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Economic conditions change quickly. In the past year agricultural prices have continued to decline; consequently, for the American farmer and the associated agricultural industries, there is less certainty about the . . .

Agricultural Economic Outlook

Any assumptions are based upon the premise that we will not have an all-out war. If we do, it is my guess that we will again have inflation—farm prices will go up, farm incomes will rise, and considerable inflation will occur regardless of governmental controls. The rest of this paper will be based upon the assumption that the unsettled conditions in the world will continue for most of the next decade. An armistice in Korea will not bring an end to the tension existing between the various segments of the world. The degree of tension will vary from time to time. This means that large military expenditures, necessitating heavy taxes, will be required.

Prices Have Been Anything But Stable

Let us briefly review what has happened to wholesale prices in the United States since 1800 (Figure 1). Without going into detail, one can see that prices have been anything but stable. There have been four inflationary peaks, each associated with wars—the War of 1812, the War Between the States, World War I, World War II, and the Korean War. In addition prices are now at a high level in terms of history, even though there has been some decline in the past year. The movement of the general price level is, perhaps, a most significant factor affecting the economic well-being of the American farmer.

During periods of rising prices, prices received by farmers go up faster than prices paid by farmers (Figure 2). This makes for higher net income in agriculture. This happened during World War I, during the recovery from the depression of the 30's, during World War II, and again with Korea. The opposite is true during periods of falling prices; that is, prices received by farmers drop faster and further than prices paid by farmers. In other words, farm costs stay high while farm prices decline. This happened in 1920 following World War I, in the depression of the 30's, following World War II, and is happening at the present time. The fact that all prices do not move together, uniformly, is of great significance to American agriculture. The amount of money farmers have had left for their year's work and management has fluctuated almost directly with movements in the general level of all prices.

Normal Relationships

The data presented in the charts are of particular significance at the present time in discussing agricultural outlook. In some quarters we hear talk about returning to the sound dollar. The sound dollar has not always been defined, but some infer that a sound dollar is one that has a 100% purchasing power in terms of the old prewar dollar. All I can say is that if prices fall until we have the old 100% prewar dollar this would have very serious economic implications, including disastrously low farm prices, unemployment in our cities, and low profits for business. It is my judgment that we should not attempt to shrink our money supply and force prices down to anything approaching the pre-World War II level. There are just too many adjustments involved for all our economy. On the other hand, there is no assurance that we can maintain the peak now existing. If we knew enough about monetary management, that might be preferable to drastically reduced prices.

The census lists nearly 5.5 million farms in the United States. Actually, there are perhaps not more than 3 million commercial farms. It has been estimated that 10% of the farms produce 50% of the products sold by farmers. This discussion applies to the commercial family farms, not to all the part-time farmers, rural residents, and subsistence farmers.

It seems unrealistic, to expect farm returns to continue at the levels that

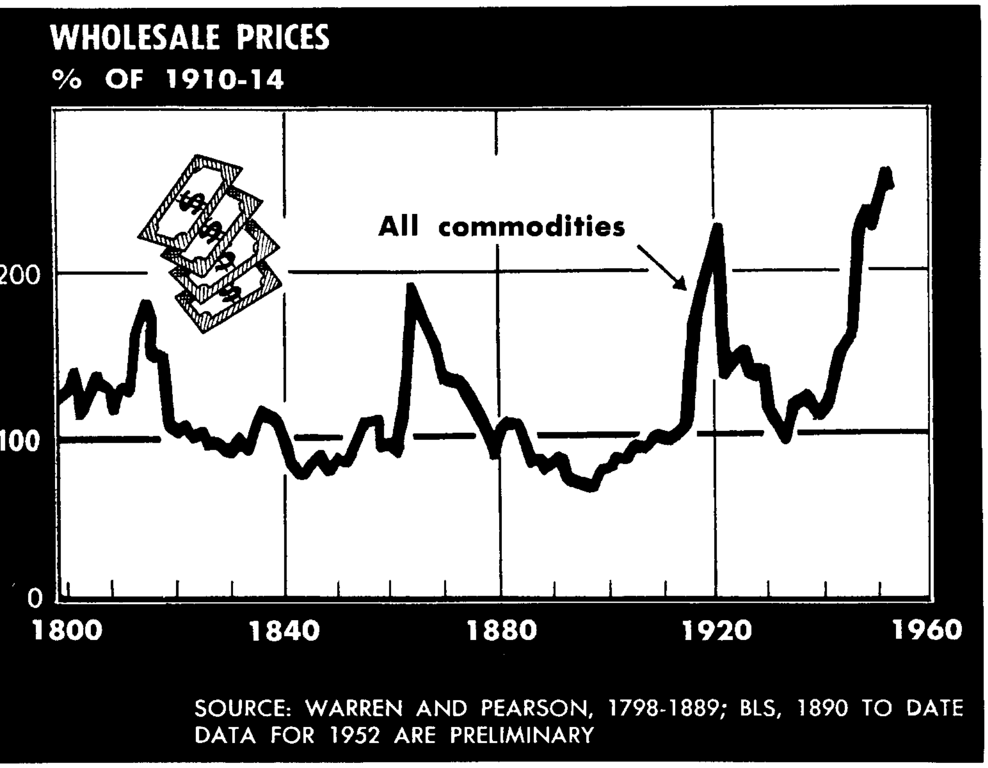

Figure 1

have existed during most of the past inflationary decade. From 1942 to 1952 farm prices averaged 107% of parity. Parity is that price for farm products that will give them the same purchasing power as they had during the base period, usually 1910-14. We are in danger of worshiping at the shrine of parity to too great a degree. In the 43-year period, from 1910 to 1952, farm prices averaged 95% of parity. If we omit the two world war periods, World War I and World War II, farm prices averaged 90% of parity. Leaving out the great depression and the war periods, they averaged about 93% of parity. It is my judgment that somewhere between 85 and 95% of parity is a more normal relationship between prices received and prices paid by farmers than the so-called 100% of parity. Now this has nothing to do with what is fair or what the farmers ought to have. I simply think this is a more realistic appraisal of what is likely to exist. Unfortunately I am not one who has a lot of faith in the Government's ability to keep prices too far out of line from where they might otherwise be under a more free economic condition. The efficient, well-organized farm that has not gone into debt too heavily at high prices will be able to operate at an average of 90% of parity.

Fertilizer Industry and Farm Incomes

As pointed out earlier, the fertilizer industry is an important segment of the American agricultural economy. It has contributed materially to scientific production. Agriculture has changed a great deal since pre-World War II. Farm output has increased around 40%. Total man hours used in agriculture have decreased 17%. The use of farm machinery has increased 76%. The use of major plant foods is up 230%. The acres of crop land have remained practically unchanged. Crop production per acre has increased 29%. The American people are today virtually eating on science, and they will do so to an even greater degree in the future.

The long-time trend in the consumption of plant food in the United States has been markedly upward, increasing from 40,000 tons in 1900 to about 5 million tons annually in 1952. Compared with each previous year, tons of fertilizer consumed have been higher in all but nine of the last 52 years. The major declines took place during the 1920-21 drop in prices and in the early stages of the depression of the 1930's.

According to the material presented last year by Oris Wells, Chief of the Bureau of Agricultural Economics, in 1920 farmers spent about $359 million or 2.8% of their cash income for fertilizer. During the period of 1923 to 1927 fertilizer expenditures by farmers ranged between $205 and $299 million annually, or about 2.1% of their total farm income. Fertilizer sales dropped from $268 million in 1929 to $113 million in 1932, although in each of these years farmers were spending 2.4% of their cash income for fertilizer. By 1937 this expenditure had increased to $208 million. With the drop in prices, it had fallen, by 1938, to $182 million. By 1951 farmers were spending $867 million or 2.6% of their cash income for fertilizer. It is not impossible that farmers may reduce fertilizer purchases if farm incomes decrease significantly.

Short-Term Outlook for Agriculture

Farm prices are now about 17% below the high point reached in February 1951. They have declined rather rapidly during the past year, about 11%. The fact that farm prices are declining, in itself, is not a particularly disturbing factor, except that this decline has taken place at a time when business activity and consumer incomes are at a very high level. The recent price decline is not the first experienced since World War II. From January 1948 to December 1949, farm prices declined an average of 24%. With the Korean War, farm prices increased rapidly, and even with the present decline they are still 10% above the pre-Korean, December 1949 level. However, prices paid by farmers are about 13% higher.

Now let us look into what might be some of the causes of this recent decline in farm prices. The 1952 production of agricultural products was 4% higher than the previous year. Exports of farm products were down approximately 30% compared with the high level that existed in 1951. The combination of increased production and a drop in exports meant that there were considerably more farm products to be disposed of on the American market. It looks as if the price relationship that existed between American farm prices and American industrial prices could not be maintained, even with high business activity and good consumer incomes.

While any price decline is distasteful to a producer, the present situation does not spell disaster for American agriculture, and that it is not of such great severity that we must act as if we are headed into a depression. The decline in cattle prices has been drastic, but a review of the long-time relationship between cattle prices and other agricultural prices indicates that cattle prices were out of line and could not be maintained indefinitely at the previously existing level.

With industrial activities at a high level, it appears that the year 1953 will not be a bad year for farmers. It will be slightly less favorable than the year 1952, due primarily to the drop in farm prices and farm expenses remaining high. It is likely that net farm income may be off somewhere around 10% compared with 1952, when it was down considerably from the 1951 level. This will mean that farmers will be less inclined to buy. It will take more effort to sell them such things as machinery and fertilizer. They will have to be convinced that fertilizer is a good buy and that it is a money-making investment. A curtailment of expenses is not necessarily a wise procedure when an income starts to fall.

It appears that in the year 1954 we will experience some further declines. It is entirely possible that we will have some slackening off in business activity as United States passes a peak in its military spending program. A mild business recession in late 1953 or 1954 is a distinct possibility; however, a serious business depression is not expected. The year 1954 might not be a good one for American agriculture compared with the wartime period, but neither will it be a disastrous year.

By the foregoing I do not mean to imply that there will be no agitation or discontent, or that there will be no problems in the agricultural sector of our economy. Actually, there is likely to be much room for complaint when we compare the agricultural situation with previous conditions. Wheat may be headed for trouble. The price of wheat is higher than we can maintain it over a period of years. Governmental programs may keep it up for a few years, but sooner or later the economic facts of the situation will have to be faced.

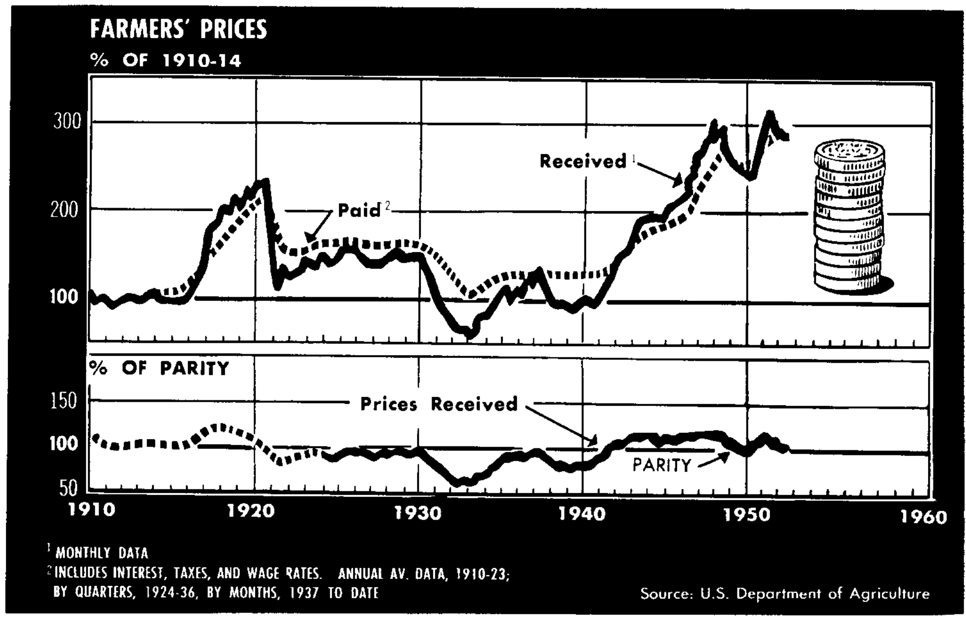

Figure 2

Long-Time Outlook for Agriculture

The long-time outlook for agriculture varies greatly according to the approach you take. There are some who envision an acute shortage of food; there are others who, viewing the great production capacity of this country, predict disastrous agricultural surpluses. I do not foresee a shortage of food in this country. I do not, however, mean that all the world will be well fed, well housed and well clothed.

Any discussions of the long-time outlook for agriculture are based on the premise that we will not have an all-out war. In event of an all-out war, there will be inflation, high incomes in agriculture, and much demand for the products of agricultural industries.

I cannot see a very bright future for the small, inefficient farm. Our new technologies in agriculture are requiring more and more capital and larger farms in order to operate efficiently. This does not mean big corporation farms, but larger commercial family farms. On the other hand, the farmer with an efficient operating unit who is in a position to equip it in terms of modern known-how should be able to get along in a rather satisfactory manner during the next decade.

We have a tremendous production potential in American agriculture. Prof. Heady of Iowa State College recently published an article which stated that with existing know-how and the same acreage of land, year after year Iowa farmers could produce more than 50% more grain and 170% more forage in the form of hay and rotation pastures than they are now producing. He mentions that this increase would come by boosting the per acre yields of corn and oats by 60% and hay by 90%. Such production figures cause one to wonder if American agriculture does not have the capacity to produce more than is needed for the American economy and the export markets during the next decade. From the standpoint of production, therefore, I would say that we have the ability to produce; the amount of increased production will depend upon the exisiting price relationships.

The well-being of the American farmer is closely tied in with the export market for farm products. While the domestic market is by all odds the most important market to the farmer, the export market does materially influence prices received. I am not too enthusiastic about the possibility of a greatly expanded volume of agricultural exports, unless we continue a give-away program. The large volume of agricultural exports for the past several years has been brought about by the fact that Europe had not restored her production, plus the fact that by one means or another we have been extending credits which greatly facilitated the movement of our products. With the present dollar shortage, when foreign countries do have dollar exchange they tend to seek needed food supplies elsewhere and conserve their dollars for purchases of our industrial products. While the export market does not look too bright on a commercial basis, nevertheless as long as the cold war is as hot as it is now a considerable quantity of our excess production will find a use in foreign areas.

One of the optimistic factors in the agricultural picture is our tremendous increase in population. We now have about 28 million more consumers than we had in 1940. It is estimated that by 1960 we will have 16 million more than we now have, or a total of about 175 million people to feed. Some people dramatize our population increase by calling it the fifth plate; that is, where we had four people in 1950 we will have five people to feed by 1975. Our population is now increasing at the rate of about 1.5% per year. While there is no assurance that this high rate of population increase will continue, it does appear almost certain that the increased population will provide an expanding home market for the American farmer. If we can maintain a fair degree of business activity with a good distribution of consumer purchasing power, the American farmer should have fairly good markets for his products.

Expect Period Similar to 1922–29

A most significant factor in discussing the long-time outlook for American agriculture is the normal movement of price relationships. If we have checked the inflationary spiral in prices and if we assume that prices are to decline slightly over the next decade, we can foresee a situation in which prices received by farmers could be low relative to farm operating costs. We know that once prices go up, many of the costs of doing business, such as freight rates, wages, rents, machinery, and marketing costs, are slow to come down. A period of high operating costs relative to prices received by farmers, in my judgment, could prevail even though we have a high level of industrial business activity and good consumer income.

If I had to make one definite guess as to what the future holds for American agriculture, it would be something like this. Agricultural net incomes will be lower in 1953 than in 1952 by something like 10%. In 1954 we will likely have some further decline. After this, barring an all-out war, agriculture may be headed for another period similar to that which existed between 1922 and 1929, that is; one in which we had fairly good industrial activities, one in which farm costs remained relatively high in relation to prices received by farmers. Farm prices during that period averaged between 87 and 95% of parity. Those who contracted high indebtedness during the inflationary period of World War I were in trouble. I expect somewhat the same thing to happen again. I do not feel that this will be a disastrous situation for agriculture, but it is a long way from the conditions farmers experienced during the war years. The next decade will, of course, not be exactly like the period 1922 to 1929. We have a number of techniques now which should help. What I am trying to say, however, is that there will be a strong tendency in that direction due largely to price adjustment in a deflationary period following a rather long and pronounced period of inflation.

The more we can do to prevent a drastic deflation in prices, the less likely are there to be problems in agriculture, and as far as that goes, problems in the rest of the economy as well. I have a feeling that we know pretty well how to control inflation by monetary and fiscal means if we had the political fortitude to do so. I have much less confidence in our ability to prevent deflation by such means. We can restrict the supply of money and credit, but it is very difficult to force people to borrow money or to use credit if they cannot see an opportunity to obtain a justifiable return.

Problems, Challenges, and Opportunities in Agriculture

Many problems, challenges, and opportunities face American agriculture. Only a few willl be mentioned. A book could be written concerning any one of them. Most of the really important problems facing farmers are the same as those facing other citizens. They include such problems as war or peace, national security, maintaining a high level of productive employment, and increasing our standard of living.

One problem is the role that the Government is going to play in regulating farm prices. High fixed prices above the free market level involves controls. A progressive agriculture with millions of individual farm businessmen making individual decisions as to how to operate their farms, how to adjust to changing conditions in an attempt to obtain the largest profit, is one of the greatest assets that this country possesses. If farmers insist on high support prices, then they will have to accept the accompanying controls. In my opinion we have never experienced the type of controls necessary to maintain some of the existing prices during a noninflationary period. Do not forget that farm prices have increased in 16 out of the last 20 years.

We do not have the answer to the farm price problem. We are not sure that we are even close to the answer. It is one of the big problems facing the American public, tremendously complicated both from the economic and from the political angle.

We need a positive program for the low income farmers in this country. This cannot be a price program. They do not produce enough for sale to yield satisfactory incomes, even if they receive high prices. This involves education and, for many, opportunities for other types of work; for others, it involves providing an opportunity to become more productive in agriculture.

One of our big challenges in agriculture is to bring about greater consistency between our farm programs and our international policies. Better international relations are undoubtedly one of the key problems of our time. Farm programs should contribute to, not hinder, this objective. The American farmer has a real interest in maintaining a large volume of agricultural exports. In order to export we must also import.

Another of our real challenges is to promote increased efficiency in agriculture, yet it is not impossible to foresee a situation in which productive efficiency could be sacrificed for other objectives. The well-being of the majority of the American people cannot be increased by equally dividing a smaller and smaller pie. The best hope is for our citizens to participate in the fruits of a productive and expanding economy.

I do not have a great deal of confidence in the ability of government to solve all the problems of the farmer. I do, however, have much confidence in the ability of the American farmer to adjust to changing conditions. Downward adjustments are not made without considerable pain and sacrifice. The American farmer has a right to expect that other businesses in the economy should also attempt to adjust to changing conditions. Therein lies a real challenge to other industries, particularly those serving the farmer.

Opportunities for Fertilizer Industry

The fertilizer industry plays an important part in efficient agricultural production. Although your sales have increased rapidly, in many instances the use of fertilizer by farmers has not even come close to approximating the amount recommended by the experts, so your sales should expand.

One of the stated purposes of the American Plant Food Council is to support and encourage agricultural research and education. It seems that many people are talking about the need for research but are doing very little about it. Talk will not do research—it takes dollars to hire trained personnel and to buy equipment. With increased cost, the real support for much of the fundamental research in agriculture has been decreased.

There is a strong possibility that industries serving agriculture will be subjected to much more criticism than they have experienced during the past decade. It is difficult to explain to farmers why the price of things they buy does not come down in the same proportion as the price of the products they sell. There will be increased problems in the area of public relations.

There will be increased pressure for lower prices. Increased costs cannot be as easily passed on in increased prices. Farmers will be harder to sell. Competition will intensify. The fellow who can cut cost, produce, and merchandise efficiently will progress. The inefficient will and should fall by the wayside. That is the American system. It is not a one way street from rags to riches.

It is not enough to be just salesmen of fertilizer. People working with and contacting farmers have the responsibility of spreading sound information on some of the broader problems, such as our international responsibilities, foreign trade, various farm programs, and the like. They also can be great disseminators of education concerning better production practices in all phases of farming.

Just as the day is past when the farmer can confine his interest only to what takes place on his own farm, the day is also past when a businessman in fertilizer industry can confine his interest only to manufacturing and merchandising of fertilizer. Businessmen must accept their responsibilities as citizens in a democracy. We live in one of the few places in the world where what the individual thinks is really important. We all have responsibilities that go far beyond our particular industry. Likewise, what happens in the fertilizer industry is of direct interest to many people besides the owners of the business. We are in an age of enlightened capitalism. The responsibilities are great, but the opportunities are even greater.

In closing, the economic outlook for American agriculture is not a bed of roses, nor is it a crown of thorns. There will be many problems. Some will solve themselves with the passing of time. The Government will aid in the solution of some. Private business will help with many. The farmers themselves will have to solve most of their own problems. Some problems will remain unsolved and there will be new ones which we do not now know about. I am confident, however, barring a destructive World War, that the American people will continue to enjoy a rising standard of living and that the efficient farmer will participate in the rise.

(*Address before the American Plant Food Council, annual meeting, June 12, 1953, Hot Springs, Va.*)