize persons buying for occupational use, this would have resulted from the price rise, in any case. If this control were applied in conjunction with a permit system of land sales, the greatest single opportunity for evasion would be eliminated, although administrative effort would be greater than under a system of allowing sellers to decide which of several ceiling bids to accept.

Though the use of ceilings is one of the most effective methods of curbing future land price inflation, there is, unfortunately, little likelihood of its being politically acceptable. Too many influential groups are of the opinion that current increases in the price of farms are justified by prospects of high future farm product prices.

Capital Gains Taxes. A less direct method of removing the speculative motive from the farm land market would be to tax away the profits from all early resales. There have been three suggestions as to how this could be done: the use of a special capital gains tax, the extension of the holding period required before this capital gain could be taxable at less than ordinary income tax rates, and an increased transfer tax.

As outlined by its advocates and incorporated in bills already introduced into Congress, the resale gains tax would be administered under regular income tax procedures. Like the extended holding period, legislation would be required to instrumentalize it. This tax would be based on two variables: (1) the profit, excess of resale over purchase price, on any capital sale transaction, and (2) the period intervening between purchase and sale. As embodied in a Senate bill (S.1584, 78 Cong., 1 Sess.) introduced in December 1943, the capital gains tax was to apply only to the sale of farm real estate and took the form of an amendment to the Internal Revenue Code. The base of the tax was defined as the net gain from resale (allowing deduction of costs of improvements and other costs covered by the Code) of farm properties acquired after November 1,

1943, or within three to four years following the end of hostilities, by means other than "inheritance or devise or by gift," but excepting executor or administrator sales and sales through condemnation "or the threat or imminence thereof." The tax rate varied downward from 90 per cent on gains from sales taking place within two years of purchase, to 30 per cent on gains from sales taking place five but less than six years after purchase. These taxes would be, in effect, in lieu of regular income tax on such gains. On property held six years or longer, the tax did not apply, but the regular income tax re-entered the picture.

It is obvious that such a tax would go far toward eliminating either speculation or hedging in farm land, since it would prevent the realization of major profits through appreciation. Handled as a part of regular income tax procedures, it would involve no great administrative difficulty. Even the usual non-coverage of agricultural incomes, mentioned above, would affect it little, for most short-run speculating and hedging activities are carried on by nonfarm persons. The tax would cover a period long enough to reach well past the transition period, affecting all lands purchased within three or four years and sold within nine or ten years following the war's end, with few exceptions. Finally, since it would not affect long-term holdings of farm land, it could not interfere with the legitimate profits of owner-operators or true investors.

In the administration of a capital gains tax, it would be important that allowances be made to cover certain sales by farmers. For example, if a farmer found that he could improve his income and opportunities by selling his present farm and buying another, perhaps at a higher price, it would be unfortunate if he were prevented from shifting by reason of being forced to pay the tax if he sold his old farm. Similar situations can be visualized which might necessitate some degree of flexibility in the tax.

A comparatively mild deterrent would be merely to extend from six months to a longer period (usually placed at three years) the holding period necessary to define a gain on farm resale as a "capital" gain, taxable as such, rather than as ordinary income. Since income tax rates are the higher, it is thought that this redefinition of gain would be sufficient to restrain land speculation. Unfortunately, the income tax rates which would apply are relatively low in comparison to the rates applicable under the proposed resale gains tax and would provide far less restraint. Although far better than nothing, the extension of the holding period cannot be effective in a strongly speculative market unless supplemented by other measures. This tax has the advantage that, like the resale gains

tax, it could be administered through existing machinery acting under the Internal Revenue Code.

The suggestion has also been made that the present real estate transfer tax be greatly increased. The rates usually recommended have been in the neighborhood of 20 per cent *ad valorem* on property sold. There is no doubt that this tax could be administered, probably as well as is the present low tax, but its fairness and feasibility are quite another matter. The biggest objection is that it would affect *all* transfers regardless of the degree to which they were inflationary. Distress sellers would be taxed to the same degree as speculators. In order to absorb a large part of speculative profits without hurting legitimate sellers, this tax would have to be rendered impotent by many exemptions and qualifications.

Forced Savings of Receipts from Sales. The idea of making all sellers of farm land accept some proportion of their sales price in the form of nontransferable Government bonds, redeemable at some future date, has received some discussion. Advocates of this control contend that it would be less punitive and more flexible than other controls, and could be administered more simply. Although this approach would have considerable virtue at the beginning of a land boom, its slow cumulative effect is hardly adapted to the control of later stages of inflation. Further, there are legal complications to requiring the acceptance of any special form of tender. Finally, the singling out of a particular group of sellers and the application to them of a forced saving plan would hardly be acceptable.

LOW INCOME GROUPS IN SOUTHERN AGRICULTURE

by

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Problems concerning the distribution of wealth and income are not only among the most intricate in economic theory, but they are among the most thorny in the field of economic policy. Problems of production, since they are largely concerned with means instead of ends, can ordinarily be viewed with a fair degree of objectivity, somewhat in the way an engineer can view dispassionately the technical problems with which he is concerned. The distribution of wealth and income, on the other hand, involves the ends of economic activity and hence gives rise to questions of a non-economic order—questions that touch the status of men in their society and thus involve their personal lives and destinies. It is difficult to consider with scientific objectivity any question so heavily fraught with social and personal implications. In the real world, such questions tend to become the focal points of group tensions and political activity.

The tendency for problems of distribution to become political issues probably goes far to explain the long history of special aids to agriculture on the part of Federal and State governments. The socio-political expediency that has been thought to justify special consideration for agriculture as a whole is also invoked to win consideration for low-income groups within agriculture, for agriculture is far from being a homogeneous sector of the national economy. On the contrary, agriculture is extremely heterogeneous and contains groups that follow diverse patterns of production and have very different standards of living.

It is the groups at the lower end of the present income scale that will be discussed here, together with the conditions that create and perpetuate them, as well as policies that look toward the elimination of such groups or the amelioration of their position.

SUMMARY

Although rural poverty can be found in almost every section of the country, the degree to which it is concentrated in the South makes this region a national problem.

Three interdependent and overlapping causes are chiefly responsible for the prevalence of rural poverty in the South. These are (1) an unusually high ratio of population to land resources, (2) the overshadowing importance of cotton as a cash crop, and (3) a tenure system characterized by a high rate of tenancy. The first of the three is the most fundamental because it tends to perpetuate the other two, although it is also reinforced to some extent by them.

Possessing only 17 per cent of the total land in farms, the South has 40 per cent of the nation's farm population. Such a situation results in an average size of farm that is incapable of supporting a farm family on any decent level of living under prevailing agricultural practices on land that is inherently low in fertility. Whereas, in 1940, the average size of farm in the United States was 174.0 acres, in the South Atlantic States it was only 90.8 acres, and in the East South Central States it was 75.3 acres. Farms of 15 or 20 acres of cropland per farm family are very numerous throughout the region.

The high man-land ratio is an historical result of the cash cropping of tobacco and cotton under conditions of slavery. When land holdings shrank as a result of the breakup of the slave system, the necessity for the farmer of a few acres to find the cash for his fixed expenses led to a perpetuation of cotton cropping. Cotton still possessed, as it had before, the greatest comparative advantage as a source of cash.

The tenure system that followed the breakup of the slave system was characterized by a large proportion of tenants, both cash tenants and sharecroppers. Because of their need for cash and the small size of their farms, the tenants who pay rent in the form of cash or in a fixed amount of lint continue the soil-depleting cropping of cotton. Since sharecroppers who pay rent in the form of a share of the crop have little initiative in determining what they shall raise and since the landlord's interest lies in getting an easily marketable crop, they too continue to raise cotton.

As long as these three factors remain important, widely advocated programs for agricultural rehabilitation that stress soil conservation, diversification of crops, and farm ownership, desirable though they are, have little chance of success. Such programs presuppose more extensive forms of agriculture and hence larger farms; before they can be put into practice there must be a reduction in the ratio of population to land.

The solution of the problem of low farm income in the South therefore lies in large part in the realm of the general economy. A level of industrial activity that will attract large numbers of marginal and submarginal

farmers and farm laborers from the land is essential. Industrial development within the South is an important part of this national goal. The achievement of such a situation will require the intelligent cooperation of Government, banks, and private business.

When larger farms have become possible, training, guidance, and suitable financing may then be used to effect a gradual shift to more extensive and socially desirable types of agriculture. Failure to bring about the necessary reduction in population pressure on the land would result, in all probability, in the perpetuation of rural poverty in the South.

THE GEOGRAPHY OF RURAL POVERTY

The geographical distribution of rural poverty is brought out clearly in a 1943 study of rural levels of living by Margaret Jarman Hagood of the Bureau of Agricultural Economics.

With 1940 figures, an index of rural farm living is constructed, based upon such components as the percentage of occupied dwelling units with fewer than 1.51 persons per room; the percentage of dwelling units with radios; the percentage of farms with gross income of more than \$600 per year; the percentage of farms reporting automobiles of 1936 or later models; and the median grade of school completed by persons 25 years of age and over. From these series, each of which is indicative of a much wider range of data, an index is computed for each county. The county index is then related by percentages to a similar index for a nation-wide sample of counties. The county indexes thus express the level of living of the farm population of counties relative to the level of living of the farm population for the nation as a whole.

In terms of this index of rural farm living, it was found that most of the counties falling below the national average were confined to 12 Southeastern States. The only other areas having an index below that of the nation were some counties in northern New Mexico and Arizona, and a small cut-over area in the Great Lakes States. To an overwhelming extent, therefore, the problem of rural poverty is a problem of the southeastern part of the country. Since the greatest concentration of rural poverty is found there, this paper will confine itself to that geographical area.

Within the 12 Southeastern States, as might be expected, rural levels of living vary considerably, the index ranging from a high of 86 per cent of the national average in Virginia to a low of 64 in Alabama and Louisiana. In 4 out of the 12 States the index was below 70, and in 7 States

—Alabama, Louisiana, Mississippi, South Carolina, Georgia, Arkansas, and Tennessee—it was below 80.

If the farm population of the country suffers from a standard of living lower than that of the urbanized industrial population, then the farm population of the Southeast as a whole and particularly of the 7 States named is at a still greater disadvantage. What such a position means in terms of inadequate diet, housing, health, education, and the infrequency of all those facilities ordinarily associated with our ideas of a desirable standard of living is sufficiently well known to require no elaboration here. In the South, these inadequacies were so marked that in 1938 the National Emergency Council in its "Report to the President" gave to this region its now famous appellation—"the Nation's No. 1 economic problem."

SOME FOUNDATIONS OF RURAL POVERTY IN THE SOUTH

The fundamental elements of the South's problem of rural poverty are simple and obvious and have long been recognized by all observers. They are (1) a high ratio of population to land resources, (2) the overshadowing importance of cotton and tobacco as the region's leading cash crops, and (3) a land-tenure system that represents a more or less incomplete adjustment of the antebellum system of slave labor to the condition of legal freedom brought to the South's labor system as a result of the Civil War. These fundamentals, of course, are not independent of one another. On the contrary, each conditions and reinforces the others.

The apparent simplicity of the problem, however, does not make the solution any easier. Indeed, it is because these fundamentals are mostly historical products, because they involve elements of social lag, and because, in addition, they are colored by prevailing racial attitudes that the problem becomes extremely obdurate.

Population and Land. The relative overpopulation of rural areas is **not** a condition confined to the South. That 50 per cent of the nation's farmers produce 90 per cent of all farm products sent to market is sufficient evidence of a large surplus farm population in the nation as a whole. More people are evidently trying to get a livelihood from the land than can be supported by it on any reasonably satisfactory level of living.

In the South, however, overpopulation is especially acute and contributes heavily to the general agricultural problem for the nation. **With** the exception of a few scattered States, the Southeastern States comprise the only major geographical region in which the reproduction rate of the population exceeds unity, that is, where the number of children being

reared exceeds the figure necessary to maintain a stationary population. With one quarter of the nation's population, the South before the war was furnishing one-half the nation's natural increase in population. Inasmuch as the urban reproduction rate is no higher in the South than it is in other regions, the conclusion is clear that Southern farms have become the major source of the nation's population.

Two-thirds of the natural increase in farm population for the nation during the period 1930-34 occurred in the South where only one-half of the farm families were living. Migration out of the region and from farms to cities within the region has served to relieve the pressure of population on land resources to some extent but not enough to remedy the serious maladjustment implicit in the situation. With approximately 40 per cent of the nation's farm population, the South has only 17 per cent of the total land in farms. Under such circumstances, unless the soil be exceptionally fertile and unless it be tilled with exceptional skill, the result could only be a lower-than-average level of living for its cultivators.

The high man-land ratio implied in the foregoing figures is naturally reflected in the small average size of farm in the South. Whereas, in 1940, the average size for the United States was 174.0 acres, in the South Atlantic States it was only 90.8 acres, and in the East South Central States it was 75.3 acres. Within the 12 Southeastern States, the average size of farm varied from a high point of 127 acres in Florida to a low point of 66 acres in Mississippi and Louisiana.

Actually the situation is worse than these figures indicate. Within the South Atlantic States in 1940 almost half of all farms had less than 50 acres each and in the East South Central States more than half of the farms were of less than 50 acres. Moreover, not all farm land is available for providing a current living, some of it being wood lots, some wasteland, and some lying fallow. The result is that farms of 15 or 20 acres of cropland per farm family are very numerous throughout the region, and this amount of land is commonly considered insufficient to provide a decent living for a family under present cropping practices and where soils are low in fertility.

Cash Cropping. Another fundamental cause of the low farm incomes of the Southeast is the predominance of cash cropping—chiefly of cotton and, though to a lesser extent, of tobacco.

Nothing in commercial farming or in specialization in one or more crops is inherently uneconomic. On the contrary, many economies are possible where there is such specialization.

The evils of cash cropping in the South grow out of the relation of such a system to the man-land ratio. In one sense cash cropping is the cause of the man-land ratio, and in another sense it is an effect of that ratio. The two things are parts of a single whole that has its roots in the failure of an historic situation to adjust to technological and social changes.

Historically, the South was the nation's first great commercial farming area. The cultivation first of tobacco and later of cotton on a commercial basis to satisfy the demands of a world market dates from Colonial times. These two crops had one characteristic in common; namely, they were both large consumers of labor time at certain peak seasons.

In a new country, where land is abundant and cheap and where labor is in short supply, it would be natural to expect that a large amount of land would be used per unit of labor and that farming would become extensive rather than intensive. These expectations did not materialize in the South as they did in other areas because the character of the labor supply under conditions of slavery made supervision a necessity and prevented the dispersal of labor over very large areas of land. Labor thus came to be concentrated in the form of plantation gangs. A combination of land and labor that, in view of their respective supplies and costs, would have been uneconomic in a system of free labor could be made to pay the landowner financially only if the cost of the inherent wastefulness of the system could be shifted to labor and land—to labor in the form of a subsistence standard of living and to land in the form of the exhaustion of soil fertility. The exhaustion of the soil, however, did not represent any real cost so long as new land was available to replace that which had been worn out. The entrepreneur planter could shift the labor supply to its most profitable place of use. This geographic mobility of labor, plus the fact that the remuneration of labor was arbitrarily fixed at a subsistence level and represented no equilibration of supply and demand, made the concentration on cotton and tobacco financially profitable to the entrepreneur planters.

With the legal freeing of the slaves, the planters lost their power to shift the labor supply in accordance with their own interests. Indeed, since slaves had been capital, their emancipation left the planters with almost no capital except land. When entrepreneurs who possessed nothing but land confronted a labor supply destitute of land and capital, a *modus vivendi* was established in the form of a tenure system characterized by small tenant holdings. If anything, this system was more uneconomic than slavery, for the former geographic mobility of labor was

lost and the high man-land ratio became more or less permanently established as an institution.

Having lost geographic mobility, the labor supply was compelled, by its small holdings as well as by the terms under which access to land was secured, to continue the production of cash crops. These crops were still the traditional staples of the South. Cotton remained the crop that had the greatest comparative advantage, for any other crop or combination of crops would have implied a more extensive type of agriculture and, consequently, a lower money yield per acre. The immediate economic interest of any individual operator lies in securing the highest value product per acre. Whether he thus gets enough to maintain a desirable level of living, however, depends upon how many acres he has at his disposal.

The gross value of farm products per acre, for example, is higher in the Old Cotton South than it is in the newer cotton-producing areas in the Southwest. In Alabama in 1940, this figure was \$6.25 per acre—the lowest in the Southeast. In Texas, the value of farm products per acre was \$3.70; in New Mexico, it was \$1.23; and in Arizona, it was \$1.64. Nevertheless, the value of farm products *per farm* amounted to only \$522 in Alabama in 1940, compared with \$1,246 in Texas, \$1,455 in New Mexico, and \$2,370 in Arizona. The higher money yield per acre in the Old South was more than offset in its influence on the level of living by the small average size of farm. The size of farm, in turn, was the result of the disproportion of population to land resources.

Cotton and tobacco, as well as the corn that is generally raised for stock feed and farm consumption, have in common another characteristic that works to the disadvantage of the Southern farmer; namely, their tendency to impoverish the soil. These are all intertilled crops and so facilitate a rapid runoff of water in rainy seasons. The top soil, which has never been very thick in the South, is thus subject to a heavy annual loss from erosion. The "Report to the President" of the National Emergency Council called attention to the fact that 61 per cent of the nation's badly eroded soil is found in the Southern States. At least 22 million acres of once-fertile soil, it was said, had been ruined beyond repair. In order to make other abused and badly depleted lands produce, it is necessary to make heavy applications of fertilizer. In 1942, the South Atlantic States and the South Central States purchased nearly 6 million tons of commercial fertilizers—three-fourths of the nation's total. Meanwhile, it is estimated, 27.5 million tons of nitrogen and phosphorus compounds are leached out of Southern soil annually.

Exhaustion of the soil and the necessity for heavy fertilization implies higher costs of production, and rising costs place the Old South at a disadvantage in competition with newer producing regions where land is fresh and fertilization less necessary. In South Carolina, for example, in 1941 the yield of cotton was 166 pounds per acre, compared with the 1934-41 average of 290 pounds, and the cost of production was 16.6 cents per pound of lint, having risen from 8.7 cents per pound in 1934. In Arkansas, by way of contrast, the 1941 yield was 342 pounds of cotton per acre, compared with the 1934-41 average of 297 pounds, and the cost of production per pound of lint had fallen from 9.9 cents in 1934 to 7.9 cents in 1941.

Not only does the Old Cotton South face a future of increasing difficulty in competition with newer low-cost areas in the United States, but it faces, in common with all cotton producers, increasing competition in the world market from foreign countries. The prospect of the complete mechanization of cotton culture from planting to harvesting with the near approach of the mechanical picker and stripper may make it possible for the Southwestern areas to raise cotton in competition with foreign countries, for mechanical equipment is particularly adapted to level land and is most economical when used on large farms. Such equipment is less adaptable for use on the rolling terrain of the piedmont region and parts of the upper coastal plain in the Old South. It is therefore doubtful that this region can take full advantage of the cost-reducing possibilities of mechanization.

The Tenure System. If population pressure on the land and the system of cash cropping are two aspects of the strait jacket in which the Southern rural economy finds itself, the land-tenure system is a third aspect growing out of the others, but at the same time reinforcing them.

The predominant characteristic of this tenure system is the high proportion of tenancy. Tenancy, as has often been pointed out, is not necessarily bad in itself. It may represent a stage in a farmer's climb up the ladder to full ownership of his farm. On the other hand, it may represent a step downward from full ownership to a lower status.

Of all the farm tenants in the United States in 1935, 41.4 per cent were to be found in the Cotton Belt and 8.9 per cent in the Tobacco Belt. Tenants in these areas are of two kinds—cash tenants who pay a fixed cash rent or a fixed amount of cotton lint and croppers who pay rent in the form of a share of the crop, the size of the share varying widely from one case to another and depending upon the amounts of feed, fertilizer, and equipment that are furnished by the landowner.

The distribution of these classes of tenants differs markedly between white and colored farmers. Forty-four per cent of the white Cotton-Belt farmers in 1935 were owners or part owners, whereas 15 per cent were croppers and the remainder mostly cash tenants. Of the Negro farmers in the Cotton Belt, however, only 16 per cent were owners or part owners, while 51 per cent were croppers and the remainder cash tenants.

Theoretically, cash tenants partake of the nature of entrepreneurs, as do owner-operators, in virtue of their power to control the disposition of their labor and land among various alternative uses. Practically, however, this freedom of action is limited by the small average size of tenant holdings. The necessity of earning the cash to pay rent, taxes, and other fixed charges, as well as to provide items in the family living that are not produced on the farm, causes the small tenant farmer to squeeze his few acres for their maximum cash yield. Since cotton still possesses the greatest comparative advantage for the small farmer, the cash cropping of cotton is perpetuated. Where acres are few, none can be spared for crops that involve more extensive forms of agriculture.

Economically speaking, the sharecropper partakes more of the nature of a wage laborer—a laborer, however, who, while assured of a year's employment, is assured of no definite wage for his year's work. His wage—his share of the crop—is sharply affected by the yield of the crop and the price at which it is sold, as well as by the rate of interest charged by merchant and landlord on any advances that have been made to him. Moreover, since the landlord usually wants his return in the form of an easily marketed commodity, and no other commodity so readily lends itself to a division between owner and tenant as cotton does, the cropper must perforce plant his land to cotton. Thus, without an entrepreneur's freedom of choice, the cropper is really a wage worker who must in addition accept entrepreneurial risks.

Since leasing arrangements are typically made for a year at a time and are often merely oral agreements, there comes about a restless milling about from farm to farm by the tenants at this lower end of the scale. Tenants move more frequently than do owners, and croppers move more frequently than do cash tenants. Of the croppers in the 12 Southern States in 1940, 22 per cent had moved to their present farms within the three months preceding April 1 and 41 per cent had been on their farms less than 15 months.

This instability of tenure, of course, involves a social cost. A tenant moving from one farm to another each year has little incentive to main-

tain the tenant house or other farm buildings in good repair. He has little incentive to care for the land beyond his own short-run needs. He has no incentive to plant and cultivate a year-round garden that might serve to improve the quality of the family diet. The decade of 1930-40 witnessed some spectacular changes in the institutional pattern of farm tenure in the South. In the first place, farm ownership increased. This increase, however, was entirely within the ranks of white owners; the number of Negro owners on the contrary declined. There was also a sharp decline in the number of tenants of all classes, both white and colored. Since the decline in tenancy greatly overbalanced the increase in farm ownership, it did not represent any improvement in the position of Southern farmers. Indeed, the net effect of these changes was for the worse. It meant that tenants and share croppers were being forced out of even the tenuous connection with the land which they did possess. In part these displaced tenants migrated to the cities, especially to Southern cities, where the urban growth between 1930 and 1940 was nearly three times as great as the national urban increase. In part, too, these dislodged tenants and croppers sank down into the class of farm labor where they were more "marginal" than they had been in their former status. In either case, casual and seasonal employment and Government relief became their chief means of support.

In large part, the cause of these changes lay in the Government's agricultural policy of the 1930's: cotton acreage was retired in an effort to reduce the cotton surplus and to raise prices, and benefit payments were made to encourage certain soil-conserving practices. This policy, working within the traditional tenure system, gave landlords a direct economic incentive to reduce the number of their tenants even though, under the policy, they were supposed not to do so. In this way, the social cost of the policy tended to be shifted to the weakest tenure groups who were reduced to a still more precarious income status.

PROGRAMS AND POLICIES

The fundamental causes of low farm income in the South have been recognized for a long time. For a long time, also, a program has been advocated to deal with some of the more unfavorable aspects of Southern agriculture—a program that has become almost a tradition of the "New South." Three major items in this program are (1) soil conservation, (2) diversification of farm operations, and (3) farm ownership.

The ravages of erosion are so evident throughout much of the South

that little argument is needed to justify all practicable measures for soil conservation. Less obvious but equally deleterious is the exhaustion of the soil when planted year after year to the same soil-depleting crops. The plowing of rolling country to follow the contours of the hills instead of running furrows up and down the hillsides where every furrow becomes a gully to carry off the rainfall is, of course, only rational. Similarly, the terracing of hillsides to check the runoff of water is also essential. The planting of winter cover crops and legumes is necessary to check erosion and to restore plant food to the soil. Soil is the foundation of agriculture, and unless it is conserved there will be no profitable agriculture in the future.

The diversification of enterprises on the individual farm has been advocated for a number of reasons. By diversification a farmer can make himself more nearly self-sufficient; a larger part of the living requirements of himself and his family can be produced on the farm. By engaging in a variety of enterprises, a farmer spreads the risk of failure of any one of them over the whole group. By a combination of pasture for the grazing of livestock with crops properly rotated, much can be done to check soil exhaustion as well as erosion. Diversification also makes possible a fuller use of available labor time. In raising cotton, for example, the peak demand for labor comes in the spring and the autumn. For at least four months in the year, labor is idle except for chores. Crops, therefore, that have somewhat different peak demands for labor can be raised at practically no cost, since they would be produced by labor that would otherwise be idle.

As the third part of this program, farm ownership and the family-size farm have been insisted upon. These are conditions for carrying out the conservation and diversification parts of the program. Only a farmer who has the security of tenure that comes with ownership and who possesses a sufficiently large farm can be expected to engage in these better practices.

Not only has this general program been advocated for years, but the technical knowledge for putting it into effect has been carried to the farm leadership of the Southern States by county agents of the Extension Service of the United States Department of Agriculture with a great deal of missionary zeal and with the support of Federal and State agricultural authorities. It was expected that the improved farm practices would be adopted by the leading farmers and by imitation would finally reach the lower rungs of the agricultural ladder.

There is no gainsaying the general desirability of the practices advo-

cated in this program, and it cannot be said that its advocates have been entirely without success in winning a response. Nevertheless, the results have been far from commensurate with the time and effort and talent that have gone into the propagation of the plan.

The cause of this disappointing outcome is fairly clear. The program cannot be carried into effect in the face of the existing disproportion of population to land resources that keeps the average size of the farm small. It is idle to preach the desirability of soil-conservation practices and diversification to a sharecropper who has little or no control over the use to which his land is put. It is almost equally futile to do so to a cash tenant or an owner-operator with but few acres at his disposal.

Moreover, such practices require capital that must be invested for some time before it begins to bear fruit in increased income. The small owner-operator or tenant, with little collateral to pledge for a loan, experiences difficulty in securing such capital in the first place. In the second place, he cannot afford to wait for the fruition of an investment several years hence. The pressure to get a living in the immediate present is too insistent.

A study made in 1942 by the Agricultural Experiment Station of Alabama Polytechnic Institute in cooperation with the Bureau of Agricultural Economics of the United States Department of Agriculture brings out the limitations of such a program as that advocated. This study was concerned with ways and means of increasing incomes and conserving resources on cotton-corn farms in Marion County, Alabama. A typical one-mule farm in this county with a total area of 85 acres, of which 22.5 acres were cropland, was the subject of one set of calculations. As it was then being worked, this farm was yielding at 1935-39 average prices a net cash income of \$101.40. An alternative system was outlined. This included clearing some woodland in order to increase the amount of cropland and pasture. It included larger applications of fertilizer to increase yields of cotton and feed crops—the additional feed would make possible an increase in livestock. Fall oats, cowpeas, kudzu, and vetch were added. Idle cropland was reduced. Farm garden patches were increased.

These were the kinds of adjustments usually recommended. They would have involved an investment of about \$350 and an increase in total cash expenses amounting to \$140 a year. Net cash income, however, would have been raised to \$186.25—an increase of 82 per cent. If depreciation and interest on the investment are subtracted from these

figures and nonfarm income and the value of farm living produced on the farm are added, the family labor earnings, which were \$339 before the adjustments were made, would have been \$449 afterward. That the owner of this farm would not have been lifted to the class of the well-to-do by any such means is evident.

Similar calculations were made in this study for typical two-mule and three-mule farms. For a three-mule, cotton-corn farm of 141.5 acres, family labor earnings under the current system were \$327. After the recommended adjustments they would have been \$643. Even on a farm of this size—much larger than the average in any of the Southeastern States—the results are not sufficient to provide much in the way of a good living standard for the farm family. The farmer and his family would still be in the low-income group.

In a capitalistic society, income tends to bear a direct relationship to productivity, and high productivity presupposes the use of resources in their most economical combination. If rational behavior on the part of all concerned is assumed, labor is expected to move from a low-income area, where its productivity is low, to a high-income, high-productivity area. Or labor is expected to move from occupations yielding low incomes to occupations yielding high incomes. The objective conditions for such a migration of labor from the South to other regions, or from farms in the South to industrial occupations, are obviously present.

Such a migration has in fact occurred, but not in sufficient volume to relieve the pressure on the land. In the decade 1930-40, the South experienced 44 per cent of the nation's increase in population. While the States west of the Mississippi River, except Louisiana, experienced a decrease in farm population, the South Atlantic States had a 2 per cent increase and the East South Central States, approximately a 4 per cent increase.

But what did not happen even under the stress of the economic depression of the 1930's has been brought about to an unprecedented extent by the war. Farm labor has been drained off to the armed forces, to wartime construction work, to war industries, and into shipyards, and the population pressure has thus been relieved to some extent. The labor shortage has caused a great outburst of enthusiasm for cattle raising in the Southern States. Many an old cotton county in the Black Belt of Alabama and Mississippi is now green with pasture. War crops such as peanuts and soybeans have expanded, and other food crops as well. Diversification has been given a great impetus. The demand for most

crops is good and prices are high. Incomes are higher than they have been for a generation. Even the Negroes—the lowest income group of all—are enjoying a degree of prosperity they have never known before.

The postwar outlook, however, is not so bright. After one, or at most two, crop years the foreign demand for American foodstuffs will decline sharply. Cotton faces a gloomy future because of the loss of foreign markets to other countries, where production has been stimulated by the United States policy of maintaining prices above the world level, and because of the growing competition of rayon and other substitute fibres. Only 20 million acres were planted to cotton in 1944, the lowest acreage since 1895. Conditions that seem most likely to prevail in the postwar period all point to a further decrease in cotton acreage.

On the other hand, the end of the war will see the return of many thousands of men from the armed services and from war industries. On their return, these men will find a radically altered pattern of land use—one in which the need for labor is much less than it was when they went away. There literally will be no place for them on Southern farms. In a country that was once a good cotton country but which has been converted almost entirely to cattle raising, a banker described the situation by saying, "When these people come back, they will have to march right on down the road. There will be no place for them here."

Under such conditions, the economic problem of low-income farm groups may be converted into a social problem of quite another order, especially since it will be darkened by the racial issue. The basic difficulty of the South—the high man-land ratio—will then stand out, starkly demanding a solution.

Some elements in the solution are clear:

(1) There must be such a demand for labor in the nation's industries at such wages that the excess population of the rural South will be drained off. Although the inauguration of desirable agricultural programs is not necessarily contingent upon industrialization, to put such programs into effect in the absence of industrial opportunities for the displaced rural population would result merely in trading one social problem for another of equal gravity.

(2) Better still would be an industrial expansion in the South itself sufficient to absorb the surplus rural population. If labor were perfectly mobile, of course, it would not matter where industrial expansion occurred. Labor would be expected to gravitate to the jobs. Practically, however, labor is far from being perfectly mobile. The result is that an industry presenting a given number of job opportunities in Illinois has far less capacity to absorb Southern labor than would the same industry located in the South.

(3) To this end, businessmen should be on the alert to discover and develop all possible opportunities for industrial growth and banks should be prepared to finance such activities to the limit of their ability, despite a certain element of risk that would necessarily be involved. Banks might well be encouraged in making such loans by some form of guarantee.

(4) Vocational and technical training should be provided in order to fit rural labor to the requirements of modern industry. Access to such training as well as to industrial employment, both skilled and unskilled, should be given without regard to race; for the Negro, being on the lowest rung of the agricultural ladder, is likely to bulk large in the surplus population that must be drawn off from the land.

(5) Thorough and systematic efforts should be made by Federal, State, and local governments to place men in jobs for which they are fitted and, if necessary, to assist them financially to move to such jobs.

If the farm population of the South could be reduced by these means to the point where a large increase in the average size of farm could be effected, then the extensive forms of agriculture that have long been advocated would have a better chance of success. Soil conservation practices could be more widely adopted. If this condition could be brought about, then:

(1) The system of tenure should be reformed so that tenants would be placed on a cash basis and under long-term leases, with provision for the recovery at the time the lease terminates of the unexhausted value of any improvements they may have made.

(2) Widespread training should be provided in the techniques incidental to new and unfamiliar farm projects. Ways and means of increasing yields of familiar crops should also be widely taught.

(3) Banks should stand ready to finance by long-term loans and at reasonable rates the radical shift from intensive to extensive agriculture as well as the adoption of soil conservation practices, mechanization, and any other development that would have the effect of reducing costs. Here, too, bank loans for such purposes might well be guaranteed by Federal Reserve Banks or other appropriate agencies.

(4) Farmers should be encouraged to carry their product one or more processing stages beyond the harvest where this is physically possible. This might in some cases be accomplished on the farm; in other cases it might be done in small local plants, cooperatively or privately owned.

The key to the solution of low agricultural income seems to lie not in the field of agriculture itself but rather in that of the national economy as a whole. If industry fails, nationally or regionally, to provide employment for the people who are no longer needed on farms, because of the increased physical productivity in agriculture and the inelastic character of the demand for agricultural products, then the South faces a bleak future indeed. This is the South's dilemma: Either a large fraction of its

farm population must shift to nonfarm employment within or outside the region, or the South must resign itself to being the most depressed rural area in the United States in the future as it has been in the past. In the latter event the rural South will probably have to be supported to a considerable extent by Federal subsidies of one kind or another or by the channeling of increasing expenditures for Government public works into the region.