

Assuming, for the moment, the criterion laid down by the Commission to be correct, can it be said from the data given above that the rupee has maintained its gold value? It would be over-confident if not rash to say that the system, even from the narrow point of view of the Commission, has been an unquestioned success.

Between June, 1893, and January, 1917, the rupee was rated to gold at the rate of 1 rupee equal to 7.53344 troy grs. of fine gold. At that rate the sovereign should be equal to 15 rupees, the mint price of gold should be Rs. 23-14-4 per tola (i.e. 180 grs.) of bar gold 100 touch, and the exchange on London should be 1s. 4d., and should have varied within 1s. 4.125 d., the import point, and 1s. 3.906 d., the export point, for gold.

Taking a general survey of the stability of the rupee with regard to its value in terms of gold, it will be noticed that from the date of the Mint closure up to 1898 the rupee was far below par. The depreciation of the rupee, measured in terms of exchange or price of gold or sovereign, ranged somewhere between 25 to 30 per cent. So great was the depreciation that it redoubled the difficulties confronting the Government when the rupee was not fixed to gold. The financing the Home Treasury by the usual means of selling Council Bills became well-nigh impossible.* The Secretary of State found himself in an embarrassing position. Offering to sell below par involved the obloquy of having led the way to the defeat of the policy of stabilizing exchange. Refusing to sell at market rates involved the danger of a dry Treasury. The Government of India suggested that the Secretary should lay down a minimum rate for or a maximum amount of the bills that he put upon the market. The Secretary of State agreed to neither, but consented to reduce his drawings so as not to unduly depress the exchange rate. The drawings of the secretary of State during the first fiscal year since the Mint closure have been the smallest on record :—

TABLE XXIX
Council Drawings

Date of drawing			Amount of Drawings £ 1,000 omitted	Rate at which drawn (Pence per Rupee)
1893.	June	...	2,478	15.039
	July	...	25	15.974
	August	...	78	15.243
	September	...	7	15.350
	October	...	5	15.334
	November	...	617	15.251
	December	...	14	15.242
	January	...	98	14.408
1894.	February	...	1,023	13.787
	March	...	1,915	13.870
	April	...	1,368	13.626

* See Commons Paper 7 of 1894, East India (Currency and Sale of Bills).

The curtailment of drawings to save the rate of exchange from being lowered was not an unmitigated good, for it imposed the necessity of a resort to the by no means inexpensive method of sterling borrowings to finance the Home Treasury.* The remittances by drawings fell short of the net disbursements of the Home Treasury in 1893-94 by £6,588,000, which deficit was met by permanent sterling borrowings to the extent of £7,430,000, the interest on which added to the already overheavy burden of the gold payments. Rather than incur such a penalty the Secretary of State gave up the attempt to dominate the market and preferred to follow it. But this let-go policy was not without its cost. The drop in the exchange below 1s. 4d. added to the burden of remittances to the Home Treasury, and also compelled the Government to grant exchange compensation allowance to its European officers, civil and military—an aid which it had so far withheld. The cost to the Government involved by the fall of the rupee below par was quite a considerable sum.†

TABLE XXX
Cost of the Fall of the Rupee

Years	Loss on Council Bills being sold below par	Loss by Exchange Compensation Allowance	Loss by Increase of Pay of British Troops	Total on each Account in each Year	Total on all Counts for three Years	
					In Rupees	In Sterling at 1s. 4d.
1894-95 ...	3,74,15,000	78,02,000	37,84,000	4,90,01,000	11,91,86,000	£ 7,945,733
1895-96 ...	3,05,91,000	87,18,000	49,38,000	4,42,47,000		
1896-97 ...	1,66,48,000	48,95,000	44,25,000	2,59,38,000		

In the midst of such a situation it is no wonder if the faith of the Government in the ultimate stability of the rupee had given way, for we find that in October, 1896, the Financial Member of the Council had personally come to the conclusion that it would be better in the interest of stability to substitute 15d. for 16d. as the par of exchange between the rupee and gold.‡ But the suggestion was dropped as the rupee showed signs of reaching the gold par, which it did in January, 1898, after a period of full five years of depreciation from the established par.

* Evidence of Sir H. Waterfield before the Fowler Committee, Q. 4,332-39.

† Evidence of Hon. A. Arthur before the Fowler Committee. Q. 1,806-7.

‡ Cf. Shirras, *Indian Finance and Banking*, p. 168.

Between January, 1898, and January, 1917, twice did the rupee fall below its gold par. The year 1907-8 records the second occasion when the parity of the rupee under the exchange standard broke down. The actual rates of exchange prevailing in the market were as follows:—

TABLE XXXI

RATES OF EXCHANGE, LONDON ON INDIA (FROM "THE TIMES")

Par R. = 1s. 4d.					
Date		On Calcutta		On Bombay	
		Highest	Lowest	Highest	Lowest
1907.	September ...	1 $4\frac{1}{32}$	1 $3\frac{31}{32}$	1 $4\frac{1}{32}$	1 $3\frac{31}{32}$
	October ...	1 $4\frac{1}{32}$	1 $3\frac{31}{32}$	1 $4\frac{1}{32}$	1 $3\frac{31}{32}$
	November ...	1 4	1 $3\frac{25}{32}$	1 $3\frac{31}{32}$	1 $3\frac{23}{32}$
	December ...	1 $3\frac{15}{16}$	1 $3\frac{27}{32}$	1 $3\frac{15}{16}$	1 $3\frac{27}{32}$
1908.	January ...	1 $3\frac{15}{16}$	1 $3\frac{29}{32}$	1 $3\frac{15}{16}$	1 $3\frac{7}{8}$
	February ...	1 $3\frac{31}{32}$	1 $3\frac{7}{8}$	1 $3\frac{31}{32}$	1 $3\frac{7}{8}$
	March ...	1 $3\frac{29}{32}$	1 $3\frac{27}{32}$	1 $3\frac{29}{32}$	1 $3\frac{27}{32}$
	April ...	1 $3\frac{7}{8}$	1 $3\frac{27}{32}$	1 $3\frac{27}{32}$	1 $3\frac{27}{32}$
	May ...	1 $3\frac{7}{8}$	1 $3\frac{27}{32}$	1 $3\frac{15}{16}$	1 $3\frac{27}{32}$
	June ...	1 $3\frac{29}{32}$	1 $3\frac{27}{32}$	1 $3\frac{7}{8}$	1 $3\frac{27}{32}$
	July ...	1 $3\frac{7}{8}$	1 $3\frac{27}{32}$	1 $3\frac{7}{8}$	1 $3\frac{27}{32}$
	August ...	1 $3\frac{29}{32}$	1 $3\frac{27}{32}$	1 $3\frac{29}{32}$	1 $3\frac{27}{32}$
	September ...	1 $3\frac{31}{32}$	1 $3\frac{29}{32}$	1 $3\frac{31}{32}$	1 $3\frac{7}{8}$
	October ...	1 $3\frac{15}{16}$	1 $3\frac{7}{8}$	1 $3\frac{29}{32}$	1 $3\frac{15}{16}$
	November ...	1 $3\frac{29}{32}$	1 $3\frac{7}{8}$	1 $3\frac{7}{8}$	1 $3\frac{7}{8}$
	December ...	1 $3\frac{15}{16}$	1 $3\frac{29}{32}$	1 $3\frac{31}{32}$	1 $3\frac{7}{8}$

After a crisis lasting over a year the rupee recovered to its old gold par and remained fixed at it, though by no means firmly, for another seven years, only to suffer another fall from its parity during the year 1914-15 (*see* table, p. XXXII).

After 1916 the stability of the exchange standard was threatened by a danger arising from quite unsuspected quarters. The Indian exchange standard was based upon the view that the gold value of silver was bound to fall or at least not likely to rise to a level at which the intrinsic value of the rupee became, higher than its nominal value. The price of silver at which the intrinsic value of the rupee equalled its nominal value was 43d. per ounce. So long as the intrinsic value of the rupee remained

TABLE XXXII
RATES OF EXCHANGE, LONDON ON CALCUTTA (FROM THE
NATIONAL BANK OF INDIA)

Month	1914		1915	
	Highest	Lowest	Highest	Lowest
January ...	...	...	1 $3^{15}/_{16}$	1 $3^{15}/_{16}$
February ...	...	...	1 $4^{1}/_{32}$	1 $3^{39}/_{32}$
March ...	...	...	1 4	1 $3^{15}/_{16}$
April ...	...	...	1 $3^{15}/_{16}$	1 $3^{29}/_{32}$
May ...	1 $4\frac{1}{4}$	1 $3^{15}/_{16}$	1 $3^{15}/_{16}$	1 $3^7/_8$
June ...	1 $3^{31}/_{32}$	1 $3^{15}/_{16}$	1 $3^7/_8$	1 $3^{27}/_{32}$
July ...	1 $3^{31}/_{32}$	1 $3^{13}/_{16}$	1 $3^{22}/_{32}$	1 $3^{23}/_{32}$
August ...	1 $3^7/_8$	1 $3^{13}/_{16}$	1 $3^{15}/_{16}$	1 $3^{27}/_{32}$
September ...	1 $3^{15}/_{16}$	1 $3^{13}/_{16}$	1 4	1 $3^{15}/_{16}$
October ...	1 $3^{15}/_{16}$	1 $3^{15}/_{16}$	...	...
November ...	1 $3^{15}/_{16}$	1 $3^{15}/_{16}$	...	...
December ...	1 $3^{15}/_{16}$	1 $3^{15}/_{16}$	...	...

below its nominal value, i.e. the price of silver did not rise above 43d., there was no danger of the rupee circulating as currency. Once the price of silver rose above that point the danger of the rupee passing from currency to the melting-pot was imminent. Now, with the exception of a brief period from September, 1904, to December, 1907, the gold price of silver had since 1872 showed a marked tendency to fall. The decline in its price was so continuous and so steady as to create the general impression that the low price had come to stay. Indeed, so firm was the impression that the framers of the exchange standard had never taken into account the contingency of a rise in the price of silver above 43d. So little was it anticipated, that the system was not criticized on this ground by any of the witnesses who deposed before the successive Committees and Commission on Indian currency. But the unexpected may happen, and unfortunately did happen after 1916, and happened suddenly. On February 10, 1914, the cash price in London of silver per ounce of standard fineness was 26 $5/8$ d. It fell to 22 $11/16$ d. on February 10, 1915, and though it jumped to 27d. on the same date in 1916, yet it was below the rupee melting-point. After the last-mentioned date its rise was meteoric. On February 9, 1917, it

rose to 37 5/8 d.; on February 8, 1918, to 43d.; and on the same date in 1919 to 48 7/16d., thereby quite overshooting the rupee melting-point. But the price of silver broke all record when on February 11, 1920, it reached the colossal figure of 89 1/2d. per standard ounce.

The rise in the intrinsic value of the rupee above the nominal value at once raised a problem as to how the rupee could be preserved in circulation. Two ways seemed open for the solution of the problem. One was to scale down the fineness of the rupee, and the other to raise its gold parity. All other countries which had been confronted by a similar problem adopted the former method of dealing with their silver coinage—a method which was successfully tried in the Philippines and the Straits Settlements and Mexico in 1904-7, when a rise in those years in the price of silver had created a similar problem in those countries.* The Secretary of State for India adopted the second course of action and kept on altering the rupee par with every rise in the price of silver. The alterations of the rupee par following upon the variations in the price of silver are given below:—

TABLE XXXIII

Date of Alteration of the Rupee Par.					Pitch of the Par.	
					s.	d.
January 3, 1917	...	...	...	...	1	4½
August 28, 1917	...	...	...	...	1	5
April 12, 1918	...	...	...	...	1	6
May 13, 1919	...	...	...	...	1	8
August 12, 1919	...	...	...	...	1	10
September 15, 1919	...	...	...	...	2	0
November 22, 1919	...	...	...	...	2	2
December 12, 1919	...	...	...	...	2	4

After having played with the rupee par, for two years, in this manner, as though such alterations involved no social consequences, the Secretary of State, on May 30, 1919, appointed a new Currency Committee under the chairmanship of Babington Smith, to recommend measures “to ensure a stable gold exchange standard.” The majority of the Committee, after half a year of cogitation, reported to the effect† that

* Cf. E. W. Kemmerer, *Modern Currency Reforms*, 1916, pp. 349-354, 445-49, and 535-47.

† See Report, P.P.Cd. 527 of 1920, par. 59.

- “(i) The object should be to restore stability to the rupee, and to re-establish the automatic working of the currency system at as early a date as practicable.
- “(ii) The stable relation to be established should be with gold and not with sterling.
- “(iii) The gold equivalent of the rupee should be sufficiently high to give assurance, so far as is practicable, that the rupee, while retaining its present weight and fineness, will remain a token coin, or in other words, that the bullion value of the silver it contains will not exceed its exchange value.

“After most careful consideration” (the Committee said) “we are unanimous (with the exception of one of our members who signs a separate report) in recommending that the stable relation to be established between the rupee and gold should be at the rate of one rupee to 11.30016 grs. of fine gold both for foreign exchange and internal circulation.” i.e. the rupee to be equal to 2s. (gold).

The minority report, which harped on the old cry of a stimulus of low exchange and penalty of high exchange, stood out for the maintenance of the old rate of 15 rupees to the gold sovereign or 113.0016 grs. troy of pure gold, and recommended the issue of a two-rupee silver coin of reduced fineness compared with the old rupee, so long as the price of silver in New York was over 92 cents.*

By the announcements of February 2, 1920, the recommendations of the majority of the Committee were accepted by the Secretary of State and also by the Government of India, which abandoned the old parity of 7.53344 grs. per rupee for the new parity of 11.30016 grs. troy. Now, has the rupee maintained its new parity with gold?

In the matter of ascertaining this fact the exchange quotation on London is no guide, for the value of the rupee was 2s. *gold* and not 2s. sterling. Had gold and sterling been identical the case would have been otherwise. But during the war, owing to the issue of virtually inconvertible money, the pound sterling had depreciated in terms of gold. We must therefore take as our standard a currency which had kept its par with gold. Such a currency was the American dollar, and the exchange quotation

* Report, p. 41.

on New York is therefore more directly helpful in measuring the gold value of the rupee than is the sterling quotation on London. We can also employ the actual rupee-sterling quotation as a measure by comparing it with the amount of sterling the rupee should have purchased, as an equivalent of 11.30016 grs. of fine gold, when corrected by the prevailing cross-rate between New York and London.*

Compared with the par of exchange, the actual exchange, either on New York or on London, indicates a fall of the rupee which is simply staggering (*See* table XXXIV).

Consider, along with the external gold value of the rupee, its internal value in terms of sovereigns and bar gold (*see* table XXXV).

The tables need no comment. The rupee is not only far away from 2s. (gold), but is not even 1s. 4d. (sterling).

Do not the facts furnish an incontrovertible proof of the futility of the exchange standard? How can a system which fails to maintain its value in terms of gold, which it is supposed to do, be regarded as a sound system of currency? There must be somewhere some weakness in the mechanism of a system which is liable to such occasional breakdowns. The rupee fell or rather was below par in 1893, and did not reach its parity to any real degree of firmness until 1900. After an interval of seven years the rupee again falls below par in 1907. The year 1914 witnesses another fall of the rupee. A meteoric rise since 1917, and again a fall after 1920. This curious phenomenon naturally raises the question: Why did the rupee fail to maintain its gold parity on these occasions? A proper reply to this question will reveal wherein lies the weakness of the exchange standard.

* The formula for this computation is as follows:—

$$\begin{array}{rcl}
 \text{if } x \text{ pence} & = & 1 \text{ rupee} \\
 & = & 11.30016 \text{ grs. fine gold,} \\
 23.22 \text{ grs. fine gold} & = & 1 \text{ dollar} \\
 D \text{ dollars} & = & 1 \text{ pound sterling} \\
 & = & 240 \text{ pence.} \\
 & & \frac{11.30016 \times 240}{23.22 \times D} = \frac{11,680}{D} \text{ pence.} \\
 \text{Then } x & &
 \end{array}$$

Cf. Rushforth, F. V., *The Indian Exchange Problem*, 1921, p. 9.

TABLE XXXIV
ACTUAL GOLD VALUE OF THE RUPEE AND THE NEW PARITY IN TERMS OF FOREIGN EXCHANGES

As in the Middle of— the Month of—	New York on Bombay in cents.				Bombay on London in s. d.														
	1920.		1921.		1922.		1920.		1921.		1922.								
	Par Rate.	Actual Rate.	Par Rate.	Actual Rate.	Par Rate.	Actual Rate.	Par Rate.	Actual Rate.	Par Rate.	Actual Rate.	Par Rate.	Actual Rate.							
January .	0.4866	0.4400	0.4866	0.2925	0.4866	0.2800	2	7½	2	3⁵⁄₈	2	7⁵⁄₁₆	1	5⁵⁄₈	2	3⁵⁄₈	1	3 1⁄₁₆	3⁷⁄₁₆
February .	0.4866	0.4850	0.4866	0.2800	0.4866	0.2845	2	10½	2	9 1⁄₈	2	5 1⁄₃	1	4 1⁄₈	2	27⁄₃₂	1	3⁹⁄₁₆	3⁹⁄₁₆
March . .	0.4866	0.4850	0.4866	0.2625	0.4866	0.2787	2	7 2⁄₃	2	5 3⁄₄	2	5 3⁄₄	1	3 1⁄₄	2	22 9⁄₃₂	1	3 5⁄₁₆	3 5⁄₁₆
April . .	0.4866	0.4775	0.4866	0.2625	0.4866	0.2785	2	5 7⁄₁₆	2	3 3⁄₄	2	5 1⁄₁₆	1	3 5⁄₈	2	2 ½	1	3 1⁄₈	3 1⁄₈
May . . .	0.4866	0.4325	0.4866	0.2675	0.4866	0.2930	2	6 1⁄₃	2	2 1⁄₈	2	5 7⁄₃₂	1	3 1⁄₂	2	2 ¼	1	3 9⁄₁₆	3 9⁄₁₆
June . .	0.4866	0.4125	0.4866	0.2525	0.4866	0.2900	2	5 3⁄₄	2	10 3⁄₁₆	2	6 2⁄₃	1	3 3⁄₈	2	2 1⁄₈	1	3 9⁄₃₂	3 9⁄₃₂
July . . .	0.4866	0.3900	0.4866	0.2400	0.4866	0.2900	2	5 3⁄₄	2	8 1⁄₁₆	2	8 9⁄₃₂	1	3 ¾	2	2 5⁄₈	1	3 5⁄₈	3 5⁄₈
August . .	0.4866	0.3650	0.4866	0.2475	0.4866	0.2916	2	8 9⁄₃₂	2	10 1⁄₁₆	2	7 2⁄₃	1	4 3⁄₄	2	2 9⁄₁₆	1	3 9⁄₃₂	3 9⁄₃₂
September .	0.4868	0.3325	0.4866	0.2675	0.4866	0.2875	2	9 9⁄₁₆	2	10 1⁄₁₆	2	7 1⁄₃	1	5 1⁄₆	2	2 9⁄₁₆	1	3 9⁄₁₆	3 9⁄₁₆
October .	0.4866	0.3025	0.4866	0.2825	0.4866	—	2	9 2⁄₃	1	7 3⁄₄	2	6 1⁄₃₂	1	5 7⁄₁₆	—	—	—	—	—
November .	0.4866	0.3025	0.4866	0.2695	0.4866	—	2	10 9⁄₁₆	1	7 1⁄₈	2	5 1⁄₃	1	4 1⁄₈	—	—	—	—	—
December .	0.4866	0.2650	0.4866	0.2775	0.4866	—	2	9 9⁄₁₆	1	5 1⁄₄	2	4	1	3 7⁄₈	—	—	—	—	—

TABLE XXXV

GOLD VALUE OF THE RUPEE AND THE NEW PARITY IN TERMS OF
THE PRICE OF SOVEREIGNS AND GOLD

Months	1920		1921		1922	
	Price of British Sovereigns Par 10 Rs. = 1 Sov.	Price of Bar Gold per Tola 100 touch Par Rs. 15-14-10 = 1 Tola	Price of British Sovereigns Par 10 Rs. = 1 Sov.	Price of Bar Gold per Tola 100 Touch Par Rs. 15-14-10 =1 Tola	Price of British Sovereigns Par 10 Rs. = 1 Sov.	Price of Bar Gold per Tola 100 touch Par Rs. 15-14-10 =1 Tola
	Rs. A. P.	Rs. A. P.	Rs. A. p.	Rs. A. P.	Rs. A. p.	
January ...	Nominal	28 0 0	Nominal	Official Figures not yet published	17 14 0	Official Figures not yet published
February ...	"	22 0 0	"		17 14 0	
March ...	"	24 0 0	"		17 14 0	
April ...	"	24 8 0	18 12 0		...	
May ...	"	22 12 0	19 0 0		...	
June ...	"	22 4 0	19 12 0		...	
July ...	"	23 0 0	20 9 0		...	
August ...	"	21 8 0	20 9 0		...	
September ...	"	25 4 0	19 2 0		...	
October ...	"	27 6 0	18 14 0		...	
November ...	"	28 10 0	18 8 0		...	
December ...	"	27 12 0	18 6 0		...	

The only scientific explanation sufficient to account for the fall of the rupee would be to say that the rupee had lost its general purchasing power. It is an established proposition that a currency or unit of account will be valued in terms of another currency or unit of account for what it is worth, i.e. for the goods which it will buy. To take a concrete example, Englishmen and others value Indian rupees inasmuch and in so far as those rupees will buy Indian goods. On the other hand, Indians value English pounds (and other units of account, for that matter) inasmuch and in so far as those pounds will buy English goods. If rupees in India rise in purchasing power (i.e. if the Indian prices level falls) while pounds fall in purchasing power or remain stationery or rise less rapidly (i.e. if the English price level rises relative to the Indian price-level), fewer rupees would be worth as much as pound, i.e. the exchange value of the rupee in terms of the pound will rise. On the other hand, if rupees in India fall in purchasing power (i.e. if the Indian price-level rises) while pounds rise in purchasing power or remain stationary or fall less rapidly (i.e. if the English price-level falls relative to the Indian price-level), it will take more rupees to be worth as much as a pound, i.e. the exchange value of the rupee in terms of the pound will fall.

On the basis of this theory the real explanation for a fall in the Indian exchange should be sought for in the movement of the Indian price-level. Lest there be any doubt regarding the validity of the proposition let us take each of the occasions of the fall and find out whether or not the fall was coincident with the fall in the purchasing power of the rupee.*

TABLE XXXVI
PERIOD I, 1890-99

Years	Currency in Rupees Circulation + Notes		Index Number of prices in India 1890-94=100	Index Number of prices in England 1890-94 = 100
	Amount in Crores of Rs.	Index Number 1890-94 = 100		
(1)	(2)	(3)	(4)	(5)
1890 ...	120	92	113	104
1891 ...	131	100	106	105
1892 ...	141	108	100	99
1893 ...	132	101	96	99
1894 ...	129	99	85	93
1895 ...	132	101	89	90
1896 ...	127	97	99	89
1897 ...	125	96	120	90
1898 ...	122	93	109	91
1899 ...	131	100	108	94

TABLE XXXVII
PERIOD II, 1900-1908

Years	Currency in Rupees Circulation + Notes		Index Number of prices in India 1890-94 = 100	Index Number of prices in England 1890-94=100
	Amount in Crores of Rs.	Index Number 1890-94 = 100		
(1)	(2)	(3)	(4)	(5)
1900 ...	134	103	126	103
1901 ...	150	115	120	98
1902 ...	143	109	115	96
1903 ...	147	113	111	97
1904 ...	152	116	110	100
1905 ...	164	126	120	100
1906 ...	185	142	134	107
1907 ...	190	145	138	113
1908 ...	181	139	147	104

* The figures for the following tables are taken, unless otherwise stated, from the Report of the Price Inquiry Committee, Calcutta, 1914.

TABLE XXXVIII
PERIOD III, 1909-14*

Years	Currency in Rupees		Circulation + Notes	Index Number of prices in India 1890-94 = 100	Index Number of prices in England 1890-94 = 100
	Amount in Crores of Rs.		Index Number 1890-94 = 100		
(1)	(2)		(3)	(4)	(5)
1909 ...	198		152	138	105
1910 ...	199		152	137	110
1911 ...	209		160	139	114
1912 ...	214		164	147	117
1913 ...	238		182	152	124
1914 ...	237		182	156	124

* Figures for 1913 and 1914 are those of Mr. Shirras given in the Appendix to his Indian Finance and banking. Figures in column 3 are calculated from his figures.

TABLE XXXIX
PERIOD IV, 1915-1921*

Years	Currency in Rupees		Circulation + Notes	Index Number of prices in India 1913=100	Index Number of prices in England 1913=100
	Amount in Crores of Rs.		Index Number 1913 = 100		
(1)	(2)		(3)	(4)	(5)
1915 ...	266		104	112	127.1
1916 ...	297		116	125	159.5
1917 ...	338		132	142	206.1
1918 ...	407		155	178	226.5
1919 ...	463		180	200	241.9
1920 ...	411		160	209	295.3
1921 ...	393		114	183	182.4

* Index numbers of prices are taken from the League of Nations *Memorandum on Currency*, 1913-1921, 2nd Ed. (1922). Table VIII. Figures for Circulation are taken from H. S. Jevon's. *The Future of Exchange and Indian Currency*, 1922, p. 44, Index numbers of circulation are calculated.

Now do these tables confirm, or do they not, the argument that the fall in the gold value of the rupee is coincident with a fall in the general purchasing power of the rupee? What was the general purchasing power of the rupee when a fall in its gold value occurred? If we scrutinize the facts given in the above tables in the light of this query there can be no doubt as to the validity of this argument. From the tables it will be seen that the gold value of the rupee improved between 1893-1898 because there was a steady, if not unbroken, improvement in its general purchasing power. Again, on the subsequent occasions when the exchange fell, as it did in 1908, 1914, and 1920, it will be observed that those were the years which marked the peaks in the rising price-level in India; in other words, those were the years in which there was the greatest depreciation in the general purchasing power of the rupee. A further proof, if it be needed, of the argument that the exchange value of the rupee must ultimately be governed by its general purchasing power is afforded by the movements of the rupee-sterling exchange since 1920 (*see* Table XL).

But, although such is the theoretical view confirmed by statistical evidence of the causes which bring about these periodic falls in the gold value of the rupee (otherwise spoken of as the fall of exchange), it is not shared by the Government of India. The official explanation is that a fall in the gold value of the rupee is due to an adverse balance of trade. Such is also the view of eminent supporters of the exchange standard like Mr. Keynes* and Mr. Shirras.†

No doubt, some such line of reasoning is responsible for the currency fiasco of 1920. How is it possible otherwise to explain the policy of raising the exchange value of the rupee? Both the Smith Committee on Indian Currency‡ and the Government of India§ were aware of the fact that the rupee was heavily depreciated, as evidenced by the rise of prices in India.

*Op. cit., p. 16.

† op. cit, p. 4.

‡Cf. Report, pp. 19-21.

§ Memorandum from the Government regarding Indian price movements. App. XXVIII to the Report of the Currency Committee of 1919.

TABLE XL

Date			Rupee Prices in India. 1913=100	Sterling Price in England (<i>Statist</i>). 1913=100	Average Rate of Exchange London on Calcutta	Rupee- Sterling Purchasing Power Parity . $16dx \frac{\text{Col.3}}{\text{Col.2}}$
(1)			(2)	(3)	(4)	(5)
					d.	d.
1920.	January	...	202	289	27.81	22.89
	February	...	203	306	32.05	24.12
	March	...	194	301	29.66	25.40
	April	...	193	300	27.88	25.95
	May	...	190	298	25.91	25.77
	June	...	192	293	23.63	25.08
	July	...	196	282	22.63	24.49
	August	...	193	263	22.75	24.70
	September	...	188	244	22.31	24.94
	October	...	188	232	19.88	24.00
	November	...	186	215	19.69	22.62
	December	...	179	209	17.44	21.81
1921.	January	...	169	200	17.66	21.96
	February	...	164	191	16.31	20.98
	March	...	162	183	15.53	20.40
	April	...	163	186	15.75	19.63
	May	...	170	182	15.44	17.98
	June	...	172	176	15.53	17.14
	July	...	171	163	15.38	17.40
	August	...	178	161	16.25	16.36
	September	...	178	157	17.22	15.82
	October	...	178	156	17.02	14.65
	November	...	173	161	16.25	14.89
	December	...	169	157	15.94	14.86
1922.	January	...	162	156	15.88	15.41
	February	...	159	156	15.59	16.70
	March	...	160	157	15.34	15.70
	April	...	160	159	15.19	15.90
	May	...	162	159	15.59	15.70
	June	...	169	160	15.63	15.14
	July	...	170	158	15.69	14.87
	August	...	166	153	15.66	14.74

Given this fact, any question of raising the gold value of the rupee to 2s. gold when the rupee had scarcely the power to purchase 1s. 4d. sterling was out of the question. The Committee indulged in loose talk about stabilizing the Indian exchange. But even from this standpoint the Committee's insistence on linking the rupee to gold must be regarded as little grotesque. Stable exchange, to use Prof. Marshall's language, is something like bringing the railway gauges of the world in unison with the main line. If that is what is expected from a stable exchange, then what was the use of linking the rupee to gold which had ceased to be the "main line"? What people wanted was a stable exchange in terms of the standard in which prices were measured. Linking to gold involved unlinking to sterling, and it is sterling which mattered and not gold. Given this importance of sterling over gold, was any policy of exchange stabilization called for? First of all it should have been grasped that such a policy could succeed only if it was possible to make sterling and rupee prices move in unison, for then alone could the ratio of interchange between them be the same. What control had the Government of India over the sterling? They might have so controlled the rupee as to produce the effect desired, but all that might have been frustrated by an adverse move in the sterling. The success of the policy of linking to sterling would have been highly problematical although highly desirable. But was it called for?

Now the problem of stabilization is primarily a problem of controlling abnormal deviations from the purchasing-power parity between two currencies. In the case of India there were no abnormal deviations from the rupee-sterling purchasing-power parity. On the other hand, the Indian exchange was moving in a more or less close correspondence with it. There was therefore no ground for originating any policy of exchange stabilization. But, supposing there were abnormal deviations and that, owing to some reasons known to it, the Committee believed that the exchange value of the rupee was not likely to return to the point justified by its general purchasing power, in that case the Committee should have fixed the exchange value well within the range of the purchasing power of the rupee. As it was, the value of the rupee fixed by the Committee the rupee never had. In giving a value to the rupee so much above

its purchasing-power parity, it is obvious the Committee originated a solution for the simple problem of stabilizing the rupee which involved the much bigger and quite a different problem of deflation or raising the absolute value of the rupee. How was the object to be attained? The Committee never considered that problem. And why? Was it because the price of silver had gone up? May be. But it is doubtful whether the Committee could have believed firmly that the value of silver was going to be permanently so high as to require a modification of the gold par. Anyone who cared to scrutinize the rise in the price of silver could have found that the rise was largely speculative and could not have been permanent.

TABLE XLI
PRICE OF SILVER IN STERLING (PENCE)*

Year	Highest	Lowest	Average	Range of Variation
1913	29 $\frac{3}{8}$	25 $\frac{15}{16}$	27 $\frac{9}{16}$	3 $\frac{7}{16}$
1914	27 $\frac{3}{4}$	22 $\frac{1}{8}$	25 $\frac{5}{16}$	5 $\frac{5}{8}$
1915	27 $\frac{1}{4}$	22 $\frac{5}{16}$	23 $\frac{11}{16}$	4 $\frac{15}{16}$
1916	37 $\frac{1}{8}$	26 $\frac{11}{16}$	31 $\frac{5}{16}$	10 $\frac{7}{16}$
1917	55	35 $\frac{11}{16}$	40 $\frac{7}{8}$	19 $\frac{11}{16}$
1918	49 $\frac{1}{2}$	42 $\frac{1}{2}$	47 $\frac{9}{16}$	7
1919	79 $\frac{1}{8}$	47 $\frac{3}{4}$	57 $\frac{1}{16}$	31 $\frac{3}{8}$
1920	89 $\frac{1}{2}$	38 $\frac{7}{8}$	61 $\frac{7}{16}$	50 $\frac{5}{8}$
1921	43 $\frac{3}{8}$	30 $\frac{5}{8}$	37	12 $\frac{3}{4}$

But supposing that the rise in the price of silver was not speculative, did it follow that the rupee was appreciated? The diagnosis of the Committee was an egregious blunder. With the facts laid before the Committee it is difficult to understand how anyone with a mere smattering of the knowledge of price movements could have concluded that because silver had appreciated the rupee had therefore appreciated. On the other hand, what had happened was that the rupee had depreciated in terms of general commodities, including gold and silver. Indeed, the appreciation of silver was a depreciation of the rupee. The following (Table XLII) is conclusive evidence of that fact:—

* From Kirkaldy's *British War Finance*, 1921, p. 35. Figures for 1921 are added from the Indian Paper Currency Report.

TABLE XLII
DEPRECIATION OF THE RUPEE

Date		Price of Bar Gold in India (Bombay) per Tola of 180 grs.		Price of Silver in India (Bombay) per 100 Tolas		Index Number for Prices in India 1913=100
		Rs.	A.	Rs.	A.	
1914	...	24	10	65	11	...
1915	...	24	14	61	2	112
1916	...	27	2	78	10	125
1917	...	27	11	94	10	142
1918	August ...	(July) 34	0	(May 16) 117	2	178
"	...			(Nov. 28) 82	10	...
"	...	30	0	...		...
"	Sept. ...	32	4	...		...
1919	March ...	32	0	113	0	200

Thus, the rise in the price of silver was a part of the general rise of prices of the depreciation of the rupee. The Committee desired to raise the gold value of the rupee to 10 rupees per sovereign when it cost twice that number of rupees to purchase a sovereign in the market. So marked was the depreciation of the rupee in terms of gold that a few months before the Committee submitted its report the *Statesman* (a Calcutta paper) wrote:—

“If you land in the country with a sovereign the Government will take it away from you and give you eleven rupees three annas in return. If you are in the country and happen to have a sovereign and take it to the currency office you will get fifteen rupees for it. On the other hand, if you take it to the bazar you will find purchasers at twenty-one rupees.”

These facts were admitted by the Finance Department of the Government of India to be substantially correct,* and yet in the face of them the Committee recommended the 2s. gold parity for the rupee. The Committee confused the rupee with the silver, and thus failed to distinguish the problem of retaining the rupee in circulation and raising its exchange value in terms of gold. The latter solution was applicable only if the *rupee* had appreciated. But as it was silver that had appreciated in terms

* Cf. the reply of the Hon. Mr. Howard to the question of the Hon. Mr. Sinha on September 23, 1919. *S.L.C.P.*, Vol. LVII, p. 417.

of the rupee, the only feasible solution was to have proposed the reduction of the fineness of the rupee. Had the Committee regarded silver as a commodity distinct from the rupee like any other commodity to be measured in terms of the rupee as a unit of account, probably it might have avoided committing the blunder which it did. But what is more than probable is that the Committee did not think that the general purchasing power of the rupee was a factor of any moment in the consideration of the matter it was asked to report upon. What was of prime importance in its eyes for the maintenance of the exchange value of the rupee was a favourable balance of trade, and that India had at the time the Committee drafted its Report. For the Committee, in the course of its general observations on the exchange standard, remarked :

“that the system had proved effectual in preventing the fall in the value of the rupee below 1s. 4d., and unless there should have been profound modifications in India’s position as an exporting country with a favourable trade balance, there was no reason to apprehend any breakdown in this respect.”*

Proceeding on this view of the question it was quite natural for the Committee to have argued that if a favourable balance of trade sustained 1s. gold exchange, why should a similar balance of trade not sustain 2s. gold exchange ?

Again, it is only on some such hypothesis that one can explain why the recommendations of the Committee were adopted at all when the necessity for their adoption had passed away. Even if the intrinsic value of the rupee exceeded its nominal value, there was no danger of a wholesale disappearance of the rupee from circulation in view of the enormous volume of rupees in India.† What would have taken place was not a wholesale melting of rupees, but a constant dribble of an irregular and illegal character leading to the contravention of the orders then issued by the Government of India against the melting or exportation of the rupee coin. At the time when the Committee reported (December, 1919) the price of silver was no doubt high, but it was certainly falling during 1920 when the Government

* Report, par. 33.

† Cf. evidence of Mr. Keynes before the Committee of 1919. Q. 2,665-68.

took action on the Report. Indeed, on August 31, 1920, when the Bill to alter the gold value of the rupee was introduced into the Council, gold was selling at 23¼ rupees to the tola, while if the sovereign was to be equal to 10 rupees, the market price of gold should have been Rs. 15-14-0 per tola, so that there was a difference of Rs. 7½ or 33 per cent. between the market ratio of gold to the rupee and the new mint ratio. Moreover, the price of silver had also gone down in the neighbourhood of 44d., so that there was no danger of the rupee being melted out of circulation.* But, notwithstanding such a disparity, the Government rushed to fix a higher gold parity for the rupee. The financial reason for this rash act was of course obvious. The impending constitutional changes were to bring about a complete separation between provincial and imperial finance in British India. Under the old system of finance it was open for the central Government to levy "benevolences" in the form of contributions on the Provincial Governments to meet such of its imperious wants as remained unsatisfied with the help of its own resources, apart from the lion's share it used to take at every settlement of the provincial finance. Under the new constitution it was to be deprived of this power. The Central Government was therefore in search of some resource to obtain relief without appearing to tax anybody in particular. A high exchange seemed to be just the happy means of doing it, for it was calculated to effect a great saving on the "home charges." But how was this high exchange to be maintained, supposing it was desirable to have a high exchange from the financial point of view ?† Not only had the price of silver gone down and the rupee shown evident marks of depreciation in terms of gold, but the balance of trade had also become adverse to India at the time when the government proceeded to take action on the Report of the Committee. But this enactment, so singular in its rashness, was none the less founded upon the hope that the balance of trade would become favourable in time and thus help to maintain the 2s. gold value of the rupee. That this is a correct

* Cf. the speech of the Hon. Mr. Tata on the Indian Coinage (Amendment) Bill, *S.L.C.P.*, Vol. LIX, p. 112.

† In the recent discussions on the Indian exchange it has been entirely overlooked that this was the underlying motive of raising the Indian exchange to 2s. gold. But it was laid bare by the Finance Member of the Council in his speech on March 10, 1920, in the course of the debate on the resolution *re* Reverse Councils, *S.L.C.P.*, Vol. LVIII, p. 1292.

interpretation of the Government's calculations is borne out by the following extract from the letter which it addressed to the Bengal Chamber of Commerce in explanation of the currency fiasco.* After speaking of the necessity for granting international credits to revive commerce, the letter goes on to say:—

“ But for the rest they [i.e. the Government of India] can now only rely on the natural course of events and the return of favourable export conditions, combined with the reduction of imports..... to strengthen the exchange. Experience has demonstrated that in the present condition of the world trade stability is at present unattainable, but the Government of India see no reason why the operation of natural conditions..... should not allow of the eventual fixation of exchange at the level advocated in the report of the Currency Committee.”

Which of the two views is correct ? Is it the low purchasing power of the rupee which is responsible for its fall, or is it due to an adverse balance of trade ? Now, it must at once be pointed out that an adverse balance of trade, as an explanation of the fall of exchange, is something new in Indian official literature. A fall of exchange was a common occurrence between 1873 and 1893, but no official ever offered the adverse balance of trade as an explanation. Again, can the doctrine of the adverse balance of trade furnish an ultimate explanation for the fall that occurred in 1907, 1914, and 1920? First of all, taking into consideration all the items visible and invisible, the balance-sheet of the trade of a country must balance. Indeed, the disquisitions attached to the Indian Paper Currency Reports wherein this doctrine of adverse balance as a cause of fall in exchange is usually to be found, never fail to insist that there is no such thing as a “drain” from India by showing item by item how the exports of India are paid for by the imports, even in those years in which the exchange has fallen. The queer thing is, the same Reports persist in speaking of an adverse balance of trade. Given the admission that all Indian exports are paid for, it is difficult to see what remains to speak of as a balance. Why should that part of trade liquidated by money be spoken of as a “balance” ? One might as well speak of a balance of

* The letter was published in the *Times of India*, November 20, 1920, p. 14, col. 6.

trade in terms of cutlery or any other commodity that enters into the trading operations of the country. The extent to which money enters into the trading transactions of two countries is governed by the same law of relative values as is the case with any other commodity. If more money goes out of a country than did previously, it simply means that relatively to other commodities it has become cheaper. But if there is such a thing as an adverse balance in the sense that commodity imports exceed commodity exports, then there arises the further question : Why do exports fall off and imports mount up ? In other words, given a normal equilibrium of trade, what causes an adverse balance of trade ? For this there is no official explanation. Indeed, the possibility of such a query is not even anticipated in the official literature. But the question is a fundamental one. An adverse balance of trade in the above sense is only another way of stating that the country has become a market which is good to sell in and bad to buy from. Now a market is good to sell in and bad to buy from when the level of prices ruling in that market is higher than the level of prices ruling outside. Therefore, if an adverse balance of trade is the cause of the fall of exchange, and if the adverse balance of trade is caused by internal prices being higher than external prices, then it follows that the fall of exchange is nothing but the currency's fall in purchasing power, which is the same thing as the rise of prices. The adverse balance of trade is an explanation a step short of the final explanation. Try to circumvent the issue as one may, it is impossible to escape the conclusion that the fall in the exchange value of the rupee is a resultant of the fall in the purchasing power of the rupee.

Now what is the cause of the fall in the purchasing power of the rupee ? In that confused, if not absurd, document, the Report of Price Inquiry Committee,* one cause of the rise of prices in India was assigned, among others,† to the decline in supplies relatively to population. In view of the more or less generally accepted theory of quantity of a currency as the chief determinant of its value, the line of reasoning adopted by the

* This Committee was appointed in 1910 to investigate into the rise of prices in India and was composed of Messrs. Datta, Shirras, and Gupta. The first and the last named commissioners being members of the Finance Department of the Government of India, the Committee may be regarded as more or less an official body. The results of its investigations appeared in 1914 in five volumes, Vol. I of which contained the Report signed by Mr. Datta.

† See Report, paras. 126-27.

Committee is somewhat surprising. But there is enough reason to imagine why the Committee preferred this particular explanation of the rise of prices. The position of the Government with regard to the management of the Indian currency is somewhat delicate. Already the issue of paper currency was in the hands of the Government. By the Mint closure it took over the management of the rupee currency as well. Having the entire control over the issue of currency, rupee and paper, the Government becomes directly responsible for whatever consequences the currency might be said to produce. It must not, also, be forgotten that the Government is constantly under fire from an Opposition by no means over-scrupulous in the selection of its counts. As a result of this situation the Government walks very warily, and is careful as to what it admits. Lord Castlereagh, in the debate on Horner's resolution of 1811 stating that bank notes were depreciated by over-issue, asked the House of Commons to consider what Napoleon would do if he found the House admitting the depreciation even if it was a fact. The Government of India is in the same position, and had to think what the Opposition would do if it admitted this or that principle. The reason why the Government of India adheres to the adverse balance of trade as an explanation of the fall of exchange is the same which led the Committee to ascribe the rise of prices to the shortage of goods. Both the doctrines have the virtue of placing the events beyond the control of the Government and thus materially absolving the Government from any blame that might be otherwise cast upon it. What can the Government do if the balance of trade goes wrong? Again, is it a fault of the Government if the supply of commodities declines? The Government can move safely under the cover of such a heavy armour!* But does the explanation offered by the Committee invalidate the explanation that the cause of the rise of prices in India was excess of currency? The value of money is a resultant of an equation (of exchange)† between money and goods. To that equation there are obviously

* It may, however, be noted that this explanation of a shortage of goods, which was apparently offered as most likely to absolve the Government from any blame for having inflated the currency, was repudiated by the Government in its resolution reviewing the Report of the Committee, probably because such an admission on its part was likely to be interpreted as an argument to show that under it India was getting poorer. But the Government, in a hurry, did not realize that with the repudiation of this doctrine no other explanation was left except that of an increased issue of money to account for the rise of prices in India.

† *The words in bracket are inserted from the Problem of Rupee.—Ed.*

two sides, the money side and the commodity side. It is an age-worn dispute among economists as to which of the two is the decisive factor when the result of the equation of exchange undergoes a change, i.e. when the general price-level changes. There are economists who when discussing the value or the general purchasing power of money emphasize the commodity side in preference to the money side of the equation as the chief determinant of it. To them if prices in general fall it may not be due to scarcity of money; on the other hand, it may be due to an increase in the volume of commodities. Again, if prices in general rise they prefer to ascribe it to a decrease in the volume of commodities rather than to an increase in the quantity of money. It is possible to take this position, as some economists choose to do, but to imagine that the quantity theory of money is thereby overthrown is a mistake. As a matter of fact, in taking that position they are not damaging the quantity theory in the least. They are merely stating it differently. The weakness of the position consists in failing to take note of what the effect on the general price-level would be if in speaking of increase or decrease of commodities they *included* a corresponding increase or decrease of currency. If the volume of commodities increases, including the volume of currency, then there is no reason why general prices should fall. Similarly, if the volume of commodities decreases, including the volume of currency, then there is no reason why general prices should fall. Similarly, if the volume of commodities decreases, including the volume of currency, then there is no reason why general prices should rise. The commodity explanation is but the reverse side of the quantity explanation of the value of money. Recasting the argument of the Committee in the light of what is said above, we can say without departing from its language that the rise of prices in India was due to the supply of currency not having diminished along with the diminution in the supply of goods. In short, the rupee fell in purchasing power because of currency being issued in excess, and there is scarcely any doubt that there has been a profuse issue of money in India since the closing of the Mints in 1893.

The first period, from 1893-98 was comparatively speaking the only period marked by a rather halting and cautious policy in respect of currency expansion. The reason no doubt was the well-known fact that at the time the Mints were closed the currency was already redundant. Yet the period was not immune

from currency expansion.* At the time the Mints were closed the silver bullion then in the hands of the people was depreciated as a result of the fall in its value due to the closure. An agitation was set up by interested parties to compel the Government to make good the loss. Ultimately, the Government was prevailed upon by Sir James Mackay (now Lord Inchcape), the very man who forced Government to close the Mints, to take the silver from the banks. The Government proposed to the Secretary of State that they be allowed to sell the silver even at a loss rather than coin and add to the already redundant volume of currency. The Secretary of State having refused, the silver was coined and added to the currency. The stoppage of Council Bills in 1893-94 had temporarily accumulated a large number of rupees, in their Treasuries, a transaction which practically amounted to a contraction of currency. But the Government later decided to spend them on railway construction—a policy tantamount to an addition to currency. The resumption of Council Bills after 1894 had also the same effect, for a sale of bills involves an addition to currency. In view of the heavy cost of financing the Home Treasury by gold borrowings, the resumption of sale was a pardonable act. But what was absolutely unpardonable was the increase in the fiduciary portion of the paper-currency reserve from 8 to 10 crores,† thereby putting 2 crores of coined rupees into circulation, particularly so because the Finance Minister refused to pay any heed to its incidence on the currency policy, arguing :—

“I am a little doubtful whether, in discussing the question of the investment of the currency reserve, we are at liberty to look at outside considerations of that kind.”‡

All told, the additions to the currency during the first period were negligible as compared to what took place in the second period, 1900-1908. This period was characterized by a phenomenal increase in the volume of currency poured by the Government into circulation. Speaking of the coinage of rupees

* Cf. H. M. Ross, *The Triumph of the Standard*, Calcutta, 1909, pp. 16-17.

† By Act XV of 1896.

‡ Financial Statement, 1896-97, p. 89.

during this period, Mr. Keynes, anything but an unfriendly critic of the Government's policy observed* :—

“The coinage of rupees recommenced on a significant scale in 1900 a steady annual demand for fresh coinage (low in 1901-2, high in 1903-4, but at no time abnormal), and the Mints were able to meet it with time to spare, though there was some slight difficulty in 1903-4. In 1905-6 the demand quickened, and from July 1905 it quite outstripped the new supplies arising from the mintage of the uncoined silver..... This slight scare, however, was more than sufficient to make the Government lose their heads. Having once started on a career of furious coinage, they continued to do so with little regard to considerations of ordinary prudence..... without waiting to see how the busy seasons of 1906-7 would turn out, they coined heavily throughout the summer months..... During the summer of 1907, as in the summer of 1906, they continued to coin without waiting until the prosperity of the season 1907-8 was assured.”

Evidently, in this period the Government framed their policy “as though a community consumed currency with the same steady appetite with which some communities consume beer.” The period also witnessed a material expansion of the paper currency. Up to 1903 the use of the currency notes was limited by reason of the fact that they were not only legal tender outside their circle of issue, but also because their encashability was restricted to the offices of the circles of their issue. This was a serious limitation on the extension of paper currency in India. by Act VI of 1903 the Rs. 5 was made universal in British India excepting Burma, i.e. was made legal tender in all circles, and also encashable at all offices of issue. Along with this the fiduciary portion of the paper-currency reserve was increased to Rs. 12 crores by Act III of 1905. The first event was only calculated to enlarge the circulation of the notes, but the second event had the direct effect of lowering the value of the rupee currency.

The third period (1909-14) was comparatively a moderate but by no means a slack period from the standpoint of currency expansion in India. The first three years of the period were, so to say, years of subdued emotion with regard to the rupee coinage. With the exception of the year 1910, when there was no net addition to rupee coinage, and 1911, when the addition

*Op. cit., pp. 131-35.