

The Papers of Eugene Meyer (mss52019)

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Subject File, Federal Reserve Board, Reports – Economic Depression,
France & England, 1931

EUGENE MEYER

SUBJECT FILE

FEDERAL RESERVE BOARD
REPORTS ~~ON~~ ECONOMIC DEPRESSION,
FRANCE + ENGLAND 1931

DEPARTMENT OF COMMERCE
OFFICE OF THE SECRETARY
WASHINGTON

July 1, 1931.

Hon. Eugene Meyer
Governor, Federal Reserve Board
Washington, D. C.

Dear Mr. Meyer:

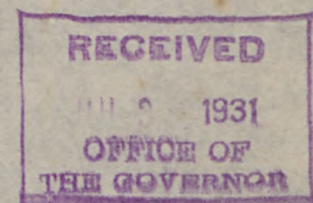
Mr. Edward Eyre Hunt who is in Geneva, Switzerland, attending the meetings of the Economic Committee and of the special committee which is studying the course and phases of the business depression, has asked me to send you in confidence the enclosed report on the Economic Depression Enquiry--United Kingdom.

I think you will find it particularly interesting.

Yours very sincerely,

Catherine M. Dickerson

Secretary to E. E. Hunt.



E.D.E.5. (a)
(May 1931)

ECONOMIC DEPRESSION ENQUIRY.

UNITED KINGDOM.

Memorandum of the London and Cambridge Economic Service.

Introduction

SUMMARY OF DEVELOPMENTS
1922 - 1929.

The economic history of Great Britain from 1922-1929 resolves itself into an account of attempts to restore equilibrium, upset by maladjustments resulting from war conditions, and in certain cases aggravated by the post-war boom. War demands had stimulated an expansion of productive capacity in the basic industries, and the cessation of that stimulus rendered much of that capacity redundant. This was followed in certain industries by further expansion and/or capitalisation at inflated values by the inflation boom of 1920.

Thus the cotton industry suffered a change in structure, the public company replacing the private firm; the flotation being carried out on the expectation of the continuance of boom profits.

In shipbuilding there was considerable replacement of tonnage destroyed during the war, and of obsolete ships which would otherwise have been scrapped earlier. To cope with the increased demand new yards were constructed. Woolen textiles were affected by the demands of the demobilised forces for civilian clothing and though there was no recapitalisation, as with cotton, there was considerable expansion of the merchanting section of the industry.

Briefly, then, 1922 found British Industry overequipped with plant, much of which was obsolete or worn out by the accelerated rate of working in war time, but all of which was capitalised at values which bore no relation to earning capacity at the deflated price level.

In the case of coal the stimulus was continued until mid-1924 by the Ruhr occupation, and the absence from the market of a principal competitor.

The return to the Gold Standard in 1925 brought falling prices in terms of paper, but the fall did not keep pace with the appreciation of the exchange so that it left internal gold prices at a higher level than in the rest of the world and the export industries found costs of production out of equilibrium with world prices.

The attempts of the coal industry to adjust itself to changed conditions led to the strike of 1926, and the fears of labour as a whole that a general attack was to be made on the level of wages caused the strike to spread to almost the whole field of industry. The next year - 1927 - saw some recovery in the early part, and on balance the general industrial position regained the level of 1924.

Some measure of revival became apparent in 1928; according to the London and Cambridge index the prices of industrial shares rose 20% during the year, and this was accompanied by a slight rise in fixed interest securities (between 1 and 2%). There was an increase in the volume of capital issues, characterised by a more than proportionate increase in home issues. Taken on the whole it was the best year since the 1920 boom, and compared with 1930, a year of fairly good trade.

It became apparent that, just as the prices of British exports had risen more than import prices in the period previous to 1924, so now with a falling price level import prices fell more than export, so that, over the post-war years there was a continuous change in the terms of trade, which is not without significance in the study of the British unemployment problem.

Of goods imported prices generally rose about 58% from 1913 to 1924, the rise being 55% for food and 73-76% for materials, while in the same period prices of exports of home produce rose as a whole 89%. For manufactures alone the rise was 87%.

Meanwhile weekly wages rose 70-75%, and weekly earnings 95%. (See Memorandum No.28).

Between 1924 and 1928 the general index of wholesale prices fell 16%, materials falling 20% while imported materials fell about 17%. The average price of exported manufactures fell about 15%, while wage rates were steady. The changes in the terms of trade as shown by the changes in the price indexes of imports, and exports, are again exemplified by the import and export figures. In 1924 the total value of retained imports had increased by 67%, but physical volume had increased only 7%. Some change in the quality of imports is shown by the somewhat smaller proportion of materials and partly manufactured goods, which had increased 60% in value, but fallen off 11% in quantity. Between 1924 and 1928 there was a fall of 5% in the value of retained imports, accompanied by a rise of $7\frac{1}{2}$ % in volume. Over this period the quantity of materials and partly manufactured goods was practically the same, while their value had fallen 15%.

As regards export trade, 1924 showed an increase of $4\frac{1}{2}$ % in value, and a decrease of 20% in volume over 1913. Manufactured

goods had fallen 25% in volume and risen 44% in value. These figures are consistent with stationary production for the home market.

Between 1924 and 1928 there was a fall of 10% in the value of British exports, accompanied by an increase of 5% in quantity. Exports of coal had fallen off considerably. The value of manufactured goods had fallen 6%, while volume had increased 8%. However the physical quantity of exported manufactures was only about 82% of the 1913 level, although the productive capacity of British industry had increased in the meantime.

In 1929 British Foreign Trade was maintained at a level slightly above that of the previous year, but output statistics show signs of definite improvement, the increases in output over 1928 in various industries being coal 9%, pig iron 13%, steel 13%, while production indexes and unemployment figures show similar improvements.

In a review of this period a particular point of interest and perhaps of importance arises in the case of Great Britain. The abnormal unemployment which persisted throughout these years gave the impression that the period was one rather of depression than of expansion. To a large extent, therefore, the significance of the general movement which is now recognised to have been one of cyclical upturn, was overlaid by the peculiar problems of Great Britain. Thus, although the Stock market participated in the world-wide security boom, although general production was increasing and in the case of the newer industries at a fairly rapid pace, although unemployment in the southern half of the country was not inconsistent with prosperity conditions, the private and public view of the situation right

up to the end of 1929 was concentrated on the hope that the country would emerge from a depression. Certainly the possibility of a decline from the level of existing activity was not contemplated and the superimposition of the world depression on the apparently already depressed British economy came as a startling shock.

While the abrupt turn in the conjuncture movement created a situation for which the country was unprepared, at the same time it threw a new light on the previous position. The unemployment problem illustrates this point.

Although the chronic nature of the unemployment which prevailed from 1922-29 was being recognised, in the later years the round figure of one million unemployed was accepted as a maximum upon which schemes for relief or solution of this problem should be based. In effect it is revealed as a minimum upon which a cyclical depression was super-imposed a further total of one million and a half.

Similarly there was misinterpretation of the monetary factor. The monetary stringency which culminated in 1929 was regarded not as a symptom of over-expansion in trade and industry, but as a factor in depression and was attributed to special post-war circumstances such as the return to the gold standard. For this reason the fall in money rates in late 1929 was welcomed as the removal of a handicap, and was expected to open the way to recovery. It was in fact the precursor of a drastic setback.

See Article by G.M. Wood in Current No. Weltwirtschaftliches Archiv., account of Woollen and Woosted Export industry in past ten years.

Influence of Regulation of output, sales and
prices and obstacles to trade.

Although various output and sales agreements have existed during the past ten years, it is in general difficult to fix any responsibility for the high level of manufacturing costs to them. Lacking the assistance of a tariff, it has not been possible to raise internal prices above world prices. An account of certain associations in the Iron and Steel industry is given in the Balfour Reports*, but the only successful agreement seems to have been that of the International Steel Rail Pool.

Britain must, however, accept the responsibility for one of the most disastrous output restriction agreements - the Stevenson scheme for Rubber. This is fully described and its effects considered in the Memorandum by J.W.F. Rowe (a copy of which is appended to this report).

The present Coal Quota scheme by which the Government fixed output quotas for each coalfield has not been working long enough to permit an observation of its effects. One can only record that collieries in the Barnsley district of Yorkshire** are complaining that it is necessary to dismiss labour to keep output within the quota while they still have orders unfilled. Also householders are finding that orders for specific grades of coal cannot always be filled.

* Chap. 2 Section b: Survey of Metal Index to Part IV
Reports of Committee on Industry and Trade, 1928,

** A district mining high quality household coal.

The existence of a Ring controlling the price of building materials has frequently been alleged as the cause of the high cost of building in this country, but the rigidity of trade union regulations and wage rates is equally a contributing cause.

The rigidity of retail prices in the face of falling wholesale prices has been a marked feature of the past decade, but the wide margin has probably reflected high distribution costs rather than abnormal retailers' profits.

In the absence of a census of shops it is impossible to demonstrate a redundancy of retail establishments; but from surveys of small areas which have been undertaken, there is little doubt that such is the case. High gross profit* margins are needed to cover overhead costs, and local retail associations have been formed to maintain these high margins. Such associations are particularly active in retail trade in branded goods sold at fixed prices. The association approaches the manufacturer or wholesaler to induce him to refuse supplies to a retailer who cuts prices. If the manufacturer refuses, a boycott of his goods in the area of the association may be arranged.

In the automobile industry distributors selling below list prices are blacklisted, and no manufacturers may supply them, fines being demanded for removal of the distributor from the black list. Evidence of such practices is obtainable from cases before the Courts, and an Enquiry into Restraint of Trade is being made.

A further obstacle to trade has been the restrictive

* See W. R. Dunlop, "Retail Profits" Econ. Journal, Sept. 1929.

nature of Trade Union regulations. These have varied from the alleged regulation of daily output (number of bricks laid per day in the case of bricklayers*), to cumbersome demarcation rules. The wide scope of the Unemployment Insurance has certainly been a contributory circumstance to the maintenance of these restrictions, but this aspect will be dealt with in the next section.

RIGIDITY OF MONEY WAGE RATES

Indexes of Prices and Wages in First Quarters of
Years 1925-31.

Average of 1925 - 100.

| | <u>Wholesale Prices</u> | | <u>Retail Prices</u> | <u>Wages</u> | |
|---------------------|-------------------------|------------------|-----------------------|--------------|-------|
| | <u>Food</u> | <u>Materials</u> | <u>Cost of Living</u> | <u>Food</u> | |
| 1925 | 105.6 | 99.4 | 101 | 102 | 100.5 |
| 1926 | 92.8 | 86.3 | 98 | 96 | 100.5 |
| 1927 | 90.8 | 82.9 | 97 | 94 | 101 |
| 1928 | 91.5 | 81.1 | 94 | 92 | 100 |
| 1929 | 89.5 | 80.5 | 93.8 | 90.5 | 99.5 |
| 1930 | 80.7 | 74.8 | 92 | 87.5 | 98.7 |
| 1931 | 67.4 | 62.2 | 86 | 78 | 98 |
| Fall in 6 years: | 38.2 | 37.2 | 15 | 24 | 2.5 |

It is improbable that such disparity between movements of wage rates and of prices should have persisted over a number of years, had it not been for the greater immobility of labour caused by the Unemployment Insurance Scheme.

As was seen in the introductory summary the pre-war staple industries had expanded to a productive capacity beyond post-war requirements. There has been a considerable expansion of the labour force attached to these industries, the outstanding

* This has always been denied by the Union.

example being coal, where there was a permanent surplus of some half million men in 1925.

The loose interpretation of the "genuinely seeking work" clause of the Insurance Acts (now repealed) enabled unemployed to refuse work which they were capable of doing on the ground that it was not their usual occupation.

Trade unions have been able to pursue a policy of wage rate maintenance because they were free both from the obligation to maintain their own unemployed members and from the risk of strike breaking with blackleg labour.

Further, employers have felt less compunction in dismissing labour, partly because the existence of the "dole" removed humanitarian objections, and also because it is possible to turn men off for short periods when business is slack and to get the same men back again when more orders are secured. It is consequently possible to keep the labour force of an individual concern intact without paying wages during quite short slack periods. It is not arguable, however, that the wage index shown in the table above should have fallen *pari passu* with any one of the price indexes. The productivity of labour had increased by about 11%* between 1924 and 1929. Still there is evidence that some wages are too high and that somewhere workmen are being precluded from selling their labour below certain prices and that rigid wage rules have contributed to the inelasticity of the structure of British industry at a time when rapid adaptation to changing conditions was required. **

* See Bulletin, Jan. 23, 1930 and attached sheets.

** See article Slump of 1930, L. C. Robbins, "Times' Annual Commercial and Financial Review," Feb. 10, 1931.

ing FINANCE.

The accompanying tables give series of the short and long term investment markets, and it is seen that while short money rates fell after the collapse of the post-war boom, they tended upward by the middle of 1923, and maintained distinctly high levels. Only once in 1924 did the monthly average of day to day money fall below 2%, while the average for the year was nearly $2\frac{1}{2}\%$, the average for 3 months discounts being almost $3\frac{1}{2}\%$. In March 1925 day to day money rose above 3% and remained above this level for five years, exceeding 5% for 3 months during 1929. From the Return to the Gold Standard up to the beginning of 1930 the open market discount rate remained above 4% except for three brief periods.*

In consequence the idea became current that the cause of the difficulties which British industry was experiencing at this period was dear money, and the possibility of cheap money after the Wall Street crash was heralded as the coming of revival for British trade.

Dear money was too facile an explanation, and the structural disequilibria were ignored.

Thus, although in the short run trade was depressed by high money rates due to attraction to New York for speculative purposes, yet in the long run greater injury might have been done if structural maladjustments had been intensified by another boom in production.

The latter part of 1928 and the first three quarters of 1929 show some features of boom conditions - increased stock exchange activity, increased profits and the like - all except rising prices, and it was probably the absence of this characteristic that deceived so many.

* The monthly average rate was below 4% in Sept. - Oct. 1925, May 1927, May - July, 1928.

CHARACTER OF THE PRESENT DEPRESSION

As previously noted, the present depression was superimposed in Great Britain upon an existing state of serious disequilibrium. It followed a period of slow but continuous fall in prices over 1924 to 1929, a movement unique to this country since it was partly determined by a return to the gold standard from a price level just above the gold price level. With the elements of rigidity in the system this steady fall gave rise to maladjustments which were reflected most obviously in the difficulties of the export trades. A world depression would in any case have had serious effects on the economy of a country such as Great Britain, with a large part of its product destined for export, but with the particular situation which existed beforehand the present depression has expressed itself chiefly as a serious aggravation of that situation.

This was certainly true of the early course of the depression and partly explains the tardy recognition that a new factor had entered into the situation of Great Britain. For the first quarters of 1930 at least, the economic situation could be regarded as analogous to that of the corresponding period in previous years, and the results were disappointing, not because of a definite change for the worse, but because of the absence of any change for the better. There was no serious setback in production, and not until the last month of the quarter did unemployment suggest a different trend to that of previous years.

In the second quarter the new situation was revealed by a

by a heavy fall in production and in exports and by a definite reversal of the seasonal movement in employment. There was progressive deterioration over the remainder of the year, and by the end the depression had definitely involved such sheltered industries as building.

Geographically this was reflected in a spreading of the "black spots" in the North to cover nearly the whole of the country.

The character of the change can be illustrated by representative indices for the first quarters of 1929, 1930, 1931.

| | <u>1929</u> | <u>1930</u> | <u>1931</u> |
|-----------------------------------|-------------|-------------|-------------|
| County & Prov. Clearing £Mn. | 1191 | 1156 | 1016 |
| New Capital Issues £Mn. | 183 | 106 | 22 |
| Coal Output (0000 tons) | 6813 | 7014 | 5941 |
| Pig Iron (000 tons) | 167 | 192 | 101 |
| Steel (000 tons) | 240 | 237 | 139 |
| Shipbuilding commenced (000 tons) | 362 | 427 | 33 |
| Index of Production 1924 =100 | 1106 | 1109 | - |
| Unemployment (000's) | 1375 | 1599 | 2675 |
| Volume of Exports : % of 1924 | 106.7 | 99.9 | 69.2 |
| Unemployment %: | | | |
| (S.E. Area | 6.5 | 8.0 | 12.7 |
| (S.W. Area | 8.6 | 9.7 | 14.7 |
| (N.E. Area | 14.1 | 16.3 | 26.8 |
| (N.W. Area | 12.6 | 18.1 | 28.9 |

Comparison with earlier depressions.

If, as is necessary in the case of Great Britain, the previously existing situation is taken into consideration, the seriousness of the present depression is of course unparalleled. Even if the period of the world depression is isolated, the magnitude and the duration of the depression combine to make it one of the most

serious on record. The following figures afford a comparison of some features. The 1921 depression is omitted because of the exceptional circumstances, but even then with the intensified effect of a coal strike the Trade Union unemployment percentage was below 21.

| <u>Unemployment %</u> | <u>Statist Price Index 1867-77-100</u> |
|------------------------------|--|
| 1891 Minimum (Feb.) 2.6 | 1891 Maximum (May) 72.8 |
| 1892 Maximum (Dec.) 10.2 | <u>1892 Minimum (Sept.) 66.8</u> |
| % Fall over 19 months = 8 % | |
| 1907 Minimum (Apr.) 2.8 | 1907 Maximum (May) 82.4 |
| 1909 Maximum (Feb.) 8.4 | <u>1909 Minimum (Feb) 71.9</u> |
| % Fall over 21 months = 13 % | |
| 1929 Minimum (June) 9.6 | 1929 Maximum (Mar.) 120.5 |
| 1931 Maximum (Feb.) 21.7 | <u>1931 Minimum (Apr.) 84.4</u> |
| % Fall over 25 months = 30 % | |

Percentage decline in output

| | <u>Pig iron</u> | <u>Steel</u> |
|-----------|-----------------|--------------|
| 1892/1891 | 10 | 8 |
| 1908/1907 | 10 | 19 |
| 1930/1929 | 18 | 24 |

Repercussion on the national economic situation of the depression in other countries.

This is an important factor in the depression in its effect on an industrial country such as Great Britain, with a large import trade in raw materials and food stuffs, and a large export trade preponderatingly of manufactures. It should be noted that the price

movements quoted in the previous section are measured from indices which relate mainly to foodstuffs and raw materials, and that these are largely obtained from abroad. They are thus by no means representative of internal price movements, nor in particular of the price movements in the exports which are exchanged for the imported food and raw material.

Thus the Board of Trade general index of wholesale prices for 1930 showed a decline of 12% on 1929, and this coincided with a similar decline in the price index of imports. In the case of exports the decline was only 4.5%. For imported foodstuffs the general fall in prices was 12.5% and for imported raw materials 17% whilst the prices of exported manufactures (which constitute the bulk of the export trade and are moreover representative of home production) only fell by 4.2%. Such diversity of movement represents a considerable change in the terms of trade to the advantage of industrial countries. The effect is that the industrial country obtains its imports for a smaller volume of exports. In comparing 1930 with 1929, it is seen that Great Britain imported a slightly larger quantity of food and the same quantity of manufactures. Her exports of manufactures declined in quantity by 20%, and this was reflected in a reduction of 10% in the imports of raw materials which are partly required as a basis for exported manufactures. In effect the country maintained its home consumption of overseas produce, paying for it with 20% less effort. The release of effort expressed itself in unemployment and a rough statistical

estimate suggests that most of Great Britain's additional unemployment induced by the world depression, has occurred in the export industries and is accounted for by this paradoxical operation of a favourable change in the terms of trade. As a further stage in this process, it could be demonstrated that the benefits of the change have been transferred from those remaining in employment to the displaced workers via unemployment relief.

This analysis has been freely applied to the general world situation, and will presumably receive adequate treatment in discussions of the effects of reduced purchasing power in the food and raw material producing countries. The above interpretation of the repercussions of changing terms of trade requires further development, which might throw a different light on the supposed immediate and long run results. The statistics of Great Britain's trade may be quoted here as data for such an investigation.

Trade of Great Britain with some of the Countries
supplying Food and Raw Materials (£Mn.)

| | Imports | | Exports | |
|---------------------|-------------|-------------|-------------|-------------|
| | <u>1929</u> | <u>1930</u> | <u>1929</u> | <u>1930</u> |
| Argentina | 82 | 57 | 29 | 25 |
| Egypt | 24 | 14 | 12.5 | 10 |
| U.S.A. | 196 | 154 | 46 | 29 |
| Brazil | 7 | 8 | 13 | 8 |
| Canada | 46 | 38 | 35 | 29 |
| Australia | 56 | 46 | 54 | 32 |
| New Zealand | 48 | 44 | 21 | 18 |
| India | 63 | 51 | 78 | 53 |
| Straits Settlements | 14 | 9 | 12 | 7 |

Monetary Factors.

The immediate effect of the depression was to bring relief in the money field. As has been explained, this relief was at first regarded, not as a symptom of trade and industrial recession, but as a factor working for improvement on the existing unsatisfactory situation. As events soon proved, the rapid easing of money rates was the orthodox precursor of a trade depression. From $6\frac{1}{2}\%$ at the end of October 1929 the Central Bank rate fell rapidly by successive stages of $\frac{1}{2}\%$ to 3% in May 1930: open market and other rates declined correspondingly. This development was representative of monetary movements in the leading centres, but the subsequent developments in the British money market showed that the special factors which had rendered the British position delicate before the slump still persisted. Gold movements were unfavourable over the remainder of the year and the principal exchanges kept below parity. As a result Great Britain lagged behind the downward movements of the leading countries and at times open market rates were pegged artificially to support the exchanges. On occasions a rise in the Bank Rate was not out of question. To the present moment open market rates in London have remained 1% higher than in New York, Paris, Amsterdam and Switzerland.

Nevertheless, money has been cheap enough to encourage enterprise, if this were the only factor in the situation: but an important lesson of the depression is that cheap money in itself does not automatically provoke a rapid recovery. The lack of enterprise in face of favourable money rates is well illustrated by the figures for capital issues in Great Britain for 3 selected periods:

New Capital Issues in Great Britain

| | 1st quarter of year | | |
|------------|---------------------|-------------|-------------|
| | <u>1929</u> | <u>1930</u> | <u>1931</u> |
| For Home | 69 | 36 | 7 |
| For Abroad | <u>45</u> | <u>33</u> | <u>8</u> |
| Total: | 114 | 69 | 15 |

Stock Exchange Development.

The downward turn in ordinary shares came as early as February 1929, coinciding with increased monetary stringency. The raising of the Bank Rate from 4 $\frac{1}{2}$ % to 5 $\frac{1}{2}$ % after it had remained at the former figure for nearly two years, marks this change of phase on the Bourse. Since then the trend of share prices has been sharply downwards with only few and short periods of apparent stability. Practically all classes of shares have suffered in this slump. 1929 saw the collapse of many highly speculative and dubious issues of the boom period; but the actual depression has involved leading first-class securities and has inflicted serious losses on the sober investor. Fixed interest securities and government stock in particular should have risen pari passu with the fall in interest rates, but the movement has not been as uniform and as general as is usual in such a phase of the cycle. The depression has involved several food and raw material producing countries in financial difficulties, and the blow to the national credit has been reflected in the prices of their bonds. Since Great Britain is a large holder of overseas securities the investor has also lost heavily in that field of investment. Australia and Brazil may be quoted as examples. In addition to adverse economic influences on national credit, political factors have worked in the same direction, and Germany, China and India afford examples of this. The result has been that the swing over to bond

investment which should characterise a depression period has proved singularly feeble, and in the absence of this line of business the Stock Exchange and the capital market have remained almost completely stagnant.* The few new issues that have been made have been placed with great difficulty and recent well-sponsored issues stand at a considerable discount. British Government stocks have withstood these depression influences but even here the movement has not been consistent. For example apprehension concerning the national finances caused a severe set-back in gilt-edged securities in early 1931.

Budgetary difficulties.

While the national finances have been severely strained by the depression, the development so far rather goes to illustrate the financial strength of Great Britain. For one thing the great bulk of the revenue is raised by direct taxation, and the difficulties experienced by countries which rely heavily on revenue from tariffs have not arisen. Also indirect taxation is mostly derived from duties on a comparatively small range of commodities in inelastic demand. As a result, estimates have not been badly thrown out by falls in prices and reductions in quantities, imported or consumed, of dutiable articles.

As compared with the previous financial year the ordinary revenue of 1930 - 31 actually increased by £42 Mn., against an estimated increase of £55 Mn., mostly to be derived from additional

*There were of course cases where issues were heavily over-subscribed as in November 1930 £86 Mn. offered for £6 Mn. Central Electricity Board $4\frac{1}{2}\%$ @ $95\frac{1}{2}$. South Africa $4\frac{1}{2}\%$ also oversubscribed.

taxation. Of the direct taxes only the stamp duties badly falsified the estimates and this was due to a mistaken calculation of Stock Exchange activity over the year. Customs duties practically reached the estimates and the short fall in excise revenue was less than 5. On the expenditure side supplementary estimates for unemployment relief increased the deficit, which on balance amounted to £23 Mn. It should be emphasised that the result covered provision for debt redemption to the total of £43 Mn.

Reference must be made, however, to an important form of expenditure which is not included in these accounts, namely borrowing by the Unemployment Insurance Fund. This borrowing is of course ultimately based on Government credit and is likely to be irrecoverable as far as the Unemployment Insurance scheme itself is concerned. In addition to ordinary expenditure out of the Fund and supplementary government expenditure (included in the Budget accounts) unemployment relief has further involved borrowing by the Fund to the total in that financial year of £36 Mn.

But even if this is taken strictly into account, the public financial balance sheet shows a credit of £ 7 Mn. In other words, Great Britain in a year of unexampled depression, covered its public expenditure including generous provision for a vast army of unemployed and achieved a small but genuine balance for debt redemption. For the year 1931-2 in spite of an estimated lower yield from direct taxation (assessed on the poor business results for 1930) and in spite of continued provision for the unemployed, the budget is balanced (in estimate) with the aid of only £6 Mn. of new taxation.

To the Memorandum was attached a set of annexes. One table (Turning points of various Statistical Series) is here reproduced (Annex I); a list of the other tables is given below with indications of original sources.

LIST OF STATISTICAL TABLES

1. (a) Imports, main classes, values.
(b) Exports, main classes, values.
(c) Output. Coal, Iron and Steel.
(d) Shipbuilding. Tonnage commenced.
2. Transport: Shipping Clerances.
Freight and Charter Rates indexes.
Unemployment numbers by industries.
3. (a) Net Imports of Raw Materials Values.
(b) Exported Manufactures.
4. Physical Volume of exports of certain manufactures by country of destination.
5. Iron and Steel statistics for U.K.
6. Quarterly Index numbers of production.
7. Wholesale Prices Board of Trade.
8. Wholesale Prices Sauerbeck.
9. Bowley's Wages Index - Old Index.
10. Bowley's Wages Index - New Index.
11. Index of Terms of Trade.
12. Balances of Income and Expenditure for U.K.
13. Finance Tables from Bulletin 1924-31.
14. Exchange Rates.
15. Profits Quarterly variations and earnings.

16. Analysis of Net Profits (Annual) by industries.
17. Gold Movements U.K.
18. Migration of British Nationals.

Source: Nos. 1 - 6, 13, 14 and 17, London and Cambridge Economic Service; (Monthly Bulletins and Special Memoranda).
Nos. 7 and 18, Board of Trade Journal.
No. 8, The Statist.
Nos. 15 and 16, The Economist.

ANNEX II.

Memorandum of the London and Cambridge Economic Service.

SOURCE /Contin./ :

Tables Nos. 9 and 10, London and Cambridge Economic Service,
Prof. Bowley's Memorandum.

Table No. 12, The Board of Trade Journal.

It has been considered desirable to reproduce the tables on Terms
of Trade /No. 11/. This table is given below:

INDEX OF TERMS OF TRADE

1880 - 1913 = 100

| Year | Import Prices | Export Prices | A/B x 100 |
|-----------------|---------------|---------------|-----------|
| | A | B | |
| 1920 | 379 | 487 | 77.8 |
| 1921 | 253 | 366 | 69.1 |
| 1922 | 202 | 271 | 74.5 |
| 1923 | 198 | 258 | 76.7 |
| 1924 | 206 | 257 | 80.15 |
| 1925 | 206 | 252 | 81.7 |
| 1926 | - | - | - |
| 1927 | 181 | 223 | 81.2 |
| 1928 | 182 | 222 | 82 |
| 1929 | 178 | 216 | 82.4 |
| 1930 (1st Qtr.) | 165 | 214 | 77.1 |

See A. G. Silverman: Review of Economic Statistics August 1930.
The above figures are a continuation of Silverman's for post-war
period.

APPENDIX I.

TURNING POINTS OF VARIOUS STATISTICAL SERIES.

| Series. | | Before 1929 | 1929 | | | | 1930 | | | |
|--|------|------------------------------|----------------------|-----------|----------------------|----------|--------------------------|----------|----------|----------|
| | | | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. |
| Price 90 Industrial Shares | Max. | | Jan.-Feb. | | | | | | | |
| Index Fixed Int. Securities | Min. | | | | Sept. | | | | | |
| Short Money Index | Max. | | | | | Oct. | | | | |
| Day to Day Rate | " | | | | | Nov. | | | | |
| 3 Mths. Discount Rate | " | | | | | Oct. | | | | |
| Capital Issues U.K. | " | | April | | | | | | | |
| " " Abroad | " | | Jan. | | | | | | | |
| Bank Clearings | | | | | | | | | | |
| Town ^{x/} | " | | | | | | | | | |
| Provincial | - | Dec. '28 ⁽¹⁾ | | | | | March | | | |
| Wholesale Prices | - | | | | Sept. ⁽²⁾ | | | | | |
| Cost of Living | Max. | | | | | | Oct.-Nov. ⁽³⁾ | | | |
| Food Retail Index | " | | | | | | Oct.-Nov. ⁽³⁾ | | | |
| Imports (Value) All Groups ^{x/} | " | | Jan. ⁽⁴⁾ | | | | | | | |
| Exports ^{x/} Excluding Food | " | | | May | | | | | | |
| " " Food | " | | | April | | | | | | |
| Output | | | | | | | | | | |
| Coal | " | | March ⁽⁵⁾ | | | | | | | |
| Pig Iron | " | | | | | Oct. | | | | |
| Steel | " | | March | | | | | | | |
| Shipping ^{x/} | | | | | | | | | | |
| Tonnage Entered | " | | | | | | May | | | |
| " Leaving | " | | | | | | Jan. | | | |
| Railway Receipts | " | | | | | Oct. | | | | |
| Unemployment Males | Min. | | | | | | | | | |
| Total | " | | June | | | | | | | |
| Coal | " | | | | | | Jan. | | | |
| Iron and Steel | " | | March | | | | | | | |
| Engineering | " | | | June-July | | | | | | |
| Shipbuilding | " | | June | | | | | | | |
| Building & Construction | " | | June | | | | | | | |
| Cotton & Wool | | End of '28 ⁽⁶⁾ | | | | | | | | |
| Other Occupations | | 3rd Qtr. 1927 ⁽⁷⁾ | | | | | | | | |
| Production Quarterly | | | | | | | | | | |
| General Index | Max. | | | | | | | | | |
| Coal | " | | | | | | | | | |
| Pig Iron | " | | | | | | | | | |
| Steel | " | | | | | | | | | |
| Shipbuilding | " | | | | | | | | | |
| Railway Vehicles | | 2nd Qtr. 1928 [?] | | | | | | | | |
| Textiles | | | | | | | | | | |
| Food & Tobacco | | | | | | | | | | |
| Chemicals | | | | | | | | | | |
| Paper | | | | | | | | | | |

x/ Judged from a series corrected for Season.
 (1) Beginning of Down Trend.
 (2) Steady Fall Began.
 (3) Steady Fall began December.
 (4) Turning Point for Food and Raw Mat. separately Manufactured Imports Aug. '29.

(5) Variations no more than Seasonal till end 1930.
 (6) Renewal of Upward Trend.
 (7) Not Significant! Employment increasing more than in other industries.
 (8) Too recent.

DEPARTMENT OF COMMERCE
OFFICE OF THE SECRETARY
WASHINGTON

July 9, 1931.

Hon. Eugene Meyer,
Governor, Federal Reserve Board,
Washington, D. C.

Dear Mr. Meyer:

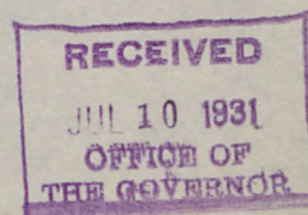
Mr. Edward Eyre Hunt who is in Geneva,
Switzerland, attending the meetings of the Economic
Committee and of the special committee which is studying
the course and phases of the business depression, has
asked me to send you in confidence the enclosed report
on An Inquiry into the Economic Depression,—France.

I think you will find it particularly
interesting.

Yours very sincerely,

Catherine M. Dickinson

Secretary to E. E. Hunt.



Translated from French.

STATISTICAL INSTITUTE OF THE UNIVERSITY OF PARIS.

An Inquiry into the Economic Depression.

This report should have been accompanied by a large number of tables. It will serve all necessary purposes to refer to those tables that have been published in the Statistical Year Book for France (the retrospective part) for annual figures; for the monthly figures from 1919 on, refer to those tables that have been prepared by the investigating committees of the various countries and which will shortly be published under the auspices of the Permanent Office of the International Statistical Institute.

FRANCE.

(A report according to the plan approved by the meeting of March 4, 1930, at Geneva).

I. General Study of Economic Conditions since 1922. Tendencies of the Cyclic Movement and Changes in the Economic Structure.

The period from 1922 to 1930 followed upon a sudden depression which occurred after the crisis of 1920. For instance, the French monthly index of wholesale prices, computed on the basis of the average for the period 1901-1910, after having as an average value in 1920 reached the figure 589, declined to 391 in 1921; the special index for industrial products changed inside of one year from 655 to 389. The rise of prices, account being taken of the decline of exchange on New York, has been greater following the war than in the course of the Napoleonic wars, in France, England and in the United States.

As we shall show later, an upswing in business took place up to 1926-1927, which was then followed by the present depression. To what extent have these movements, analogous to other movements of a fluctuating nature observed since the close of the 18th century, been influenced by changes in economic structure? It is difficult to say. Certain changes are ap-

parently the result of the former war situation. The needs which this war created have required changes in equipment, and new inventions came upon the market which in their results do not always correspond to the needs of peace times; the reconditioning of the devastated regions enabled our country to improve the existing plants, while financial expenses required for this reconditioning and for meeting the enormous war expenditures greatly increased the general expenses of production and exchanges.

The losses of human lives which might have interfered with the upswing of production have been compensated for, at least in part, by a certain increase in the active female population and by an inflow for foreign laborers.

Under these conditions, it cannot clearly be seen that changes that have arisen in the economic structure have been notably more accentuated than in the course of the preceding centuries, when many inventions were patented requiring important changes in equipment.

Through the various rhythms which characterized the economic movement, the progress of business and the increase of general well-being seem not to have been eclipsed except during war times.

The cyclic movements have shown a certain regularity. Outside of seasonal movements, short periodic cycles (of a few years only) have been superimposed upon movements of longer duration, and this two-fold rhythm was modified only in amplitude by reason of the war.

For the period 1922-1930, the details of this movement must be read from the following considerations:

A. FIGURES REGARDING PRODUCTION, CONSUMPTION AND STOCKS.

I. Crude Foodstuffs.

We shall confine ourselves in this examination to a few agricultural products.

The wheat harvest has been smaller in 1922 than in 1921. The harvest of the latter has been exceeded only in 1925, and in 1929 we had returned to a production equivalent to that of 1921 and 1913. The increase in yield made up for a diminution of the areas cultivated. The rye harvest is now a bit smaller than during previous periods, due undoubtedly to the more general use of wheat bread.

Wheat consumption has changed but little: 927,000 hectoliters from 1922 to 1929 as against 959,000 from 1902 to 1909.

Stocks seemed to have somewhat increased in France by reason of the favorable harvest of 1929; at the beginning of 1931 they seem to have been reduced.

They are still considerable in other countries which accounts for the price decline which we shall consider later on.

Potato production and consumption are like what they were before the war.

Wine production and consumption has increased, in comparison with what they were before the war. Sugar production had greatly increased following the war; it has now reached again the former level. Consumption has increased.

Cattle whose importance had declined after the war, has now been about restored.

In France, by reason of the division of areas, agriculture still requires much labor: the work of the women and the inflow of foreign laborers made up for the shortage resulting from the number of dead or mutilated during the course of the war.

2. Raw Materials.

Extraction of mineral fuel has always been below consumption.

It was particularly important in the regions devastated during the

war. In 1922, it was still considerably below the level of prewar times; it has increased since and yields a tonnage by one-third larger than before the war. On the other hand, consumption has increased, necessitating the importation of foreign coal in excess of prewar times. Extraction of iron ores shows in 1922 double the tonnage of prewar days, this tonnage has been increased two-fold from 1922 to 1930. Production of cast iron and steel, largely owing to the plants that have been integrated in the national domain, and the increase in our iron and steel equipment, had in 1922 regained the prewar level. In 1930 it was notably larger. The total iron and steel production represents an important export article.

Many other products France must import, if not entirely, at least raw materials to be manufactured into finished products.

3. Manufactured Products.

France does not keep a production statistics. Movements of the production of finished articles can be appraised only by means of more or less significant indexes.

According to the estimates of France's general statistics, production of the total industries does not exceed, in 1922, two-thirds of what it had been in 1913. In the cotton industry, prewar output had not been regained, not even in its maximum level in 1928; on the other hand, in the woolen industry and in the production of silk, the level of 1913 had been exceeded in 1928, to decline again since 1929.

In the mechanical industry, including the manufacture of automobiles, activity has increased from 1922 to 1929. It then declined, at least insofar as the automobile industry is concerned; it progressed rather rapidly up to 1926 when prices suddenly took an upswing. After a sensible decline, it reasserted itself, exceeding in 1930 the volume of constructions in 1913;

but a slowing down occurred again toward the end of 1930.

B. EFFECT OF REGULATIONS,- WAGES AND POPULATION FACTORS.

During the war, official regulation of prices and consumption of goods had for its main object elimination of waste and the rise in prices for necessaries of life.

The results have not always met expectations in view of the fact that in many cases it was impossible to follow the production through its various transformations, while in other cases the impossibility of selling at a sufficiently remunerative price entailed production decline, and consequently a restricted offer and high price. However, official regulations were maintained for a few years. They have yielded, in the face of the many inconveniences which they disclosed. Certain regulations still persist, involving necessaries of life. For instance, bread is subject to municipal taxes. Many laws have regulated the rents for dwelling houses; rents not exceeding a certain figure are still subject to these regulations; the upswing of construction of houses has been in part paralyzed by this legislation.

Nevertheless, it does not appear that the measures taken by the public authorities, even during the latter years, have had much effect on the movement of business. It is quite possible that construction advocated by the municipalities may have contributed to maintaining a certain activity and to relieve unemployment.

Agreements, cartels, and other measures of a similar nature entered into by the national or international industrialists to insure some price stability of certain goods have generally been of such moderation that their effect upon business stability has been satisfactory. The conditions for the success of such agreements must not be denied; agreements abroad regarding the permanency of rubber prices have led to a swift increase of

production which in turn was followed by even a swifter decline of prices.

Protectionism in many countries has resulted in more marked effects by paralyzing foreign trade. However, due to the exchange premium from 1922 to 1926, French industry was able to export to such an extent as to meet the slack in domestic consumption. Later, it has, to a greater extent, felt the effect of foreign competition, and as a result exports have declined.

During the last few years, agricultural production could be maintained only on the basis of protective tariffs, by reason of the sudden extension of production in different foreign regions. This intervention was successful in maintaining the power of production and consumption of a large part of the population in the country. In this sense, it may have relieved the depression and facilitated a certain resumption of general activity.

6. Rigidity of Wages.

From 1922 to 1930, nominal wages have constantly increased, yielding to the decline of monetary value. They have even increased the faster by reason of the increased cost of living, inasmuch as the latter is in part determined by the import duties on agricultural products.

Computed in gold francs, the rise from 1911 to 1929 has even been higher than during the period of like duration which immediately preceded the period 1911-1929.

Foreign competition, made possible by wage reductions, compelled certain French companies to adopt like reductions although the cost of living had hardly decreased. There was therefore, a certain delay as compared with reductions enacted in other countries, and it may be that this delay interfered with the decline of prices for manufactured products. The prices for manufactured objects have not followed the movement in the prices of

raw materials inasmuch as the latter figure for only part of the cost price.

It is difficult to say to what extent the relative rigidity of wages may have been an obstacle in the development of consumption because it enabled industrial laborers to maintain their manner of living. It is easier to note the slowing up in exports.

7. Population Factors.

The world war not only resulted in the loss of human lives; it has led to a decline in the birth rate.

Owing to this fact, the population living within the same territory has decreased. In view of the fact that the number of inhabitants includes to a greater extent than ever before foreign laborers who came to France to fill the ranks of domestic labor and women in larger numbers have entered the labor ranks; furthermore, in view of the fact that industrial plants and equipment have been perfected, the thought lies near that production has rapidly increased while consumption could not follow a parallel development.

Unfortunately, no exact investigations are made in France with regard to production, so that it is not possible to follow its development through the different industrial branches. In certain respects, as for instance, in the cultivation of wheat, production and consumption have followed a nearly parallel course; in others, as in the mining of coal, the sugar industry, the iron and steel industry, whose chief operations were restricted to the devastated regions, production which in 1922 was much below the prewar level, has now exceeded the prewar level. Other industries such as the manufacture of automobiles, have developed on the basis of increased needs.

Nevertheless, when the prices of the various goods began to decline in 1927 and beginning in 1928 a slowing up in consumption was noted, no

steps were taken to stimulate the latter by increasing credit to consumers, and imports of raw materials declined, as for instance, in the case of textile materials, and production was restricted to those branches that operate especially for direct consumption.

C. MONETARY AND FINANCIAL FACTORS, INTEREST RATE, ETC.

During the first half of the 1922-1930 period, the progressive decline of the monetary unit favored expansion abroad. The wholesale price index in England, converted into francs, showed with regard to the French index established with regard to the same goods, a difference of 4% in 1922; this difference even increased up to 1926 and subsequently it declined progressively after the franc had been stabilized, June 26, 1928. The need for replenishing the stocks after the war led to a deficit in our trade balance during the few first years following. Then, since 1924, exports began to exceed the value of the imports; but since 1926, exports have apparently decreased faster than imports.

Stabilization reduced export facilities and required a considerable increase of taxes which had to cover in addition the charges on loans contracted chiefly for the reconditioning of the devastated regions and to insure the service of war loans. These taxes have increased the expenses of industry and commerce and intensified and made difficult our struggle against foreign competition. These facts have undoubtedly a part in the slowing up of our exportations of manufactured products.

Although the necessary amounts for the reconstruction of the devastated regions could be obtained without too much difficulty, yet much capital emigrated during the acute period of inflation.

On the other hand, the purchase of foreign exchange for payments that could be called for to refund foreign loans, also led to outgoing shipments

of currency which fortunately could be compensated for through the purchase of currency held in the country. After stabilization, the capital that had gone abroad came back to the country; this to a large extent led to the continued increase of the cash in the Bank of France with a corresponding increase in the amount of notes issued.

Prospects for investing foreign capital were not promising, for the interest rate has been lower or at most equal to what it was in the other countries. Before the stabilization period, it fluctuated between 5 and $7\frac{1}{2}\%$. Subsequently, it declined to $6\frac{1}{2}\%$ and then to 4, 3 and 2%. It appears, therefore, that the capital movement between France and foreign countries has been especially the result of confidence in the financial and political situation of the country: capital left the country when this confidence decreased, and returned when it increased.

However, if the fiscal charges caused by the war and by the loans which it entailed, have weighed on French production and interfered with its expansion, it appears that the monetary or financial circumstances have had no other influence upon the present depression except to lighten its effects.

D. PRICES, WAGES, PROFITS.

(a) Prices of Raw Foodstuffs, Raw Materials, Semi-manufactured and Finished Articles.

From 1922 to 1930, the general wholesale price index, after having increased up to 1926, when it reached the maximum, has since declined from year to year. However, as 1926 was marked by an excessive inflation, it is well to consider the quotient of the index through the quotation of the dollar. It is then realized that this quotient reached its maximum in 1925, the year when the wholesale price index as computed in the United States also reached its highest value and when the index as computed in England, likewise passed its maximum.

Also in 1926 (or 1925) the index computed separately for foodstuffs and the index computed for industrial products reached their highest levels.

Among the foodstuffs, the prices of vegetable products increased at first faster than the prices for animal products; the latter then continued to increase while the former declined. For instance, the price of wheat on the Paris market rose from 78.90 francs per quintal in 1922 to 188.70 francs in 1926, and declined again to 150.35 in 1929, whilst the wholesale price for meat in 1922 changed from 6.00 francs in 1922 to 9.40 in 1926, 9.90 in 1929 for beef, and from 8.20 in 1922 to 13.35 in 1926, and 15.00 in 1929 for veal. Other animal products have, of course, followed a similar movement even as the movement for the various vegetable products followed that of wheat. As to colonial products, the maximum was reached either in 1926 or 1927.

When the price decline set in in 1929-1930, the tariff on wheat was raised to 80.00 francs per quintal, equal to the price for foreign wheat which is thus practically doubled. Furthermore, certain milling regulations favored wheat cultivation to a variable extent for the purpose of interfering with speculation. The prices for industrial products do not bear as high duties as agricultural products, and therefore generally follow world prices.

As for textile materials, prices have generally increased from 1922 to 1926. Apart from flax and hemp which were quoted at higher prices, the rest of the materials such as cotton, jute, wool, silk, began to decline beginning in 1926 and up to the present, excepting wool perhaps, which latterly has been quoted somewhat higher. Prices for mineral products have decreased since 1926 with alternative changes of rise and decline; rubber has declined considerably since that year, and this is true of hides and leathers which were quoted at their highest in 1926.

Prices for semi-manufactured products after having generally declined, have again been quoted at higher prices since 1929, as for instance commercial iron, alcohol, gasoline and paper.

Rates for gas and electricity have been lower than before the war as may be seen by computing these rates into gold values and yet the price of gold, calculated on the same basis has increased. Likewise, transportation cost by rail or by water has not increased to the same extent as the raw materials or finished products. As it is very difficult to appraise whether finished products of the same name are also of the same quality, it is hardly possible to compare their prices for different periods.

However, for some domestic articles, we get a significant indication when we compare retail prices with wholesale prices of the material used in manufacturing the finished products.

(c) Wholesale and Retail Prices.

The wholesale price index computed on the basis of July 1914 having risen from 354 in 1922 to 718 in 1926 and then declined to 543 in 1930, the price index of some domestic staples, sold at retail in Paris, changed from 331 in 1922 to 554 in 1926 and 618 in 1930. This retail price stopped rising only at the beginning of 1931.

However, this comparison bears not upon the same articles. When we compare the wholesale price index for material incorporated in the articles used for the computation of the retail price index, the difference is much smaller. For instance, during the first half of 1928, the wholesale price index for these articles was 596, while the retail price index reached only 612, or a difference of 2.5% only, which can be explained by the fact that the cost for wages, taxes and general expenses had increased a little more than the cost of the materials themselves.

(d) Wages and Agricultural Income in Export Industries and in the Industries Manufacturing for the Domestic Market.

In France it is hardly possible to follow the changes in wages except for laborers in coal mines and in the small industries (housing, small industries, etc.) We have, however, some data regarding agricultural laborers. From the totality of these data there seems to result that agricultural hands have had their wages increased from 25 to 30% from 1924 to 1928 in the same or in about the same proportion as the quotation of the dollar.

As for workmen engaged in the smaller industries, it is possible to estimate that, on the basis of daily wages paid in 1911, the subsequent figures represent 4 in 1922, 5.8 in 1926, 7.3 in 1930, or an increase in excess of that in the value of the dollar.

As for coal miners, the daily wage computed for the totality of their number, was in 1922 3.5 times that paid in 1913, and in 1926 it was 5.2 times, in 1930 5.8 times, that paid in 1913. Thus, in a general way, the rise has slightly exceeded the increase in the value of money, but it has remained below that of the cost of living. It is true that in certain regards advantages are now added to the wages (family aid, annuities, etc.)

As for a distinction between industries engaged in the export business and those engaged in the manufacture of articles for domestic consumption there is hardly any such difference in France. The movements we have just outlined are chiefly applicable to industries of the second class. But many industries are engaged in production, at the same time, for national consumption and for export. There is nothing to indicate that the wage movement is influenced by either the one or the other of the markets. For international competition bears as much upon exported products as upon products consumed within the country. When, for instance, wages were recently reduced in the coal mines, this resulted from the pressure of the

competition of foreign coal and in spite of the fact that France consumes all she produces.

(e) Industrial Profits.

When the prices of raw materials declined, as has been the case in France since 1926, the balance sheets must take into account such depression, and profits are to that same extent reduced. On the other hand, a decline in price for agricultural products diminishes the returns of the farmers and their purchasing power. Lastly, a decline of prices generally creates a tendency to diminish purchases, everyone hoping to buy at an even more favorable time.

We can hardly have any idea of the variation occurring in industrial profits except by noting the dividends distributed by joint stock companies. Nevertheless, the variation in these dividends gives us but a short view of the variation of the profits. Indeed, even as in France, an effort is made to regularize wages by circumventing rapid rises and declines, even so efforts are being made to regularize dividends, by increasing the reserves in the prosperous years and by deducting, if need be, from these reserves when the profits decline excessively or are wiped out altogether.

II. Change of Direction of the Present Cyclic Movement. Succession and Interrelation of the Different Statistical Series Dealing With Speculation, Prices, Production, Unemployment, Consumption, Trade, Rate of Interest and Capital Movements.

To study these changes it is best to trace curves or to juxtapose indexes. We shall elect the following indexes:

Speculation and Price. - Speculation may be engaged in with regard to many articles, especially goods, securities, bonds, etc.

The movement of speculation bearing upon the one or the other of these objects is sufficiently characterized: 1'. By the change in the value of

these objects; 2° . By the change in the quantities contracted for in a certain number of objects remaining always the same; and 3° . By the changes in the stocks of these articles.

We shall consider in each group, simultaneously, a total of objects and a particular kind.

As regards commodities, the index computed by the general statistics of France for 45 years, the quantities of which are sufficiently definite, characterizes sufficiently the movement in the wholesale prices. Unfortunately, we have no information regarding the quantities contracted for nor the stocks of these commodities.

As regards stock exchange securities, the index computed by the general statistics of France for a large number of such securities is a satisfactory index. Only, in France we do not have information regarding the quantities dealt in nor the amounts offered. We can nevertheless get an idea of the activity of such negotiations through the amount of taxes collected on stock exchange operations, by taking into account the changes in the tax rates.

As a special item we shall take the quotations of the stocks of four business banks.

Production and Unemployment. - For a long time we have had in France no investigation regarding industrial production, and agricultural production is estimated for the chief harvests. We know what the production is for some products:

Mineral fuel, ores, cast iron, steel, sugar.

In spite of the insufficiency of such investigations the General Statistics of France computes an index for production based on indirect data that may be used in the different branches of activity.

Again, we have no periodic investigation regarding unemployment except such data as are furnished by the five-year census. That we may get some idea of the importance of unemployment, we can but ascertain the restricted number of unemployed aided by unemployment funds or we may make use of the indirect indication furnished by the statistics of public employment offices by noting the changes between the ratio of jobs secured and the number of jobs applied for.

We shall keep this latter index and the general index of production by adding to it the special index determined for the textile industries.

Foreign Trade, Domestic Trade. - As an index of foreign trade we shall keep track of the movement of raw materials imports and the movement of manufactured articles exported.

As index of the activity of the domestic trade we shall use the daily number of loaded cars.

Interest Rate, Capital Movement. - To characterize the interest rate we shall note the index of the interest rate on securities with a fixed income, the discount rate of the Bank of France, and the rate of discount for first-class securities other than bank securities.

It is difficult to watch and note capital movement, since a telegram or a telephone message will suffice for sending out or reimporting a considerable amount. Movements of long duration may be appraised by the variations in the cash of the Bank of France and by the amount of our deposits abroad.

| Years | Value of 100 franc paper | Wholesale price index | Price of cast iron | Index of security quotation of variable revenue | Index of quotation of bank securities | Index of amount of exchange transactions | General production index | Index of production of textiles | Wheat production (in million hectoliters) |
|--------|--------------------------|-----------------------|--------------------|---|---------------------------------------|--|--------------------------|---------------------------------|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| 1922 | 419 | 335 | 234.2 | 119 | 140 | 256 | 78 | 84 | 86.1 |
| 1923 | 312 | 426 | 409.8 | 172 | 164 | 518 | 88 | 83 | 96.8 |
| 1924 | 268 | 499 | 348.3 | 208 | 169 | 648 | 108 | 85 | 101.6 |
| 1925 | 244 | 561 | 341.2 | 200 | 140 | 832 | 107 | 85 | <u>118.6</u> |
| 1926 | 165 | <u>713</u> | <u>500.4</u> | 233 | 163 | 1,520 | 124 | 94 | 83.6 |
| 1927 | 203 | 630 | 471.7 | 287 | 212 | 1,257 | 109 | 90 | 101.1 |
| 1928 | 203 | 634 | 441.7 | 415 | 397 | 2,417 | 127 | <u>99</u> | 99.5 |
| 1929 | 203 | 623 | 472.9 | <u>507</u> | <u>399</u> | <u>2,009</u> | 139 | 92 | 113.2 |
| 1930 | 203 | 546 | 467.5 | 437 | 320 | 894 | <u>140</u> | 85 | 83.1 |
| 1929 J | 202 | 642 | 450 | 543 | 513 | 2,546 | 137 | <u>97</u> | |
| 1929 F | 202 | 652 | 475 | <u>548</u> | 508 | <u>3,360</u> | 136 | 96 | |
| 1929 M | 202 | <u>653</u> | 475 | 535 | 447 | 2,615 | 138 | 94 | |
| 1929 A | 202 | 640 | 475 | 518 | 391 | 2,108 | 139 | 95 | |
| 1929 M | 202 | 203 | 475 | 512 | 382 | 1,842 | 139 | 93 | |
| 1929 J | 203 | 623 | 475 | 491 | 333 | 1,687 | 141 | 95 | |
| 1929 J | 203 | 626 | 475 | 497 | 371 | 1,560 | 139 | 92 | |
| 1929 A | 203 | 609 | 475 | 501 | 330 | 1,292 | 139 | 88 | |
| 1929 S | 204 | 610 | 475 | 518 | 333 | 1,860 | 138 | 87 | |
| 1929 O | 204 | 602 | 475 | 489 | 357 | 1,739 | 141 | 90 | |
| 1929 N | 204 | 596 | 475 | 461 | 339 | 1,844 | 143 | 91 | |
| 1929 D | 204 | 588 | 475 | 463 | 334 | 1,622 | 144 | 91 | |
| 1930 J | 204 | 576 | <u>490</u> | 496 | 336 | 1,475 | 144 | 87 | |
| 1930 F | 203 | 576 | 490 | 479 | 340 | 1,550 | 143 | 88 | |
| 1930 M | 203 | 565 | 490 | 478 | 339 | 1,182 | <u>144</u> | 85 | |
| 1930 A | 203 | 561 | 490 | 486 | 361 | 1,304 | 144 | 87 | |
| 1930 M | 203 | 553 | 490 | 462 | 345 | 1,054 | 144 | 86 | |
| 1930 J | 203 | 544 | 490 | 437 | 315 | 790 | 144 | 87 | |
| 1930 J | 204 | 549 | 490 | 440 | 320 | 640 | 141 | 82 | |
| 1930 A | 204 | 543 | 490 | 424 | 307 | 331 | 139 | 80 | |
| 1930 S | 203 | 535 | 490 | 425 | 309 | 691 | 137 | 80 | |
| 1930 O | 203 | 519 | 490 | 395 | 290 | 602 | 136 | 84 | |
| 1930 N | 203 | 504 | 400 | 378 | 281 | 605 | 135 | 86 | |
| 1930 D | 204 | 498 | 310 | 349 | 270 | 503 | 134 | 85 | |

| Years | Coal production (in million tons) | Cast iron production (in million tons) | % proportion of finding jobs to number asked | Imports of raw materials | Exports of manufac- tured products. | Interest rate on securi- ties of fixed income | Bank of France discount rate | Discount rate on 1st class securities | Bank of France holdings (in billion francs) | Credits abroad (in billion francs) |
|-------|--------------------------------------|---|---|--------------------------|--|--|---------------------------------|--|--|---------------------------------------|
| (I) | (II) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| | | | | | | % | % | % | | |
| 1922 | 31.9 | 5.1 | | 14.0 | 13.5 | | 5.08 | | 5.8 | |
| 1923 | 38.6 | 5.4 | 314 | 25.8 | 17.7 | 3.17 | 5.00 | | 5.9 | |
| 1924 | 45.0 | 7.7 | 317 | 25.9 | 26.7 | 3.61 | 6.08 | | 5.8 | |
| 1925 | 48.1 | 8.5 | 261 | 29.4 | 29.2 | <u>4.59</u> | 6.50 | | 5.9 | |
| 1926 | 52.5 | 9.4 | 293 | <u>40.4</u> | <u>37.8</u> | 4.47 | <u>6.67</u> | 5.47 | 5.9 | |
| 1927 | 52.9 | 9.3 | 65 | 33.4 | 32.6 | 3.34 | 5.13 | 2.76 | 5.5 | (A) |
| 1928 | 52.3 | 10.1 | 215 | 33.0 | 32.1 | 2.98 | 3.50 | 2.92 | 29.2 | |
| 1929 | 54.9 | <u>10.4</u> | <u>315</u> | 35.1 | 31.5 | 2.84 | 3.50 | 3.45 | 37.1 | <u>27.6</u> |
| 1930 | <u>55.0</u> | 10.0 | 233 | 29.3 | 26.9 | 2.52 | 2.71 | 2.33 | <u>45.8</u> | <u>25.7</u> |
| | | milers: | | | | | | | | |
| | | de | | | | | | | | |
| | | T. | | | | | | | | |
| 1929J | 4.5 | 904 | 235 | 3.2 | 2.2 | 2.85 | <u>3.5</u> | 3.4 | 33.7 | 31.0 |
| F | 4.2 | 782 | 211 | 3.2 | 2.5 | 2.90 | 3.5 | 3.4 | 34.0 | 30.1 |
| M | 4.6 | 880 | 280 | 3.1 | 2.6 | <u>2.97</u> | 3.5 | 3.4 | 34.0 | 29.3 |
| A | 4.5 | 871 | 318 | 3.1 | 2.7 | 2.95 | 3.5 | <u>3.5</u> | 34.3 | 28.7 |
| M | 4.4 | 897 | 356 | 3.1 | 2.5 | 2.85 | 3.5 | 3.5 | 36.5 | 26.3 |
| J | 4.5 | 865 | 365 | 3.1 | 2.7 | 2.84 | 3.5 | 3.5 | 36.6 | |
| J | 4.8 | 878 | 396 | 2.6 | 2.7 | 2.83 | 3.5 | 3.5 | 36.7 | 25.8 |
| A | 4.6 | 893 | 392 | 2.4 | 2.4 | 2.85 | 3.5 | 3.5 | 38.5 | |
| S | 4.4 | 851 | <u>418</u> | 2.5 | 2.6 | 2.84 | 3.5 | 3.5 | 39.1 | 25.8 |
| O | 4.9 | 894 | 292 | 2.7 | 2.7 | 2.79 | 3.5 | 3.5 | 39.8 | |
| N | 4.7 | 852 | 262 | 2.8 | 2.6 | 2.71 | 3.5 | 3.5 | 40.7 | 25.8 |
| D | 4.4 | 879 | 256 | 3.1 | 2.9 | 2.67 | 3.5 | 3.4 | 41.2 | 25.9 |
| 1930J | 5.0 | 875 | 212 | 2.9 | 2.3 | 2.52 | 3.5 | 3.4 | 42.5 | 25.9 |
| F | 4.5 | 815 | 207 | 2.9 | 2.5 | 2.49 | 3. | 2.9 | 42.9 | 25.7 |
| M | 4.8 | 898 | 209 | 2.5 | 2.5 | 2.56 | 3. | 2.5 | 42.6 | 25.7 |
| A | 4.5 | 854 | 239 | 2.7 | 2.5 | 2.57 | 3. | 2.5 | 43.3 | 25.6 |
| M | 4.6 | 901 | 252 | 2.5 | 2.3 | 2.58 | 2.5 | 2.3 | 43.2 | 25.6 |
| J | 4.2 | 841 | 307 | 2.4 | 2.0 | 2.53 | 2.5 | 2.3 | 43.9 | 25.5 |
| J | 4.6 | 861 | 312 | 2.2 | 2.7 | 2.47 | 2.5 | 2. | 44.5 | 25.7 |
| A | 4.4 | 845 | 283 | 2.3 | 2.0 | 2.43 | 2.5 | 2. | 47.0 | 25.8 |
| S | 4.6 | 800 | 298 | 2.0 | 2.2 | 2.47 | 2.5 | 2. | 47.5 | 25.6 |
| O | 4.7 | 827 | 213 | 2.2 | 2.2 | 2.50 | 2.5 | 2. | 49.4 | 25.6 |
| N | 4.4 | 781 | 143 | 2.2 | 2.1 | 2.53 | 2.5 | 2. | 51.4 | 25.6 |
| D | 4.5 | 800 | 116 | 2.2 | 2.0 | 2.56 | 2.5 | 2. | 52.9 | 25.8 |

(1) Quotient of 518 for the dollar quotation - (2) Index of price movement for 45 articles, basis 1901-10 = 100 - (4) Price of phosphorous cast iron at Paris - (5) Index of the quotations of about 300 stocks, basis 1913 - (7) Index of the tax amount on exchange operations, with correction of tariff changes, basis 1904-13 - (A) Change in the value of the franc.

III. Nature of the Present Depression.

(a) General Study - Comparison with Previous Depressions.

The movement characterizing the present depression does not in France present a phase clearly different from all previous movements, outside of the fact that external influences extend further with greater intensity and greater speed.

However, when, for instance, we observe a phenomenon which incontrovertibly stands as the source of all sudden changes of activity, to wit, the movement of commodity prices or the movement in the stock quotations, we perceive, at any period since the beginning of quotations, that is to say, of wholesale prices since the close of the 18th century, successive fluctuations, similar to those that the harvest results have evidenced at all times. They are similar in this sense that instead of manifesting themselves with extreme irregularity as results of unforeseen events, they do, on the contrary, over a certain period of time, evidence a certain regularity, and assume the aspect of periodic fluctuations with variable periods and amplitudes.

All great phenomena at the source of these movements, especially those which manifested themselves a long time ago, are connected with the production of things needed or simply useful in life. When the duration of the fluctuations does not exceed one year, the cause generally appears evident: the change in the seasons is the chief factor, as this change is regular, at least in point of time, if not in extent, it is possible to foresee it to a considerable extent and, consequently, it is possible to prepare for its eventuality.

But fluctuations of longer duration are due to more complex influences. The variations in harvests, for instance, depend on diverse climatic factors whose coincidence leads to very different results from one year to

another.

These fluctuations do not generally occur in the same years in the different countries. For instance, abundant harvests in certain countries, by reason of favorable climatic conditions, are confronted by less abundant harvests in countries not so favored. A certain levelling process takes place over a certain number of years, but in the meanwhile, while national or international communications were difficult and slow, famines ruled in certain regions while in others life-sustaining products existed in abundance. Progress in transportation and communication has done away with famine generally speaking. On the other hand, the development of machinery which made this progress possible has increased human needs in various directions. It has opened up new ways to human activity; it has singularly multiplied the causes of perturbations of this activity and made their analysis more difficult.

By confining ourselves to an experimental examination of such movements, we observe in the first place that, among the many indexes of the economic status, that particular index, the changes of which may be followed over a long period of time, and which, at the same time, plays a capital part in the explanation of cycles, is the wholesale index price movement of the various commodities.

For more than a century, such an index has been computed in several countries. The process of computation undoubtedly differs from country to country, and even at different periods for one and the same country. But, if we are willing to admit that the necessary connections have been intelligently established and that the variations recorded but roughly represent the variations of the totality of the prices of things in the places of their chief exchanges, the following observations cannot but be accepted.

(1) Since the close of the 18th century, we have been able to observe

at least for England, the annual changes of the wholesale prices for a certain number of commodities, and to construct an index of these changes whose fluctuations vary from one epoch to another by period and extent.

(2) By comparing the curves of such an index for three countries, England, the United States and France, we observe that the fluctuations do not generally agree one with another.

When they do not agree one with another, say, over one or two years, we do not meet with any serious economic event that might affect general prosperity. The ready communications between countries to which we have already referred makes compensations between different countries possible.

(3) When the fluctuations arise nearly at the same time and in the same direction in the chief countries, such compensation can no longer be effected and troubles of a certain gravity appear. Such troubles arise when phases of extreme tension in general activity are followed by phases of depression.

(4) Between phases of the same nature the interval of years has never exceeded 12 or 13 years, the cycle of troubles following upon these phases extending at a minimum to 4 or 5 years.

(5) These cycles of short duration have superimposed themselves on two cycles of long duration whose peaks may be chronologically fixed at the close of the wars in the beginning of the 19th century, from the first Franco-German War, and the World War.

It may also be observed that these peaks correspond to a certain break, at those moments when the rate of the growth of precious metal stock is highest.

(6) According to these observations, independently of the cycles of short duration, we have records of long periods of price declines (1815-1850, 1873-1896) with which the period beginning in 1920 is comparable.

These various observations, and the fact that the economic upsets noted at other epochs, have been more serious than those of the present time, warrant us in concluding that in France the present depression phase is not of a greatly different nature from that of similar preceding phases. However, as in 1920, for reasons that the World War sufficiently explains, prices have reached considerable values, the consecutive decline may be naturally greater than that in previous epochs not beset by such serious difficulties.

Furthermore, it appears that in France we heeded the warning conveyed by the decline of prices which began in 1926; France did not discount future consumption by an exaggerated extension of credits. In addition, France lacked the necessary labor to meet normal needs, and did not, through a measured development of production means, increase beyond measure the manufactured products best fitted to meet such extension.

- (b) Repercussion of the Depression from which other Countries Suffered, upon the national economic situation. Monetary factors, evolution of stock exchanges, budgetary difficulties, capital market, total housing construction, etc.

There can be no doubt but that the acute period of the depression is attributable to the stock exchange crisis which occurred in the United States in the Fall of 1929.

The decline of wholesale prices which began in 1926 might have left the impression in the United States that the balance between production and consumption was threatened. In spite of that, efforts were made to increase consumption by developing credit sales and by practicing betimes a reasoned policy of high wages. In this way future consumption was discounted and production was decreased by lowering the cost price; profits increased at the same time. Hence, stock exchange speculation was stimulated by this increase; it attracted the capital from all over the world, either for security

purchases or for investments at short term at a rate that could not long be maintained, and the capital market reached the limit. When, in turn, agriculture had to appeal to capital, liquidations of securities swiftly followed, and the crisis was felt in France even as in all other countries.

We are justified in observing that, during the years preceding French stabilization, a large number of French industrialists and merchants to cover sales abroad without running the risk of increasing exchanges, had left on deposit abroad considerable capital from which they naturally sought to secure a momentary revenue. After stabilization had been effected, only part of this capital came back to France, and the part left abroad found fruitful use, especially in the United States.

After the crisis the use of this capital has become much less profitable and was exposed to greater risks; return to France of this capital increased more and more as witnessed by the development of the holdings in the Bank of France.

Repercussion of the American crisis on the Paris Stock Exchange was immediate, but slightly felt at first, but it has continued even to this day. It was shown especially by a considerable decrease in operations, for the decline of securities with variable income has been relatively slow, as the owners of depreciated values preferred to hold on to them rather than be the victims of the consequences of the decline.

However, some speculative deals which had grown swiftly and factitiously during the prosperous period, ran into failures and in the collapse following dragged other enterprises along with them; failures increased, the more so because the decline of commodity prices began at the same time accentuated, and subjected enterprises that had held important stocks, to losses. The decline of agricultural products especially had paralyzed the markets

of industries depending on rural consumers. The exchange crisis has wiped out entire fortunes and the construction industry which had swiftly developed during the prosperous period had to slow down for want of takers.

Lastly, the repercussion of these hard times on public finances, upon railroad revenues and public utility bodies, soon made itself felt. Former surpluses were changed into deficits. It is time that the depression period be brought to an end, for the budgetary difficulties can be solved only with difficulty when the muddled state of things interferes with an increased tax and customs duty.

IV. PROSPECTS - OBSERVATIONS IN REGARD TO THE FACTORS LIKELY TO AFFECT THE FUTURE ECONOMIC EVOLUTION.

Fortunately, the example of past depression periods enables us to look for a future improvement in the situation.

In the first place, the cause of the present state of affairs is to be found in the decline of commodity prices which has increased the needs for credit of long term, while at the same time it tended to reduce the margins of profit. The decline of securities followed this price movement only after the lapse of a certain interval, even as happened in 1864-66 and in 1880-82.

Now, as for certain materials such as wool, price decline seems to have come to an end, it is, on the other hand, increasing with regard to other materials.

Undoubtedly, the visible stocks have not as yet decreased; they increased with regard to certain products because the operating companies tried to maintain their personnel, while purchasers are holding back in the hope that they may later on purchase at even lower prices. But the invisible stocks are becoming less as indicated by the slowing up in the imports of raw materials. We may, therefore, hope that the end of the price decline

is approaching. Besides, protection afforded French agriculture provides purchasing power to the rural population, a power which it had lacked in 1929-30, and as a result domestic trade shows signs of renewed activity.

The financial market continues stagnant, because foreign markets continue depressed. However, there are signs of greater activity in other countries both in regard to industrial and commercial enterprises.

We need not look for an early rise in commodity prices because, since 1920 we seem to have entered a period of long price declines, similar to that which occurred during the first half of the 19th century. As observed with regard to past epochs, this does not interfere with momentary upswings.

When prices begin to rise, domestic stocks will be replenished and the visible stocks will be reduced; this will lead to a new rise of a nature to facilitate the establishment of favorable balance sheets and to stimulate the financial market provided that the situation abroad does not react unfavorably.

In this manner, economic movements have followed one another ever since it became possible to follow and note them with some exactness. The great war undoubtedly stimulated to invention and to the perfecting of production processes; but as we stated in the beginning of this report, the same things were noticed in the time of the Napoleonic wars. Industrial progress, development of communication means have had social results comparable to those that we now notice. In one and the same country, the trade currents have changed their direction; the centers of activity were on the brink of danger when new centers came into being and took the place of the older ones.

But today, the problems connected with the national plan and whose solution was made easy because of the existence of a national structure, are now transferred to an international base, that is, on a base whose

structure remains to be created. As past experience also shows that troublous events occur less frequently in periods of slowing down, as in the present period, than in eras of wide economic upswing, it is permitted to hope that efforts tending to stabilize international relations will meet with success, for, as has been stated already, the prosperity of each nation is closely tied up with the confidence in the stability of international markets.

to his attention upon his return to the office.

Very truly yours,

Secretary to the Governor

July 10, 1931.

Miss Catherine M. Dickinson,
Office of the Secretary,
Department of Commerce,
Washington, D. C.

Dear Miss Dickinson:

In the absence of Governor Meyer, I acknowledge receipt of your letter of July 9 enclosing a confidential report on An Inquiry into the Economic Depression,--France, which you have sent him at the request of Mr. Hunt.

I know the Governor appreciates your courtesy in sending this report to him, and I shall be glad to bring it to his attention upon his return to the office.

Very truly yours,

(Signed) F. L. Fahy

Secretary to the Governor