

**STATISTICAL AND SOCIAL INQUIRY SOCIETY  
OF IRELAND.**  
**ASPECTS OF THE AGRICULTURAL CRISIS AT HOME  
AND ABROAD.**

By JOSEPH JOHNSTON, M.A., F.T.C.D.

*Barrington Lecturer in Economics.*

*(Read on Thursday, 23rd May, 1935.)*

INTRODUCTORY

A Barrington Lecture on the above subject has recently been given in Cork, Enniscorthy, Limerick and Sligo, and this paper represents the further elaboration of the material collected for that lecture.

The paper itself is a sequel to certain other lectures, given in 1933, which have since been published by the Talbot Press under the title of "The Nemesis of Economic Nationalism and Other Lectures in Applied Economics." I have also made use of the material contained in an article on "The Purchasing Power of Irish Free State Farmers in 1933," which appeared in the *Economic Journal* of September, 1934.

I would like to express my great indebtedness to Mr. A. I. Qureshi, M.Sc. (London), who has made a special study of post-depression agricultural credit problems in Australia, New Zealand, South Africa, and the U.S.A., and is now completing, in Trinity College, Dublin, a valuable and important work on agricultural credit in the last-mentioned country. Many of the works referred to in the bibliography were acquired by him in the course of his world-wide travels and investigations, and made available for my use in the most convenient possible manner.

DEAD NATIONAL ECONOMIES FOR THE ECONOMIC DISSECTING-ROOM.

It has hitherto been considered a serious handicap for the scientific pursuit of economic investigations that economists are debarred from making experiments. Such experiments might concern too closely the lives and fortunes of millions of people in all lands, and even if they were allowed to make them, economists would hesitate to do so on any serious scale, for they realise all too clearly the complexities of economic situations, and are temperamentally averse from mixing elements which might become explosive in certain combinations.

Politicians, however, sometimes rush in where economists fear to tread, and occasionally produce results which the latter, from their more limited point of view, must regard as almost miraculous.

We have had in recent years, in many lands, a series of most valuable and interesting experiments, and I would like to express the gratitude which all economists must feel for the important contribution to the scientific study of economics which politicians have incidentally been making.

The student of economic anatomy is now provided with the same educational facilities as the medical student. He occupies a dissecting-room liberally provided with the corpses of national economies; he can study the dead limbs of many which owed their life to an international economy now disintegrated, and he can also study the embryology of the more self-contained national economies that are issuing from the vitals of the decaying system.

## OTHER PEOPLE'S TROUBLES MAY CONSOLE US.

An ancient poet has said that it is pleasant to stand on the shore and watch other people tossing about on a stormy sea. Our natural sympathy with our neighbour, when he falls ill, is qualified by a half-conscious sense of satisfaction that it is our neighbour and not ourselves who has caught the disease in question. But when our neighbour contracts measles, or some other infectious disease, we are concerned for ourselves as well as for him, and we begin to examine our bodies anxiously for spots. Economic depression is a highly infectious disease, and, when I look round the world and see the black spots in the economic life of other countries, I begin to think that the disease now afflicting it is more akin to smallpox than to measles. I become more and more alarmed about the outlook for our own country when I apply the method of comparison and use the microscope of statistics. The fact that we continue, to all outward appearance, to enjoy comparatively good health only fills me with greater alarm.

The onlooker who sees so many ships of state evidently heading for the rocks can only come to the conclusion that some form of magnetism has deflected the compass of economic life from its true direction.

The only compass by which the private enterpriser *can* steer is the relation between the prices which are his costs and the prices he hopes to receive.

The outstanding fact about many modern national economies is that *some* prices have been manipulated, and price relations in the economy as a whole, in consequence, perverted.

The practical conclusion to which I come is that, unless we wish to go onward to a complete regimentation of all our economic life on Bolshevik lines, we must remove our economic compass from the field of political magnetism, and get back to a régime in which prices reflect, not political ideals, but economic realities, and profits depend on the success with which enterprise adjusts itself to hard objective facts.

Whether we are immune from the perils which have affected other countries or not, and even if symptoms which have meant so much in their case mean nothing in ours, or are counteracted by other factors which I have overlooked in my diagnosis, it will be profitable to learn what we can from the recent experience of other agricultural communities.

One might make comparison with many countries, but the circumstances of American agriculture from 1920 to to-day have perhaps most to teach us.

## FUNDAMENTAL SIMILARITIES BETWEEN AMERICA'S SITUATION AND OURS.

(a). Since the war America has been a creditor country and, as always, has been an important producer of primary agricultural products, e.g., wheat and cotton, for the world market. Other primary product exporting countries, e.g., the Argentine and Australia, have been developed mainly by foreign capital, and still owe thousands of millions of pounds to foreign governments and investors, the service of which requires a continuous flow of exports, even if they imported nothing at all (*W. E. S.* (1932-33) p. 264). We resemble America (and differ from Australia) in being a creditor country as well as an exporter of primary agricultural products.

(b). From 1922 to 1929 America pursued a policy of rapid industrial expansion, based on high and rising tariffs, which brought unheard-of prosperity to the towns and cities of America, but only served to aggra-

vate the difficulties of the agricultural interest, which were already acute at that time. In this period the price system internal to the American economy became thoroughly disordered. American industrial prosperity was based on a cost structure that could not be permanently maintained. Not being based on a concurrent expansion of agricultural purchasing power and agricultural prosperity, when it collapsed in 1929 it could not, by its own efforts, raise itself again. The central features of the Roosevelt economic policies are based on the view, now widely held over there, that if American industry is ever to achieve any worth-while prosperity the farmer must at all costs be put back in the market, and agricultural prosperity restored.

(c). Twenty-five per cent. of America's working population derives its living from agriculture, fifty per cent. of ours.

(d). From 1922 to 1929 there was a rapid influx of population from rural to urban centres in America. Now the tide has turned, and on January 1, 1933, farm population reached an all-time peak of over 32 millions—an increase of more than 2 millions in three years (*Farm Real Estate*, 1932-33, p. 5). We are still in the pre-1929 stage, and urban real estate development proceeds apace. If we are destined to repeat the post-1930 experience of America, ought not the new urban houses, that are so rapidly being run up, to be provided with wheels? Rents in America in 1921 were 98% of the 1923 level; in 1924 106%; in 1929, 92%; and in 1932, 72% (*Goldschmidt*, p. 296).

#### THE FACTS ABOUT THE AGRICULTURAL SITUATION IN AMERICA AND ELSEWHERE.

From January, 1929 to March, 1933, agricultural prices declined in America (in terms of the national currency) by 59.6%, in Canada by 53.2%, in the Argentine by 51.4%, in Australia by 35.9%, in Germany by 37.4%, in France by 30.4%, in the U.K. by 32.1%, and in New Zealand by 11.5% (*W.E.S.*, (1932-3) p. 57).

In 1933 the world production of food stuffs was 103% of the 1925-29 average, in Europe (less Russia) it was 112%, in North America 88% (*W.E.S.*, (1933-4) p. 87).

Cotton acreage increased from 30 million acres in U.S.A. in 1921 to 46 million acres in 1926, and cotton acreage outside the U.S.A. increased from 29 million acres in 1921-2 to 42 million acres in 1925-6. The carry-over of unsaleable American cotton in 1932-3 was 13 million bales—nearly a year's crop (*A.A.A. Report*, p. 20).

The wheat situation was similar, but even the price of hogs, dairy and beef products which do not require an outlet in the export market had suffered a disastrous fall. (*Farm Real Estate*, 1932-3, p. 8.)

Farm real estate values, which had risen to 170% of pre-war (1912-14) in 1920, had fallen to 73% of pre-war in 1933. The gross income of farmers which in 1912-14 was nearly 7,000 million dollars, and which from 1923-9 averaged well over 11,000 million dollars, was only a little over 5,000 million dollars in 1932. (*W.E.S.*, 1932-3, p. 151.) In June, 1932, farm prices were only 52% of pre-war, while the commodities bought by farmers stood at 108%. The farmer's dollar was now worth only 48 cents. (*Farm Real Estate*, 1932-3, p. 20 and p. 24.)

Operating expenses declined too. Wages fell from 924 million dollars in 1924-9 to 380 million dollars in 1932, but interest on mortgage and other debts, and taxes, remained nearly the same in actual amount. Thus they absorbed 12% of gross income in 1924-9, but this percentage

rose to 22.7% in 1932. As only 42% of farms were mortgaged in 1930 they probably absorbed more than 30% of gross income in 1932 in their case.

The net income results (exclusive of food and fuel consumed in the household) fell from about 1,250 dollars per farm (in the case of 6,000 typical U.S.A. farmers) from 1924-9 to 66 dollars per farm in 1932. The total value of farm real estate fell from 66,000 million dollars in 1920 to 30,000 million dollars in 1933. (*A.A.A. pamphlet*, p. 21.) Yet the real estate value of farms under 20 acres was well maintained, and in 1930 was 85% greater than in 1910. (*Farm Real Estate*, 1932-3, p. 35.)

In America, as here, it was the farm of 50 acres or more which bore the brunt of the depression. These are the farms which must produce mainly for exchange, and when their business is financially disastrous to themselves, it spreads disorder throughout the whole commercial and industrial economy. The comparative prosperity of the 20 acre farmer did not save America. Will it save us?

The number of distress sales multiplied and rose to 54 per 1,000 farms in U.S.A. in 1933. In part of South Dakota nearly 1 farm in 3 has been foreclosed since 1920.

The total farm debt on January 1st, 1932, was estimated at 12,000 million dollars, of which 8,500 million dollars represented farm mortgage debt; 2,000 million dollars mainly short-term commercial bank loans, and 1,500 million dollars merchant credits. The mortgage debt alone was nearly 3 times the 1910 figure.

#### CAUSES OF AMERICA'S AGRICULTURAL DISASTERS.

(a). America's tariffs kept out European industrial goods and made it difficult for Europe to buy America's agricultural surpluses.

(b). America's war debt policy, in combination with her tariffs, made it impossible for Europe to pay those debts and at the same time buy America's export goods.

(c). Europe increased food production and became more or less independent of America's supplies. (*W.E.S.*, 1933-4, p. 324.)

(d). The post-war immigration laws restricted the growth of America's population and limited the expansion of the home market.

(e). People were now eating less wheat and more fruit and vegetables. American wheat consumption per head fell from 5.6 bushels in 1914 to 4.6 bushels in the 1920's.

(f). Horse transport was now displaced by motor transport—and horse power by motor power—even in agricultural production. This destroyed the outlet for the crops grown on 35 million acres of American land.

(g). America had put 40 million fresh acres under the plough in the war years, and American farmers had borrowed heavily in order to provide themselves with the necessary equipment—and had bought that equipment at peak prices.

#### DOES THE AMERICAN CAP FIT?

There are some obvious contrasts between the post-war American national economy and ours. America's multitudinous banks recall a period in the history of these islands which came to an end about a hundred years ago. If we come through the present crisis with our financial and monetary structure unimpaired, the fact that our bank

are few and large, and represented by branches in many different parts of the country, will afford an important part of the explanation.

The American economy was saturated by the poison of speculation in the hectic years which preceded 1929. So far we have escaped that menace. The experiment in "protection" of the home market has been tried here and in Great Britain with evident success, but the conditions differ profoundly from those which existed in America in 1929 and 1930.

One great advantage of a life of strict sobriety is that one can sometimes ward off or cure a serious illness by a liberal dose of alcohol. The American economy was steeped in "protective" alcoholism, and the further experiments in that direction that were made in 1930 only made the patient worse.

The apparent success of Protectionism here and in Great Britain, as a means of industrial revival, is really a tribute to the health of economic constitutions, nourished and invigorated in the bracing atmosphere of Free Trade. The danger is that we may become, so to speak, habitual toppers.

On the other hand there are certain other contrasts which seem to make American agriculture more fitted to stand the shocks of external economic circumstance than ours. Contrary to the general impression the American farmer, like the Irish one, derives the greater portion of his income from the production of live stock and live stock products. The money value of "cash-crops" in 1932 was 2,000 million dollars, but live stock and live stock products represented a cash value of 3,000 million dollars. (*Farm Real Estate*, 1932-3, p. 18.)

Unlike our farmers, the American producers of live stock and live stock products were concerned only with their own home market of 120 million people. Their exports were practically nil; but, equally, they had no competitive foreign imports to fear. We produce enough beef to feed our own 3 million people and 12 million others, having the same standard of beef consumption as we have, and enough of the other typical live stock products—e.g., butter, eggs and bacon—to feed a total population of about 6 millions. Only in wheat production does our agriculture fall seriously short of the requirements of the home market.

The American agricultural surpluses, which played so important a part in destroying the balance of economic relations, were a 25 per cent. surplus of wheat and a 55 per cent. surplus of cotton. Overproduction and price collapse in these commodities spread to pigs, beef and dairy products, and the New England farmer, who catered only for the home market, found himself sharing the disasters that had befallen his fellows in South Carolina and South Dakota.

Our export surpluses are a matter of 80 per cent. of beef production and 45 per cent. of most other live stock products. It is not without significance that the farmers in the East Midland counties are turning from bullocks to cows, and a glance at the most recent volume of our official Agricultural Statistics will show a substantial increase in the cow "population" of Louth, Meath and Kildare.

In view of the evident effect of 25 and 55 per cent. surpluses on the American economy I am concerned about the possible effect of 80 per cent. and 45 per cent. surpluses on ours.

Apart from these contrasts, some of which make our outlook brighter, whilst others make it more dismal, there are certain similarities, of sinister import, between America's case and ours. In particular America's agricultural export surpluses have been the victims of an economic war

levied by Europe since 1930. Our export surplus of cattle has hitherto borne the brunt of our little economic war.

America has learnt that the home market for agricultural products can only expand as population expands. Pending the expansion of our three million population to something like the six million figure, which would be needed to maintain the normal volume of our agricultural production, we must continue to produce for export, or greatly restrict the volume of our agricultural production—as well as alter its pattern. In the meanwhile, transferring people from commercial employment to industrial employment does not add one iota to the home market for our agricultural products. The man who serves counters is already in the market as a farmer's customer, and will not be any more so if he gets a job in a new aluminium factory.

It is often stated that if we take an unemployed worker and give him a job in industry, we are "expanding the home market" for agricultural produce, but it must be remembered that the unemployed are already consuming, for example, beef and milk, and they may not add very much to their consumption of these and other Irish farm products when they get work.

If we take a surplus worker from agriculture and employ him in industry we are actually *lessening* the home market for agricultural produce. It is officially estimated that the members of farm households consume each 38 gallons of whole milk, 283 eggs, 43 lbs. of butter and 7 cwt. of potatoes, in the year. (*Ag. Output*, p. 31.) The only market which the Irish farmer may approach without fear of the harpies of commerce or bureaucracy, is the market represented by his own kitchen. The more he can expand this market the better it will be for him and his household—and the worst it will be for the rest of us.

Even under present conditions there are perhaps 100,000 workers who could be spared from agriculture without reducing the volume of its production, but if we must go further and reduce substantially the volume of our agricultural production, the problem of locating in industry 200,000 or more workers dislocated out of agriculture and commerce seems to me to be quite insoluble. If we even attempt it, our economy will be shaken from its foundations and social order imperilled.

There are only two ways of expanding the home market. One is to maintain a national economy in which the standard of consumption may continue to rise. The other is to use all legitimate means for promoting an increase of population. Government can best assist these salutary processes by leaving them alone, and minding its own business.

#### SYMPTOMS OF OUR AGRICULTURAL DECAY.

Imports of maize, etc., which in 1929 were 8 million cwt. and in 1931 and 1932 rose to about 12 million cwt. are now down to 6 million cwt. (1934).

Imports of cotton seed cake and meal and oil seed cakes and meals from 1929 to 1932 added up to nearly one million cwt. per annum. In 1934 this total was 655,160 cwt. (*Trade and Shipping Statistics*, 1932, p. 31.)

The number of milch cows and springers exported in 1934 was 47,000, as against 28,000 in 1933. The price per head fell only from £12.17 to £11.15, whereas the average price of all cattle and calves exported fell from £10.4 to £8.6. The export of milch cows, if carried to excess, will impoverish our agriculture.

The present price relation between feeding stuffs and beef is destructive of stall feeding. Indian meal was 8/- and more per cwt. in 1934, and oats 9/4d. Counting in the usual proportion of linseed meal at 11/7d. per cwt. the cost of a fattening ration of meals must have come nearly to 1d. per lb. It takes at least 4 lb. of meals to produce 1 lb. live weight of beef. At 20/- per cwt. live weight, 1 lb. of beef is worth 2d. No farmer in his senses is going to stall feed 4d. worth of meals to produce 2d. worth of beef. Without stall-feeding for beef there must be a shortage of manure for root-crops this spring, and without an expansion of root crop acreage, any expansion of wheat acreage must impoverish our land and degrade our agriculture.

#### DISRUPTION OF PRICE-RELATIONS IN OUR NATIONAL ECONOMY.

The effect of the present (temporary) high value of cereal raw materials in relation to the low value of live stock products is to disorder our agricultural production economy, and perhaps start it off in new directions that will prove unprofitable in the long run.

But the chief example of disordered price relations is the fall in agricultural purchasing power in relation to the sustained high prices of the things that farmers would like to buy. (*Economic Journal*, Sept., 1934.) According to my calculations the aggregate money receipts of our farmers fell from over £45 millions in 1929 to nearly £27 millions in 1933.

A fall of £18 millions in money receipts does not necessarily mean an equal fall in net money income. In 1929, now regarded in retrospect as a year of halcyon prosperity, the savings of our farmers were estimated at £5½ millions. (Dr. Kiernan, Statistical and Social Inquiry Society paper, 22nd June, 1933.) Reduction in rates and annuity payments may be taken as £3 millions. In addition expenditure on feeding-stuffs and artificial manures fell by as much as £5 millions. Some reduction in the consumption of purchased household goods did undoubtedly take place—as no expansion of the volume of outstanding debts was permitted by our very careful banks and merchants.

Withdrawal of bank deposits and sales of investments to meet current cash expenditures may, in consequence, only have amounted to £2 or £3 millions per annum, and it is probable that the *financial* adjustment was so nearly complete as to preserve the *appearance* of a thoroughly sound national economy.

Some years ago, when markets were still free and our farmers had every incentive to increase production, I calculated that if our poultry and animal stock were to receive anything approximating to the ration recommended by the Department of Agriculture a great deal more tillage would have to be done, and more feeding stuffs imported. Our farmers were relying too much on grass and hay, and allowing their cattle to lose "condition" in the winter-time. If this was so in the "green tree" period of 1926 to 1931, we may thank Providence and the grass that continued available in the open winters of recent years, for the fact that our cattle have not died wholesale of starvation in the "dry" economic circumstances of these times.

Feeding a full ration to cattle in the winter-time enriches the quality of cattle manure, and maintains the fertility of the land, as well as improving the quality of the stock. Thus the financial economy that takes the form of cutting expenditure on feeding stuffs and artificial manures by £5 millions is an economic extravagance of a most undesirable kind. Our farmers have nearly managed to balance their financial

budgets by failing to maintain their fixed capital and, as I shall show subsequently, letting down their stocks. The ultimate effect on production and the national welfare is postponed, but is not any the less inevitable, and will not be any the less unpleasant on that account. Financial barometers do not record processes of this kind in their insidious beginnings. The extent to which these processes are taking place now is the measure of the extent to which the Agricultural Credit Corporation will have to extend its activities in the future, and even then it may take years to reverse a trend in the volume of agricultural production, which must acquire momentum as it proceeds.

In November, 1934, agricultural prices as a whole stood at 84.7% of the 1911-13 base. The cost of living was 157% of the July, 1914 base. Like his American fellow, the Irish farmer's dollar in 1934 was worth only about 50 cents. (*C. C. Stat.*, p. 8.)

The American farmer was already waterlogged with debt in 1929, and American agriculture could not stand up to the events of 1929-33.

Irish farmers are stated to have owed the banks a total of about £20 millions before the occurrence of the present crisis. I do not know on what authority this figure is given. If we may suppose that the average farmer had outstanding debts to merchants averaging £50, the total of this form of indebtedness would amount to nearly another £20 millions. For reasons already given the aggregate of £40 millions, though doubtless "frozen" to a considerable extent, has not been increased in recent years, and certainly has not diminished.

This figure is given as a rough estimate of my own. The actual figure, at all events as far as the banks are concerned, is quite easily ascertainable. It is of the utmost importance that it should be ascertained and made known to all whom it concerns.

Farm real estate in the U.S.A. averaged £13 an acre in value in 1920 and fell to £6 an acre in 1933. Our 12 million acres of farm land and buildings were probably still worth an average of £20 an acre in 1929, and are probably now worth less than £10—if they can be said to have a market value at all. The total debt of American farmers amounted to £2 10s. an acre of all farm land in January, 1932, and is still about the same. (*F. C. A.*, p. 44.) If the total debt of our farmers is anything like £40 millions, it now averages over £3 an acre of our farm land. Our average debt is nearly one and a half times the amount of average debt per acre in America, and farm real estate values are, perhaps, still nearly one and a half times the American average per acre. Hence the problem of our agricultural indebtedness is now of somewhat similar dimensions to the American problem in recent years.

Since writing the above I discovered, quite accidentally, that the Land Registry Office has been in the habit of reporting all sales of agricultural holdings to the Valuation and Boundary Survey. These records exist in a convenient manuscript form as far back as 1921 in the latter Office, and are available from a much earlier period in the former Office. The trouble about the pre-1921 records is that it would require considerable legal skill to interpret and disentangle the required information from the other matter in which it is embedded.

By the courtesy of the Departments concerned I have been enabled to inspect the manuscript records. I give as an appendix an analysis based on a fairly complete examination of the figures for 1921, 1929 and 1934, but for the other years it was only possible, in the time, to examine random samples of about 15 per cent. of the available data. The results of my examination have aggravated rather than relieved



my own apprehensions, but they must be regarded as suggestive of the need for further examination and official publication, rather than conclusive of any particular views about the state of our agriculture.

One important feature of these figures is that they make articulate the opinion of the agricultural community on the prospective profit-earning capacity of the agricultural business.

It is extremely difficult to ascertain figures of net profit, or net loss, on the operations of the small farms which are typical of our husbandry. There are, however, a score or more large farmers who are in the habit of keeping reliable records and accounts, which they furnish at regular intervals to the Income Tax authorities. There ought to be no difficulty in securing the assent of those concerned to the use of this invaluable data as a means of estimating the trend of farm profits in different types of farming over a series of years from, say, 1926. Without such data I do not see how any investigation of the agricultural credit problem can give any useful results.

I attach, for the purpose of illustration only, a Trading, and Profit and Loss Account, the figures of which are based on actual experience, but are adjusted to correspond to the circumstances of an owner-operated small farm, and to the officially estimated standards of consumption in the average farm household of five persons.

#### TRADING ACCOUNT, 1933.

	Value of Stock 1/1/1933 (1)	Bought in 1933 (2)	Sold in 1933 (3)	Value of Stock 31/12/1933 (4)
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Cattle . . . . .	99 10 0	Nil	40 0 0	53 0 0
Poultry . . . . .	23 15 0	—	3 10 0	16 0 0
Roots . . . . .	—	3 12 0	—	—
Oats . . . . .	—	3 15 0	—	—
Brewers' Grains . . . . .	—	5 5 0	—	—
Maize Mixture and other Feed . . . . .	—	46 17 0	—	—
Milk . . . . .	—	—	6 13 0	—
Butter . . . . .	—	—	12 10 0	—
Eggs . . . . .	—	—	49 0 0	—
	123 5 0	59 9 0	111 13 0	69 0 0
Adding (1) and (2) . . . . .		182 14 0		
Adding (3) and (4) . . . . .				180 13 0
Gross Loss (to Profit and Loss Account) . . . . .		182 14 0		2 1 0 182 14 0



the price of labour and other factors of production, within the economy, whether the economy is self-contained nationally or has an international scope. It thus depends on the relation between the different elements in the price and income structure as a whole. The disruption of price and income relations within the American economy destroyed the credit of the agricultural producer and threatened the owners of 12,000 million dollars of financial claims against the farmers with the complete loss of their assets. The State simply had to come to the rescue and develop a vigorous programme of agricultural reconstruction which had for its object the restoration of price parity between agricultural and non-agricultural goods, and the restoration of agricultural credit, with State help in the first instance, but by methods which it was hoped would enable it eventually to stand on its own feet.

So far our national economic policy, by keeping out imported industrial goods, has aggravated the disparity between agricultural and non-agricultural prices, but it is only a matter of time till the desperate situation of our agriculture compels whatever Government is in power to attack the root causes of our economic disease, and then perhaps we shall study President Roosevelt's experience with interest.

#### AMERICAN REMEDIES FOR THE AGRICULTURAL SITUATION.

The Agricultural Adjustment Act was passed in May, 1933. Its main object was not only to increase agricultural purchasing-power, but to do so "as an essential step towards promoting general revival." (*A. A. A. Report*, p. 4.) It defined for "basic" commodities a "fair exchange value" as such a price in terms of the goods farmers buy as would give the farmers producing such commodities the same real purchasing power as they enjoyed in the base period 1909-14. (*A. A. A. Pamph.*, p. 28.) This "parity price," so called, was 96 cents a bushel for wheat in 1933 and 13.5 cents for cotton. The actual price for wheat in 1932 was 37 cents and for cotton 6.5 cents. Of course the parity price varies from time to time with the price of things farmers buy.

The first effort of the A.A.A. administration was to cut off the un-economic surpluses in the production of wheat, cotton and other basic commodities. In the case of cotton over a million cotton growers were induced in 1933 to take over 10 million acres out of cotton production. A processing tax of 4.2 cents per lb. was levied on cotton retained for domestic consumption, and the proceeds of this tax were used to pay 160 million dollars to contracting cotton growers, in proportion to the area which each grower withdrew from cotton production. The combined effects of this benefit payment, and of the increase in market price from 6.5 to 9.6 cents which resulted from the reduction of supply, was to raise the farm value of the 1933 cotton crop to 857 million dollars from 425 million dollars in 1932.

In the case of wheat a processing tax of 30 cents a bushel yielded the funds which, together with an increase of price from 37 cents to 73 cents a bushel, raised the cash value of the wheat crop from 169 million dollars in 1932-3 to 376 million dollars in 1933-4. The normal rate of processing tax was defined as the difference between the current market price and the "fair exchange value" of the commodity. (*A. A. A. Report*, p. 7.)

In the case of wheat and cotton nearly the full rate was levied and it caused no restriction of consumption, but in the case of pigs the Administration had to be content with a lower and gradually rising

rate in order to avoid restricting consumption, and piling up new unwanted surpluses.

In September, 1933, an uneconomic surplus of 6 million pigs was bought by the Federal Government and processed mainly into inedible products. The price of pigs per 100 lb. live weight was \$3.59 in 1932-3. (*A. A. A. Report*, p. 260.) In October, 1933, a contract was made between the Ministry of Agriculture and one and a half million farmers, by the terms of which they were to receive a benefit payment of \$5 a head on 75 per cent. of the average number of hogs sold by each of them in a base period from December 1, 1931, to December 1, 1933. In return each contracting producer undertook to reduce the number of litters farrowed, and the number of pigs sold by 25 per cent.

Since then the drought of 1934 has reduced production still further. On January 1, 1933, there were over 61 million hogs in America—on January 1, 1935, only 37 million—and pig prices now stand at \$9 per 100 lb. in Chicago. (*N. C. B. Letter*, March, 1935, p. 35.) The processing tax on pig products began at 50 cents per 100 lb. on November 1, 1933, was raised to \$1 on December 1, 1933, and to \$1.50 in February, 1934. This was much less than the gap between the 1933 market price of \$3.49 and the 1933 "parity price" of \$7.84, but it was necessary to avoid too steep a rise in consumer prices, and to bear in mind that factory pay rolls and total cash income from hogs rise and fall together. The same is true of dairy products, beef and mutton. (*A. A. A. Report*, p. 100, cf. pp. 156, 198, 248.)

Now with market prices at \$9 there is probably no processing tax at all, but total cash income from hogs is affected by the fall in total production and the higher cost of feed, as well as by the higher price per unit of output.

It should be noted that the restriction schemes which have done so much to raise the purchasing power of American farmers were not applied, at all events in the first instance, to commodities in which our agriculture is particularly interested. They were not applied to beef or dairy products. The cases in which they were applied are not mentioned as examples for our imitation, but as evidence of the frantic exertions made by the Government of a great country to restore agricultural purchasing power "as an essential step towards promoting general revival." We are surely unique in the post-depression period, in our apparent ability to combine industrial revival with agricultural decay.

#### STRENGTHENING THE MACHINERY OF AGRICULTURAL CREDIT.

In 1916 twelve federal land banks were established, one in each of twelve federal land bank districts, with an aggregate capital of 9 million dollars, provided by the U.S. Treasury. In 1932 the Treasury provided an additional 125 million dollars for the capital stock of these banks. Normally they make mortgage loans through national farm loan associations of borrowers suitably grouped locally, and acquire the funds by the sale of Federal Land Bank Bonds of 10 to 30 years currency in the investment markets. They may lend only up to 50 per cent. of the appraised value of farms. During 1933 and early in 1934, it was necessary for the State to guarantee principal and interest on these bond issues. (*F. C. A.*, p. 154.)

#### SHORT TERM CREDIT.

In 1923 twelve Federal Intermediate Credit Banks were established

in the same twelve districts with the same officers and directors. They may lend indirectly through local Production Credit Associations up to a maximum of three years, but the average currency of their loans is about six months. (*F. C. A.*, p. 244, p. 266.) They obtain the funds by the sale of debentures of a maximum currency of five years. (*F. C. A.*, p. 259.)

Thus America is possessed of the essentials of a complete farm credit structure, and this was completed by a reorganisation in 1933.

#### REFINANCING FARM INDEBTEDNESS.

The situation in 1933 was that America had lost in recent years about 10,000 of her 30,000 banks, and many rural areas had hardly any banking facilities at all. (*Goldschmidt*, p. 288.) Over 1,000 million dollars of the mortgage debt was owed to commercial banks, many of which were themselves bankrupt. (*F. C. A.*, p. 47.) Only 12 per cent. of the total mortgage debt was in the hands of the Federal Land Banks, which alone were in a position to continue financing it. (*F. C. A.*, p. 49.) Twenty per cent. of mortgaged farms owed more than 70% of the total value of their farms. All mortgagors were finding the burden of their annual charges and taxes intolerable in view of their sadly diminished incomes. It was desirable to arrange for the Federal Land Banks to take over as much as possible of the debt due to other institutions and persons.

The Land Banks might not lend in excess of 50% of the appraised value of farms, but a Land Bank Commissioner was established with an initial fund of \$200,000,000 of public money, who was authorised, in conjunction with the Land Banks, to lend an additional 25% in approved cases. It was further arranged that the appraised value of farms for the purpose of these loans should not be the actual market value, but the normal pre-war "parity value" of farm-land. In 1933 farm real estate values were only 73 per cent. of pre-war. (*Farm Real Estate*, p. 8.) Thus loans up to more than 100% of actual market value have been authorised and made on a considerable scale. (*F.C.A.*, p. 222, 163.)

Even so it was necessary to arrange a scaling down of debts in thousands of cases before the new institutions could contemplate refinancing at all. (*F. C. A. Report*, p. 12.) In 17.6 per cent. of Land Bank Commissioner loans (there were 230,000 of such loans made from May 12, 1933 to June 30, 1934) (*F. C. A.*, p. 223), such scaling down had to take place, and the average amount of the reduction of indebtedness was about 23% of the original amounts owed.

These points are mentioned as a typical example of the efforts being made by a Government to put agriculture back in a financial position in which it can carry on. They could be paralleled from a dozen other civilised countries.

#### OUR POLICIES AND ACHIEVEMENTS.

On the assumption that present economic conditions must continue there is much to be said for some of our policies. The factory for turning old cows into meat meal is sound economics. The slaughter of calves is perhaps a regrettable necessity. The fixed price for butter may be defended as a partial restoration of the purchasing-power of farmers, but it gives an artificial value to old cows and increases the dependence of the creamery industry on the export market, in which it is quite

patriotic to sell butter, bacon, eggs and turkeys ; but, one would almost think, unpatriotic to sell grass-fed bullocks.

Our wheat policy would be a comparatively harmless enterprise if it was not likely to lead to an extension of corn-crops without an equivalent extension of root-crops, thus permanently lowering the fertility of our soil. Our beet policy involves a loss of revenue of a million pounds a year, which must be found from some other source.

The coal-cattle pact is the first indication of the recognition that cattle are the central feature of our agriculture and must remain so. Consumption of beef per head is falling in England, but that country still consumes the equivalent of 4 million cattle carcasses in the year. Even when we exported 600,000 dry stock in the year we were only giving the Englishman his dinner of beef on a Sunday.

The British quota policy, throwing back 100,000 of our fat cattle to do slimming exercises on our bare winter fields, can do them very little good, but is doing us infinite harm. The other States of the Commonwealth, notably New Zealand and Australia, are threatened with similar policies similarly disastrous to them.

The new British agricultural policy is the moral and economic equivalent of the Stamp Duty and the Navigation Acts which caused the revolt of the American colonies. As a member-state of the Commonwealth we have the right to assume the leadership of the sister-states in a moral insurrection against this infamous eighteenth century policy which is ruining us and threatening them. It is not only the moribund economy of the rancher, but the whole of our agriculture which is threatened with ruin if the cattle industry is crippled or destroyed. Live stock and live stock products must remain our chief agricultural activity. Thus, and thus alone, can tillage be permanently expanded, employment extended, and the greatest of our economic assets, the grass that clothes our fields, yield its full quota of wealth to the national household.

To anyone capable of ruminating, the grass that clothes our fields must indeed present itself as one of the greatest gifts of Providence to our country. Unfortunately there are those who pride themselves on their freedom from the cattle complex, and are incapable of the ruminatory process. Their intelligence is certainly not of the bovine order. Our cattle at any rate have the kind of intelligence that appreciates the supreme value of grass. One has only to watch them go to it in the late spring time.

#### AGRICULTURE AND THE INDUSTRIAL REVIVAL.

Every good Irishman wishes well to the industrial revival, and some of us cannot withhold a reluctant admiration for the faith that has achieved apparent impossibilities. The fate of America warns us that a one-sided urban prosperity cannot endure. We must make haste to provide the imposing structure of our new industrialism with a solid foundation by restoring the prosperity of agriculture. Any industrial revival which is not founded on the rock of agricultural prosperity must, sooner or later, crumble and decay.

## APPENDIX.

## PRICE OF LAND PER ACRE, 1921-1934.

" Small farms " — under 20 acres.

" Medium farms " — 20 to 40 acres.

" Large farms " — over 40 acres.

## CAVAN-SLIGO

—	1921	1926	1929	1932	1934
	£	£	£	£	£
Small ...	34.8	23.0	18.7	15.3	15.4
Medium ...	29.1	—	13.8	16.6	11.8
Large ...	20.8	—	—	—	10.8

## CLARE.

Small ...	24.4	—	—	—	19.3
Medium ...	(25.0)	—	—	(20.2)	(15.2)
Large ...	—	—	9.6	—	6.7

## CARLOW-WEXFORD.

Small ...	31.9	(28.8)	18.6	(6.3)	11.0
Medium ...	24.3	13.1	8.0	9.9	8.1
Large ...	24.7	11.7	6.8	8.7	6.1

## LOUTH.

Small ...	32.8	(13.2)	25.7	25.9	(9.4)
Medium ...	30.4	(12.4)	(11.7)	—	13.3
Large ...	25.9	—	(9.6)	—	10.6

## LIMERICK.

Small ...	81.6	40.4	33.3	23.2	27.6
Medium ...	43.5	32.3	32.2	14.7	16.2
Large ...	31.1	20.6	20.7	(12.0)	11.8

## MEATH-WESTMEATH-KILDARE.

—	1921	1926	1929	1932	1934
Small ...	32.6	22.7	15.3	14.3	9.7
Medium ...	36.1	16.6	13.2	13.4	10.6
Large ...	27.6	13.1	13.0	10.5	7.2

The figures printed in brackets are based on an insufficient number of instances.

## BIBLIOGRAPHY.

- E.M.B./c./3. Meat Report of the Empire Marketing Board, 1932. The Agricultural Output and Food Supplies of Great Britain, 1929.* Ministry of Agriculture and Fisheries.
- World Economic Surveys, 1931-4.* League of Nations, Geneva.
- Quarterly Statistical Bulletins.* Currency Commission, Dublin.
- Irish Trade Journals,* Dublin.
- The Agricultural Output of Saorstát Éireann, 1926-7.* Dublin.
- Pig Industries Tribunal Report on Pig Production, 1933.* Dublin.
- Agricultural Statistics, 1847-1926.* Dublin.
- Agricultural Statistics, 1927-1933.* Dublin.
- Statistical Abstracts, 1933 and 1934.* Dublin.
- Agricultural Reform in the United States.* J. D. Black. McGraw-Hill Book Co. Inc. New York, 1929.
- The Changing Structure of American Banking.* R. W. Goldschmidt. G. Routledge & Sons, Ltd., London, 1933.
- Farm Credit Administration.* American Institute of Banking New York, 1934.
- First Report of the Agricultural Adjustment Administration.* U.S.A. Department of Agriculture, 1934.
- First Annual Report of the Farm Credit Administration.* United States Government Printing Office, Washington, 1934.
- The Farm Real Estate Situation, 1932-33.* Circular No. 309. United States Department of Agriculture, Washington, 1933.
- Farm Mortgage Credit. Technical Bulletin No. 288.* United States Department of Agriculture, Washington, 1932.
- Achieving a Balanced Agriculture.* United States Department of Agriculture, Washington, 1934.
- National City Bank of New York. Monthly Letter,* March, 1935.



## DISCUSSION ON MR. JOHNSTON'S PAPER.

*Following are résumés of the observations of some of the speakers to Mr. Johnston's paper:—*

**Professor G. O'Brien**, proposing the vote of thanks, congratulated Mr. Johnston on the energy and courage he had shown in dealing with the current problems of Irish agriculture, thus carrying out the intention of the founder of the Barrington lectures. He stated that the Irish situation was not unique, but was a particularly acute case of a world-wide malady caused by the growth of economic nationalism which had produced a crop of economic wars between nations which were politically at peace with one another. Established export industries in every country had had to accommodate themselves to a new and rapidly changing situation. The agricultural exporting countries had found the readjustment most difficult owing to the peculiar economic features and to the great changes in the technical conditions of agricultural production. He enumerated the possible methods of dealing with the export industries in a period of rapid transition, namely, the seeking of new export markets, the expansion of the home market and the restriction of production, and indicated the limitations of each of these expedients. He further suggested that the characteristic difficulties of agriculture to-day are largely due to the failure of the agricultural industry to adapt itself to the changed conditions of production, and that the adoption of the desirable measures of reorganisation is being retarded by the prevalence of protectionist policies.

**Major Barrow**: I would like to add my most hearty congratulations to Professor Johnston on his most excellent and much-needed paper.

I think the point that needs most emphasising in that paper is the extent to which farm economies have been upset by artificial manipulation. I do not speak as an old hand, for I only began farming in 1921, at peak prices and on an impoverished farm, but I have kept accounts for the whole of that time and, for some years of it, cost accounts. I do not know what is the real measure of success in farming, but I have, since 1921 at least, doubled the numbers of all classes of stock, besides adding some 2,000 head of poultry to it. I will not say so much about the profit and loss account except to mention that it was slowly but steadily improving till 1931. In 1932 it crashed badly, mainly owing to the heavy drop in values, for prices fell heavily that year. From then on the less said about it the better, except that each year shows a heavy loss, and that it is only in the hope of better times that I keep it going at all.

I drew attention to the period 1921-31 because during these years there was a steady fall in farm values, but in those days farm prices were not affected by political considerations, and so, in spite of that fall in values it was possible to make headway on a mixed farm with a fair proportion of tillage.

The United States Government have laid it down as a fundamental policy that farming must pay if the nation is to prosper. How much more so must this be the case in the Free State, where our farming population is double the proportion of theirs.

The lecturer has drawn attention to the comparative prosperity of the 20-acre man in America. The small farmer here may be comparatively prosperous, but only because he lives on the sweated labour of himself and his family, and has reduced his scale of living to one no decent industrial worker would accept. Even so, except for a chance turn in the wheel of speculation, he has no money to spend and so furnishes no market for our industries. The bigger farmer, by reducing stock, wages and employees, may carry on for a little, but he is living on capital just the same, even if he has not gone to the bank for it, and

so he, too, is no buyer of our industrial produce. In the long run these industries can only succeed if the farmer can buy.

Professor Johnston has pointed out that in a natural grain country three-fifths of the cash value of farm produce was live stock and their products. Nevertheless, in a chancy climate, and in the finest grazing country in the world, attempts are being made to eliminate live stock and grow grain. Even that is not carried out as a considered policy, for they encourage dairy produce but ban the bullock.

You cannot have wheat without manure or manure without live stock, or live stock without fertile grass lands, and you cannot have these without security of tenure or continuity of policy, for no man will incur the expense of enriching his land unless he is reasonably sure of getting a return, and the effect of manuring is spread over many years. Live stock is the basis of all farming.

**Mr. A. I. Qureshi (India):** Mr. Johnston deserves our most sincere congratulations not only for his very scholarly paper but also for his courage in writing on a subject which is unpopular. I blame the economists for their policy of isolation. In a democratic country where every adult citizen has a right to vote, and where politicians are exploiting the ignorance of the people, I think it is the moral duty of economists to come forward and expose their fallacies. Before going to Australia I was a great advocate of State enterprise and firmly believed in the miracles of Protection. But after studying the economic condition of various British Dominions at first hand, I was very badly disillusioned. I accepted a small travelling grant, to enable me to go to Australia, partly with the idea that I should be able to save plenty of money, as all foodstuffs and fruit would be very cheap out there. But on my reaching Australia I found, to my dismay and surprise, that almost everything was at least 50 per cent. dearer than in London. Australian butter, which was selling in the retail shops (at the time I left London in July, 1933) at 9d. a pound, was being sold for 1/5 a pound in Sydney. I asked why prices were so high in Australia, and I was told that wages were high. I asked why were wages so high, and was told that the cost of living was very high. Why was the cost of living so high?—because there were tariffs. Why were there tariffs?—because they could not compete with other countries as wages in Australia were very high. This is a very vicious circle. The nations of the world are drifting very fast towards national self-sufficiency without considering its price. There is a tendency everywhere in the world to exaggerate the miracles of Protection. In my opinion, before any industry is given Protection its case must be thoroughly examined by a body of experts, and it should fulfil the following three fundamental conditions:—(1) There should be an abundance of raw material for the industry that is to be protected in the country; (2) the industry should be of importance to the country and should be in need of protection in its infancy stages; (3) there should be definite evidence to show that after a reasonable period of protection it should be able to stand on its own feet and would be able to face outside competition without the shelter of tariff barriers.