INDIA THROUGH THE DEPRESSION

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Elsewhere[1] we have tried to establish that the years 1927-28 and 1928-29 formed a period of comparative stability when there was a substantial measure of external and internal equilibrium. It is the purpose of the present paper to see how this equilibrium came to be upset and to what extent, if at all, it was re-established at a subsequent period.

The actual incidence of depression in a country is to be inferred from the diminution in the national income. For industrially advanced countries, employment and production figures indicate roughly the trend of national income, whereas for backward agricultural countries, harvest returns, export values and barter terms of trade have to be utilised for the purpose.

FOREIGN TRADE QUANTA AND PRICES.

The broad features of the depression and the recovery are set forth in the following tables from annual data. In Table No. 1 the quanta of exports and imports have been computed on the basis of the declared values per unit in 1927-28. In other words, if q'_0, q''_0, q'''_0 etc. are the respective quantities of exports (or of imports) in 1927-28 and p'_0, p''_0, p'''_0 etc. are the corresponding declared values per unit in 1927-28, and if further q'_1, q''_1, q'''_1 etc. are the respective quantities of exports (or of imports) in any other year, then the index number of quantum for that year, referring to the year 1927-28 as 100

$$= 100 \times \frac{p'_0 q'_1 + p''_0 q''_1 + p'''_0 q'''_1 + \text{etc.}}{p'_0 q'_0 + p''_0 q''_0 + p'''_0 q'''_0 + \text{etc.}}$$

So far as the price level is concerned, the relative index number is found by comparing the actually recorded values with the adjusted values on the basis of 1927-28 prices, which may be represented by p_1', p_1'', p_1''' etc. with the same notation. In other words, when referred to that year as the base, the index number of prices

$$= 100 \times \frac{p_1' q'_1 + p''_1 q''_1 + p'''_1 q'''_1 + \text{etc.}}{p'_0 q'_1 + p''_0 q''_1 + p'''_0 q'''_1 + \text{etc.}}$$

TABLE 1. QUANTUM AND PRICE LEVEL OF EXPORTS AND IMPORTS.
[Data from *Review of the Trade of India in 1936-37*]

Year	Quantum of		Price level of	
	Exports	Imports	Exports	Imports
1927—28	100·0	100·0	100·0	100·0
1928—29	106·1	105·2	97·5	96·4
1929—30	108·0	103·4	90·2	93·2
1930—31	96·6	82·5	71·5	80·0
1931—32	82·5	70·6	59·2	71·7
1932—33	74·9	81·4	55·3	65·2
1933—34	86·2	72·7	53·5	63·5
1934—35	87·8	84·1	54·1	63·0
1935—36	88·4	86·6	56·9	62·1
1936—37	107·4	79·8	57·2	62·8

So far as exports are concerned, the nadir of quantum was reached in 1932-33 and that of price level in the following year. The price level of imports shows a continuous decline upto 1935-36, after which there is a slight recovery. The quantum of imports shows an irregular feature.

INTERNAL TRADE.

As regards inland trade movement, the net ton mile figures of Class 1 railways, as given in Table 2, will throw some light:—

TABLE 2. NET TON MILES OF CLASS 1 RAILWAYS.
[Data from the *Report by the Railway Board on Indian Railways*]

Year	Net ton miles in millions	Index No. 1927-28=100
1927–28	21.620	100·0
1928–29	21.645	100·1
1929–30	21.265	98·4
1930–31	20.146	93·2
1931–32	18.107	83·8
1932–33	16.978	78·5
1933–34	18.460	85·4
1934–35	20.091	92·9
1935–36	20.202	93·4

Here also the lowest point was reached during 1932-33.

A parallel set of figures for inland trade is available in gross earnings of State railways and the number of waggons loaded.

TABLE 3. GROSS EARNINGS AND WAGGONS LOADED.
[Data mainly from *Review of the Trade of India in 1936-37*]

Year	Gross Earning in State Railways (Crores of Rupees)	Index No. 1927–28 =100	Total Waggons Loaded (Thousands)	Index No. 1927–28 =100
1927—28	104 a	100·0	6732 b	100·0
1928—29	105	101·0	6993	103·9
1929—30	102	98·1	6898 c	102·5
1930—31	97	93·3	6632 c	98·5
1931—32	87	83·7	6098	90·6
1932—33	84	80·8	5996	89·1
1933—34	87	83·7	6489	96·4
1934—35	90	86·5	6850	101·8
1935—36	91	87·5	6964	103·4
1936—37	96 d	92·3	7265	107·9

[a] From *Report by the Railway Board on Indian Railways for 1928-29*.
[b] From *Indian Trade Journal*, April 19, 1928.
[c] Approximate figures.
[d] Figures for Burma Railways are approximate only.

PROFITS.

As regards direct loss of income, an endeavour has been made in *Review of the Trade of India* in 1936-37 to estimate the grand totals of profits earned by different companies during the past few years and to check up the results by means of index numbers of ordinary share prices of the various industries. The method adopted has not been fully explained, but the result obtained seems to be doubtful. On page 19 of the *Review for 1936-37*, grand totals are given for 1928 onwards of profits earned by various companies for which statistics are continuously available from that year. From that table, the profits in 1931 seem to be the lowest, whereas the figures previously quoted show that it was during the year 1932-33 that the full brunt of the depression was felt, when profits should have been the lowest.

There is another official estimate of profits, although in an indirect manner. In the *Monthly Survey of Business Conditions in India*, there are published two series of index numbers of security values, the first, bearing fixed interest and the latter, having variable yield. Recently, the two series were reconstructed as explained in the *Survey* for April, 1937. Table 4 below gives the results obtained from the revised figures:—

TABLE 4. INDEX NUMBER OF PRICES OF INDUSTRIAL SECURITIES. 1927-28 = 100.
[Data from *Monthly Survey of Business Conditions in India*]

Year	Fixed Yield	Variable Yield
1927—28	100·0	100·0
1928—29	102·1	99·3
1929—30	104·2	97·2
1930—31	100·2	80·6
1931—32	92·8	64·3
1932—33	100·3	67·9
1933—34	115·4	86·2
1934—35	126·8	107·2
1935—36	131·3	107·3
1936—37	136·5	116·8

It appears that the values were the lowest in 1931-32, from which it is clear that profits must have been lowest in 1932-33, for it is common knowledge that in stock exchanges all the world over it is the future yields which are discounted to arrive at the present prices.

INCOMES.

A direct estimate of incomes from income tax returns gives the following results.

TABLE 5. PROFITS OF COMPANIES.
[Data from *All India Income Tax Report and Return*]

Year	Profits (Rs. lakhs)	Year	Profits (Rs. lakhs)
1927—28	3876	1932—33	2359
1928—29	4269	1933—34	2028
1929—30	4515	1934—35	2441
1930—31	4194	1935—36	2639
1931—32	2645		

The assessable income of companies was the lowest in 1933-34, from which it is clear that the actual income during the year previous, that is, in 1932-33 must have been the smallest.

CO-OPERATIVE STATISTICS.

Another index of the acuteness of the depression is available from the statistics of co-operative societies. In the following Table 6 percentages have been calculoted of overdue loans on total loans due by individuals to co-operative agricultural societies separately for British India, Indian States and India as a whole.

It is apparent that the position became most serious in 1933-34. It must be remembered however that in this case the effect is cumulative. In other words, any deterioration in the financial situation becomes aggravated of itself. It follows that the acutest phase of the depression must have occurred sometime before 1933-34.

TABLE 6. PERCENTAGE OF OVERDUE LOANS TO TOTAL LOANS DUE BY INDIVIDUALS TO CO-OPERATIVE AGRICULTURAL SOCIETIES.
[Data from *Statistical Statement relating to the Co-operative Movement in India* (Annual)]

Year	British India including Burma	Indian States	Grand Total
1927—28	20·8	21·0	20·8
1928—29	21·3	22·0	21·5
1929—30	24·8	24·0	24·5
1930—31	32·6	30·0	32·3
1931—32	40·9	34·0	40·1
1932—33	46·3	48·0	46·6
1933—34	47·4	54·0	48·5
1934—35	45·8	38·0	44·9

STRAIN PRECEDING THE CRISIS: APRIL TO SEPTEMBER, 1929.

Hitherto we have considered only annual figures. It is necessary to consider quarterly and even monthly figures to study the course and phases of the depression. In the *World Economic Survey* for 1931-32, issued by the League of Nations, the fourth quarter of 1929 has been shown to be the starting period of the depression in India. The figures however seem to indicate that the strain in our economic system began to be felt almost from the beginning of 1929, although the actual crisis was in evidence by October that year.

WHOLESALE PRICES AND COST OF LIVING.

It will appear from Table 3 in *Sankhyā* Vol. 3, Part 2, p. 130, that the disparity between wholesale and cost of living indices in India began to widen as early as March 1929 when it was 96 as compared with 99·3 in the same month a year ago. Since then the disparity became wider and this index recorded a fall of some 11 points in December, 1929 as compared with the pre-war period. It is hardly necessary to add that this disparity was brought about by the relative fall in wholesale prices as compared with the changes in the cost of living. While Calcutta wholesale index fell by 1 point in March, 1929 in comparison with the index number for the same month in 1928, the cost of living index during the same month recorded a rise of 4 points as compared with the figures for the corresponding month a year ago. In fact the cost of living index remained fairly steady up to December, 1929. The relative movements of the two indices have been shown in Tables 1 and 2 in Vol. 3, part 2 of *Sankhyā* pp. 128 and 130.

It appears from Table 1 there that our wholesale index number fell gradually from 143 in March to 138 in June, 1929, but it rose again to 142 during the next month and reached 143 in August and September, 1929. This however does not mean a temporary revival. It only corroborates the well-known fact that when prices first begin to fall, merchants, being reluctant to sell at a loss, withhold their stock for some time, with the result that prices just harden a little. But this effect is only temporary. It follows therefore that this slightly upward movement of prices reflects the strain which reached the breaking point in October, 1929.

Movement of Prices *inter se.*

A better indication of the lack of adjustment is the movement of prices *inter se.* For it is well known that in a period of economic disturbance, all prices are not affected to the same extent, nor at the same time. Thus relative disparity among individual prices is at once an indication and a measure of economic maladjustment.

This is well illustrated by the course of price movement during the period of strain. (Thus from Table 10, Sec. B, *Sankhyā*, Vol. 3, Part 2, p. 138, in which has been shown the course of export and import prices, it will appear that there was a continuous fall in the net barter term of trade from 1928-29 onwards until 1931-32, the figures being 95·2, 91·7, 89·3 and 88·5 respectively. Monthly figures were calculated by Messrs. Sen and Sinha some time ago, on a somewhat different basis.[8] Representing the term of trade to be 100 in January, 1929, it dropped to 90 in June that is in 6 months' time.)

Prices of Raw Materials and Manufactured Goods.

(A similar disparity is noticeable in the prices of raw materials and manufactured goods. The price of both these classes of goods falls, with the approach of a depression but the price of manufactures, falls less than that of raw materials. This has been clearly shown in the paper on *Indian Prices During the Depression* by Messrs. Sen and Sinha[3]. It appears from this paper that while the disparity index of the composite price of cotton and jute manufactures on the one hand, and of the composite price of raw cotton and raw jute on the other, was 100 in January, 1929, it rose to 101 in April and reached 105 in September of the same year. This disparity is also apparent from Table 7 giving the course of prices for raw cotton and cotton manufactures. The widening of the gap between the two during the period of the strain is clearly brought out in column 4 of the table where the disparity is seen to increase from about 100 during the latter half of 1928 to 103, 108 and 112 respectively during the first three quarters of 1929.)

It is true that this disparity is partly due to the imposition of tariffs. To obviate this difficulty a corresponding Table 8 has been prepared for prices of raw and manufactured jute, which is otherwise instructive, for it reveals a weakness in our economic system inspite of the fact that we have a monopoly of this product.

It will appear from the *World Economic Survey* for 1931-32 that the depression had begun in Java and Australia long before it began elsewhere. The demand for jute bags considerably fell off in these two important markets with the result that the price of jute manufactures was falling very rapidly—indeed at a more rapid rate from the last quarter of 1927 than that of raw jute which was also declining, showing that in certain cases even manufactured goods may record a steeper decline than agricultural products. We find also that the price of 3½% Government paper which is a fairly good index of our long-term-rate of interest began to fall definitely from March 1929, as will be evident from Table 5 of *Sankhyā* Vol. 3, part 2, p. 133. Conditions in the short term market were also tighter

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TABLE 7. PRICES OF RAW COTTON AND COTTON MANUFACTURES (QUARTERLY) JULY 1914=100.
[Data calculated from the *Indian Trade Journal*]

Year		Index No. of Raw Cotton	Index No. of Cotton Manufactures	Percentage of Manufactured Cotton Index to Raw Cotton Index
1928	III	161	161	100
	IV	159	160	101
1929	I	157	162	103
	II	148	160	108
	III	144	161	112
	IV	133	156	117
1930	I	107	149	139
	II	99	145	146
	III	85	135	159
	IV	74	127	172
1931	I	89	129	145
	II	84	125	149
	III	75	119	159
	IV	86	120	140
1932	I	99	128	129
	II	82	120	146
1932	III	95	114	120
	IV	90	112	124
1933	I	82	113	138
	II	84	114	136
	III	83	113	136
	IV	71	113	159
1934	I	73	114	156
	II	71	114	161
	III	73	116	159
	IV	77	118	153
1935	I	79	119	151
	II	76	118	155
	III	75	115	153
	IV	83	116	140
1936	I	77	114	148

TABLE 8. PRICES OF RAW JUTE AND JUTE MANUFACTURES (QUARTERLY) JULY 1914=100.
[Data calculated from the *Indian Trade Journal*]

Year		Index No. of Raw Jute	Index No. of Jute Manufactures	Percentage of Manufactured Jute Index to Raw Jute Index
1927	I	92	141	153
	II	88	138	157
	III	105	156	149
	IV	88	148	168
1928	I	91	144	158
	II	104	153	147
	III	106	159	150
	IV	99	147	148
1929	I	107	139	130
	II	95	123	129
	III	95	125	132
	IV	83	104	125
1930	I	78	94	121
	II	75	95	127
	III	55	90	164
	IV	45	74	164
1931	I	44	81	184
	II	47	73	155
	III	47	67	143
1931	IV	60	83	138
1932	I	51	80	157
	II	42	70	167
	III	47	78	166
	IV	41	74	180
1933	I	38	69	182
	II	47	83	177
	III	42	81	193
	IV	37	73	197
1934	I	42	80	190
	II	38	76	200
	III	37	75	203
	IV	41	76	185
1935	I	46	79	172
	II	51	77	151
	III	48	71	148
	IV	54	70	130
1936	I	54	66	120

throughout the year 1928-29 as compared with 1927-28 which itself was a year of stringency, relatively to the easy money conditions prevailing during the greater part of the year 1926-27. Thus the financial year 1928-29 opened with 7 per cent. bank rate. It dropped to 6 per cent. on the 21st of June and to 5 per cent. on the 15th of November and to 7 per cent. on the 13th of December 1928. On the 14th February, 1929, there was a further rise to 8 per cent. which rate remained in force till the second week of April next —a rate not since reached any time after May, 1924. This rise in both short and long term rates of interest reflects strain on our economic system during the closing months of the financial year 1928-29.

Remittance of Funds

Another indication is provided by the volume of remittance of funds through the Imperial Bank of India. This is a fairly reliable index of the activity in internal trade. It appears from Table 9 (p. 200) that the demand drafts purchased in the Bengal Circle during the first half of the calendar year 1929, was Rs. 7 crores less than those during the same period in 1928. The drafts purchased in Bombay and Madras Circles from January to June 1929 were, however, slightly greater in value than that during the same months of the previous year. This shows that the strain in Bengal began earlier than in Bombay or Madras. An obvious explanation of this lies in the fact that the problem of Bengal is mainly the problem of jute. The fall in jute prices brought about an economic maladjustment in Bengal much earlier than in other parts of India.

Events Abroad and their Repercussion

The question now is, how did this strain affect our monetary system? As the strain was due to adverse external situation, one of its earliest effects was on the exchange rate. It was consistently above parity and rose to 1s. 6 1/16d. in November, 1928, but events were moving very swiftly abroad. In the spring of 1928, the Federal Reserve System in the U. S. A. entered upon a policy of credit restriction, with a view to check speculation in the New York Stock Exchange. By three successive stages in 1928, the discount rate of the Federal Reserve Bank of New York was raised from 3½ per cent to which it had been reduced in August 1927 to 5 per cent in July 1928. By this measure, by open market operation and by moral pressure, the supply of call-money from New York banks was successfully cut off. But the effect was to raise the level of call-money rates to a figure, which made investments in such funds highly attractive. This, in its turn, reduced foreign lending by the U.S.A., which necessarily, one may say almost inevitably, led to an increase in the import of gold to the U.S.A. Between June 23, 1928 and January 11, 1929, the gold stock of the U.S.A. rose by 7 million (old) dollars, which was not allowed to affect the price level in any way.

On this policy of credit restriction in the U.S.A., were superimposed the changes in French monetary policy. By the law of August 7, 1926, the Bank of France was permitted to buy foreign exchange and to issue notes against such assets. This was reversed by the law of June, 1928. This Act as well as the punitive tax on the export of capital from France, were mainly responsible for the accumulation of gold in that country. By the end of December, 1928, the total stock of gold of central banks and governments in the world excluding Russia, was 9,918 million (old) dollars. Out of it 1254 million (old) dollars was held by the Bank of France and 3746 million (old) dollars by the Treasury and Federal Reserve Banks of the U.S.A. As compared with her holding on December 31, 1924, France had increased her stock of gold by 544 million (old) dollars while the U.S.A. had reduced her stock by 344 million (old) dollars. But from the beginning of 1929,

TABLE 9. REMITTANCE OF FUNDS THROUGH THE IMPERIAL BANK OF INDIA (RS. CRORES).
[Data from the *Annual Reports of the Controller of Currency*]

Year		Demand Drafts Purchased				Drafts and T.T.'s sold			
		Bengal Circle	Bombay Circle	Madras Circle	Total	Bengal Circle	Bombay Circle	Madras Circle	Total
1920	1st half	...	...	...	...	...	...	...	...
	2nd half	14·21	4·39	12·58	31·18	12·14	5·48	7·03	24·65
1921	1st half	5·10	4·78	10·31	20·19	18·95	16·71	9·31	44·97
	2nd half	17·36	9·72	10·95	38·03	17·42	17·15	8·82	43·39
1922	1st half	9·65	9·50	13·29	32·44	22·64	21·80	10·16	54·60
	2nd half	18·68	11·00	11·75	41·43	24·54	20·02	7·47	52·03
1923	1st half	16·13	18·92	16·30	51·35	22·34	26·38	9·39	58·11
	2nd half	27·07	18·91	10·50	56·48	22·80	25·03	9·30	57·13
1924	1st half	23·66	28·66	18·30	70·62	26·90	30·94	12·43	70·27
	2nd half	33·54	17·84	12·55	63·93	34·31	27·10	9·96	71·37
1925	1st half	29·93	34·54	19·59	84·06	38·57	35·74	11·62	85·93
	2nd half	38·70	20·55	13·71	72·96	45·53	30·93	11·55	88·01
1926	1st half	23·57	27·38	15·37	66·32	50·71	29·85	11·80	92·36
	2nd half	28·95	15·98	12·29	57·22	41·48	27·31	10·33	79·12
1927	1st half	26·52	24·56	17·48	68·56	38·79	29·36	11·14	79·29
	2nd half	34·04	21·27	15·55	70·86	37·36	29·41	9·80	76·57
1928	1st half	31·48	30·20	21·55	83·23	32·87	30·49	11·29	74·65
	2nd half	34·10	22·09	16·30	72·49	39·73	29·52	14·00	83·25
1929	1st half	24·25	33·93	22·17	80·35	38·31	38·15	13·94	90·40
	2nd half	27·09	23·29	17·48	67·86	34·18	31·14	11·62	76·94
1930	1st half	23·34	23·89	13·92	61·15	34·96	33·11	12·31	80·38
	2nd half	20·39	14·51	10·74	45·64	29·21	32·16	11·20	72·57
1931	1st half	17·45	16·48	10·07	44·00	31·52	34·74	13·71	79·97
	2nd half	17·86	12·32	6·88	37·06	27·10	30·87	14·93	72·90
1932	1st half	19·86	17·41	7·61	44·88	32·43	29·68	14·06	76·17
	2nd half	19·29	12·57	8·64	40·50	28·12	25·97	10·94	65·03
1933	1st half	19·08	19·18	9·14	47·40	30·58	29·41	13·54	73·53
	2nd half	16·59	10·87	5·96	33·42	29·09	22·49	11·57	63·15
1934	1st half	21·67	15·50	8·84	46·01	33·23	26·87	15·70	75·80
	2nd half	19·71	10·61	6·49	36·81	28·54	25·49	17·79	71·82

the gold holdings of both France and the U.S.A. rose steeply, while those of the rest of the world fell at an equally sharp rate. They were obliged to take steps to prevent further drain of gold. It is no wonder therefore that the Bank of England raised its rate of discount from 4½% to 5½% on February 7, 1929, and further raised it to 6½% on September 26 next. In consequence of this increase in the Bank of England rate, the rate at which the Government of India was prepared to lend emergency currency was raised to 8%,[4] thereby causing the Bank Rate to rise to the same level in February, 1929. This high rate of interest was unable to prevent the fall in exchange. In fact, during the nine months from January to September, 1929, the rate of exchange remained lower than during the corresponding months of the previous year as will be evident from Table 10.

TABLE 10. HIGHEST AND LOWEST QUOTATIONS FOR TELEGRAPHIC TRANSFERS ON LONDON FOR EACH MONTH.

[Data from the *Annual Reports of the Controller of Currency*]

Year	Month	Highest s–d	Lowest s–d	Year	Month	Highest s–d	Lowest s–d
1927	November	1–6	1–5 15/16	1928	November	1–6 1/16	1–6 1/16
..	December	1–6 3/32	1–6	...	December	1–6 1/32	1–6 1/32
1928	January	1–6 3/32	1–6 1/32	1929	January	1–6 1/32	1–6
...	February	1–6 1/32	1–5 15/16	...	February	1–6	1–5 15/16
...	March	1–5 31/32	1–3 15/16	...	March	1–5 31/32	1–5 31/32
...	April	1–5 31/32	1–5 31/32	...	April	1–5 31/32	1–5 29/32
...	May	1–5 31/32	1–5 31/32	...	May	1–5 29/32	1–5 27/32
...	June	1–5 31/32	1–5 27/32	...	June	1–5 7/8	1–5 13/16
...	July	1–5 7/8	1–5 27/32	...	July	1–5 13/16	1–5 25/32
...	August	1–5 31/32*	1–5 7/8	...	August	1–5 27/32	1–5 3/4
...	September	1–6	1–5 15/16	...	September	1–5 27/32	1–5 13/16
...	October	1–6 1/16	1–6	...			

* In the *Controller of Currency's Report for 1928-29*, p. 38, the highest rate for August quoted is 1s. 5 21/32d. This is obviously a misprint for 1s. 5 31/32d.

IMPERIAL BANK PERCENTAGE OF CASH TO LIABILITIES.

This weakening in exchange coupled with high money rate led naturally to an outcry from the business community that the Government was starving the commercial world of its needs for currency. But in his Budget Speech on February 28, 1930, Sir George Schuster defended this policy on the ground that the contraction of currency was neither severe nor unjustified. He alluded to the percentage of cash to liabilities of the Imperial Bank, which, according to him, was the real index of the adequacy of currency and pointed out that this percentage was higher in February, 1930 than it was at the time a year ago. The relevant figures are given in the Table 11 below for a number of years.

TABLE 11. PERCENTAGE OF CASH TO LIABILITIES OF THE IMPERIAL BANK OF INDIA.*

[Data from the *Annual Reports of the Controller of the Currency for India*]

Year	Apr.	May.	Jun.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1926-27	28·91	37·00	39·60	50·73	53·07	49·63	45·58	41·81	25·42	20·55	18·35	20·34
1927-28	18·52	18·42	23·43	37·47	37·57	35·64	34·20	30·32	12·92	15·75	16·51	13·60
1928-29	11·33	13·38	17·53	28·41	29·17	29·46	23·35	17·92	12·89	14·98	13·71	13·46
1929-30	15·91	23·33	32·38	36·29	36·95	33·84	34·61	28·26	19·13	18·78	20·78	21·00
1930-31	18·02	16·32	19·92	24·00	29·20	28·32	28·69	24·55	14·46	14·35	11·58	15·99
1931-32	17·86	18·68	20·78	24·99	25·19	8·38	15·73	13·90	10·86	12·53	13·40	13·28
1932-33	15·24	19·39	24·38	35·45	35·81	35·84	35·64	33·64	27·18	24·84	28·92	31·42
1933-34	28·53	25·34	28·19	33·09	32·71	29·94	27·86	29·01	22·50	20·91	14·52	14·45
1934-35	17·25	19·89	26·19	31·92	35·29	33·70	31·93	33·29	24·16	21·75	18·59	25·23

* Reserve Bank of India began operations on April 1, 1935.

It is quite evident that the figure for February, 1929 was not a normal figure at all and quite unsuitable for purposes of comparison. In fact, it was lower than the corresponding figures during 1927, 1928, 1933, 1934 and 1935. It was only somewhat higher than the corresponding figures during the years of acute depression, *viz.*, 1931 and 1932. In any case, the comparison of any year with any other year, by placing the figures for the same month in the two years side by side is invalid. For, the monsoon does not break in exactly on the same date every year, and the busy season in consequence is sometimes early and sometimes late. It will appear from the Table 11 that the months of minimum percentages were as shown below:—

1927 February, April/May, December
1928 April, December
1929 February/March, December
1930 May, December
1931 February, September, December
1932 January, March
1933 January, December
1934 February/March, December

In view of all this, it is somewhat surprising to notice the complacent attitude of Sir George Schuster who in his Budget Speech on February 28, 1929, lightly referred to "bad patches" in the financial year which was then just closing and assured the House that there was no "ground for serious pessimism." But in fairness to Sir George, it may be asked: Was not the business world of the West, in spite of all its indices of business forecasting, really taken unawares by the great depression which broke out after the collapse of the stock exchange boom in New York? Possibly the widely prevalent belief that a boom could occur only in an era of rising prices was responsible for the unpreparedness of the world for the greatest financial debacle.

FIRST PHASE OF THE DEPRESSION: OCTOBER, 1929 TO JUNE, 1930.

It is possible to divide the whole course of world depression into a number of broad phases, the first extending roughly from October, 1929 to June, 1930,[8] the characteristic feature of which was its heavy incidence specially in countries producing raw materials and foodstuffs. It is well known that during the period of the strain, prices of agricultural goods began to fall more steeply than those of manufactured goods, in spite of valorisation schemes, etc. and other devices. In the next place it has to be remembered that, generally speaking, these are debtor countries, and the real burden of their debts was considerably increased. To meet these onerous foreign obligations and to maintain the external value of national currencies, high short-term and long-term rates of interest, and similar devices had to be resorted to, intensifying the fall in the price level further. Even that did not make the cup of misery quite full. For such serious decline in prices was sought to be remedied by increased output so as to maintain the same income, with the result that there was an enormous addition to the available supply for overseas markets, which were however restricting access to these commodities by strong measures such as tariffs and quotas. The vicious circle was quite complete, and it is no wonder that agricultural countries were most adversely affected.

THE SECOND PHASE: JULY, 1930 TO AUGUST, 1931.

During the second phase from July, 1930 to August, 1931, manufactures also became depressed. There was a deepening of the depression in the countries already suffering, whereas some other countries not yet affected such as France and Scandinavian countries began to feel the effect of the depression. We have seen that during the previous phase agricultural and debtor countries could carry on only by applying drastic methods, which by their very nature could not be expected to yield permanently beneficial results. On the other hand during that period the condition of manufacturing countries was rapidly deteriorating although all the features were not apparent on the surface. The demand for manufactures, the income from foreign investments, the exchange rate with such agricultural and debtor countries,—all these were maintained by easy credit and free lending on the part of manufacturing countries. On the top of this, the catastrophic fall in agricultural prices was tending to bring down manufacturing prices throughout the first phase of the depression and this pressure could not be withstood any longer.

As prices tended to go down or went down in manufacturing countries, their trade languished. The demand for money for trade purposes fell for a double reason, firstly because trade was less than before and secondly because prices were lower. Production was equally affected and there was less need for industrial circulation. Stock markets were stagnant, which again called for less money. There was less of business confidence requiring bankers to proceed with caution when loans had to be issued.

It is no wonder therefore that there was a large reduction in bank rates in most of the manufacturing and creditor countries. The Bank of England rate which had been reduced to 3% in May, 1930 towards the close of the first phase of the depression was further reduced to 2½% on May 14, 1931, the lowest rate reached after the war. On May 1, 1930 the Bank of France rate had been reduced to 2½%. It was further reduced to 2% on January 2, 1931. The New York Federal Reserve Bank rate was lowered to 2% in December, 1930 and further lowered to 1½% in May, 1931 Such easy money conditions hid great economic maladjustment in those countries. Nor could this ease pass on to agricultural and debtor countries. In fact, the situation was so seriously out of joint that it ended in the tragedy of the pound.

THE THIRD PHASE: SEPTEMBER, 1931 TO DECEMBER, 1932.

With the breakdown of the gold standard in England, was ushered in the third phase of depression which lasted from September, 1931 to December, 1932. During this period as pointed out in the *World Economic Survey* (1932-33), "trade restrictions, declining trade, distorted balances of payments, frozen debts and exchange instability reacted unfavourably one upon another." Even this list is not quite complete. Political unrest prevailed in many countries, partly due to growing unemployment and partly due to the severity of the measures of taxation and retrenchment which had to be adopted for the balancing of budgets and for meeting external obligations. The failure of the Disarmaments Conference and of the settlement of war debts, the increased tension between China and Japan and similar other factors aggravated the difficulties. In spite of this, it must be recognised that the rate of deterioration in the economic condition somewhat slowed down after September, 1931. For throughout the last phase, there was a growing recognition of the desirability of raising prices if necessary, in an international way. Cheap money prevailed in most countries. There was considerable increase in bank deposits everywhere. What was more gratifying was that there was an appreciable fall in the long-term rate of interest, enabling the Governments of several countries to fund or convert their debts on easier terms, thus relieving their financial situation to some extent.

Repercussion on India.

Let us now proceed to trace the incidence of these three phases of the depression on Indian economic life. Some indices of economic activity are extracted from the *Monthly Survey of Business Conditions in India* and reproduced in a summary form in Table 12. It is recognised that there are several difficulties in this procedure. Firstly, some of the necessary data are available only after the beginning of the period of recovery. If earlier data are extracted from other sources, they cannot be easily reduced to a comparable form. In the second place, monthly figures which alone can furnish materials for a description of short-term fluctuation are subject to large seasonal changes in India. Data for a sufficient number of normal years have not yet been accumulated to permit adjustments for seasonal changes on a proper statistical basis. There are other difficulties also, which will be enumerated when the particular series are described.

Table 12. Production and Finance.

[Mainly from the *Monthly Survey of Business Conditions in India*]

Phase of Depression		Production		Finance						
		Coal (Thousand Tons)	Cotton Piece goods (Millon Yards)	Calcutta Index No. of Wholesale Price	Bombay Cost of Living Index	Active circulation of Notes	Unadjusted clearing figures (Crores Rs.)	Index No. for 3½% G. P. Notes	Index No. for Non-Speculating Securities	Index No. for Speculative Securities
(1)	(2)	(3)	(4)	(5)	(5)	(7)	(8)	(9)	(10)	(11)
Pre Depression Year	Average for Sept., 1926, '27,' 28	1850	168·3	146	151	156·0	158·3	78	111	227
	September. 1929	1875	202·4	143	149	159·0	155·4	72	110	240
	Percentage	*101*a	*120*	*98*	*99*	*102*	*98*	*92*	*99*	*106*
	Change (During pre depression year)	+1	+20	−2	−1	+2	−2	−8	−1	+6
Phase I (9 months)	June. 1930	1754	2152	116	140	152·9	129·1	68	98	206
	Percentage	*95*	*128*	*79*	*93*	*98*	*82*	*87*	*88*	*91*
	Change (Sept., 1929 to June 1930)	−6	+6	−19	−6	−4	−18	−6	−11	−14
Phase II (14 months)	August. 1931	1285	233·0	92	108	135·9	127·9	62	90	116
	Percentage	69	137	63	72	87	81	80	81	51
	Change (June 1930 to Aug. 1931)	−27	+8	−21	−23	−11	−1	−9	−8	−44
Phase III (16 months)	December. 1932	1596	2950	88	110	158·1	133·9	76	101	150
	Percentage	*86*	*175*	*60*	*73*	*101*	*85*	*97*	*91*	*66*
	Change (Aug., 1931 to Dec., 1932)	+24	+27	−4	+2	+16	+5	+22	+12	+30
	Change (Sept., 1926-27-28 to Dec. 1932)	−14	+75	−40	−27	+1	−15	−3	−9	−34
Thirty-nine months	March. 1936	1877	293·1	91	102	168·8b	135·7	102	135	212
	Percentage	*101*	*174*	*62*	*68*	*108*	*86*	*131*	*122*	*93*
	Change from Dec., 1932 to March 1936	+18	−1	+3	−7	+7	+1	+34	+34	+41
	Change (Sept., 1926-27-28 to March 1936.	+1	+74	−38	−32	+8	−14	+31	+22	−7

[a] Figures in italics indicate the respective percentages, assuming that the average for September, 1926, 1927 and 1928.

[b] The amount of notes issued less than those held in the Banking Department of the Reserve Bank of India.

During the three phases of the depression the trends were more pronounced than seasonal fluctuations. The intermediate figures have therefore been omitted and the data on the boundary dates alone are shown in Table 12. This procedure is not justified in the period from January, 1933 to March, 1936, the closing month of our narrative. In the first place, it is much longer than any of the three phases of the depression. In the second place, there was no strongly marked movement either up or down. Accordingly, quarterly figures have been inserted in the concluding portion where we propose to discuss the period "Recovery and After." (Pp. 210 *et seq.*)

PRODUCTION OF COTTON GOODS.

By far the more important production in India is agricultural production, the incidence of the depression on which during the past few years has already been shown in Table 6. For industrial production two series have been shown in Table 12, *viz.*, production of coal and of cotton piece-goods, as the production figures for other industries are available only for very recent years. Cotton being a protected industry does not reflect general conditions of production. It will be apparent from the Table that it records almost an uninterrupted progress, practically during all the phases of the depression. On a closer analysis, however, it will be seen that the rate of increase was not uniform ; during the twelve months preceding the depression it was about 20% ; during the nine months of the first phase it was 6%, the corresponding annual rate being 8% $[(6 \times 12) \div 9]$; during the fourteen months of the second phase it was 8%, the corresponding annual rate being 7% $[(8 \times 12) \div 14]$, and during the sixteen months of the third phase it was 27%, the corresponding annual rate being 20% $[(27 \times 12) \div 16]$. Thus it is only during the last phase that the pre-depression rate was attained. It may also be noticed that the rate during the second phase was somewhat less than that during the first phase, which in its turn was less than half of the pre-depression rate. The above tedious calculation is made in order to test to what extent Indian cotton industry was affected by the depression, for the Hon'ble Sir George Schuster referred on several occasions to the condition of this industry in support of his view that depression had not created as much distress in India as elsewhere. Apart from this, even if the industry had really been as prosperous as stated by Sir George Schuster, it would have on the other hand showed what great sacrifices had to be made by unsheltered industries, specially agriculture, to make this possible.

COAL PRODUCTION.

The production of coal offers a better indication, not only with regard to industrial conditions but also as regards railway traffic in view of the heavy amount of coal consumed by Indian railways. On the other hand, it has to be remembered that coal had been in a bad way in India for several years before the depression began. Even when allowance is made for this, the deterioration during the first phase as compared with the pre-depression year, the aggravation during the second phase and the recovery during the third phase is clearly noticeable. It is also seen that even after December, 1932, the production was 14% less than during the pre-depression period, a distressing feature which loudly calls for amelioration.

If other production figures had been considered, they would not have shed more light on the darkness of the depression. We therefore proceed to consider some financial data because they reveal trade conditions better. Columns (5) and (6) of Table 12 record changes in the Calcutta Index Number of Wholesale Prices and the Bombay Cost of Living Index Number during the three phases of the depression and also during the previous

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period. It will be seen that during the first phase, the former fell more than the latter, showing the comparative rigidity of retail prices as compared with wholesale prices, and the equally "sticky" nature of other components of the cost of living index such as rent. During the second phase, this friction was almost completely overcome, the decline being 21% in the former case and 23% in the latter case. During the third phase both of them remained fairly steady. On the balance, however, wholesale prices by December, 1932 were 40% below the pre-depression level, whereas cost of living was 27% below the corresponding level. Whether there has been so great an increase in the purchasing power of the rupee as that, is a debatable point, partly because the basis of the index is too narrow, but chiefly because of the wide divergence in the standard of living in different parts and among different communities in India.

Active Circulation of Notes.

In column (7) of Table 12 are recorded the figures for the active circulation of notes. Curiously enough, in the *Monthly Survey* gross circulation figures alone are published. It was however thought advisable to consider the active circulation in the hands of the people. Such figures are reproduced from the annual *Reports of the Controller of Currency* in column (7) of Table 12. It will be noticed that during the year preceding the depression, neither the note issue nor the wholesale index nor the cost of living index recorded any serious fluctuation. During the first phase of the depression and also during the second stage, note circulation was restricted, but probably not to the extent warranted by the fall in wholesale prices and cost of living. On the other hand, it is common knowledge that the quantum of trade also declined at the same time, although statistics could not be given for reasons stated above. Thus the trade demand for money fell for a double reason, firstly because prices were lower and secondly because quantities were smaller. On the other hand, it is well known that during depression, the velocity of circulation whether of notes or of deposit currency greatly diminishes. To compensate for this, an increased volume of currency is usually called for. It is difficult therefore to determine in the absence of the necessary figures whether currency was starved" as popularly supposed, or properly adjusted to demands, as claimed by Sir George Schuster.

Security Values.

Clearing figures given in column (8) reflect not only trade conditions but also financial and stock exchange operations. The large increase recorded in the third phase is probably due more to financial operations than to trade revival. Evidence for this is afforded in columns (9), (10) and (11). It will be seen that during the third phase of the depression $3\frac{1}{2}$% G. P. Notes, non-speculative securities and speculative securities all recorded substantial increases in value. It is curious to notice that the difficulties of Indian public finance in the period immediately preceding the depression were responsible for a heavier fall in Government securities than in the non-speculative industrial securities but this position was reversed during the first phase, the former falling by 6 per cent. and the latter by 11 per cent. During the second phase, the two fell at about the same rate, whereas during the third phase, the rise in the price of Government securities was spectacular compared with that of non-speculative industrial securities. Speculative securities also recorded a sensational rise during the third phase, but the havoc caused during the first phase and more so in the second phase was so great that the wastage could not be made good during the third phase at the end of which speculative securities were 34% below the pre-depression level, where as Government securities and, to a less extent, non-speculative securities were practically brought back to the pre-depression level.)

EFFECT OF DEPRESSION ON DIFFERENT PARTS OF INDIA.

Hitherto we have considered India as a whole. But it is well known that the basic economic conditions of the different provinces of India are not exactly the same. In some provinces agriculture, specially production of commercial crops, is of preponderating importance and they suffered more acutely than others. The sad plight of Bengal has already been referred to. This was partly aggravated by the special features of jute already mentioned, but the areas growing cotton or groundnut or wheat for export were also very adversely affected. Production could not be curtailed, some of the crops being then on the fields. Not even could it be restricted during the next sowing season, for what other sources of income were open to our cultivators? The output of crops cannot therefore provide a dependable index of agricultural crisis. Nor is the value of the crop a valid measure of the income of the agriculturists. For, many cultivators consume a portion of what they produce, and to that extent are unaffected by the decline in prices due to the depression. In the second place, there are other transactions in kind, such as *batai* cultivation, produce rents, and paddy loans (incurring and repayment of loans in terms of unhusked rice are quite common in Bengal). Even if we concede all this, there is no doubt that the shrinkage in the value of crops raised in different provinces gives some indication of the deterioration of their economic condition. It is for this reason, that the following Table 13 has been compiled from *Review of the Trade of India in 1934-35*, showing the

TABLE 13. VALUE (IN LAKHS OF RUPEES) OF TOTAL PRODUCTION OF THE PRINCIPAL CROPS IN EACH PROVINCE IN 1928-29 AND 1933-34.

[Data from *Review of Trade in India in 1934-35*]

Part 1. Bengal, Bihar & Orissa, Bombay and Central Province & Berar.

	Crops	Bengal		Bihar & Orissa		Bombay		C. P. & Berar	
	(1)	1928-29 (2)	1933-34 (3)	1928-29 (4)	1933-34 (4)	1928-29 (6)	1933-34 (7)	1928-29 (8)	1933-34 (9)
1	Bajra ...	...	...	...	...	9.86	4.59	...	...
2	Barley ...	25	13	5,92	2.58	...	...	...	...
3	Cotton ...	24	11	22	7	15.94	6.56	18.52	5.56
4	Castor ...	...	...	...	...	...	...	...	...
5	Gram ...	63	37	6.62	3.35	2.07	1,36	2.18	1.29
6	Groundnuts	...	...	...	...	16.45	5.19	...	...
7	Jute ...	37.25	11.99	2.69	71	...	...	...	...
8	Jowar ...	...	...	...	...	21.21	11,12	12.83	4.75
9	Linseed ...	41	24	1.97	87	...	...	99	91
10	Maize ...	...	...	5.11	2.44	...	...	...	...
11	Rice ...	1.71,35	67.54	94.62	33.19	31,77	17,09	25.44	12.40
12	Rape seed	2,93	1.95	3.79	1.38	...	...	...	...
13	Sugar (Raw)	5.02	4.90	5.49	5,19	5.03	2,94	...	...
14	Sesamum ...	62	44	...	...	75	29	1,24	43
15	Tea ...	6,73	4.88	...	...	...	...	...	...
16	Tobacco ...	6.64	2.68	3.05	1.43	9.50	5.04	...	...
17	Wheat ...	52	33	8.38	4.13	7.94	6.34	7.62	4.99
	Total ...	2.32.59	95.56	1.37.86	55.34	1,20.52	60.52	68.77	30.33
	Percentage Decline	58·9		59·9		49·8		55·9	

TABLE 13. (*Continued.*)

Part 2. Madras, Punjab, U. P. and Total Provinces.

Crops		Madras		Punjab		United Provinces		Total (All Provinces)		Percentage Decline
		1928-29	1933-34	1928-29	1933-34	1928-29	1933-34	1928-29	1933-34	
	(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1	Bajra ...	10.72	4.85	3.40	1.80	4.48	1.87	28.46	12.61	55.7
2	Barley ...	—	—	2.41	58	18.06	8.44	26.64	11.73	56·0
3	Cotton ...	11.00	5.88	8.47	6.38	3.80	1.54	58.19	25.60	56·0
4	Castor ...	65	38	—	—	—	—	65	38	41·5
5	Gram ...	—	—	9.26	6.72	15.40	8.08	36.11	21.12	41·5
6	Groundnuts ...	34.64	13.82	—	—	—	—	51.09	19.01	62·8
7	Jute ...	—	—	—	—	—	—	39.94	12.70	68·2
8	Jowar ...	15.54	6.77	1.06	87	4.83	2.18	55.47	15.19	54·6
9	Linseed ...	—	—	—	—	1.72	1.00	5.09	3.02	40·7
10	Maize ...	—	—	4.31	1.32	8.56	3.43	17.98	7.19	60·0
11	Rice ...	97.26	45.20	4.60	2.38	22.16	17.57	4.47.20	1.95.37	56·3
12	Rape seed ...	—	—	3.03	1.18	7.32	3.64	17.07	8.15	52·3
13	Sugar (Raw) ...	6.54	4.39	4.72	3.22	18.32	10.25	45.12	40.89	9·4
14	Sesamum ...	2.45	1.05	—	—	—	—	5.06	2.21	56·3
15	Tea ...	1.98	1.83	—	—	—	—	8.71	6.71	23·0
16	Tobacco ...	—	—	—	—	—	—	19.19	9.15	52·3
17	Wheat ...	—	—	35.52	16.16	35.87	17.70	95.85	49.65	48·2
	Total	1.80.78	83.17	76.78	40.11	1.40.52	85.65	9.57.82	4.50.68	52·9
	Percentage Decline	54·0		47·8		39·0		52·9		

values of crops in 1928-29 and 1933-34, by provinces and by crops. From the percentage declines given in the last line of the table, it will be seen that the province Bihar and Orissa was the worst sufferer. Bengal was almost in the same deplorable condition. The United Provinces were the least affected because her chief exports, seeds, were not so much affected as other commercial crops like jute, tea, etc. The development of sugar industry and of raw cane production is also another cause.

PERCENTAGE OF OVERDUE LOANS IN CO-OPERATIVE SOCIETIES.

Another index of agricultural depression has already been referred to, *viz.*, percentage of overdue loans to total loans due by individuals to co-operative agricultural primary societies in different provinces given in Table 14. It is recognised that the data refer only to those members of rural co-operative societies who are in debt and not to agriculturists in general, but it is believed that the broad features of the distress are revealed therein.

It will be seen that the percentages remained fairly steady during 1927-28 and 1928-29, although there were wide variations from province to province, Punjab and Burma recording the lowest percentages, and Assam about the highest percentage. It will be seen that in all areas, the percentages rose very sharply during 1929-30, 1930-31 and 1931-32, somewhat less steeply during 1932-33, when there was noticed steadiness in some cases. In most cases there is an improvement in 1933-34 as compared with 1932-33, which has since been maintained.

In Bengal the deterioration in the economic condition began as early as 1927-28, since when there is a steady increase in the proportion of overdue loans. In Bombay, however, the proportion remained steady up to 1930-31, after which period there is recorded a rise, but not at a very fast rate. This great difference between a predominantly agricultural province growing a commercial crop and a manufacturing province enjoying protection is noticeable.

TABLE 14. PERCENTAGE OF OVERDUE LOANS TO TOTAL LOANS DUE BY INDIVIDUALS TO CO-OPERATIVE AGRICULTURAL PRIMARY SOCIETIES.

[Data from *Annual Statistical Statements Relating to the Co-operative Movement in India*]

Year		Madras	Bombay	Bengal	Bihar & Orissa	United Province	Punjab	Burma	C. P. & Berar	Assam	Other Provinces in British India	Total British India*	Total Indian States*	Grand Total*
1927-28	...	27	34	29	12	43	6	5	31	34	14	20.8	21	20.8
1928-29	...	27	31	34	12	38	6	7	35	41	7	21.3	22	21.5
Average of 1927-29	...	27	32.5	31.5	12	40.5	6	6	33	37.5	10.5	21	21.5	21
1929-30	...	30	31	40	17	47	8	7	46	50	6	24.8	24	24.5
1930-31	...	45	30	56	22	65	8	13	58	64	9	32.6	30	32.3
1931-32	...	55	44	68	43	70.5	7	12	68	72	9	40.9	34	40.1
1932-33	...	59	49	81	58	68	6	38	74	88	9	46.3	48	46.6
1933-34	...	60	47	80	71	66	5	58	80	95	6	47.4	54	48.5
1934-35	...	54	48	74	81	59	5	65	79	95	5	45.8	38	44.9

* These figures are not the averages of the percentages recorded here. They are derived from the totals of the original data for loans and overdues.

GOLD EXPORTS.

There were two outstanding currency events during the period of depression, *viz.* linking of the rupee to sterling after the suspension of the gold standard by the United

TABLE 15. FLOW OF GOLD.

(+) Indicates export from India. (−) Indicates imports into India.

Year (Apr.-Mar.)	Average price* of 100 touch per tola (a)	Net Export of Gold from India (private): Quantity Million fine ounces	Net Export of Gold from India (private): Value Crores of Rupees	Balance of transaction in treasure (Private) (i.e Gold, Silver & Currency Notes) Crores of Rupees	Visible balance of trade in Merchandise (private) Crores of Rupees	Balance of remittances of funds Crores of Rupees	Total visible balance of accounts Crores of Rupees	Year Calendar year	Annual word production of gold (b) (excluding U.S.S.R.) Million fine ounces
	Rs. As. p.								
1931-32	24 12 0	+ 7.63	+ 57.97	+ 55.65(d)	+ 32.74(d)	− 34.32	+ 54.07(d)	1931	20.61
1932-33	29 4 6	+ 8.35	+ 65.52	+ 64.93(c)	− 0.12(c)	− 48.63	+ 16.18(e)	1932	22.89
1933-34	31 12 3	+ 6.70	+ 57.05	+ 57.23	+ 33.02(c)	− 60.44	+ 29.81(e)	1933	22.73
1934-35	34 11 6	+ 5.69	+ 52.54	+ 52.54	+ 19.31	− 49.78	+ 22.07	1934	23.34
1935-36	35 4 4	+ 4.02(c)	+ 37.36(a)	+ 36.37	+ 29.90(a)	− 46.45	+ 19.82	1935	24.76

* Government buying price of gold according to Currency Act of 1927 was Rs. 21. 3 as. 10 pies per tola of fine gold.

[a] *Review of the Trade of India in 1935-36.*

[b] *Statistical Year Book of the League of Nations 1935-36;* Kilograms converted to Troy ounces @ 1 Kg. = 32.1507 oz. Troy. Rest of the figures are taken from the *Reports of the Controller of Currency*, 1931-32 to 1934-35.

[c] Taken from *Annual Statement of the Seaborne Trade of British India for the year endings 31st March, 1936.* Vol. I. Table 18, p. 886.

[d] Revised figure from the *Report of the Controller of Currency for 1933-34*, p. 51.

[e] Revised figures from the *Report of the Controller of Currency for 1934-35*, p. 41.

Kingdom and gold export from India. The relevant figures for the latter are given in Table 15. The economic implications of these two events have been discussed by one of us elsewhere.[*]

Recovery and After : January, 1933 to March, 1936.

As stated above, we now proceed to examine the quarterly data during the period from January, 1933 to March, 1936.

Production.

In Table 12 have been shown the figures for coal production on particular dates. As already pointed out, the table does not show the course of coal production during the period under review, it only shows the extent of the rises and falls on the specified dates. Nothing has been recorded with regard to the intervening months. This fact is well illustrated by the figures for coal production, quarter by quarter, given in the below Table 16.

Table 16. Production.

[Data from *Monthly Survey of Business Conditions in India*]

Year	Coal (thousand tons)							
	April—June		July—September		October—December		January—March	
Average 1926-29	1762		1581		1618		1979	
1929-30	1942	*112*[*]	1659	*96*	1774	*102*	2083	*120*
1930-31	1963	*113*	1692	*98*	1790	*102*	2177	*123*
1931-32	1705	*98*	1419	*82*	1521	*88*	1826	*105*
1932-33	1538	*89*	1358	*78*	1500	*86*	1625	*94*
1933-34	1520	*88*	1366	*79*	1484	*86*	1693	*98*
1934-35	1916	*99*	1575	*91*	1717	*99*	1940	*112*
1935-36	1754	*101*	1527	*88*	1726	*99*	1952	*113*

Year	Cotton Piece goods (million yards)							
	April—June		July—September		October—December		January—March	
Average 1926-29	171·8		166·9		186·9		190·9	
1929-30	172·3	*91*[*]	190·2	*106*	227·1	*127*	216·8	*121*
1930-31	213·8	*119*	202·9	*113*	212·0	*118*	230·8	*129*
1931-32	240·9	*135*	249·3	*139*	245·8	*137*	260·6	*146*
1932-33	250·9	*140*	274·8	*153*	281·6	*157*	249·3	*140*
1933-34	229·4	*128*	244·5	*137*	257·9	*144*	249·8	*139*
1934-35	241·4	*135*	284·5	*159*	319·7	*178*	286·7	*157*
1935-36	288·5	*161*	293·3	*164*	315·1	*176*	292·2	*163*

[*] Figures in italics indicate the respective percentages, assuming that the average for the three years 1926-27 to 1928-29, was 100.

It is clear from Table 16 that the production of coal continued low throughout the year 1932-33 and began to increase only from the third quarter of 1933-34. The economic significance of this should not be lost sight of, for, it is evident that inspite of the spectacular rise in the value of Government securities and improvement in other indices described before, the general economic condition began to show a decided improvement only from a subsequent date.

As regards production of cotton piece-goods, sufficient has been said to show that it cannot furnish a good index of economic activity. Speaking generally, it may be stated that the production during 1933-34 was somewhat lower than during 1932-33, and there was a moderate revival during 1934-35 and 1935-36.

Prices and Cost of Living.

The movements of the Calcutta Wholesale Prices and of the Bombay Cost of Living have been shown in Table 17 quarter by quarter. The former recorded a small rise but is not free from fluctuation. The highest value reached during this period was 94 in January, 1935 and the lowest value was 82 in March, 1933. It is difficult to distinguish a definitely upward trend. All that can be said is that prices tended more upwards rather than downwards during this period.

Table 17. Wholesale Price and Cost of Living Indices.*

Year	Calcutta Wholesale prices Index							
	April—June		July—September		October—December		January—March	
Average 1926-29	146		146		146		144	
1929-30	139	*95*	143	*98*	137	*94*	127	*87*
1930-31	120	*82*	113	*77*	103	*71*	99	*68*
	96	*66*						
1931-32			92	*63*	97	*66*	96	*66*
1932-33	89	*61*	90	*62*	90	*62*	85	*58*
1933-34	87	*60*	89	*61*	88	*60*	89	*61*
1934-35	90	*62*	89	*61*	88	*60*	90	*62*
1935-36	90	*62*	90	*62*	93	*64*	91	*62*

Year	Bombay Cost of Living							
	April—June		July—September		October—December		January—March	
Average 1926-29	151		153		151		151	
1929-30	147	*97*	149	*98*	150	*99*	144	*95*
1930-31	147	*92*	137	*90*	126	*83*	114	*75*
1931-32	109	*72*	108	*71*	108	*71*	110	*72*
1932-33	107	*70*	109	*72*	110	*72*	107	*70*
1933-34	102	*67*	103	*68*	100	*66*	95	*63*
1934-35	94	*62*	98	*65*	100	*66*	98	*65*
1935-36	100	*66*	102	*67*	104	*68*	102	*67*

* Non-italic figures have been calculated from the monthly data as published in the *Indian Trade Journal* in the case of Calcutta Wholesale price Index and in the *Labour Gazette, Bombay* in the case of Bombay cost of Living Index. Figures in italics indicate the respective percentages assuming that the average for the year 1926-27 to 1928-29 was 100.

On the other hand, there was a definite downward trend in the Bombay Cost of Living Index Number, the lowest point having been reached in April, 1934 when it was only 93. The difficulty inherent in comparing monthly figures subject to large seasonal changes has already been referred to. In the case of the Bombay Cost of Living Index Number this difficulty is aggravated because of inclusion of foodstuffs which are marked by strong seasonal fluctuations.

FINANCIAL STATISTICS.

The active circulation of notes expanded as shown in Table 18 by as much as 8%, but clearing figures do not show any appreciable increase during the post-depression period. Substantial improvement is however recorded in the prices of 3½% Government paper, of non-speculative securities and of speculative securities, which show the nature of the recovery. These are shown in Table 19. The rise in the price of 3½% paper is specta-

TABLE 18. FINANCE.

[Data from *Report of the Controller of Currency for India* and *Report on Currency and Finance for 1935-36 and 1936-37* by the Reserve Bank of India]

Year		Active Note Circulation (Crores of Rupees)							
		April—June		July—September		October—December		January—March	
Average	1926-29	162·3		153·0		165·6		173·3	
	1929-30	167·1	*102**	157·1	*96*	164·2	*100*	163·6	*100*
	1930-31	156·3	*96*	148·6	*91*	150·0	*92*	149·6	*91*
	1931-32	142·9	*87*	139·1	*85*	159·6	*98*	168·9	*103*
	1932-33	155·2	*95*	147·1	*90*	153·4	*94*	152·3	*93*
	1933-34	155·1	*95*	152·8	*93*	158·4	*97*	163·5	*100*
	1934-35	162·1	*99*	156·9	*96*	161·2	*99*	166·1	*102*
	1935-36	164·6	*101*	155·6	*95*	164·2	*101*	167·6	*103*

Year		Unadjusted Clearing Figures (Crores of Rupees)							
		April—June		July—September		October—December		January—March	
Average	1926-29	135·1		137·8		158·3		151·1	
	1929-30	171·1	*118**	164·9	*113*	161·8	*111*	168·9	*116*
	1930-31	149·3	*102*	146·0	*100*	137·1	*94*	144·4	*99*
	1931-32	131·1	*90*	114·2	*78*	130·7	*90*	129·1	*89*
	1932-33	127·2	*87*	137·5	*94*	131·9	*90*	142·9	*98*
	1933-34	150·9	*104*	119·6	*82*	126·6	*87*	150·0	*103*
	1934-35	138·9	*95*	136·5	*94*	145·1	*100*	160·1	*110*
	1935-36	156·1	*107*	158·2	*109*	145·6	*100*	149·1	*102*

* Figures in italics indicate the respective percentages, assuming that the average for the three years 1926-27 to 1928-29 was 100.

cular. It has reached a point which is far above the pre-depression level, even above what may be called the normal pre-war level. There is also a considerable improvement in the value of non-speculative shares. In fact this is higher than the corresponding pre-depression figures. Speculative shares have also risen but not yet attained the pre-depression level.

TABLE 19. FINANCE.

[Data from *Monthly Survey of Business Conditions in India*, July 1914 = 100]

Year	Index No. of 3½ p.c. Government Paper								Index No. of Non-speculative Industrial shares							
	Apr.-Jun.		Jul.-Sept.		Oct.-Dec.		Jan.-Mar.		Apr.-Jun.		Jul.-Sept.		Oct.-Dec.		Jan.-Mar.	
Average																
1926-29	80		79		79		79		108		111		111		112	
1929-30	74	*93**	71	*90*	71	*90*	68	*86*	112	*101*	110	*99*	109	*98*	100	*90*
1930-31	69	*87*	67	*85*	67	*85*	65	*82*	98	*88*	93	*84*	95	*86*	95	*86*
1931-32	64	*81*	61	*77*	55	*69*	59	*75*	93	*84*	90	*81*	86	*77*	87	*78*
1932-33	65	*82*	72	*91*	76	*96*	85	*108*	88	*79*	91	*82*	99	*89*	104	*94*
1933-34	88	*111*	88	*111*	86	*109*	89	*113*	108	*97*	110	*99*	110	*99*	111	*100*
1934-35	92	*116*	94	*119*	98	*124*	101	*128*	114	*103*	118	*106*	126	*114*	132	*119*
1935-36	97	*123*	96	*122*	98	*124*	101	*128*	130	*117*	130	*117*	129	*116*	133	*120*

Year	Index No. of Speculative Securities							
	Apr.-Jun.		Jul.-Sept.		Oct.-Dec.		Jan.-Mar.	
Average								
1926-29	229		232		235		247	
1929-30	240	*103**	240	*103**	236	*101*	210	*90*
1930-31	209	*90*	184	*79*	158	*68*	159	*69*
1931-32	154	*66*	121	*52*	140	*60*	124	*53*
1932-33	126	*54*	140	*60*	152	*65*	162	*70*
1933-34	173	*74*	175	*75*	194	*75*	186	*80*
1934-35	197	*85*	205	*88*	236	*101*	244	*105*
1935-36	218	*94*	211	*91*	218	*94*	211	*92*

*Figures in italics indicate the respective percentages assuming that the average for the three years 1926-27 to 1928-29 was 100.

EXTENT OF RECOVERY.

To sum up, there is no doubt that there has been practically an all-round improvement in the period under review especially after 1932-33. But the improvement has been lop-sided. For instance, the improvement in the price of speculative shares must be due to the inclusion of shares of protected industries, such as cotton and sugar. Similarly, the improvement in the price of Government securities is brought about by heavy taxation, both direct and indirect, and by rigid economies in public expenditure, which by their very nature can only be temporarily successful. The smaller improvement in the value of speculative shares as compared with that of non-speculative shares shows that there is, even now, business pessimism. In other words, the ravages of depression have not yet been made good.

MEASURES ADOPTED.

That there has been a recovery is an undoubted fact. The question now is, how did it come about? Was it a passive affair, India improving along with the rest of the world? Or was there any conscious effort for promoting recovery in India? It is therefore necessary to examine briefly the chief economic measures adopted in other countries for fighting the depression with a view to secure trade revival, and to see how far they were applicable and were actually given effect to, in our country.

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It is not necessary to examine monetary and non-monetary measures separately, as most of the latter, though not monetary in origin, have some monetary effects. For example, tariff which is apparently a non-monetary measure, is closely interrelated to currency problems. Protective duties have often been imposed not merely for national industrial development but also for correcting temporary failures to balance international payments. Thus Keynes in his *Treatise on Money* advocated tariff for adjusting the foreign balance to foreign lending. In the Addendum to the *Report of the Committee on Finance and Industry* in England which was published some time after his *Treatise*, he proposed a scheme of tariff *plus* export county as an alternative to devaluation.

DIRECT EFFECT OF TARIFF ON INDUSTRIES.

Let us therefore consider how far protective tariff is a remedy against trade depression. Its remedial power depends, as Hawtrey points out, on the amount of imports excluded by such measure. In India protection has been granted to quite a number of industries during the period of depression and after, the most important of which are cotton goods and sugar. It is true that the steel industry was the first to receive protection and that the output increased from 163,000 tons in 1923-24 to 630,000 tons in 1934-35, but our steel tariff dating from 1924, cannot evidently be called a depression or a recovery measure. It is similarly true that cotton yarn was protected as early as 1927 long before the beginning of the depression but protection to Indian cotton industry really began with the passing of the Cotton Textile Industry (Protection) Act of 1930. Sugar obtained protection in April, 1932 during the third phase of the depression. How far the production of cotton piece-goods and sugar has increased in recent years at the expense of imports from abroad, will appear from Table 20.

TABLE 20. PRODUCTION AND IMPORTS OF COTTON PIECEGOODS AND SUGAR.
[Data from *Annual Review of the Trade of India* and *Bulletin No. 57 of Indian Industries and Labour*]

Year	Production of Sugar from Cane and Gur (thousand tons)	Import of Sugar excluding Molasses (thousand tons)	Mill production of Cotton piecegoods (crore yards)	Import of Cotton Piece-goods excluding fents (crore yards)	Handloom Production in India (crore yards)
1925—26	91	733	195	154	116
26—27	121	827	226	177	133
27—28	120	726	236	194	131
28—29	99	869	189	190	108
29—30	111	940	242	188	140
30—31	152	901	256	88	139
31—32	228	516	299	75	150
32—33	370	369	317	119	170
33—34	515	261	295	76	144
34—35	617	223	340	94	146
35—36	962	201	357	95	166

It will appear from the table that while cotton mill production increased rapidly, partly under the stimulus of tariff, handloom industry showed a relative decline during 1933-34 and 1934-35. The rapid increase in sugar production is noticeable. In fact, India is now practically self-sufficient as regards sugar supply, as is apparent from the substantial decline in imports.

EFFECT ON AGRICULTURE.

It is therefore clear that it is possible to encourage the development of a particular industry by protective tariff. That does not however establish its efficiency as a remedy against depression, which is open to serious doubt for various reasons. In a country like India, the burden of protection to manufacture, will be felt for years to come by agriculturists, who form the majority of the population of the country. We have already referred to the disparity between the prices of agricultural and manufactured products during the depression which has hit hard the agriculturist. He has to part with more of his goods in order to obtain the same quantity of manufactured products. Protection cannot bridge this disparity, but only widens it.

It is true that so far as protection to sugar is concerned, the agriculturist is obtaining a higher price for his sugar-cane, but this is not the immediate results of the tariff but has been due to the passing of the Sugarcane Act of 1934, imposing a minimum price for cane. Such a measure is not practicable in the case of raw cotton. In any case, a surplus has to be created artificially by a high protective duty or by an excise duty (when imports decline), and it is out of that surplus that a particular class of agriculturists growing sugar cane or cotton can be paid, whereas the sacrifice due to the protective or excise duty has to be made by all agriculturists even though they receive no benefit—at least in the short period. For it is only in the long run that there may be some benefit to them due to an increased demand for food-stuffs and raw materials from industrial centres. We need not however go into that question here as we have to consider only the short period effects of tariffs for trade revival.

AGRICULTURAL PROTECTION.

Even if temporary protection during a period of depression is given to agriculture along with manufacture, as has been done in India in the case of wheat and broken rice, its scope must be extremely limited, for it can be applied only in the case of those agricultural goods which are imported into India. There is a further condition. The decline in imports must stimulate production in India on a considerable scale. Even then, the benefit will accrue not to the whole body of agriculturists but to those alone, who are able to fill the void created by the exclusion of imports.

It is thus clear that protection at least in the short period can benefit only a small section of the community possibly at the expense of others and cannot therefore succeed as a measure of general trade revival. In any case it is essentially a policy of promoting revival in one country at the cost of intensifying depression in others. Thus while the production of sugar in British India almost ~~doubled~~ in 1933-34 as compared with the production in 1929-30, the output of sugar in Java, from which India received the bulk of her imported sugar in recent years, dropped to nearly one-fifth in 1933-34 as compared with the volume of production in 1929-30.[1]

LONG-PERIOD EFFECT.

Moreover, the restriction of imports by means of tariffs will mean in the near future, though not immediately, a restriction of exports also. Even admitting for the sake of argument that self-sufficiency should be our goal, the policy of making our country an oasis of prosperity in a desert of depression, by means of tariffs, is likely to be futile, as it would increase not only the difficulties of other countries but also of our own export industries. It is of course true that Keynes has proposed bounty on export along with import tariff, to guard against this latter danger. But even if the financial difficulty of providing for the bounty is solved, such subsidy is likely to provoke the imposition of countervailing duty by foreigners and may give rise to the same difficulties as those of a depreciating exchange.

DEVALUATION.

This brings us to the question of devaluation, which both of us have discussed elsewhere because the issues are more economic than statistical. The present position has been summed up by one of us in *Sankhya,* Vol. 3, Part 4.

WAGE REDUCTION.

It is well known that in order to induce recovery there should be increased profits, either through increased prices or through reduced costs or through both. In the supplementary budget of the Government of India in September, 1931 a ten per cent. cut on salaries was imposed on all its employees. Provincial Governments, local bodies and even private employers followed suit. Besides, this measure was adopted when the rate of worsening of the economic situation was gradually slowing down. In other words, the reduction in salaries would not then have led to such a diminution in purchasing power in the hands of the consumers that there was a possibility of prices falling faster than costs, and thus of aggravating the difficulties. But, inspite of this, the fact remains that the cut in salaries did not lead to any reduction in wages, either industrial or agricultural, and thus to diminution in costs. Although there is no organised trade unionism in India, any substantial cut in industrial wages is not practicable. As regards agriculture, which is carried on in very small independent units, the position is, if possible, even more difficult. Thus wage reduction as a method of promoting recovery was not and could not be attempted.

DIMINUTION IN INTEREST RATES.

But can we not promote agricultural revival by cost reduction in the form of interest charges? This has been adopted more as a relief measure for the indebted agriculturist than as a method for promoting trade revival, not only in some of the Indian provinces and States but also in several other agricultural countries of the world. "Swat the creditor" seems to be the underlying note of most of the recent debt relief legislation in India. Compulsory debt reduction euphemistically called 'conciliation,' has too often been rammed down the throat of the creditor who is the underdog at the present time. But champions of debtors who are anxious to benefit the debtors at the expense of creditors, should remember that "while an old creditor is a nuisance, a new lender may be a timely help and the new lenders will take note of the treatment meted out to the old."

If agriculture is as much an industry as manufacture and cannot do without credit, any legislation, however well-meaning, will fail as a recovery measure if it shakes the foundation of rural credit. Thus the attempt to provide cheap credit for the ryot, by fixing a maximum rate of interest much lower than the usual rate prevalent in the mofussil, is bound to fail, if the risk borne by the creditor is not simultaneously reduced.

The following remarks by the Shillong correspondent of the *Statesman,* on the 24th of January, 1937 will fully bear out this contention:—

"The Assam Money-lenders Act—passed with a view to give relief to debtors—has resulted in a restriction of credit in the country districts, to the detriment of agriculturists. Money-lenders are now no longer giving loans because it is difficult to realise them again." In fact, the general effect of most of the recent debt relief measures has been to increase the dearth of money in rural areas where money was already far from sufficient.

Thus quite a paradoxical situation has arisen in India since the middle of 1932. There has been a plethora of liquid funds in the organised money markets of India, as indicated by the rise in the price of Government securities, the fall in the bank rate and the increase of bank deposits while our rural areas are suffering from a chronic dearth of money.

Its Economic Consequences.

To what extent has this cheap money facilitated trade revival in India? So far its beneficent effect is visible mainly in two directions:—

(1) the growth of building activity in Calcutta and in some other industrial cities and

(2) the reduction of State expenditure by enabling the Government, both central and provincial, to borrow at much lower rates of interest and to reduce the burden of public debt by conversion schemes.

But beyond this, it has done little so far to contribute towards industrial recovery.

It may however be pointed out that the role of cheap money is mainly confined to removing obstacles to trade revival, rather than creating actual recovery. A stringency of money no doubt retards industrial recovery. But the mere fact that a business man can borrow at a cheap rate, does not induce him to borrow, unless he is assured of profit.

Correct Time for Public Works Programme.

Why not utilise this idle money for financing public works by the State? This is the reason why economists of the reflationist school have demanded public works financed by public loans along with a policy of cheap money, as a recovery measure. Sir George Schuster in his Budget speech on February 27, 1934 admitted that public works expenditure might prove useful when the depression is just being replaced by recovery. Mr. A. D. Gayer in his article on "Public Works as a Recovery Expedient" in *Index* (Stockholm) for May, 1936, also refers to the problem of correct timing as of crucial importance. It is true that the nature and course of the trade cycle are so obscure and imperfectly known that it is difficult to find out exactly when the crisis has been passed and only a stimulus in the shape of public works is necessary to re-establish business confidence and to start recovery. On the one hand, if public works expenditure is begun too early, it may not produce any results, unless it is on such a lavish scale that prices respond inspite of the depression, which of course is out of the question in the case of India. On the other hand, if it is begun too late, it may seriously compete with private industrial undertakings, still suffering from the after-effect of depression. If the above analysis is correct, public works should not have been started before December, 1932. The question is, has the time now passed for such a measure? It depends on whether Government borrowing will force up long-term rates of interest so much as to make industrial investment unremunerative. From Table 19 it is apparent that even as late as March, 1936 while the value of Government securities was 28 per cent. above the pre-depression level, the value of non-speculative industrial shares had risen by some 20 per cent. but the value of speculative shares was still 8 per cent. below the pre-depression level. It is therefore evident that public works programme financed by loans was not too late even in March, 1936.

Other Factors.

Another condition for the success of such a programme was laid down by the Hon'ble Sir James Grigg in his budget speech on February 28, 1936 in the following words:—"It is contrary to strict financial orthodoxy to borrow for expenditure which does not yield a cash return eqivalent to the interest and sinking fund charges on the amount borrowed." The question is, when is this cash return to be expected? Is it to be expected as soon as the first clod of earth is turned for building a road or making a canal? Or, are we to consider the return averaged for the period of the currency of the loan? In any case, it is necessary to enlarge our views and consider returns other than immediate cash returns. We should remember the following wise words in the *Future of Monetary Policy* by Royal Institute of International Affairs (p. 85): "We may consider capital works not profitable in the narrower sense, but profitable to the community at large. A new road or a new bridge may more than pay for itself; for example, if it creates new rateable values and increases the value of neighbouring property or if it increases the profits and taxable capacity of those who make use of it. If a bridge saves a long detour, the transport cost of those who use it may be substantially reduced. Similar considerations would apply to a new water supply system or any facility of a similar sort." In India there are many avenues for such useful expenditure. For instance, wells in rural areas for supplying drinking water may not yield any immediate cash return but may be otherwise useful in combating preventible diseases and increasing economic efficiency and welfare.

Nor is the criterion for testing the economic justification of any item of public works vague and otherwise unsatisfactory in India. For a famime, which is merely another name for agricultural unemployment on a large scale, nature having declared a lock-out, we have an elaborate machinery for financing and carrying on enterprises, which have justified themselves irrespective of their immediate cash returns. The Royal Commission on Labour in India similarly recommended an energetic programme of slum clearance, and the construction of roads and drainage during industrial unemployment, which must promote lasting benefit to the community.

The Pace

It now remains for us to consider the pace of the public works expenditure. It has already been pointed out that any lavish scale on the American model is beyond the capacity of India. On the other hand Mr. Gayer in his *Monetary Policy and Economic Stabilisation* has suggested flexible public works for economic stabilisation, "operations being timed to fluctuate inversely with general cyclical movements of business, that is, retarded in times of prosperity and speeded up in times of industrial stagnation." This will prevent competition of public works with private enterprises. But there is such a crying need in India for ameliorative public works relating to sanitation, public health and water supply that such alternate expansion and contraction of public works may not always be desirable. For example, the construction of hospitals or irrigation canals begun during a slump, should not be stopped simply because a boom in trade has arisen.

On the other hand, there is something to be said in favour of carrying on public works only during the off-season when there is no demand for agricultural labour in rural areas. It is evident that when roads or bridges or canals are constructed on such a heavy scale that there is a shortage of agricultural labour or a rise in their wages, the production of crops such as jute, so far as it is carried on with hired labour, is likely to become costly while the price of such crops which depends mainly on foreign demand, is not likely to increase. The position of cultivators of these crops is therefore likely to change for the worse, as a result of public works programme carried on during the agricultural season.

Special Factors in India

There are similarly other points which merit special consideration in India. In the first place, we have no unemployment insurance and can therefore have no relief to our finance through increased employment whereas other countries while spending more for increased employment saves also more through diminished unemployment. There is also the difficulty inherent in public works programme in all countries which is specially acute in India. For, if such a programme is to be successful, it must result in a rise of prices and in a corresponding fall in the exchange unless other countries raise their price levels simultaneously and to the same extent. It is idle to expect this in the present stage of international co-operation. We have therefore to sacrifice stability of exchange for the sake of increasing prices. This is exceedingly difficult for a debtor country like India with large external obligations. But it should not be impossible to provide more employment and additional purchasing power in the hands of consumers without unduly affecting the price level and the exchange rate. During famines, the exchange becomes unfavourable not because of public works but because the export surplus is scanty, or because instead of a favourable balance of trade, we have an adverse balance.

To sum up, it seems that Government have been unduly cautious with regard to public works expenditure. Some part at least of the hardship and suffering of the depression could have been mitigated by expenditure on beneficial projects, even though they could not be immediately paying propositions.

Non Possumus Attitude of Government.

From the above description it is clear that Government of India's policy whether during the depression or the recovery was one of *non possumus*. Not that, nothing was done, but everything was done passively. The public works expenditure came as a sequel to earthquakes in Beluchistan and Bihar. The regime of cheap money was inaugurated because of low rates of interest in the London money market. The reduction in the salary of public officials was called for by a similar reduction in other countries. One looks in vain for a well thought out independent way out of the trade depression. There were other measures such as restriction of acreage under jute, of output of tea and of rubber. The last two are international measures, whereas the first is halting and half-hearted. Restriction of jute, if it is to be successful, calls for the necessary machinery and also a surplus out of which the cultivator of jute has to be remunerated for the loss incurred by him, either because he keeps his jute land fallow or because he does not get as much from substitute crops as he used to get from jute.

In this, as in other cases, one notices in vain for a well thought-out policy for relieving the depression either by monetary or by non-monetary measures. It is probably true that our monetary machinery is so imperfectly developed that it is idle to expect any beneficial results through its operation. But can the same be said about non-monetary measures? In any case, it is futile to analyse the course of events during the depression unless we draw useful conclusions therefrom for removing the admitted defects in our economic organisation. The need for a better balance between agriculture and manufacture is clearly noticeable. A more intimate contact between organised money markets in the chief financial centres and the indigenous system embracing the rest of India is urgently called for. A greater flexibility and elasticity must also be imparted to our economic system. How these may be achieved in actual practice have been examined by one of us elsewhere[*], for the issues involved are more economic than statistical.

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References.

1. "The Ratio Question" in *Sankhyā*, Vol. 3, Part 2, to which the present paper is a sequel.

2. *Sankhyā*, Vol. 1, Part 1, p. 12. We have here considered the reciprocals of their figures. Thus $90 = 100 \times 100/111$.

3. *Sankhyā*, Vol. 1, Part 1, p. 14.

4. The rules of September, 1924, prescribing the rate 6 per cent. for the first Rs. 4 crores of emergency currency and 7 per cent. for the remaining Rs. 8 crores had evidently been changed in the mean time.

5. It will be seen that a departure has been made from Ohlin for facility of discussion.

6. "Currency Events during the Depression" by J. C. Sinha in *Calcutta Review* for January and February, 1938.

7. Article on Sugar in *Economist*, London, June 15, 1935, p. 1352.

8. Lecture X: *Sir Kikabhai Premchand Readership Lectures* before the Delhi University in February, 1937.

DISCUSSION ON DRS. J. C. SINHA AND H. SINHA'S PAPER

A number of questions were put by Prof. Benoy K. Sarkar, Dr. N. Sanyal, Prof. B. P. Adarkar and Dr. R. B. Gupta which were replied to by Dr. J. C. Sinha at the end of debate.

The President remarked—Drs. J. and H. Sinha's paper "India Through the Depression" is an interesting study of the genesis, continuance and effects of economic depression. The mass of data are the result of quite patient compilation and these have added value to the study. All of us will admit that such a study is very useful, for if we can rightly appraise the factors which brought about the depression and intensified its effects, we would be able to organize our economy in such a way that in the event of such a depression in future, we would experience less sufferings. Besides, the facts of the depression are likely to indicate in what directions we are to undertake our reconstruction work. On the question of public works and as a means of giving an initial push to the impending recovery, the paper has indeed made interesting suggestions. I agree with the learned writers that timing in the undertaking of public works is a very important factor. Unless the work is begun at the psychological hour, no substantial results are likely to forthcome. In the case of India, the policy of the Government with regard to public works has not been of course so timed and undertaken with the definite purpose of combating depression. Much of their criticism is not therefore probably unreasonable. But there are certain special factors in India which they have also admitted. India cannot undertake such a large scale public works programme as the American Government are doing, for India does not possess such vast resources. I do not, however, think that there is any serious cause for apprehending the danger referred to in the paper that the impetus given to prices by large scale public works might lead to complications in exchange and currency operations. India is a vast country and its money market is yet imperfectly organized, so there would be no risk of the complications apprehended unless the public works expenditure is undertaken on an extra-ordinarily extensive scale of which however, the opportunities in this country are obviously limited.

India as an agricultural country has been one of the worst sufferers during the depression which revealed the need for diversification in our economic structure. India must have to maintain an extensive foreign trade in order to pay off her foreign obligations, which means that India's economic structure will have, of necessity, many vulnerable points. It is for this reason that continuous and statistical study of economic trends is a safeguard against economic depressions in future.

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