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CAUSES OF THE AGRICULTURAL DEPRESSION IN GREAT BRITAIN

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ABOUT 1873 the period of agricultural prosperity and high farming in England, which had characterised the previous 20 years, passed away, and depression set in, which continued with minor ups and downs until about 1896. During that period the general trend in British agriculture was downward; prices declined; rents fell; marginal land went out of cultivation and as the depression deepened, distress and privation spread over a large part of the countryside. Towards the latter year the government set up a Royal Commission upon the agricultural situation, which, after taking voluminous evidence, stated its conclusions as follows: "We have no hesitation in expressing our entire concurrence in the opinion that the crisis in agriculture is due primarily to the fall in prices."

In 1920 the conditions of almost spectacular prosperity in British agriculture which had accompanied the World War abruptly came to an end and once more gave place to a depression which, although its intensity and character has changed, has continued ever since.

Today, in reviewing this depression we are forced to the same conclusion as that of the Royal Commission in 1896. The primary cause was the fall in prices.

When we come to examine the causes which have brought about the decline in prices we must first of all distinguish between those causes which lead to fluctuations in the general level of commodity prices taken together, and those which lead to fluctuations in the prices of individual products taken separately. Historically, it is the fluctuations in agricultural prices as a whole which have been of the greatest importance and have had the most far-reaching consequences, for price changes of individual commodities which are not part of a general change tend to neutralise one another, and therefore are less injurious to the farmer.

The initial step therefore in the analysis of the depression of the last ten years must be to examine the causes and agricultural consequences of a general fall in commodity prices.

Professor Sering in his address on Monday evening referred to the two periods of agricultural history which I have just mentioned—the period at the latter part of the nineteenth century, and the period beginning about the middle of 1920. Both were characterised by falling prices, both by agricultural depression spread over many countries. Professor Sering sought to show that in each period the predominant cause of the fall in prices was the intensification of production—although other factors played their part. I must first of all give the reasons for respectfully differing from those who believe in this interpretation of these two important periods of agricultural history.

It is not uncommon to hear the view expressed that the general fall in commodity prices can be accounted for on the assumption that there has been a *general* increase in the world's production of goods in relation to consumption, or in other words that supply has outrun demand. Now it is obvious that in the case of a single commodity, if production outruns demand, the price will fall. But the phenomenon we have to deal with, characteristic of both the periods I have referred to, is a general and prolonged fall in commodity prices distributed in a fairly orderly and symmetrical fashion over the whole range of commodities. To assume that such a fall in prices can be accounted for by a maladjustment between supply and demand involves—I suggest—a conception of consumptive demand contrary to experience.

The incentive to increase the gains of industry is always present; indeed it is the motive of economic progress. The twenty years preceding the war were probably as prolific a period of intensified production as any in history (taking the world as a whole).

Carl Snyder has calculated from a wealth of statistical data, that trade in the United States has been increasing during the last fifty years at the compound rate of 4 per cent. Joseph Kirchin, measuring the economic progress of the world by figures of physical production, arrives at a similar conclusion. The League of Nations in its Memorandum on Production and Trade estimates the recent growth of world's production, at approximately a rate of 3 per cent.¹

World population has been increasing during these periods at approximately 1 per cent per annum. Therefore, it is true to say

¹ See Strakosch-Economist, July 5, 1930, "Fall of the Price Level."

that there has been excess of production in the world of about 2 per cent per annum, over and above the needs to maintain the increasing population at a stationary standard of life. Yet, during the 20 years before the war, prices were rising and not falling, and except for a short period about 1907, none of the phenomena which have characterised recent years were present.

On these grounds alone we are entitled to doubt the theory that a general fall in prices is caused by supply outrunning demand. But it should be obvious that an increase in production distributed evenly over the whole range of commodities cannot alone lead to what is ordinarily meant by over-production.

Trade is an exchange—between individuals, between communities, between nations. The farming community exchanges the produce of the soil for the produce of the towns. If the volume of production of the whole range of commodities increases 3 per cent, then each producer would on an average have 3 per cent more of his own produce to exchange for the produce of others; farmers would exchange their greater produce for the greater production of the towns and both would be enriched. No disturbance in the exchange of this greater output, no fall in prices, takes place so long as there are available media of exchange in the form of money, to correspond with the increased volume of trade.

This does not, of course, mean that agricultural prices as a whole cannot be depressed relative to the general level of prices, by a relative intensification of agricultural production, or as Professor Sering truly pointed out, through a fall in demand for farm produce, as a result of the impoverishment of an industrial community. In so far as deviation from the line of symmetrical production occurs, in the case of a single commodity or in a class of commodities, the result is shown in a corresponding deviation between the price of that commodity and the general price level.

But the outstanding characteristic of the fall in prices during the last 10 years has been the evenness with which it was spread over all classes of goods—particularly is that true of the earlier years in this period. To explain a fall in prices possessing this particular feature, we are bound to assume that it is caused, not by a change in supply and demand, but by a change in the purchasing power of money.

The monetary interpretation of the periods of depression which have from time to time afflicted agriculture, is not merely arrived

at by the reasoning I have just briefly outlined. The direct historical evidence is overwhelming. It is no new fact in agricultural experience that the industry should be feeling the consequences of a general price movement. So far as we have statistical data to go upon, it would be truer to say that agriculture has hardly ever been in any other position.

The long period changes in the fortunes of British farming—from prosperity to depression, and again from depression to prosperity—have been more intimately connected with the changes from the upward to the downward, and from the downward to the upward movement in the general level of commodity prices, than with any other single economic cause. These periods are roughly:

1815-1850	Prices falling	Agricultural depression
1850-1872	Prices rising	Agricultural prosperity
1872-1896	Prices falling	Agricultural depression
1896-1914	Prices rising slowly	Agricultural recovery
1914-1920	Prices rising rapidly	Agricultural prosperity
1920-1930	Prices falling	Agricultural depression

These are periods well known to economic students, but their significant feature is that the change from falling to rising prices, and from rising to falling prices, was in each case, without exception, associated with a change in monetary conditions. The twenty years of agricultural prosperity from 1850 onwards, was associated with the discovery of new gold mines in California and Australia and the rapid expansion in the world's stocks of monetary gold; the depression of 1872-1896 was associated with the spread of the gold standard to bimetallic countries and countries whose currencies had previously been upon a silver basis. The recovery after 1896 was associated with the development of the cyanide process of gold extraction in South Africa and a rapid addition to the world's stock of gold; the prosperity during the war with the abandonment of the gold standard and the war time inflation; the depression which followed, with the post-war deflation which started in 1920.

The next step, in the diagnosis of the present situation is to examine the agricultural consequences of a general fall in commodity prices arising from monetary causes.² The consequences

² Agriculture in Great Britain throughout the last decade has suffered, not so much because prices were low, as because they were falling.

are of two kinds: One is the effect due to the long period of turn-over which is a necessary part of farming operations, and the other is the effect on the relation between the fixed charges in agriculture and the prices of agricultural produce.

1. A long period of time elapses between the expenditure in production costs, and the receipt of the proceeds of sale of the farm products. In effect the farmer buys his requisites at one price level and sells his produce at another. If the general price level has fallen in the meantime, he makes an unexpected loss; if it has risen, he makes an unexpected profit. This interval of time has been investigated by Mr. Dampier Whetham of Cambridge University and is related to what he has termed the "economic lag" in agriculture. By weighing the various factors in production, he calculates a fixed period as though all costs were incurred at one time and all sales off the farm were effected at one time. By these means he found the "economic lag" to be about fourteen months for a typical arable farm, and about 7 months for a typical grass-dairy farm. Hence, this effect of a general fall in prices is more severe in arable, than in grass-dairy farming.

2. The other direct effect is upon the fixed charges in farming and those costs which can only be adjusted downwards with difficulty. Conspicuous amongst these is mortgage interest. The indebtedness contracted to be paid off over a period of time is incurred by the farmer on the assumption that the purchasing power of the monetary unit in which the debt has to be repaid will remain the same in the future. If this does not happen and if the purchasing power of money is altered, it follows that the real cost of redeeming the debt is altered. This is precisely one of the things that has happened in our country. The farmer who bought his farm in 1920 or thereabouts, raising the purchase money by way of a mortgage on the then value of the farm, must have found that in each year of falling prices a larger and larger part of the produce of the farm had to be sold in order to pay the mortgage charges. Similarly as regards rent. Rent is not adjusted downwards automatically with prices and, therefore, as prices slowly fall, the burden of rent increases; a disparity develops and continues to widen until some readjustment has to be brought about by agreement between landlord and tenant. Hence a fall in rents has usually lagged behind a fall in produce prices, as was shown in the long depression after 1873. In the depression during the last ten years this factor

has, however, probably been of less importance than in the former period since the level of rents did not rise during the war anything like so high as the level of prices. On the other hand wages (in many branches of farming the largest single item in the cost of production) have since 1925 become, to all intents and purposes, a fixed charge. As prices have fallen wages have remained at approximately the same level, real wages have risen, and the farmer has found as in the case of other fixed charges that each year a larger and larger amount of produce must be sold off the farm to meet the wages bill. Wages are a higher proportion of the total costs in arable than in grass farming, and consequently the general fall in prices has once more worked itself out with greater severity amongst arable farmers.

These are the chief of what we may call the direct consequences of a fall in prices due to monetary causes, but indirectly monetary changes have exerted a profoundly important, if less easily analysed influence on agriculture.

A general fall in the level of commodity prices creates what may be called an unfavourable economic environment in which the farmer's calculations, based on the ordinary data of experience, must almost inevitably be miscalculations. The farmer, for example, lays out a certain amount of money on the cost of production and often incurs certain debts to banks, tradesmen and others, relying on his normal farm receipts to clear the debts. In so doing he obviously takes the usual risk of fluctuations in price which are unavoidable in farming, but his expectation is that in the long run these fluctuations will average themselves out. In a year of bad prices, due say to an abundant world harvest, he may not be in a position fully to discharge his farming debts and he therefore carries on, on credit, in the expectation of a future improvement in prices. In normal circumstances this is a perfectly correct use of credit, but if monetary causes are bringing about a *general* fall in prices, these calculations must inevitably be misleading. A year of bad prices is followed by another and another, and the expected recovery does not come. One of the consequences therefore of a fall in prices arising in this way is a tendency for the volume of debts to increase and to be carried forward even after prices have become stable. I have little doubt that the burden of debt is one of the really depressing influences in British agriculture today, at any rate in certain districts. Unfortunately we have no direct means of

ascertaining the total volume of farm indebtedness, but what evidence is forthcoming from indirect sources appears to confirm the view that, particularly in arable districts, farming is handicapped precisely in this way. A burden of this kind hampers enterprise, prevents execution of improvements, and even restricts production.

Again, agriculture at all times is exposed to relatively violent fluctuations consequent upon large world harvests, good or bad seasons, outbreaks of disease, and so forth. Now one of the effects of a falling price level due to monetary causes is to create a state of affairs in which agriculture is less able to sustain the shocks, due to adverse seasons or similar causes, than it otherwise would be. When a fall in the price of an agricultural commodity due to abundant foreign supplies, or a loss of profits due to some other cause, has been superimposed on a fall in price due to monetary causes, the result not infrequently has been to cause a crisis amongst the producers of that commodity. The same applies to bad harvests or other causes of failure. There are several historical instances of this. The cold and wet summer of 1879, accompanied by one of the worst harvests and outbreaks of disease amongst cattle and sheep, produced such a crisis. Severe depression was caused in this way by the pressure of foreign wheat on the British market in the late seventies and from about 1882 to 1895. Two cold summers in 1891 and 1892, and a drought in 1893 again produced a crisis. During the whole of this period commodity prices were slowly falling owing to the appreciation in the value of gold. In the post-war period we have the minor crisis of 1923-24, which mainly affected the corn growing districts and was largely due to the great expansion of production of cereals in the United States, Canada, the Argentine and Australia during the war. We have also the fall in meat and livestock prices in 1926 and 1927 brought about by the increased imports of chilled beef from the Argentine during the so-called Argentine meat war, and finally the present critical condition in regard to a large part of the arable districts due mainly to abnormally low cereal prices consequent upon abundant world harvests.

During the last ten years all the influences described in the above paragraphs have been operative in a greater or less degree. In the first part of this period the fall in prices that occurred was the most rapid for which we have statistical records, and but for the fact that it followed immediately upon a period of rapidly rising

prices (1914 to 1920) during which large profits were made, agriculture would have undoubtedly suffered a more serious crisis. At the end of 1923, British farmers were in a position, so to speak, of having to write off the previous ten years as a wholly abnormal period. Large profits and large losses had been made, but except in the corn growing districts where exceptionally low cereal prices had prevailed, the position was not serious. What agriculture now needed was a reasonably stable level of prices; it required a period of recuperation from the financial difficulties which the three years of deflation had imposed upon it.

Unfortunately the signs of greater stability which appeared in 1924 proved to be only temporary and in the following year, and subsequently, ill prepared for it though they were, the farmers had to face a further fall in prices. From the beginning of 1925 there was a decline in the general price level which accompanied the raising of the dollar exchange to par, and from 1925 onward there has been a further and almost unbroken decline in commodity prices, in which agricultural prices have shared to a nearly equal amount.

We may now turn to some of the non-monetary factors in the situation. Apart from the fall in prices the other general factor affecting agriculture is the rise in wages. Under the Agricultural Wages Act of 1924 minimum rates of wages have been fixed in England and Wales which have had the effect of raising weekly earnings of agricultural labourers to a level of about 76 per cent above pre-war. Owing, however, to the shortening of hours which followed upon this legislation, the actual cash payment for hired labour per hour has risen substantially more than this. It has been estimated to be approximately double what it was before the war. We can now carry the analysis a step further. I have attached to this paper a table which compares the movement over the last ten years of the index of agricultural prices with that of general commodity prices, and have then added three columns to the table in which the agricultural index is split up into three components representing:

Firstly, "Live stock and live stock products," secondly, "Cereals and farm crops," thirdly, "Fruit and vegetables" (table 1).

These in turn are compared with the price indices of fertilisers, feeding stuffs, and wages. The table gives in exceedingly compressed form the summary of the agricultural depression in Great

Table 1. Percentage Increase of Prices Over Pre-War

(Base of Statist figures is 1913, of agricultural produce, feeding stuffs and fertilizers 1911-13, and of agricultural wages, 1914).

Year	All commodities (Statist)	Agricultural produce generally	Live stock and live stock products	Cereals and farm crops	Fruit and vege- tables	Feed- ing stuffs	Ferti- lizers	Agri- cultural wages	Approximate cost of em- ploying hired labor per hour
1920.....	195	192	192	185	247	173	159	—	
1921.....	82	119	128	90	176	81	120	—	
1922.....	54	69	76	49	90	46	47	74	
1923.....	52	57	66	28	103	36	23	56	
1924.....	64	61	63	54	75	54	19	56	
1925.....	60	59	64	44	92	52	14	72	100
1926.....	48	51	58	34	62	25	13	75	100
1927.....	44	44	44	39	65	39	10	76	100
1928.....	41.2	47	51	34	82	54	-2	76	100
1929.....	35.3	44	52	23	60	39	Nil	76	100
1930 ¹	21.2 ²	36	49	6 ³	22 ⁴	6	2	76	100

¹ April only.

² March 31, 1930.

³ Excludes hops.

⁴ Vegetables only.

Britain during the last ten years. I need not read it in full but the most significant features are the relatively slow fall in prices in the live stock and live stock products group, and the relatively rapid fall in the cereals and farm crops group. Today the position is approximately as follows:

All commodities	21	per cent above pre-war
Live stock and live stock products	49	per cent above pre-war
Cereals and farm crops	6	per cent above pre-war
Fruit and vegetables	22	per cent above pre-war
Wages per hour (approximate)	100	per cent above pre-war

In regard to the live stock group, the prices are substantially higher than the general price level partly owing to the good prices obtained for milk in the last few years. The chief disparity in this case is, of course, between prices and wages. But labour on the whole forms a smaller proportion in the total cost of production than in the cereals and farm crops group. Moreover, against a higher cost of labour must be set certain compensating advantages in the low costs of feeding stuffs, and the fact that the level of rents has been lower than the level of prices. This group represents about 70 per cent of the total output of British farms, and it seems a reasonable inference from the facts—which is confirmed by special investigation—that no serious depression exists today in this most important section of British farming.

When we turn to cereals and farm crops, a very different state of affairs is shown. All the factors which I have mentioned have tended to concentrate the depression mainly upon farmers engaged in the production of arable crops; not only have prices of cereals and other crops fallen, but they have fallen substantially faster than commodity prices. The relationship is the reverse in that of the live stock group. Further, in this group labour forms a relatively high proportion of the total costs and the low prices for fertilisers has gone but a little way toward compensating the farmer for the disparity between cereal prices and the cost of labour.

I need not refer at any length to the causes which have brought about the relatively heavy decline in the prices of arable crops since these are well known. From a table prepared by the International Institute of Agriculture it is easy to see the extent to which the chief wheat producing countries have contributed to the world's output during the five years prior to the war and during the four years, 1925-28 (table 2). It is clear that the main disturbance

shown in this table dated from the world's record harvest of 1928. The present low level in prices of barley and oats in Great Britain is partly due to the influence of the excessive supplies of wheat, partly to the heavy European production of feeding crops in 1928-29, and to some extent, in the case of oats, to the imports of so called bounty feed oats from Germany. A sharp fall in the prices of potatoes in 1929-30 which contributed to the low level of prices in the "cereals and farm crops" group was primarily due to over-production at home.

Such in general outline are the causes of the depression which has afflicted British agriculture during the last ten years. Today,

Table 2. World Production of Wheat During the Five Years Prior to the War, and During the Period, 1925-1928¹
(Millions of quintals)

Country	Average 1909-1913	1925	1926	1927	1928	Average 1925-1928
Europe ²	371	380	329	347	383	360
Canada	54	108	111	131	154	126
United States	188	184	226	239	246	224
Argentine	40	52	60	65	84	65
Australia	25	31	44	32	43	37
British Indies	96	90	88	91	79	87
Other countries ³	49	60	57	62	62	60
Total ¹	823	905	915	967	1,051	959

¹ Not including the U. S. S. R. and China.

² Not including the U.S.S.R.

³ Not including China.

for the reasons I have given; it would not be true to say that the whole of our agriculture is suffering from depression. Indeed severe depression exists in an area covering not more than ten to twenty per cent of the total agricultural area. The remainder is on the whole in a fairly satisfactory condition. When we turn to the future after giving full weight to the difficulties arising out of the present wheat situation or the temporary over-production of other products, we are still left with the general over-riding problem—important alike to Great Britain and all other gold standard countries—namely, the future purchasing power of gold.

For agriculture, as for all other branches of economic life, this seems to constitute the economic problem. If agriculture is to escape from the long-period alternations from prosperity to de-

pression, and again from depression to prosperity which have characterised the past, this problem must be solved. In an article in the *Statist* newspaper of May 11, 1929 entitled "Four Years of the Gold Standard" the following passage occurs:

"If the nations of the world, having returned to the gold standard, decide to work their currency systems in the way in which they worked them before the war, if they insist upon maintaining the traditional gold reserves, it stands to reason that we shall revert, as regards the general level of prices, to the position that we would not occupy had there been no war. This position, we may rest assured, is considerably nearer the pre-war level of prices than that which now obtains. If, therefore, the theoretical perfections of an absolutely automatic currency system are so exalted as to repress any attempt at intelligent control of the value of gold, we may well see during the next decade a continuation of the downward trend in prices that has been maintained, with slight temporary reactions, since 1920. Let us remember that between 1873 and 1896, during the whole of which period an essentially automatic gold standard was in operation, sterling prices were nearly halved, falling, according to the "Sauerbeck-Statist" figures from 111 to 61. The price paid for this steady twenty years' appreciation in the value of gold will be familiar to any student of the economic history of all big trading nations in the world during that period. If the uncertainty, the artificial discouragement to industrial expansion, evident during those closing decades of the nineteenth century are to be avoided, intelligent international management of the gold standard must be attempted."

This general view of the situation seems to me incontrovertible. The future now depends on the chances of "intelligent international management," and this unfortunately still remains very problematical. The first step towards this end, was taken in 1922 at the famous conference at Genoa, when general lines for international cooperation were proposed. Since then little has been done officially, though some believe that the establishment of the Bank of International Settlements may provide a common meeting ground where international cooperation in monetary policy may be developed. In the meantime the tide continues to ebb.

So far as agriculture is concerned, I think the correct inference from what we know about the present international monetary situation, is favourable for the near future, but unfavourable for

the more distant future. The correct assumption on the available facts is that in the absence of a more definite international monetary policy, monetary factors are likely, after a short time has elapsed, to continue the slow downward pressure on prices, rather than that prices will remain stable. We should therefore not be justified in assuming that this influence in the agricultural depression has ceased.

We have, however, to recognise that in recent years a great deal of knowledge has been acquired on monetary economics. The events of the war and post-war periods have thrown a flood of light on many questions which were obscure or controversial. The immense powers for good or ill which can be exercised by the central banks by virtue of their control of credit have become better understood, not only by economists, but by representatives of industry and trade, and I do not think there can be any doubt that principal central banking authorities, such as the Bank of England and the Federal Reserve Board, wish to secure monetary stability if they can. To us as agriculturalists the monetary factor, supremely important though it is, is unfortunately outside our control. I will only say in conclusion that it should never be outside our observation.