

**FINLAND AND THE WORLD
DEPRESSION**

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PREFACE

The following survey is a summary of two studies by the author made for the Economic Council in Finland and published in their series, viz. „Taloudellinen asema” („The Economic Situation”, December 1929) and „Suomi ja maailman talouspula” („Finland and the World Crisis”, March 1931).

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FINLAND.

FINLAND AND THE BUSINESS CYCLES.

From the experience of economic life before the world war, it is evident that periods of depression in world economics are fairly faithfully reflected in the economic life of Finland. This is a natural consequence of the close connection the country has with the commercial exchanges and the international capital markets.

The importance of foreign trade appears clearly from the following table compiled by Dr. P. Jakobsson and published in the September 1930 issue of „The Index” (Svenska Handelsbanken), indicating the proportion of exports and imports relative to the national incomes of the different countries in 1928.

	Monetary Unit	National Income Millions	Imports		Exports	
			In Millions	% of National Income	In Millions	% of National Income
U. S. A.	Dollars	89,000	4,314	4.9	5,678	6.4
Italy	Lire	110,000	22,104	20.0	14,530	14.2
France	Francs	260,000	60,005	23.7	51,764	19.8
Hungary	Pengös	5,000	1,205	24.1	823	16.4
Germany	Marks	60,000	14,963	25.0	11,673	19.5
Sweden	Crowns	6,500	1,725	26.5	1,579	24.3
G. Britain	£ st.	3,600	1,133	31.5	793	22.0
Austria	Shillings	8,000	3,306	41.3	2,241	28.0
Finland	Finnish Marks ..	18,000	8,013	44.5	6,245	34.6
Switzerland	Francs	6,000	2,754	46.0	2,167	36.1

The above table does not, it is true, give a quite correct idea of the position of Finland, whose foreign trade just in 1928 was exceptionally large. For the period 1924—1928 the average value of imports was 6,061 million marks and of exports 5,706 million marks; but even taking account of this fact it is evident that foreign trade is of greater importance to Finland than to most other countries.

In the general evolution of business conditions, the export of timber and products of wood-working industries has been the most important. Before the war it constituted about 70 per cent of the total value of exports and lately this proportion has increased. Thus it was noticeable that whenever the sale of these articles increased and prices tended to rise, general business conditions

were good in Finland. Concurrently, available money increased and initiative in these industries developed which increased the earnings not only of the industrial workers but also of large rural groups by means of labour in the woods. Thence prosperity spread to other branches of production -- to the agricultural classes and to industries working for national requirements whose products were in increased demand. The effect was specially felt in the building trades.

The prosperity also affected imports. Thus the greater consumption capacity of large classes of society stimulated imports of consumable goods; but with the rapid increase of production, the import of raw materials and means of production increased even more rapidly, and in consequence, during the prosperous periods the trade balance of Finland became more and more adverse.

During the boom period the increasing development of enterprise and the rapid rise in imports in proportion to exports tended more and more to immobilise the national savings. But the more capital was used for productive purposes, the less did national savings satisfy the growing demand for credit. Foreign loans were therefore regularly raised during the boom period, especially towards its close, in order to relieve the stringency. In this way the continuation of such a period became dependent upon the foreign capital market.

Under these circumstances it was natural that whenever a general depression set in, Finland was quickly affected. The restriction on the central capital markets prevented the contraction of new foreign loans. This caused a reduction in available funds at home and a rise in the rates of interest to a maximum. There was also a decrease in the possibilities of export due to the general depression and this made the lack of capital felt even more severely in Finland.

The evolution traced above has shown how greatly dependent upon world economics business conditions in Finland are. It is understood of course, that in more than one respect the evolution has followed a special path in each individual case, and that the business cycles in Finland have had national characteristics. Thus the good or bad harvests, the intensity of certain activities, especially building, and the policy of the central bank have all exercised an influence; but as a rule, none of these national factors have been the driving forces in the development of business cycles; they have only modified them. The real causes must be sought abroad as has been seen above.

Finally, it must be remembered that although economic life in Finland has been very sensitive to fluctuations abroad, their effects have not penetrated very deeply owing to her slight industrialisation; about 60 per cent of the population still lives by agriculture and forestry. In this main part of the population the predominating form of economic life is based upon domestic consumption. During the years immediately preceding the war only about one-half of the products of agriculture were sold, the other half was retained for the producers' own consumption, and even at the present time the portion which does not enter into exchange is about 45 per cent.

THE EVOLUTION OF ECONOMIC LIFE IN FINLAND 1922—1927.

The first years of Finland's independence were a period of transition not only in her political but also in her economic life. War-time conditions had to be adapted to those immediately following the peace; the ruptured connections with Russia had to be replaced by others; the value of the Finnish mark was constantly depreciating.

One may consider this first period to have ended about 1922; the main lines of the necessary process of adaptation had been completed and the value of the mark was very nearly stable although the definitive adoption of the gold standard did not take place until 1925.

The period 1922—1927 was mainly one of rapid progress, though the movement was not smooth; a slight depression was noticeable in the years 1924—1925, while in 1926 and 1927 great prosperity prevailed. The following shows the development in the main fields of economic activity and indicates how the ground was prepared for the financial crisis in 1928.

AGRICULTURE.

The central phenomenon was the transformation of leased lands into independent farms. It was begun in 1918 and by the close of 1929 approximately 110,000 leased holdings had become the absolute property of their cultivators.

The area under cultivation rose from 2,086,000 hectares in 1922 to 2,160,000 in 1927. The harvests increased rapidly during the period: against an average total of field and meadow crops in 1922—1924 of 2,347 million fodder units, the harvests for the period 1925—1927 averaged 2,807; in the years 1911—1913 the corresponding figure was still as low as in 1907. In 1920 the yield per hectare was 858 fodder units, but in 1927 it reached the much higher figure of 1,282.

As in crops so in cattle rearing. Horned cattle increased in number during the period 1922—1927 from 1,844,000 to 1,872,000. The feeding became more intensive and the yield greater; thus the annual yield of milk per milch cow rose from 2,082 kg. in 1922 to 2,556 in 1927. The output of butter increased in the same period from 11.5 to 22.3 mill. kgs. and that of cheese from 3.2 to 4.2 mill. kgs.

The agricultural improvement required much capital; the outlay in 1920—1927 has been calculated at nearly 8,000 million marks: there was extensive building, new equipment and motor vehicles were bought, electrification projects carried out, new arable land and pasturage cleared, better grain and plant species and pedigree animals procured, fertilizers and strong fodder bought, etc.

Below we review the economic results yielded by agriculture, using for the purpose the financial results from the test-farms. The figures for net return

and capital are in terms of marks per hectare of cultivated land and the profit in percentage of the agricultural capital.

Financial year (from July 1st)	Net return	Agricultural capital	Profit
1922	352	7,512	4.7
1923	144	7,965	1.8
1924	402	9,136	4.0
1925	499	8,617	5.8
1926	486	8,975	4.9
1927	515	9,449	5.4

On the whole the economic results of agriculture in Finland during the period 1922—1927 may be characterized as comparatively favourable, with the exception of 1923 when the harvest was very poor. Prices of agricultural produce were well maintained, wages did not rise disproportionately, the prices of many agricultural requisites declined, and no very serious difficulties were encountered in marketing the produce. The standard of living of the rural population rose considerably.

FORESTRY.

In many respects forestry forms a basic factor in the economics of Finland; the rural population derives considerable income from forest sales and work in the woods; the income from state-owned forests plays an important role in state revenue; the largest branches of industry use timber as raw material; and timber and wood products are by far the most important exports. The years 1922—1927 were a boom period in the consumption of timber and the income derived from it; below are given some relevant figures:

	State revenue from forests	Approximate income of farmers derived from forest sales
	Million	marks
1922	201	482
1923	208	494
1924	239	450
1925	228	762
1926	248	742
1927	309	1,209

The state revenue thus increased by 54 per cent and the income of farmers by 151 per cent. These figures well reflect the growing prosperity during the period in question.

Consumption of timber for purposes of industry and for export.

	Sawmill industry	Paper industry	Plywood industry	Bobbin industry	Unsawn timber and fuel exported	Total
	T h o u s a n d c b m.					
1922	7,658	2,063	†	160	2,725	12,606
1923	10,150	2,281	†	183	3,286	15,900
1924	10,347	2,715	226	187	3,032	16,507
1925	10,722	3,141	321	215	3,635	18,034
1926	11,714	3,366	360	175	3,594	19,209
1927	13,807	3,708	348	160	4,443	22,466

The above figures show how rapidly the consumption of wood for industrial and foreign trade purposes increased from 1922—1927; the increase in the former case was approximately 83 per cent and in the latter case, 63 per cent.

Besides the consumption by industry and foreign trade, the rural population absorbed 12.0 million cbm., fuel for transport 1.4 millions, logging and floating waste 5.8 millions.

The total annual growth of the forests has been estimated at 44.4 million cbm. and the consumption in 1927, when it was highest, at 46.7 million cbm.

INDUSTRY.

Industrial activity developed in the period 1922—1927 according to official statistics as follows:

	1922	1923	1924	1925	1926	1927	Percentage of Increase
Number of establishments	3,294	3,293	3,212	3,317	3,526	3,787	15.0
Number of workers..	132,842	143,311	139,429	141,003	149,367	159,141	19.8
HP capacity	337,062	370,901	388,138	402,638	435,173	474,220	40.7
Wages, mill. mks ..	1,344	1,590	1,603	1,671	1,861	2,059	53.2
Value of raw materials, mill. mks..	4,327	5,018	5,081	5,409	5,855	6,579	52.0
Value of production, mill. mks	8,085	9,132	9,345	10,126	10,943	12,380	53.1

Expansion is conspicuous in the above figures; not only did the volume of production considerably increase, as seen from the greater number of workers and HP employed, but technical efficiency also made considerable progress: whereas the workers increased by 19.8 per cent, the corresponding figure for HP was 40.7 per cent. It is of especial interest to observe that wages showed the greatest increase; the average increase per worker was 27.0 per cent, whereas the rise in the cost of living was only 9.1 per cent. It should also be noticed that progress was more rapid at the beginning of the period and especially towards its end than in the medial years 1924—1925.

The different branches of industry varied considerably in their progress. The chief exporting industries, timber and paper, expanded greatly; of the home industries, the group consisting of stone, clay, glass and peat industries, the manufacture of foodstuffs and luxuries as well as lighting and power transmission showed the greatest development; the metal industry also did well; in other cases the expansion was slower, as in the important industries of textiles and clothing.

From the point of view of conjunctural development, the expansion in the timber industry was the most momentous. It is therefore of special interest to examine its yearly progress.

The timber industry.

	1922	1923	1924	1925	1926	1927	Percentage of increase
Number of establishments	717	739	693	712	811	929	29.6
Number of workers..	43,465	48,579	46,824	47,877	52,135	56,915	30.0
HP capacity	77,323	85,901	88,099	94,901	105,415	115,766	49.7
Value of wages, mill. mks	401	516	498	508	580	666	66.1
Value of raw materials, mill. mks ..	1,083	1,499	1,476	1,537	1,722	2,193	102.5
Value of production, mill. mks	1,798	2,378	2,354	2,546	2,823	3,490	94.1

The progress in the years 1922 and 1923 was a direct continuation of the considerable expansion since 1919; in that year the number of establishments had been 543 and of workers 22,145. It is characteristic that in 1924—1925, when the progress in the timber industry was retarded, the economic life in Finland as a whole was also slightly depressed; on the other hand, the excellent business outlook in the timber trade in 1926 and 1927 coincided with the great boom period; the latter was evidently brought about by the former.

On the whole, industry seemed prosperous during the period under consideration; it was the good economic results that induced the great extension in production referred to above. Now, when a wider survey is possible, the prosperity appears to a considerable extent as a delusion. Inflation had wiped out most of the old debts and the value of production was rapidly increasing, while the nominal share capital was only slowly being adapted to the changed monetary values. Indeed, even in 1927 the total share capital of all industrial companies was less than in 1913, reckoned in the new mark value, in spite of the huge amount of capital that had been invested in industry during the period (HP capacity had increased by over 100 per cent since 1913). Reckoned in real values, the profits were losses in many cases. These unsatisfactory results were perhaps in the first place caused by unsound fiscal policy, which not only burdened industry — especially the larger undertakings — with high taxes, but also unduly retarded by unwise regulations the necessary adaptation to changed values.

COMMERCE.

Home Trade.

According to statistics published in the Bank of Finland Bulletin of the total sales of some representative wholesale firms, their turnover increased from 1,766 million marks in 1923 to 2,654 millions in 1927.

Foreign Trade.

	Imports	Exports	Total	Surplus (+) or deficit (-)
	M i l l i o n m a r k s			
1922	3,970	4,468	8,438	+ 498
1923	4,600	4,393	8,993	- 208
1924	4,716	4,971	9,687	+ 255
1925	5,520	5,574	11,094	+ 54
1926	5,668	5,637	11,305	- 31
1927	6,386	6,324	12,710	- 62

The figures quoted above illustrate the great expansion in commerce in the period under consideration; the sales of wholesale firms increased by 50.3 per cent and the volume of foreign trade by 50.6 per cent; the increase in imports was 60.9 and in exports 41.5 per cent. The foreign trade was on the whole well balanced, though it should be noticed, that after 1924 imports increased in comparison with exports, a tendency that in 1928 finally led to a huge trade deficit as shown later.

THE BUILDING TRADE.

During the war and the years immediately after it the building trade was very depressed. This is seen for example, from the consumption of cement that in 1914—1921 was 54 per cent below 1913 and of lime with a corresponding figure of 75 per cent. This stagnation was not only caused by the uncertainties of the time but also by severe rent restriction which made building unprofitable.

It was only after the abolition of these restrictions in 1922 and 1923 that the building trade in the towns began to expand rapidly. This movement was favoured not only by the lack of dwellings due to the long stagnation but also by rising building costs and rents; thus building costs per cbm. reached 350 marks in 1928 against 304 in 1922. These two factors — the great demand and the rising prices — soon led to speculative building which at the end of the period reached a climax never before experienced in Finland. This boom is well illustrated by the following figures:

Residential building in Helsinki.

	Number of rooms constructed	Capital invested (wooden buildings not included) Mill. mks.
1922	2,655	48
1923	2,024	89
1924	4,764	181
1925	6,356	291
1926	8,974	379
1927	10,904	493
1928	11,527	702

TRAFFIC.

The number of passengers carried on the State Railways increased from 20,879,000 in 1922 to 23,988,000 in 1927 and the amount of goods traffic from 6,884,000 tons to 11,479,000 tons. In spite of this expansion in railway traffic, road traffic also increased rapidly. This was indeed, the period when motor traffic first gained practical importance, as is seen from the fact that the number of motor vehicles increased from 1,754 to 24,876. In comparison with land traffic, coastal and inland water traffic showed little development; many services were even suppressed under the competition of rail and road traffic.

THE MONEY MARKET.

The effects of the inflation period upon the money market were disastrous; whereas the deposits in all the banks and savings institutions had amounted to 10,633 million marks in 1913 (reckoned in the post-war money value), the corresponding figure for 1921 was only 4,746. Then however inflation was arrested and recovery was rapid in the subsequent years, as is seen from the following:

	Total amount of deposits	Rediscunts at the Central Bank	Banks' net claims (+) on or not in- debtedness (-) to Foreign Countries	The Bank Rate %
	M i l l i o n m a r k s			
1922	5,308	168	— 221	9.8
1923	5,897	444	— 128	3, 9, 8, 10
1924	6,472	158	+ 229	10, 9
1925	7,302	26	+ 1,049	9, 8, 7 1/2
1926	8,421	87	+ 1,025	7 1/2
1927	9,938	55	+ 1,296	7 1/2, 7, 6 1/2, 6

Great and conspicuous as the improvement was, the situation was not altogether satisfactory at the end of the period. Whereas the volume of trade and commerce had greatly expanded since pre-war days, the total amount of deposits had not even reached its former level. The lack of capital was generally felt and the interest rates paid in the open market were much higher than the official Bank Rate. This lack of fluid capital was not only a consequence of the earlier inflation, but was also caused by too heavy capital investments in comparison with the limited capital resources of the country; the total amount of invested capital in the years 1910—1928 has been estimated at about 27,000 millions. This achievement is the more remarkable as the foreign indebtedness of the country had increased comparatively little. The consolidated debt (including the State Cash Balance and the banks' relations to foreign countries) was 2,127 million marks in 1913 (in the new money value); in 1922 it had increased to 3,386 millions and in 1927 to 3,428 millions. To this must be added however, a considerable unconsolidated foreign debt amounting to nearly 2,000 million marks at the end of the period.

THE STATE FINANCES.

The following table shows the fluctuations in the ordinary revenue, ordinary expenditure and the Cash Balance from 1922 to 1927.

	Ordinary Revenue	Ordinary Expenditure	Differ- ence	Cash Balance
	M i l l i o n m a r k s			
1922	2,669	2,076	593	683
1923	3,063	2,257	806	1,099
1924	3,158	2,530	628	1,167
1925	3,316	2,829	513	897
1926	3,424	2,999	425	791
1927	3,908	3,329	579	788

Ordinary revenue increased by 46.1 per cent and expenditure by 60.3 per cent. Each year ordinary revenue considerably surpassed ordinary expenditure, leaving a surplus of 3,544 millions for the whole period. From this point of view the state finances were excellent and in a position to lower the too burdensome taxes and to raise the salaries of state officials which had been greatly reduced through the inflation; but instead of that, state investments in undertakings increased annually to an estimated amount of more than 400 millions of ordinary revenue. The result was that after 1924 the Cash Balance fell continuously.

The financial position of the state was also very strong in respect of its total indebtedness which increased by only 201 million marks, and amounted to 3,624 millions in 1927 as against 3,423 millions in 1922.

PRICE MOVEMENTS IN 1922—1927.

Wholesale Price Index (1913 = 100).

	1922	1923	1924	1925	1926	1927	1927 (1922=100)
Animal foodstuffs	1,040	936	997	1,052	1,021	1,008	97
Vegetable foodstuffs	1,386	1,192	1,263	1,339	1,286	1,286	93
Leather products	905	762	753	840	774	881	97
Wood goods	1,365	1,273	1,180	1,170	1,141	1,210	89
Paper products	1,075	947	887	984	983	1,009	94
Textile products	1,430	1,292	1,313	1,278	1,172	1,187	83
Iron and steel products	1,145	1,034	987	967	936	936	82
Sundry commodities	1,185	1,070	1,122	1,135	1,100	1,119	94
All commodities	1,219	1,095	1,100	1,129	1,039	1,113	91
Commodities produced and consumed in the country	1,146	1,077	1,096	1,123	1,095	1,110	97
Imported commodities	1,297	1,083	1,121	1,171	1,107	1,114	86
Exported commodities	1,267	1,143	1,084	1,093	1,053	1,117	88

In 1927 all prices stood lower than in 1922, mainly in consequence of the deflation in 1923; after that year the price level showed a rising tendency, interrupted only in 1926 when a downward movement appeared in all categories. In 1927 there was again a general rise with the exception of foodstuffs; here the retrograde movement had actually set in already in 1925, when vegetable foodstuffs reached their highest point in February with an index of 1,386 and animal foodstuffs in August with 1,127.

Index Number of Cost of Living (Jan.—June 1914 = 100).

	1922	1923	1924	1925	1926	1927	1927 (1922=100)
Foodstuffs	1,143	1,079	1,093	1,147	1,103	1,115	98
Clothing	1,096	1,065	1,039	1,043	1,042	1,036	95
Rent	710	901	1,088	1,224	1,306	1,379	194
Fuel	1,266	1,477	1,473	1,362	1,271	1,405	111
Tobacco	1,232	1,287	1,273	1,293	1,298	1,300	101
Newspapers	1,079	1,079	1,079	1,079	1,079	1,127	104
Taxes	2,202	2,514	2,378	2,291	2,058	2,135	97
Total Cost of Living	1,139	1,147	1,170	1,212	1,183	1,243	109

The rise in the cost of living by 9 per cent in the period 1922—1927 was almost wholly due to the continuous upward trend in rents which in 1922 had been kept down by restrictive regulations.

THE SITUATION AT THE END OF 1927.

The survey of the period 1922—1927 shows enormous expansion in almost all branches of economic activity — agriculture, industry, building, trade and traffic. This remarkable development was achieved with scarcely any financial aid from abroad; and yet with all this capital outlay, the money market, exceedingly distressed at the beginning of the period, improved steadily; the financial position of the state, in spite of heavy capital investments from ordinary revenue, must also be regarded as excellent at the end of the period; even as relatively easy, with a Cash Balance of nearly 800 million marks.

This favourable picture had however its reverse side. The prosperity was mainly founded upon favourable marketing conditions for timber and wood products which formed about 85 per cent of the total export. Danger was here approaching from two sides; not only were prices paid for raw material in autumn 1927 much too high even for the excellent conditions then prevailing, but also export markets were beginning to be flooded; thus the four chief timber producing countries (Finland, Sweden, Poland and Russia) increased their exports of sawn goods abruptly from 2,752,000 standards in 1926 to 3,413,000 standards in 1927 or by nearly 25 per cent. In these circumstances a setback in the timber trade was unavoidable. The building trade also had expanded too rapidly already in 1927; it could continue only on an unsound speculative basis. In agriculture again, price conditions had actually tended in an unfavourable direction since 1925. Finally, on the money market the disastrous effects of the inflation were not yet overcome, though this fact was concealed by the great recovery that had actually taken place.

THE YEARS 1928—1930.

We shall examine in the following the course of events that in 1928 led to the monetary crisis; after that a short account will be given of the depression in different economic spheres in Finland. Special attention will be drawn to the question of knowing when and to what extent the world depression spread to Finland; in other words, to what extent the financial crisis in Finland — which began before the world depression — became merged in the world depression in the course of its evolution. In the first place one must of course consider

the two lines of development — the capital market and foreign trade — by which the economic life of Finland is in direct contact with other countries. It is true that a third point of contact must be added — the psychological — but its importance, though great, cannot be measured by statistics.

1. THE OUTBREAK OF THE CRISIS.

In 1928 the economic outlook changed almost at once. The first blow, and that the hardest, came from the timber market. Already at the beginning of the year the sales of sawn goods amounted to only 400,000 stds., that was 300,000 less than in the previous year. No improvement was seen in the course of the year; on the contrary conditions became worse. The optimism of autumn 1927 had disappeared and already in May 1928 the members of the Finnish Sawmill Association agreed to restrict production by 10 per cent — the first of other similar agreements.

The state of the timber markets affected the volume of exports unfavourably; at the same time imports increased greatly as a consequence of the prevailing prosperity and the still rapidly expanding economic activities, especially in the building trade. In these circumstances the balance of trade resulted in a deficit that grew almost continuously month by month so that the year closed with the huge trade deficit of 1,760 million marks against 62 millions in the preceding year.

This could not but adversely affect the money market. The effects of the building trade were similar, the boom with its increasingly unsound speculative character continued throughout the first half of the year and was aided by the large foreign loans financing new residential buildings.

In February the first indications of a tightening of the money market were appearing; the excess of credits over deposits in the commercial banks rose at once from 1,092 to 1,306 million marks and the banks' net claims on foreign countries were considerably reduced. From this time onwards the signs of monetary stringency steadily accumulated, though only slowly in the spring months. The fact that the critical moment could still be deferred in spite of all these unfavourable factors, was the result of certain countervailing forces; reference need only be made to the considerable influx of foreign capital.

In summer the situation began to deteriorate rapidly as seen from statistics quoted below. Finally in August came the monetary crisis. The deciding blow was given by two adverse factors added to those already existing. One was the poor harvest, by this time confirmed; the other was the result of unwise monetary policy; the Government had in March invested 220 million marks in the current accounts of certain commercial banks, thereby causing the market;

in August this amount was needed for other purposes and was withdrawn and this necessarily aggravated the already difficult position.

Below is given a survey of the events on the financial market after the beginning of the crisis and during the subsequent period of depression.

2. THE FINANCIAL MARKET.

Amounts borrowed and lent by the Commercial Banks and the difference between them.

	Deposits	Loans	Difference
	M i l l i o n m a r k s		
31. 12. '27	6,982	8,118	1,136
31. 3. '28	7,499	8,808	1,309
30. 6. '28	7,807	9,430	1,623
30. 9. '28	7,613	9,621	2,008
31. 12. '28	7,380	9,525	2,145
31. 3. '29	7,625	9,782	2,157
30. 6. '29	7,730	10,047	2,317
30. 9. '29	7,554	9,788	2,234
31. 12. '29	7,481	9,566	2,085
31. 3. '30	7,790	9,595	1,805
30. 6. '30	8,282	9,354	1,072
30. 9. '30	7,977	9,072	1,095
31. 12. '30	7,098	9,200	1,502

Rediscounts at Finland's Bank, Reserve in Notes, and Official Rate of Discount.

	Rediscounts	Note Reserve	Rate of Discount
	M i l l i o n m a r k s		
31. 12. '27	55	697	6 %
31. 3. '28	17	621	6 "
30. 6. '28	103	462	6 "
30. 9. '28	478	300	6 1/2 " (7/8)
31. 12. '28	677	209	7 " (15/11)
31. 3. '29	590	317	7 "
30. 6. '29	617	348	7 "
30. 9. '29	604	434	7 "
31. 12. '29	550	536	7 "
31. 3. '30	380	555	7 "
30. 6. '30	23	821	6 1/2 " (28/4)
30. 9. '30	6	434	6 " (26/8)
31. 12. '30	150	793	6 "

From this it is apparent that the financial crisis which began in 1928 continued all through 1929. Towards the end of the year a slight improvement was noticeable especially in the central bank's position, which was most difficult at the turn of the year 1928—1929 and then became easier. In May 1929 the excess of credits over deposits in the commercial banks reached its maximum, while the rediscounts attained theirs three months later. In 1930 the relaxing of the money market was very conspicuous; from the middle of the year the

general situation was even better than before the money stringency began in the first half of 1928. From August the discount rate could again be lowered to 6 per cent; the commercial banks likewise reduced their rates on six months' deposits in the course of the year from 7 to 6 per cent and the rate on current accounts and deposits on demand from 5½ to 4 per cent; smaller financial institutions followed suit. Towards the end of the year a slight tightening of the money market set in again.

To obtain a correct idea of the causes influencing the development of the financial market it is necessary to consider the relations between Finland and other countries in respect of payments and capital during the period under notice. In 1928—1929 considerable foreign capital was attracted to Finland, as is reflected in the deficit in her balance of payments. In 1928 this deficit rose to 1,600 million marks and the following year 480 million marks, making a total for the two years of more than two milliards. Part of it had presumably been paid for by previous exports, but about two milliards had to be covered during those years by imported capital.

In what form did this capital come to Finland?

Foreign Bond Loans.

	Received	Paid	Difference
	Million	million	marks
1928	990	840	150
1929	200	150	50
1930	c. 1,170	—	—

In 1928, especially at the beginning of the year, Finland received important loans of foreign capital; in the following year on the other hand, foreign loans were relatively small in amount. But as she had considerably reduced her long-term indebtedness, the net result of the consolidated debts of these two years was reduced to 200 millions, that is a tenth of the amount to be expected when considering the deficit in the balance of payments.

Net Claims on and Net Indebtedness to Foreign Countries.

	Finland's Bank	Commercial Banks
	Million	marks
31. 12. '27	+ 1,245	+ 7
31. 3. '28	+ 962	— 136
30. 6. '28	+ 712	— 306
30. 9. '28	+ 601	— 181
31. 12. '28	+ 732	— 273
31. 3. '29	+ 706	— 386
30. 6. '29	+ 545	— 444
30. 9. '29	+ 547	— 237
31. 12. '29	+ 670	— 249
31. 3. '30	+ 933	— 274
30. 6. '30	+ 877	+ 46
30. 9. '30	+ 869	+ 216
31. 12. '30	+ 813	— 134

An important part of the deficit of 1928 was covered by reducing the credit accounts abroad or by increasing the debit accounts; thus in 1928, new capital to an amount of 793 million marks was drawn to Finland. In the first half of 1929 the inflow of capital continued and by the end of June the addition was 358 million marks; after this the flow altered its direction and the net surplus of 1929 was only 86 million marks. In this way a total capital of 879 million marks was imported into the country during 1928 and 1929.

THE SHORT TERM FOREIGN LOANS AND DIRECT INVESTMENTS BY FOREIGNERS.

Thus by bond loans and by bank deposits a little more than one milliard marks was imported into Finland in 1928 and 1929. About one milliard of the deficit had to be compensated for in another way. It is known that a certain number of Finnish shares passed into foreign hands, but there were also direct investments by foreigners in Finnish undertakings. The greater part of the deficit was however, covered by foreign short term credits; these were obtained by many industrial enterprises, commercial and building firms, especially in the autumn of 1928, but also later. During 1930 these short term loans could be decreased to a certain extent by consolidated foreign loans, and the banks too were able to strengthen their position towards foreign countries.

If we now try to form a conception — on the basis of what has been set forth — of the causes which influenced the course of affairs on the money market, we can state that during the first phase of the depression, a considerable amount of capital was attracted to Finland through the medium of bank deposits and in the form of short term loans. It was thus possible, in spite of the stringency, to continue production almost without interruption and to the same extent as before — as appears from figures given later. This phase lasted till about the middle of 1929.

In the second half of 1929, the banks' position towards foreign countries began to improve and there seems to have been very few short loans taken up; this was a direct consequence of the increasing depression in economic life. Industries especially sensitive to business cycles, like building and saw-mill, declined rapidly in proportion as the production, begun under the boom period, was completed. The capital thus released returned to the money market; this move is clearly reflected in the fewer loans granted by the banks from the middle of 1929, and it was undoubtedly this fact which caused the subsequent changes in the movement of capital referred to above.

As conditions on the money market of Finland became easier, the trend in the financial centres of the world took the opposite direction. The American stock market speculation attracted short term money from all over the world and thus caused a general stringency. The pressure on the Finnish money

market was thus in the first place a consequence of the evolution in her own economic life, and this latter was only affected by the general world situation in so far as the easing of the money market was thereby retarded. If conditions on the world market had been easier, more capital would have flowed to Finland and her money market would have eased more rapidly and presumably the Bank Rate could have been already lowered in 1929; but even in that case the cyclical development could scarcely have been altered and the spread of the depression checked.

When at last, at the beginning of 1930 the world financial situation revived so that Finland could obtain some fairly large loans, the effect on the national market was immediate, as appears from the figures given above. But by this time the economic depression was so widespread that the financial position could not greatly affect business conditions and in addition, the effects of the world depression began to be more and more distinct.

During 1930 international capital movements did not pursue such a favourable course as might have been expected from conditions at the beginning of the year; on the contrary, the bond market was at the end of the year very depressed. This state of things had clearly an unfavourable effect on financial conditions in Finland; as the proceeds of the earlier foreign loans were consumed, a slight tightening of the money market set in towards the end of the year as was indicated above; but this was also caused by a sudden spurt in imports on account of impending increase in duties.

3. FOREIGN TRADE.

VOLUME OF TRADE.

Below are given the indices of the volume of foreign trade as calculated by „Unitas”, in periods of 3 months for the last three years (1926 = 100).

	Imports			Exports		
	1928	1929	1930	1928	1929	1930
1st Quarter	172	121	104	134	122	159
2nd „	134	142	106	108	138	133
3rd „	138	125	104	109	112	83
4th „	131	114	120	109	107	86
Total	141	125	109	111	117	102

In 1928 imports reached a higher figure than ever before; that of 1926 was exceeded by 41 per cent, that of 1927 by 25 per cent; even in the imports of 1929, little sign was apparent of the approaching depression; although 10 per cent less than that of the previous year, it was still 25 per cent above that of 1926 and 11 per cent above that of 1927. Not until 1930 did imports show a sudden decrease, and even then in the last quarter of the year the imports of coffee, sugar, tobacco etc. temporarily expanded on account of impending increased duties. The decline in imports in 1930 was specially heavy in farm

products as a consequence not only of the depression but of the favourable crops in 1929 and 1930. There was also a considerable fall in the imports of raw materials and machinery as is usual in a time of depression.

One is struck by the fact — appearing from the above figures — that in 1929 the exports exceeded those of 1928; but this was to some extent a result of the beginning depression itself. Calculations made by the saw-mill industry after purchasing their raw materials were completely upset, and many firms hastened to liquidate their stocks in 1929, realising that it was impossible to continue production under the changed circumstances. The result was that, in spite of unfavourable conditions, Finland exported more sawn goods than in the preceding year and almost the same quantity as in the record year of 1927. Nor had the depression as yet — in 1929 — checked exports in other branches; on the contrary, many of them shewed larger quantities than in 1928, such as plywood, chomical and mechanical pulp, dairy products.

Also during the first half of 1930, the indices of export were considerably higher than in 1928, and even, in some cases, than in 1929; actually, this fact has not much significance seeing that, up to the month of June, exports are usually relatively unimportant, though in the winter 1929—1930 they were somewhat increased owing to favourable ice conditions. On the other hand, the indices of the chief export period shews a sharp fall and clearly indicates the depression. Below are given the quantities exported of the most important goods in 1928, 1929, 1930.

		1928	1929	1930
Unsawn timber	1000 cbm.	3,876	3,159	2,710
Sawn timber	1000 stds.	3,876	3,159	2,710
Plywood	1000 kg.	82,882	98,601	82,199
Matches	" "	3,339	4,202	2,359
Bobbins	" "	5,559	5,823	4,829
Mechanical Pulp	" "	137,717	160,870	157,442
Chemical	" "	473,030	484,143	475,829
Cardboard	" "	45,248	52,219	46,881
Paper	" "	243,807	243,855	259,658
Raw Hides	" "	5,084	5,370	5,146
Butter	" "	13,376	16,606	17,112
Cheese	" "	1,649	2,194	2,124

The above figures show that the reduction of exports in 1930 was almost exclusively limited to timber. The quantity of unsawn timber was 15 per cent and that of sawn timber 25 per cent below the export of the preceding year. This reduction in exports was due less to the world depression than to the more intensive competition of Russia.

FOREIGN TRADE PRICES.

More clearly than in the volume of trade, the effects of the world depression are seen in the development of prices. Below are given the price indices for imported and exported goods for the last three years (1926 = 100).

	1928	1929	1930
Imported goods	97	93	76
Exported goods	100	97	91

Already in 1929 import as well as export prices gave evidence of the beginning depression; but in the following year the import figures clearly reflected the collapse of prices in the world markets. Also the export prices showed a considerable fall in the same period, though not such a heavy one as in the case of imports. The development of prices in foreign trade was thus favourable for Finland: with the same amount of exports she was able to purchase in 1930 nearly 17 per cent more goods than in 1928. This has considerably alleviated the hardship caused by the contraction in the volume of trade. Finland has thus been in a more fortunate position than those mainly raw-material producing countries where the volume as well as the prices of foreign trade has been unfavourable.

It is however, clear that this favourable position can only be a temporary one. It was mainly caused by the fact that contracts for timber and products of the wood-working industries are made a considerable time — often more than a year — in advance of the actual shipment of the goods. The export statistics reflect an earlier and therefore — in a period of decline — a higher level of prices than actually prevails. In the closing months of 1930 the recent considerable fall in prices of exported articles already began to appear in deliveries and consequently, in the export statistics.

THE TOTAL VALUE OF FOREIGN TRADE.

As a result of this contracting volume and falling prices the figures showing the total value of foreign trade have rapidly declined, as seen from the following:

Total value of Foreign Trade.

	Imports	Exports	Total
	M i l l i o n m a r k s		
1928	8,013	6,245	14,258
1929	7,001	6,430	13,431
1930	5,248	5,398	10,646

In 1929 imports declined by 13 per cent and in the following year the fall was 35 per cent in comparison with 1928. On the other hand, there was an increase in exports of about 3 per cent in 1929, but in 1930 the figure fell 13 per cent lower than in 1928. As to the total value of trade, the decline was, in comparison with 1928, about 6 per cent in 1929 and 25 per cent in 1930. As the value of imports has fallen more rapidly than that of exports, the balance of trade has developed in a favourable direction. Against a deficit of 1,768 millions in 1928 and 572 millions in 1929, there was a surplus of 150 million marks in 1930.

4. MOVEMENTS OF PRICES IN FINLAND.

Above we have treated those aspects of economic life by which Finland is directly linked with World Economics; we shall now examine the movements in the internal prices.

WHOLESALE PRICES.

In the tables below the years 1926—1930 are divided into three different phases; the first lasts until August 1928 when wholesale prices in Finland began to fall on account of a change in the business cycle; the second comes to an end in September 1929, the turning point in the American business cycle after which a general world depression set in; the third phase lasts till the end of 1930.

Table I. Movement of Wholesale Price Indices.

		1926	1928	1929	1930	
			August	September	December	
Sweden	Kommerskollegium	1913 = 100	149	149	140	117
Denmark	Dept. of Statistics	1913 = 100	163	154	150	120
Norway	Central Statistical Office	1913 = 100	198	162	154	136
Switzerland	Dept. Fed. de l'Econ. Pub. July	1914 = 100	145	144	142	117
The Netherlands	Central Bureau of Statistics ..	1913 = 100	145	145	141	107
Gt. Britain	Board of Trade	1913 = 100	148	139	136	109
Canada	Dom. Bureau of Statistics ..	1926 = 100	100	95	97	78
U. S. A.	Bureau of Labor Statistics ..	1926 = 100	100	99	98	78
Estonia	Central Statistical Office	1913 = 100	114	122	117	96
Germany	Stat. Reichsamt	1913 = 100	134	142	138	118
Czecho-Slovakia	Statistical Office	July 1914 = 100	139	146	132	110
Italy	Ufficio di Statistica	1913 = 100	131	132	128	100
France	Statistique Générale	July 1914 = 100	119	128	124	101
Finland	Central Statistical Office ...	1926 = 100	100	103	96	86
Finland:						
	Agricultural products		100	114	95	78
	Other home products		100	102	98	94
	Imported articles		100	98	95	83

Table II. Proportional Movement of Wholesale Price Indices.

	1928	1928	1930	1930	
	August	September	December	December	
	1926=100	1928=100	1929=100	1928=100	
Sweden	100	94	84	79	
Denmark	94	97	80	78	
Norway	82	95	88	84	
Switzerland	99	99	82	81	
The Netherlands	100	97	76	74	
Gt. Britain	94	98	80	78	
Canada	95	102	80	82	
U. S. A.	99	99	80	79	
Estonia	107	96	82	79	
Germany	106	97	86	83	
Czecho-Slovakia	105	90	83	75	
Italy	101	97	78	76	
France	108	97	81	79	
Finland	103	93	90	83	
Finland:					
	Agricultural products	114	83	77	64
	Other home products	102	96	96	92
	Imported articles	98	97	87	85

Table II gives a clear idea of the movement of prices during the different phases. During the first phase the countries group themselves according to

whether they have experienced revalorisation or devaluation. In the first group -- except in the case of the Netherlands and Sweden -- there has been deflation, in the second group inflation; Finland is of course, included in the latter.

During the second phase (from August 1928 to September 1929) a fall in prices appears in all countries except Canada, but the fall is slight; the falling tendency is more marked in Finland than in any other country except Czecho-Slovakia, so that the effects of the depression which had begun in Finland are clearly seen in the movement of prices. The effect of the national development of business conditions is also seen in the fact that home products experienced a greater fall than imported articles.

During the last phase (from September 1929 to the end of 1930) all countries, without exception, experienced a marked deflation. The movement in Finland was consequently no longer national in character but was part of a world-wide depression. This appears clearly also from the fact, that the index for imported goods declined rapidly. A comparison of the trend in Finland with that of other countries reveals the fact, that in spite of a fall of ten per cent in the wholesale price index, the decline was smaller than in any other country under consideration. In this may be seen a natural sequence to the relatively heavy fall in the preceding phase; but to some extent at least, it was also a consequence of the raised duties at the end of 1929 and in November 1930, by which deflation was artificially retarded.

If the whole period from August 1928 is examined, it will be seen that in Norway, Germany and Finland the movement was slowest; in other countries the decline in wholesale prices was greater. It is also of interest to note the divergence in the price movements of agricultural products and of industrial products; whereas in the former case there was a fall of 36 per cent, the fall in the latter case was only 8 per cent. This reflects partly a corresponding movement in world market prices and partly the more effective protection given to industrial products against foreign competition.

RETAIL PRICES.

The Finnish cost of living index is based upon prices in 1914. In the following table are shewn the movements in the chief groups which constitute this index. The same points of time are chosen as in the wholesale prices and they are related to the 1926 price level (= 100).

	1928 August	1929 September	1930 December
Food	107	102	81
Clothing	101	101	99
Rent	109	113	112
Fuel	112	114	101
Tobacco	100	100	100
Newspapers	105	109	109
Taxes	99	101	104
Total	106	104	92

In the period before August 1928 the cost of living rose as wholesale prices did. In the following period ending September 1929, there was a slight decline against a much more marked fall in wholesale prices; in the last period on the contrary, cost of living declined more rapidly than wholesale prices. This is evidence of the rule, that general price movements affect retail prices and the cost of living later than wholesale prices. In the whole period August 1928 to December 1930 the decline in the cost of living was 13 per cent and in wholesale prices 17 per cent; the two price categories have, on the whole, followed the same course.

It is interesting to compare this development in Finland with that in other countries. If we examine the cost of living indices published in the Monthly Bulletin of Statistics of the League of Nations for the same countries as were quoted above, we find the following price levels at the end of 1930 (July 1928 = 100): France 115, Austria 100, Canada 98, Italy and Switzerland 97, Gt. Britain, Germany and Sweden 93, United States 92, Denmark and Holland 90, Norway 89, Finland 88, Estonia 85. It appears from these figures that only in Estonia was the fall in the cost of living as great as in Finland and it also appears, if these figures are compared with the wholesale indices given above, that the two price categories have generally developed quite differently; nowhere did they so closely follow the same course as in Finland.

5. THE DEPRESSION IN HOME TRADE AND INDUSTRY.

AGRICULTURE AND FORESTRY.

The most important crops have been estimated by the Bureau of Agriculture for the years 1927—1930 as follows:

	1927	1928	1929	1930
	Million k g.			
Wheat	29.0	27.2	29.8	32.4
Rye	327.5	279.4	327.9	358.2
Barley	143.1	125.6	136.7	135.5
Oats	633.0	569.8	562.2	601.8
Potatoes	753.0	638.0	826.7	785.4
Root vegetables	620.8	630.3	744.9	765.4
Hay	3,165.2	2,680.3	2,447.7	2,629.0

The poor harvest in 1928 was one of the factors aggravating the general economic situation; the value of the crop fell from 5,280 million marks in 1927 to 4,800 millions in the following year. In 1929, and especially in 1930, the harvest was much better, with the exception of hay. But in spite of this fact, its monetary value was adversely affected by the heavy fall in agricultural prices. The value of the crop has been estimated at 5,000 millions in 1929, but in 1930 the harvest did not represent much more than 4,000 millions according to preliminary calculation.

The difficulties of the rural population have been still more aggravated by the slump in timber prices. As indicated above farmers receive in ordinary times a considerable income from their forests and especially was this the case in the period 1922—1927 with the excellent prices then prevailing on the timber markets. Since 1927 prices have fallen continuously, as shewn in the figures given below, representing the average selling prices per cubic foot of logs from state forests:

	Mks.
1926	2.25
1927	4.29
1928	3.45
1929	2.44
1930	1.51

In 1930 the prices were only 35 per cent of the high prices ruling in 1927. All other wood products have also considerably fallen in price. The reduction in income thus caused fell the more heavily upon the rural population as work in the forests, upon which large groups generally depend, was also considerably restricted in consequence; all this causing them grave economic difficulties.

The farmers have, on the whole however, been well able to overcome their difficulties; especially those whose position has been relatively safe because their production was mainly domestic. On the other hand, farmers burdened by debts have had great difficulties. Though most of their earlier mortgages were wiped out in the inflation period, new loans were soon raised and rapidly increased. According to an investigation by the Economic Council, the aggregate indebtedness of farmers in Finland amounted to nearly 6,000 million marks at the beginning of 1930, a sum corresponding to 12.7 per cent of the total value of the farms in Finland. But though so great an indebtedness is not in itself a matter for anxiety, the situation is worse because the average rate at which these loans were raised was as high as 8½ per cent and because about 80 per cent of the total indebtedness consisted of short-term credits. In these circumstances many farmers have succumbed to their financial difficulties; the number of public auctions of real estate has rapidly grown and the number of bankruptcies in the rural districts has increased five-activity in 1927—1929:

INDUSTRY.

The following official statistics indicate the development of industrial activity in 1927—1929:

	1927	1928	1929
Number of establishments	3,787	4,021	4,109
Number of workers	159,141	169,729	165,073
HP capacity	474,220	503,995	542,323
Wages, mill. mks.	2,059	2,277	2,218
Value of raw materials, mill. mks.	6,579	7,453	7,141
Value of production, " "	12,380	13,710	13,179

Industrial production expanded considerably in 1928; all figures are higher than in the preceding year. Nor was 1929 a bad year; the number of establishments increased, and though the number of workers decreased a little, the HP capacity showed remarkable expansion. The decline in the value of raw materials and production by 4 per cent almost corresponded to the general fall in prices; the price index for imported goods fell at the same time by 4 per cent and that for home market industrial products by 3 per cent.

From these statistics fluctuations in industrial activity during the course of each year are not apparent nor do they cover the year 1930. These defects are partly made good by figures reflecting working conditions in industry. The quarterly indices given below are based upon the number of industrial workers — the corresponding period of the previous year = 100.

Working conditions in industry.

	1927	1928	1929	1930
1st quarter	107.7	103.3	101.2	85.1
2nd "	104.1	101.4	97.4	88.4
3rd "	95.2	107.0	98.4	88.6
4th "	95.5	105.5	93.0	85.3

The low figures for the last two quarters in 1927 and the corresponding high figures for 1928 were caused by a lock-out in the metal industry in 1927. Otherwise, general working conditions continued to be satisfactory until the last quarter of 1929; the slight decrease in the second and third quarters do not necessarily indicate a contraction in industrial activity, as they may also have been a result of technical rationalisation, for as related above, the HP capacity was rapidly increasing. But in the fourth quarter the index drops at once by 7 per cent below the preceding year; a general depression begins clearly to be felt. For the whole of 1930 the figures are unsatisfactory, working conditions being from 10 to 15 points below 1929. As industry was working shorter hours in many cases, the actual degree of employment was not even as great as these figures indicate.

In order to shed some light on the working conditions in the different branches of industry, corresponding figures relating to the last quarter of each year are given below.

	1927 (1926=100)	1928 (1927=100)	1929 (1928=100)	1930 (1929=100)	1930 (1926=100)
Sawmill industry	100.9	95.5	93.6	68.8	62.1
Paper industry	104.5	96.8	97.4	91.3	90.0
Metal industry	49.7	202.7	91.8	84.4	78.0
Glass, stone, etc. industry	108.9	111.6	83.6	72.1	73.2
Chemical industry	95.8	107.3	91.8	98.6	93.1
Foodstuffs industry	108.6	102.8	84.8	100.3	94.9
Leather industry	104.0	99.9	93.0	93.8	90.6
Textile industry	102.1	93.1	94.2	99.0	94.3
Total	95.5	105.5	93.0	85.3	79.9

The first two industries, sawmill and paper, form the main exporting industries; viewed as a whole it can be estimated that of their total output, about 85 per cent is sold abroad and only 15 per cent consumed within the country. The difficulties of these industries have already been described with the development of foreign trade. The above figures show that their working conditions were already slightly depressed at the end of 1928. One year later the number of workers had steadily declined — though at that time labour conditions had become unsatisfactory also in many home industries. Not until 1930 did the state of the exporting industries really become distressed; this is especially true with regard to the sawmill industry. As soon as old stocks acquired during the boom period were sawn and sold, work was in many cases discontinued; it is known that at the end of 1930 about 40—50 sawmills, with an average annual output of about 2,000 stds. each, had closed down.

In the paper industry, it is true, working conditions have been less unsatisfactory, though it has suffered heavy losses from declining prices; it is, however, financially in a very strong position. In recent years a thorough rationalisation has taken place and this has caused a relative reduction in the number of workers. On the other hand, new plants have been erected and the output capacity of others has been expanded; thus in 1930, two paper mills acquired new machines, two pulp factories were considerably extended and four new factories were built, one for sulphite pulp, one for sulphate pulp, one for plywood and one for insulite.

The depression has led to considerable output restriction in the export industries. Thus the sulphite pulp manufacturers in Northern and Central Europe have agreed to a restriction of 15 per cent; Finland has a similar agreement with Sweden and Norway providing for a reduction of over 30 per cent in the production of mechanical pulp; producers in Finland and Sweden have also agreed to reduce shipments of sawn goods by 20 per cent of the amount exported in 1929.

The state of the export industries has been considerably eased, in that the prices of the raw material, i. e. of timber, have been greatly reduced as seen above, and that also wages, especially since the latter half of 1930, have been cut down on the average by about 10—15 per cent.

In comparison with the exporting industries the home industries have fared better on the whole; the number of employed workers in the last quarter of 1930 was 12.9 per cent less than in 1926 whereas the corresponding figure for the exporting industries was 26.3 per cent. The most depressed of the home industries were the metal and the stone and glass industries with employment figures more than 20 per cent below those of 1926. The home industries have in general gained more than lost by the general decline of

prices. Many important raw materials could be purchased at a considerably lower price than before; thus in December 1930 import prices were lower than the average of 1929 as follows: raw cotton by 37 per cent, flax 42 per cent, wool 34 per cent, unrefined sugar 38 per cent, coal 19 per cent, pig iron 8 per cent. In addition, the price of wood used as fuel and in many cases, though not in all, wages had declined. On the other hand, the products of those industries which have been favoured by duties increased in 1929 and 1930, have only slightly shared in the general deflation; as pointed out above, the index for industrial products for home consumption was in December 1930 only 8 per cent lower than in August 1928.

The financial position of all the leading industrial concerns is very strong; in the years of inflation most of their debts were wiped out and debts incurred since then have not yet reached any disquieting amounts, as proved by an investigation by the Economic Council.

HOME TRADE.

The development in the home trade is most accurately reflected by the „Unitas'” index for the turnover in the commodity trade (1926 = 100):

	1927	1928	1929	1930
1st quarter	98	123	116	100
2nd „	112	130	141	124
3rd „	118	138	136	116
4th „	117	134	118	107
Total	111	131	128	112

In the home trade as in industry, the last quarter of 1929 was the first to indicate an approaching depression; before that no signs of contraction in the volume of trade were discernable. In 1930 the prevailing depression is clearly reflected in the declining figures; for the whole year the index is about 12 per cent lower than that for 1929 and 14 per cent lower than that for 1928. This fall seems however, to have been mainly caused by the fall in general prices and only to a less extent by an actual reduction in the volume.

THE BUILDING TRADE.

As related above, the rapid expansion of the building trade was one of the most conspicuous features of the boom period and one of the first branches of economic activity adversely affected by the beginning depression. Its course is well demonstrated by the fluctuations in the number of established real estate companies (in Finland most of the new residential buildings in the towns are owned by real estate companies formed by the inhabitants of the flats contained therein).

	1927	1928	1929	1930
1st quarter	54	85	27	21
2nd "	94	74	13	19
3rd "	39	69	19	23
4th "	53	36	15	23
Total	240	254	74	86

Though for 1928 the total figure was somewhat higher than for 1927, the last quarter of that year clearly reflects the turning point in the cyclical movement; in the next two years the number of new real estate companies was only about one third of that of the preceding years.

The fact that the boom in the building trade came to an abrupt end already in autumn 1928 does not imply that its activities were immediately restricted. On the contrary, as has already been pointed out, it required more than a year before all the building schemes launched during the prosperous period were actually finished and it was only in relatively few cases that work begun was not completed. This is all clearly seen for example in the number of inspected buildings in Helsinki. Reckoned in 1,000 cbm. it has since 1927 fluctuated as follows: 1927: 1,536; 1928: 2,109; 1929: 1,980; 1930: 889. Thus in 1929 almost as many buildings were produced as in the record year 1928 and not until 1930 was there great reduction.

As to the building trade in general there are no reliable statistics of its fluctuations. It is however well known that building by the peasants in the country has, like industrial building, closely followed the trend of general economic activity and has slowed down very much since the latter part of 1929, though not to the same extent as the residential building in the towns. The general course may be seen from figures shewing the consumption of cement, though it must be remembered that cement is also used for other purposes, e. g. for constructing roads, and that wood is still much used in building. Consumption of cement, reckoned in 1,000 casks, was in 1927: 1,570; 1928: 2,102; 1929: 1,547; 1930: 1,224.

Building costs have also declined, though not so rapidly as could be expected having regard to the cyclical movements in the trade. According to statistics collected by „Unitas” the costs in Helsinki have varied in the following way (June 1926 = 100):

	Brick	Timber	Cement	Iron	Wages	Total Costs
1927 June	106	100	102	97	101	101
1928 "	119	100	102	110	105	106
1929 "	94	97	102	109	105	103
1930 "	75	95	102	84	92	93
1930 December .	75	92	102	81	87	91

As these figures show, the costs were considerably inflated during the boom period and it was only after June 1929 that they were reduced to a marked degree. It is also interesting to note how the indices of the different

cost factors have varied; the resistance of cement prices was due to their monopolistic character.

In this connection it may also be pointed out that rents have considerably declined lately; in Helsinki and most other towns by 10 to 15 per cent, but in some cases even more, for example, in the second biggest town, Turku, by 25 to 40 per cent. (The cost of living index for rents had, in 1930, not yet registered this fall which occurred mainly in the latter part of that year).

TRAFFIC.

Below are given quarterly index figures for the volume of goods carried on the State Railways (1926 = 100):

	1927	1928	1929	1930
1st quarter	122	132	110	102
2nd "	102	106	109	102
3rd "	109	112	111	91
4th "	105	102	83	81
Total	109	112	105	94

In spite of the rapidly increasing motor traffic, the goods transported on the State Railways reached in 1928 a higher figure than in any previous year. In 1929 the traffic continued to be very favourable during the first three quarters of the year; it was only in September that an abrupt drop was noticed. In the fourth quarter the traffic was already considerably reduced and the whole of 1930 showed the effect of the general depression prevailing in the country. Passenger traffic has declined less during the depression.

THE STOCK MARKET.

The effects of the protracted depression is clearly seen in the movement of the prices of shares, of the number of protested bills and bankruptcies as well as public auctions. Indices referring to these factors are given below:

Index for shares („Unitas”); 1926 = 100.

	1927	1928	1929	1930
		D e c e m b e r		
Banks	170	147	128	115
Industrials	183	159	121	112
All shares	173	149	124	114

Index of protested bills and bankruptcies; 1926 = 100.

	1927	1928	1929	1930
Protosted bills:				
Number	104	101	235	273
Amount	100	114	275	340
Bankruptcies:				
Number	104	107	169	234

The effects of the boom period are conspicuous in the rapid rise of share prices; in December 1927 they were 73 per cent above the average level of 1926; the highest point was reached in March 1928 with the index at 182, but in June it still stood at 180, after which it began to fall rapidly. After 1928 prices declined continuously but were, at the end of 1930, still 14 points above the 1926 level. The distressed state of economic life is clearly reflected by the increasing amount of protested bills and bankruptcies, though the failures have been confined to smaller concerns. The same was the case with public auctions of real estate that increased from 1,136 in 1929 to 2,157 in 1930.

UNEMPLOYMENT.

The survey of the effects of the depression on different branches of economic life has already indicated the trend of employment. While depression spread over the country and was intensified, unemployment figures showed of course, a continuous increase. The unemployment indices given below are based upon the number of workers registered at labour exchanges (1926 = 100):

	1927	1928	1929	1930
March	95	96	144	453
June	122	88	125	385
September	94	71	205	542
December	99	132	392	430

According to these figures the situation on the labour market grew worse at the end of 1928, though not until the later months of 1929 was there actual distress, and throughout 1930 the position was very unfavourable. The actual number of registered unemployed in December 1930 was 9,336. This figure does not however, cover all those unemployed, but mainly those in the towns. According to an investigation by the Ministry of Communications and Public Works, there were in January 1931 in the whole country 58,464 unemployed people, of whom 20,492 were on public relief works.

STATE FINANCES.

The state finances were in a very favourable position during the period 1922—1927, as was pointed out earlier. Variations in ordinary revenue and expenditure as well as in the Cash Balance in the years 1927—1930 are seen from figures given below.

	1927	1928	1929	1930
	M i l l i o n m a r k s			
Ordinary revenue	3,908	4,476	4,302	4,275
Ordinary expenditure	3,329	3,568	3,643	3,834
Cash Balance	788	819	653	313

1928 was a very favourable year; revenue increased more rapidly than expenditure and 31 million marks were added to the Cash Balance. The fol-

lowing year, though still satisfactory, began to shew evidences of the turn in the business cycle. For the first time for many years the increase in the ordinary revenue was arrested, whereas expenditure still shewed a tendency to increase.

In the year 1930 the ordinary state revenue shewed signs of depression; it decreased by 27 millions. This was wholly due to lower incomes from state property and undertakings; a reduction in the revenue from direct taxes was counterbalanced by an increase from indirect taxes due to raised customs duties; ordinary expenditure increased in 1930 by nearly 200 millions. Consequently, the financial situation of the state was not quite so easy during 1930 as will be seen from the fact that the Cash Balance was reduced by 340 millions to 313 millions.

Recent development has stressed two important facts in state finances. On the one hand, it has become evident that rapid expansion of state undertakings is likely to cause difficulties during a slump; in 1929 and especially in 1930 the revenue from state-owned estates, forests, railways, mills, factories and mines declined rapidly whereas corresponding expenditure proved relatively inelastic.

On the other hand it has been an important relief in temporary difficulties that the debt service of the Finnish State is on a thoroughly sound basis. The total indebtedness which in 1927 was 3,024 million marks, has since then been slightly reduced and at the end of 1930 was 3,566 millions. This sum represents less than the capital actually invested by the state since 1922 and is not one fifth of the value of all state assets. The ordinary debt service in 1929 was 259 millions or 7.1 per cent of the ordinary state expenditure and 5.7 per cent of the total expenditure.

THE PRESENT OUTLOOK.

The effects of the world depression were at first not wholly unfavourable to Finland, as was pointed out above; when the financial markets of the world became easier at the turn of the year 1929 she also was able to raise loans on satisfactory terms which greatly assisted the national situation; the movement of prices again, was good for her in that the prices of exported articles fell less on the average than those of imported articles. On the other hand, economic life suffered much from the general decline in prices and the falling off of demand.

For some time these adverse effects must necessarily increase. In foreign trade exports as well as imports will be further reduced; the volume of exports especially will be affected by the output restrictions agreed upon. The fall in export prices hitherto retarded by factors referred to above, must

continue. The state finances again cannot but be adversely affected by the further reduction in important sources of revenue.

In overcoming these difficulties Finland benefits in some respects from the fact that her economic crisis broke out as early as 1928. If the boom period had lasted any longer — causing further expansion in capital investments, unsound speculation and higher prices — the subsequent liquidation would necessarily have been much more difficult and even dangerous for the economic stability of the country. Now on the contrary, though a setback as comprehensive and far-reaching as the present naturally produces economic difficulties of various kinds, losses of a catastrophic character have been avoided, the general decline in prices has been evenly spread over a longer period, and the crisis has on the whole, proceeded quietly. Thus Finland has been able comparatively well to adapt her economic system to the requirements of the general situation.

The conditions at the end of the depression will chiefly depend on world conditions; once the general situation improves, Finland too will benefit. A revival in world trade and a rising tendency in prices will open new possibilities for home products and increase the purchases of foreign goods. On the other hand, improvement will also depend much upon the influx of foreign long-term capital, since there is a considerable shortage of capital in the country; agriculture and town buildings are especially burdened by unconsolidated short-term capital invested in them during the boom period.

In one respect however, the situation differs greatly from ordinary business cycles — the present depression is not only cyclical, but also a consequence of fundamental structural changes which are due to Russia's re-entrance into the world trade, above all to her increasing timber exports. That of course makes the problem of adaptation more difficult. But even so, Finland may look with confidence to the future, as her timber industry has been greatly consolidated during the last two years and most of the necessary liquidation has already taken place. Much will however, depend upon whether Russia will continue her dumping policy or begin to practise ordinary business methods.

THE WORLD DEPRESSION.

STRUCTURAL CHANGES IN WORLD ECONOMICS.

THE INHERITANCE FROM THE GREAT WAR.

Economic life was affected in two ways by the war; there was enormous economic waste and the economic machinery was disrupted. Of these two the former damage appeared at the time to be the graver — in less than ten years however it was made good. Much more tenacious has been the disruption. The special needs of war-time, the discontinuance of old trade connections and the creation of new ones modified the economic structure of the belligerent countries as well as of others; after the war, trade and commerce had once more to adjust themselves to changed conditions brought about not only by the substitution of peace needs for those of war but also by the removal of old and the creation of new political boundaries. To the direct consequences of the war may also be added the international reparation and war debt payments with their great influence upon later economic development.

Further, the inheritance from the war has been felt indirectly in many ways which partly have caused new disruptions in existing economic structures and partly have retarded the necessary readjustment of commerce and trade to new conditions. Attention may be directed, for example, to the domination of economic policy by the war spirit, to developments in Russia, and to the continuous political unrest in the world in general.

TECHNICAL PROGRESS.

The economic structure of the world has been greatly affected in the last decade by technical innovations. Reference may be made, for example, to the rayon, nitrate, radio, gramophone and cinema industries, to the important roles played by the internal combustion engine and hydro-electric power in recent progress, or to the onward march of oil as motive power. In the whole of economic life, no contrast between old and new has been more striking than that in communications caused by the appearance and expansion of the motor-vehicle, the motor vessel, and the aeroplane. A distinctive feature of the time has been the rationalisation movement, which has been greatest in America, Germany, and Sweden, but has made considerable progress also in many other countries.

By technical inventions and rationalisation the efficiency of production has been enormously advanced; e. g. in America the output of industry increased by 42.1 per cent in 1919—1929 while the number of labourers decreased by 6.5 per cent; in Sweden again the industrial output increased by 32 per cent in 1920—1927, the number of labourers decreasing at the same time by 2 per cent. A similar technical progress has taken place in other branches of economic activity; e. g. agriculture is rapidly entering upon a new era of motor-driven machinery and more scientific cultivation, especially in America.

CONSUMPTION.

Consumption has undergone a profound modification during recent years in most industrial countries; chiefly in consequence of an improved standard of living, resulting from such factors as a rapidly increasing production, a lower proportion of children to the total population and a larger part of the national income being distributed among the poorer classes.

At a low standard of living, consumption is confined mainly to the primary necessities: to simple food, clothing and housing. With growing prosperity, more and better food, clothing and housing are demanded and also commodities which were formerly regarded as luxuries. This is what has actually happened in recent years; wheat has largely been substituted for rye; animal products and fruits for cereals; rayon and silk for cotton and wool; radio and the gramophone, the cinema and motor vehicles have become necessities of life for the mass of the population, in America at least. All this has profoundly influenced the economic structure of Society.

Other factors similarly affecting consumption are for example, the increasing mechanization of production whereby work has become lighter and less nourishment is needed for the workers, and the changes in women's fashions in dress and food.

STRUCTURAL CHANGES AND THE DEPRESSION.

In the eyes of a later generation, the decade 1920—1929 may appear as a period of „economic revolution” with as good reason as Economic History relates of an earlier era of „industrial revolution”. Technical efficiency has increased in a way that only ten years earlier would have been regarded as fantastic. Prosperity has spread from above downwards and from country to country; and even where progress has been retarded, the technical achievements of the period have at least given promise for the future.

But as always, progress has been accompanied by hardships to individuals, groups, or whole nations. Labour has suffered much from unemployment brought about by technical improvements and changes in consumption. Ultimately labour will always find new occupations in a progressing society with

new needs demanding satisfaction and shorter working hours. In the period of transition however, unemployment may cause serious economic and social disturbance.

In the same way many producers have had a difficult time. Structural changes always favour some classes of producers and spell economic disaster to others. Thus even in America during the time of her greatest prosperity some industries were suffering. „While rayon manufacturers have worked at top speed, cotton mills have been on part time; while the silk hosiery industry, the women's shoe trade, and the fur business have been active, there has been depression in the woollen and worsted industry; while dairying has been prosperous, grain growers have been depressed. Coal mining has been in difficulties, and classes of wholesalers and retailers have been under grave economic pressure.” (Recent Economic Changes.)

That which applies to individuals and groups applies equally to whole nations. Progress has favoured some nations specially suited to the new conditions while others have been badly hit by the changes in the general economic structure. The most striking contrasts have been America and Great Britain.

But even those spheres of economic life specially favoured by technical progress or modifications in consumption are not always safe from trouble. On the contrary, in the words of Mr. Loveday, „each new idea or important new invention is likely to be followed by a crop of new companies and a final harvest of bankruptcies.” This seems to be the actual course of economic development and has been lately exemplified by the fates of the sugar and the rayon industries.

It is evident from the above that serious disturbance has arisen from structural changes in recent years; the ground was thereby prepared for a period of general adjustment, but the necessary adjustment which follows a spell of rapid progress was this time aggravated by special factors in the technical development. In the first place the danger of over-production was increased by the growing importance of fixed capital. For the greater the amount of fixed capital employed in production, the heavier is the economic loss resulting from a discontinuance or even a reduction of that production, and the more protracted the struggle before the less efficient or the financially weaker plant is abandoned. This danger of over-production was still more emphasized by the fact that in recent years radical reforms in the technique of production spread to all branches of economic activity while in former times, as a rule, only certain branches of production were modified at any one time.

The technical progress of the last decade has also contributed to the present world situation in stimulating the boom period with its over-rapid expansion of production, a role often played by technical improvements in earlier business cycles; thus, it is impossible to imagine the prosperity years

in America without the current of inventions and rationalisation of recent years, above all, without the expansion of the automobile industry and the new traffic facilities created thereby.

OUTPUT RESTRICTION AND PROTECTION.

OUTPUT RESTRICTION.

Various restriction schemes were resorted to in recent years by producers of primary commodities and often with the active support of Governments; among such commodities were wheat, rye, coffee, tea, sugar, iron, cotton, wool, rubber, copper, tin, nitrate, oil, etc.

Output restriction may in itself be justifiable to overcome temporary difficulties e. g. when to equalise the supply of corn it is stored in bumper years and released in lean years, but even in those cases such a policy is seldom successful. On the other hand, whenever restriction schemes are resorted to in order to fix prices, as is usually the case, they are indefensible and always ultimately futile, in spite of possible initial favourable results. Economic life cannot be maintained at a certain stage of development, nor can the future course of economic expansion be controlled by political measures.

A study of the fates of recent schemes gives ample evidence of the way in which artificial restriction are removed by economic forces. Favourable prices created by restriction of sale without restriction of actual output led as a rule to over-production. That was for example the case with coffee valorisation in Brazil and the Canadian Wheat Pool. In order to prevent such a development, production was restricted in some other cases, but this only caused a great increase in production in regions outside the scope of the schemes, as in rubber, sugar, and copper. In all these cases over-production led ultimately to a collapse of the artificially maintained price level.

Sometimes technical innovations have caused the failure of restriction schemes. Thus Chile's nitrate monopoly was broken by a growing output of „synthetic“ nitrates from chemical works in Europe. The Cuban sugar restriction was rendered ineffectual chiefly by the new and much more productive sugar cane cultivated in Java; the rationalisation movement as a whole has had a similar effect upon restriction policy. Production conditions were thereby greatly changed and costs of production were brought down so that output restriction based upon a fixed price level lost its foundation.

Finally, restriction has led to changes in consumption unfavourable to its continuance. The Brazilian coffee valorisation for example, increased the demand for milder qualities, especially for Columbian coffee; the rubber restriction stimulated a more economical use of waste rubber, etc.

The relation of restriction schemes to the present World Crisis may be summed up as follows: — at a time when production was undergoing thorough technical improvements and its costs were being cut down, output restriction in many cases prevented a corresponding adjustment of prices. The favourable price conditions thus created made it possible for less efficient plants to continue their production while new plants were being erected. This partly explains the phenomenon of over-production in farm products and raw materials which has been so conspicuous in recent developments.

Further, the collapse of restriction schemes has gravely affected the course of the depression. The almost simultaneous breakdown of different output restrictions and the consequent fall in prices (wheat, rye, sugar, copper, iron, etc.) caused economic chaos not only in countries primarily concerned with such a policy, but indirectly the world over. Moreover, the huge stocks of agricultural products and raw materials have become a burden on the world market preventing prices from recovering. Thus output restriction, though originally aiming at a stabilization of prices, has become one of the main factors causing fluctuations.

PROTECTION.

The decade after the close of the Great War was a period of growing protectionism in almost all parts of the world; and though the vigour of this policy was perhaps slightly waning two or three years ago, there has been a new outburst of it since 1929.

A study of economic development clearly shows how greatly economic life was disturbed by protectionist devices. After the War old economic entities were broken up by the erection of new customs barriers. The subsequent raising of customs duties similarly caused continuous ruptures in existing economic connections, though not so abrupt and striking.

Customs barriers, dumping, and other protectionist measures have prevented economic life from wholly adapting itself either to the new conditions created by the war and the peace treaties or to the changes brought about by technical development. Protectionism in combination with restriction policy has thus led to a continuous maladjustment of production in relation to the world demand.

In one case this maladjustment has been especially spectacular and has greatly contributed to the present economic depression. America, by imposing high customs duties, has refused to receive debt payments in the natural way, i. e. in goods, and has instead attracted gold and financed her exports by liberal credits. Her failure to further extend credits led directly to a general economic crisis as shown later in this article.

The chief aim of protectionism in recent years was to build up economically independent national systems. A glance at the course of the relevant events, however, testifies that many highly protectionist countries have been most heavily hit by the depression, while on the other hand, countries with trade based on more liberal principles have in general been spared the worst results. Though this is due to many different causes, the conclusion may be drawn that economic structures supported by artificial measures have been unable to resist the effects of a World Crisis; of this, Australia is perhaps the most outstanding example. Thus the failure of protectionist policy has greatly aggravated the general economic situation.

THE DUMPING POLICY OF RUSSIA.

Of all countries Russia has developed the most consistent protectionist policy, though it forms only a part of her political system. Her foreign trade ceased almost completely during the revolution period, but in recent years she has renewed her trade connections to a large extent. Her re-entrance has necessarily caused considerable disturbance in the world-markets; but this has been greatly aggravated by her commercial methods. A study of the conditions upon which Russia's exports are based reveals the following:

Natural resources and the population have been exploited; the most accessible forest regions, for example, are terribly devastated by premature cutting. The consumption capacity of the masses is not only kept at an extremely low level, but forced labour is employed to a great extent. Thus according to a dispatch from Mr. Walter Duranty to the New York „Times” of Febr. 2 last, there are at present about 1,000,000 political exiles in Russia, of whom perhaps 200,000 are in northern timber camps.

The natural price mechanism of economic life is abolished. Not only of agricultural products are the prices wholly artificial because the Government is almost the sole buyer and extracts grain from the peasants by coercive measures, but this is equally true of industry. A careful study of this subject by Prof. Haensel is summed up in the words: „*Real* profit and *real* losses cannot be ascertained. In some cases the Government prescribes intentionally low prices (i. e. runs certain trusts at a loss and covers their direct losses by special subsidies) in order to provide with cheap means of production other branches of state industry.”

In foreign trade also prices are manipulated in many ways. Thus all foreign currency acquired by an export organization must be surrendered to the State Bank in exchange for chervontzi currency at par. On the other hand all import organizations get the necessary foreign currency from the State Bank at the same par exchange. Considering the high prices in Russia and the low prices abroad, this means that export will usually be carried on at a loss and import will give a profit.

On the other hand certain exports are supported by premiums. The sums allocated by the state budget to cover the direct monetary losses of the so-called „unprofitable export” and as premiums for aiding export amounted, according to Haensel, to 68,000,000 roubles in the budget of 1927—1928 and to about 114,000,000 roubles in the budget of 1928—1929.

Foreign competition on Russia's internal market is absolutely precluded partly by the extremely high duties but especially by the state monopoly of foreign trade.

Thus the Russian export trade is based upon an exploitation of natural resources and human power, artificial prices, export premiums, and trade monopoly. In these circumstances any prices prevailing on foreign markets may be deliberately undercut. The low export prices thus created represent of course a gift to the purchasers, as is always the case with dumping, and an economic loss to the seller. But this is only one and the less important aspect of the question. Of much more weight is the resulting confusion in world markets, where calculations based upon rational economics and ordinary business methods are thereby nullified. In this way the Russian dumping necessarily inflicts serious economic damage on other countries. And with the world already suffering from general depression, such a dumping policy, unchecked, is bound to have disastrous effects upon the possibilities of trade recovery. This certainly was the case in 1930.

THE GOLD PROBLEM.

THE GOLD THEORY OF THE CRISIS.

Gold is regarded by many economic writers as the main cause of the present World Crisis. They maintain that there has been in recent years a shortage of monetary gold in comparison with the demand for it; this shortage first led to a general deflation and finally, to a slump in trade.

This theory has been, perhaps, most lucidly stated by Sir Henry Strakosch in his paper „The Economic Consequences of Changes in the Value of Gold”, one of the documents submitted to the Gold Delegation of the Financial Committee of the League of Nations.

THE OUTPUT OF GOLD.

According to an estimate made by Mr. Kitchin for the Gold Delegation, the world's annual output of gold 1910—1914 was 94 million sterling and 1915—1929, 80 millions. Had the production been as large in the latter period as in the former the output would have been 210 million pounds greater. On the other hand, the proportion represented by the world's stock of gold money to

the total gold stock rose, according to Mr. Kitchin, from 51 per cent in 1914 to 53 per cent in 1929. This proportional change almost outweighed the decrease in the output of money during these years. In spite of this, the increase of monetary gold seems to have been insufficient to satisfy the demand for money arising from a world production expanding by about 3 per cent yearly. According to Sir Henry Strakosch to the gold deficit were added 57 million pounds in 1924—1929; in proportion to the world's monetary gold stock this was less than 3 per cent. If the maldistribution of gold were also taken into account, this deficit would increase to 195 millions according to Strakosch.

Was this deficit large enough to produce a general deflation? In answering this question we have first to realise that since gold has almost ceased to circulate, its only monetary function is to form the basis of currency in countries with gold standard or a currency linked with gold. Gold can therefore affect prices only indirectly by determining in the last resort the amount of notes in circulation and of bank credits. But as all Central Banks had up till 1929 a considerable note reserve, it is illuminating that money and credit policy has not necessarily been influenced by small fluctuations in the gold supply.

WAS THERE A GENERAL DEFLATION IN RECENT YEARS?

Sir Henry Strakosch has pointed out the continuous fall of the Economist's wholesale commodity price index since 1924, which according to him is most appropriate for the measurement of the purchasing power of gold internationally. A close study of the wholesale price indices of leading commercial countries, calculated on gold, does not however, support the conclusion drawn by Strakosch. There seems to be no evidence of a general decline in the years preceding 1929; and even in cases where wholesale prices really were deflated, the fall was mostly inconsiderable and not continuous throughout the period.

The wholesale price indices do not cover all price movements; most of them represent a limited list of farm products and crude commodities. But if in addition, corresponding indices of the cost of living are examined, it will be found that it is impossible to see in them any downward trend, if it is remembered that in many countries the currencies were revalorised on a higher gold value than corresponded to the buying power of the money. There are still other price categories which are not accurately reflected either by wholesale or cost of living indices. For example, Mr. Carl Snyder of the Federal Reserve Bank of New York recently prepared a table including retail prices, wages, rents, and prices of stocks. This index showed a rising rather than a falling trend up to the closing months of 1929.

From the foregoing we may draw the conclusion, that there were no indications of a general deflation in the period preceding 1929; we shall return to the years 1929—1930 later. Sir Henry Strakosch, by referring only to the Economist's index, has evidently given his theory too narrow a foundation. This

index is indeed an excellent reflector of the prices of raw materials and farm products in the world market, but just on that account it cannot reflect the actual buying power of currency in any single country.

THE CREDIT INFLATION IN AMERICA.

During the war and the following years gold flowed almost continuously towards America. In all, America received 2,166 million dollars in the years 1914—1929 from foreign countries; while at the same time she was producing considerable amounts of gold. The gold stocks of her banks increased from 1,891 million dollars in June 1914 to 4,324 millions in June 1929 or by 129 per cent.

This inflow of gold made a rapid credit expansion possible, for American law prescribes a minimum reserve of gold and lawful money against deposits. With a gain of 2,433 millions in gold stock, additional bank credit to the amount of 37,685 million dollars was put into circulation, or 15.49 dollars of bank credit to each additional dollar of gold. This gold stock was not sterilized, but became the basis of a huge credit inflation which finally led to the crash in autumn 1929. And so far as these phenomena prepared the way for the present world depression, the gold flow itself may be regarded as a factor in the crisis.

THE DEFLATION IN 1929 AND 1930.

Prices fell heavily all over the world in 1929 and especially in 1930. The part played by gold in this fall cannot be ignored. The monetary gold deficit which, according to Sir Henry Strakosch, averaged 11 million pounds sterling in 1926—1928, was multiplied in these years; thus, France and America absorbed from the world's gold stock 110 millions in 1929 and about 160 millions in 1930.

This maldistribution of gold caused money stringency on the money markets outside France and America. England was consequently obliged to raise her Bank Rate from 4 to 6 ½ per cent during 1929 in order to protect her gold Cash, and other countries had to follow her example. This was the beginning of general deflation and of economic depression.

From the end of 1929 the leading money markets rapidly became easier, but the weight fell more heavily upon agricultural and raw material producing oversea countries. According to an estimate made by the Institut für Konjunkturforschung, while the monetary gold stock in Europe and the United States increased by 3,753 million German marks in 1930, the other countries of the world lost 2,088 marks of their monetary gold; e. g. Brazil lost 85 per cent, Australia 52, Japan 28, Columbia 21. The currencies in almost the whole of Latin America, in Australia and New Zealand as well as in some parts of Asia became badly disturbed and the gold standard was actually suspended in many cases. All this could not but affect adversely the world situation.

THE GOLD POLICY OF THE CENTRAL BANKS.

We have dealt above with only one side of the Gold Problem, i. e. with the effects of gold movements upon economic development. But there is another side equally important and that is: What were the forces behind these gold movements?

It has been said that the Central Banks have „sterilized” gold. If this implies active hoarding on their part, it is true only in certain cases; e. g. Spain and Argentina may be found guilty. But with regard to France and America, their leading banking authorities have from time to time stated that the gold was pouring in much against their will. This may be so, for there have been more powerful forces than mere banking policy behind these gold movements. But even so, these Central Banks cannot be wholly acquitted of the charges made against them. Until recent times they have not actively tried to check the gold stream with all the means at their disposal; indeed, they would have been impeded in such a policy by certain anomalies in French and American banking organization.

There has however been a marked change in their attitude in the last year. France, for example, has lowered her taxes on foreign bonds and securities and La Banque Française d'Acceptation has been founded, — and all this in order to facilitate the placing abroad of gold and capital. Also the Bank for International Settlements that was founded in Basel last year may prove a useful instrument for a rational gold policy.

THE INTERNATIONAL CAPITAL MOVEMENTS.

Gold movements are part of capital movements and are chiefly caused by the same forces. Before the war capital movements were not often discussed; there was no real *transfer problem*, although the movements of capital were not insignificant. According to an estimate by Ivar Kreuger, before the war the main capital lending countries had an annual income of about 2½ milliard dollars from foreign loans and investments. About 80 per cent of this amount was re-lent by the capitalist countries and only about ¼ milliard, or 20 per cent of the total, was paid to them in goods or services; gold was needed for these payments only on rare occasions.

At present the international capital transfer is estimated at about 2¾ milliard dollars; of this sum about 2 milliards are re-lent and ¾ milliard actually paid to the creditor nations — that is a larger proportion than before the war. The situation has also changed in that a considerable part of these transfers is carried out in gold.

The change in the international capital movements is ultimately a consequence of the Great War. International relations, especially those of Europe and America, were thereby fundamentally altered. Germany became the chief debtor country with reparation payments amounting to 2—2½ milliard marks a year,

and America, who owed Europe approximately 5,000 million dollars before the war, became the great creditor nation of the world.

In consequence of this change in the international capital situation Germany should have become a big selling nation and America a big buyer in the world markets; the actual development, however, has been quite different. Until last year Germany had a heavy adverse balance of trade; instead of paying her debts and reparations from her own resources, she was wholly dependent on foreign capital. Thus in the years 1924—1929, according to a recent estimate, she received from abroad 18—19 milliard marks.

America, on the other hand, built high customs barriers, and was continuously selling more than she bought. In the whole period 1914—1929 she had a favourable trade balance amounting to nearly 26,000 million dollars; she received annually large sums from her foreign debts and investments in the form of interest and amortization as well as dividends. In addition to these sources of capital, considerable investments were made in America by foreigners. These capital movements were counterbalanced by several debit items in the trade balance, e. g. services by foreigners, money sent home by emigrants and above all, American investments abroad and redemption of old debts to foreign countries, the last two items amounting to more than 25,000 million dollars.

But gold too was needed to balance the payments and mainly to make good a deficit in the outflow of capital; at such times gold was pouring in. But occasionally, when America made large investments abroad, the flow turned in the opposite direction. Thus she lost considerable amounts of her gold stocks in 1925, 1927 and 1928.

It is evident that the economic relations between America and the rest of the world were based on the condition that America was able and willing continuously to export capital enough to balance the international capital movements. Failing this, Germany especially could not continue to buy nor America to sell to the same extent on the world market. This actually happened in 1929 when the American trade boom and stock market speculation were absorbing all available capital resources, home as well as foreign.

To this was added the part played by France. As seen above, the current of gold has in recent years moved towards that country. This also, has been mainly a consequence of capital movements; she has been the chief collector of German reparation payments and she has gained most from tourists. In addition, much of her capital that was invested abroad during the inflation period has returned home. The continuous rise in the cost of living in France has also led to an increasing demand for gold by increasing the note circulation.

In 1929 it was generally thought that the international distribution of gold and capital would become sounder once the American speculation had collapsed, but the subsequent period showed clearly that the maldistribution had deeper roots than that. Many of the forces which had directed strong capital

movements towards France and America still continued while other forces impeded the outflow of capital from these and other world centres; such as the distrust of foreign investments, especially on the part of France; the demand of investors for a continued high rate of interest not justified by circumstances; and the fact that New York was less suitable as a central capital market than London.')

THE COURSE OF EVENTS.

BEFORE THE STOCK MARKET CRASH.

The structure of World Economics was greatly changed by the War; in European belligerent countries normal economic activities were contracted, whereas elsewhere production was greatly expanded. This war-time development could not but lead to serious conflicts and a struggle for export markets, once peace was established and Europe could again reshape her economic activities according to normal requirements. Of all conflicts of interests, those between Europe and America were most serious, intensified as they were by war debts and the American tariff policy. This very contrast between impoverished Europe and enriched America became the central factor in the cyclical trend of the period.

A constant current of gold and capital was directed to America during and after the war; immigration on the other hand was kept down by strict regulations: consequently capital was cheap, but labour dear. Moreover, production in America was free to expand on the basis of her vast internal markets and unhindered by narrow political and trade union restrictions. In these circumstances, America developed into the largest field of technical experiment the world has ever known — the only comparable case is, perhaps, England's economic lead in the first half of the 19th century. Thus, the whole industrial machinery of America was practically remodelled in one decade.

Other industrial countries tried to follow America's example as far as possible. Rationalisation became the order of the day and much was achieved in that way. But some of the essentials upon which American prosperity was founded were in general lacking elsewhere. In most cases capital was dear in comparison with labour and therefore the economic outcome of rationalisation quite different. The working conditions of industry were hampered by the more or less strict regulations of social legislation and trade unions. But

1) Dr. Benjamin M. Anderson has recently presented the main aspects of the problem above dealt with an admirable exposition in his article „Gold“ (The Chase Economic Bulletin, March 16, 1931). The maldistribution of gold is here rightly attributed chiefly to international trade restrictions: „In the pre-war days we eased the pressure on gold by the international movements of goods. Moderate international shipments of gold would settle international balances because of the concomitant movements of goods, influenced by moderate price changes and moderate changes in rates of interest. The most important remedy for a shortage of gold and a strain on credit is to increase the mobility of goods in international trade through lowered tariffs and lessened trade restraints of other kinds.“

Europe's greatest handicap was the limited possibilities for an expanded output; nowhere did markets exist comparable in extent and buying power to America's internal market. These natural limits were still more emphasized by the highly protectionist policy of the time; just when an increase in the capacity of industrial plants demanded the abolition of artificial hindrances to trade, they were being constantly multiplied.

Further, protectionist policy, output restrictions and other similar devices hindered the necessary adaptation of commerce and trade to structural changes in World Economics brought about by the War, technical inventions, rationalisation and changes in consumption. The results of this general maladjustment were increasing signs of over-production in many spheres, especially in the primary industries, and a consequent decline in prices.

All this prepared the soil for a general economic upheaval. The factor however, which immediately led to the present World Depression, was the development in America's capital market in 1928 and 1929. America's great boom which was chiefly founded on credit inflation and technical improvements, required more and more capital. Finally, she not only reduced her credits available for foreign countries, but short-term funds were actually drawn to New York from all parts of the world. This turn in the current of international capital movements struck away the foundation of the trade relations set up in the previous period, based upon the fact that America continued to grant the credits necessary to countries requiring capital, in order to balance the effects of her tariff policy and the debt payments.

The consequences of the changed conditions resulting from the American boom were soon discernable. Countries most dependent on American credits were the first to suffer and their economic difficulties were further intensified by the fact that France too began to attract capital more needed elsewhere. The effects of this flow to America and France were the more injurious, as they at the same time aggravated the maldistribution of gold, thus creating difficulties for the central banks in other countries. From the end of 1928 stringency began to appear on the money markets, bank rates showed a tendency to rise and deflation set in.

In America the boom continued until autumn 1929, as a consequence partly of the heavy capital influx and partly of the prevailing creed that no serious break in her prosperity was possible as abrupt cyclical movements could be controlled by far-sighted banking policy. Towards the end of 1929 the signs of an approaching turning point in the situation became more and more pronounced until in October and November the big crash came.

THE SPREAD OF DEPRESSION.

The American stock market crash greatly influenced the subsequent course of events. In America itself many different factors contributed to convert the

crisis on the stock market into a general depression. The consumption power of the population was reduced by the great losses accruing from the bourse crash not only to ordinary speculators but to masses of people who had been infected by the speculation fever. These losses became heavier as short-term funds upon which speculation had largely been based were rapidly withdrawn. Consumption was unfavourably affected also by the extent to which instalment purchases had grown in the previous period and by the fact that demand for other goods than the necessities of life had rapidly expanded; in both these cases consumption was necessarily very much contracted once the economic situation changed for the worse. In production again, the long boom period had in numerous cases induced extensions and technical innovations not warranted by normal marketing possibilities, and in a time of increasing depression the burden of fixed capital charges became so much the heavier.

The immediate effect of the American crash upon the world situation in general was not only adverse. On the contrary, all important money markets eased rapidly when the capital influx to America ceased and turned in the opposite direction. This brighter outlook however was not powerful enough to counteract the effects of the depression already begun in many countries before the crash or to make the outside world immune to the growing depression in America. To these factors were added others aggravating the situation in autumn 1929 and in 1930. Attention may be directed to the following: (1.) The collapse of many restriction schemes, beginning with the failure of the Brazilian coffee valorisation and the Canadian Wheat Pool policy; (2.) Increasing protectionism causing confusion in World Economics; (3.) The rapidly increasing dumping by Russia; (4.) The collapse of silver prices and its effects upon the buying power of China, India, etc.; (5.) Persistent political unrest in many parts of the world; (6.) The unsatisfactory state of capital markets and the continued diversion of the gold holdings of the world to France and America.

The result was that depression grew worse month by month and spread from country to country; no civilized land was unaffected at the close of 1930.

THE KERNEL OF THE CRISIS.

The kernel of the present world situation can be summed up in one sentence as follows: the crisis is the outcome of two conflicting lines of development, that of technical economics and that of economic policy.

The last decade witnessed a technical economic progress scarcely equalled in any other short period. Especially in America, but to a great extent also in other countries of Western Civilisation the whole technical machinery of production was thoroughly re-modelled and its output capacity enormously increased. This opened up possibilities for a rapid increase in prosperity for all classes.

But economic life never develops in a straight line; a period of boom^a is always followed by one of depression. It was therefore only natural that the rapid expansion of recent years should come to a standstill. Looked at in this way the present depression only signifies a breathing space necessary for economic forces to collect and organize for future achievements.

This line of economic progress has been hampered by political action. Whereas economic forces have been drawing countries closer together, political action has been rupturing the economic ties connecting them. Protectionism has built high barriers round the countries. The normal degree of balance in international trade has been radically upset by the war debt payments and by reparations. In monetary policy the co-operation demanded by the gold standard has been lacking.

It is only natural that these conflicting lines of economic and political development should ultimately lead to a great catastrophe such as the present crisis. Mankind has thereby been taught the lesson that an economic policy causing damage to other countries proves directly or indirectly detrimental to the originator also. And it could not be otherwise in a world so closely connected by economic ties. This fact was recently presented in „World Trade” as follows: „Everything tells us that the crisis is general, that all nations together feel prosperity as they feel adversity. Yet all the solutions contemplated, still bear the mentality of bygone days. Mankind is passing to a new stage in its economic evolution, and one might almost be led to think that men dread this. Too many economists, businessmen and statesmen still view conditions with a mind accustomed to consider economic problems from a narrow, national viewpoint. Hence undoubtedly the unrest, the lack of perspective, the inability to adapt oneself; hence also the mistakes that do so much harm. — — — As soon as one seeks to examine the facts from a disinterested point of view, one is invariably led to the same conclusion: the phase of separate intities has been left behind; whether it wishes it or not mankind evolves in one great economic cycle.”
