was a small one, the coinage in the years 1909 and 1912 ranged from 24 to 30 lakhs. But during the last two years of this period there was a sudden burst of rupee coinage, when the total reached 26½ crores. The expansion of paper currency took place also on a great scale during this period. In 1909 the Rs. 5 were universalized in Burma as they had previously been in other parts of India. This process of universalization was carried further during this period, when, under the authority granted by the Paper Currency Act (II of 1910), the Government universalized notes of Rs. 5 and Rs. 50 in 1910, of Rs. 100 in 1911. Along with the stimulus thus given to the increase of paper currency, the Government actually expanded the fiduciary portion of the issue from 12 to 14 crores by Act VII of 1911, thereby throwing into circulation 2 crores of additional rupees.

During the fourth period (1915-1920) all prudential restraints were thrown overboard.* The period coincided with the Great War, which created a great demand for Indian produce and also imposed upon the Government the necessity for meeting large expenditure on behalf of H. M. Government. Both these events necessitated a great increase in the current means of purchase. There were three sources open to the Government to provide for the need: (1) importation of gold; (2) increase of rupee coinage ; and (3) increase of paper currency. It must not be supposed that the Government of India had no adequate means to provide the necessary currency. Whatever expenditure the Government of India incurred in India, the Secretary of State was reimbursed in London. So the means were ample. The difficulty was that of converting them to proper account. Ordinarily, the Secretary of State purchases silver out of the gold at his command to be coined in India into rupees. This usual mode was followed for the first two years of the period, and the currency was augmented by that means. But the rise in the price of silver made that resource less available. The Secretary of State had therefore to choose between sending out gold or issuing paper. Of the two, the former was deemed to be too unpatriotic. Indeed, the Secretary of State believed that from an Imperial point of view it was entirely ungracious even to "earmark" the gold he received in London as belonging to India. But how was demand for additional currency in India to be met ? As a result of deliberation it was agreed that to provide currency in India without employing gold the best plan

* For a view of the currency policy of this period the primary source are the Annual Financial Statements, for these years, of the Government of India.

was for the Secretary of State to invest at one end the gold he received on India's behalf in the purchase of British Treasury bills, and the Indian Government to issue currency notes at the other end on the security of these bills. Such a procedure, it will be observed, involved a profound modification in the basic theory of Indian paper currency. That theory was to increase the fiduciary issue by investing a portion of the metallic reserves only when the proportion of the latter to the total of the notes in active circulation had shown, over a considerable period, a position sufficiently strong to warrant an extension of the invested reserves and a corresponding diminution of the metallic reserves. The main effect of the principle was that the extent of the paper currency was strictly governed by the habits of the people, for whatever the amount of fiduciary issue at any given moment it represented metallic reserves which were once in existence. Under the new scheme the old principle was abandoned and paper currency was issued without any metallic backing, and what is more important is that its magnitude instead of being determined by the habits of the people, was determined by the necessity of the Government and the amount of security it possessed. This fatal and facile procedure was adopted by the Government of India with such avidity that within four years it passed one after another eight Acts, increasing the volume of notes issuable against securities. The following table gives the changes in the limits fixed by the Acts and the total issues actually made under them :—

TABLE XLIII

Issue of Currency Notes

Acts prescribing the Fiduciary Issue of Currency Notes							
I. Limits to fiduciary issues.	Act V of 1915	Act IX of 1916	Act XI of 1917	Act XIX of 1917	Act VI of 1918	Act II of 1919	Act XXVI 1919
	In Lakhs o Rupees:						
(a) Permanent ...	14,00	14,00	14,00	14,00	14,00	14,00	14,00
(b) Temporary ...	6,00	12,00	36,00	48,00	72,00	86,00	106,00
Total limit ...	20,00	26,00	50,00	62,00	86,00	100,00	120,00
II. Total issues of currency notes	61.63	67.73	86,38		99,79	153,46	179,67*
Silver	32,34	23,57	19,22		10,79	37,39	47,44
Gold	15,29	24,16	18,67		27,52	17,49	32,70
III. Reserve Securities	14,00	20,00	48,49		61,48	98,58	99,53

* On November 30, 1919. The rest of the figures are for march 31

But this facile procedure could not be carried on *ad infinitum* except by jeopardizing the convertibility of the notes. Consequently the very increase of paper money, added to the increased demand for currency, compelled the Government to go in for the provision of metallic money for providing current means of purchase and also give a backing to the watered paper issues. The rising price of silver naturally made the Government go in for gold. An Ordinance was issued on June 29, 1917, requiring all gold imported into India to be sold to Government at a price based on the sterling exchange, and opened a gold Mint at Bombay for the coinage of it into mohurs*. Frantic efforts were made to acquire gold from various quarters. The removal of the embargo on the export of gold by the U.S.A. on June 9, 1917, and the freeing of the market for South African and Australian gold, enabled the Government to obtain some supply of that metal. From July 18, 1919, immediate telegraphic transfers on India were offered against deposit at the Ottawa Mint in Canada of gold coin or bullion at a rate corresponding to the prevailing exchange rate, and at New York at competitive tenders from August 22, 1919. Arrangements were also made for the direct purchase of gold in London and U.S.A. Finally, to encourage the private import of gold, the acquisition rate was altered from September 15, 1919, so as to make allowance for the depreciation of the sterling. But the gold thus obtained was a negligible quantity. Besides, the issue of gold did not serve the purpose the Government had in mind—namely its retention in circulation. In the nature of things it was impossible. The rupee was depreciated in terms of gold to an enormous extent, and consequently at the rate of exchange gold passed out of circulation as quickly as it was issued by the Government. What the Government could do was to make the use of gold and silver coins illegal for other than currency purposes and to prevent their exportation, which it did by the Notifications of June 29 and September 3, 1917. Realizing that it could not rely upon gold the Government renewed its efforts to enlarge the rupee coinage. To facilitate the purchase of that metal the import of

*Act XIV of 1918.

silver on private account into India was prohibited on September 3, 1917. This measure, however, removed only a few of the smaller competitors for the world's diminished supply of silver, and the world-demand remained so heavy that the Secretary of State was unable to obtain sufficient supply notwithstanding the great conservation effected in the use of silver by substituting nickel coinage for silver coins of subsidiary order,* and by the isue of notes of denominations as low as that of R. 1† and of R. 2-8.‡ The Government of the United States was therefore approached on the subject of releasing a portion of the silver dollars held in their reserve. The American Government consented and passed the Pittman Act, under which the Government of India acquired a substantial volume at 101½ cents per fine ounce. The total silver purchased during this period was as follows :—

TABLE XLIV

RUPEE COINAGE, 1915—20

Year	Silver purchased in Open Market, Standard Ounces.	Silver purchased from U. S. A., Standard Ounces.	Total Standard Ounces.
1915-16	8,636,000	...	...
1916-17	124,535,000	...	...
1917-18	70,923,000	...	...
1918-19	106,410,000	152,518,000	...
1919-20	14,108,000	60,875,000	...
Total	324,612,000	213,393,000	538,005,000

Now, recalling the fact that from 1900 to 1914 the Government had coined about 532 million standard ounces of silver,§ it means that the coinage of silver by Government during these five years exceeded the amount coined in the fourteen preceding years by five million ounces.

* Act IV of 1918 and XXI of 1919.

† First issued on December 1, 1917.

‡ First put into circulation on January 2, 1918.

§ Cf. the figures given by L. Abrahms in his evidence to the Currency Committee of 1919.—Mit. of Evid., Q. 37-41.

Thus the fall in the gold value of the rupee is an inevitable consequence of the exercise of the power to issue inconvertible currency in unlimited quantities. This is the fate of all inconvertible currencies known to history. But it is said that an exception must be made in the case of the rupee currency, for if the Government has the liberty of issuing it in unlimited quantities it has also resources to counteract the effects of a fall when it does occur. We must therefore turn to an examination of these resources.

The basis of the reasoning is that the rupee is a token currency, and that if the value of a token currency is maintained at par with gold by applying to it the principle of redemption into gold* it should be possible to maintain the value of the rupee at par with gold by adopting a similar mechanism. What is wanted is an adequate gold fund, and so long as the Government has it, we are assured that we need have no anxiety on the score of a possible fall in the value of the rupee. Such a fund the Government of India has, and on all the three occasions when the gold value of the rupee fell below par that fund was operated upon. The process of redemption is carried on chiefly in three ways : (1) The sale of what are called reverse councils, by which the Government receives rupees in India in return for gold in London ; (2) the release of gold internally in; receipt for rupees in India ; and (3) the stoppage of the Secretary of State's council bills to prevent further rupees from going into circulation. The cumulative effect of these, it is said, is to contract the currency and raise its value to par. Although all the three may be employed, the first is by far the most important means adopted by the Government in carrying through this process of redemption. The extent of the redemption effected on the three occasions when it was employed may be seen from the three following tables :—

* *See* the very interesting discussion by Laughlin of the laws of token money in his *Principles of Money,* Chap. XV. It may be said in passing that Laughlin is an opponent of the quantity theory of money, but in his discussion of token money he virtually admits it.

I. Redemption of Currency, 1907-8

TABLE XLV

Date	By the sale of Reverse Councils		By Release of Gold-Diminution of Govt. Stock of Gold during the Month.	Private Export of Gold Coin during the Month.	Drawings of the Secretary of State.
	Amount offered	Amount sold			
	£	£	£	£	£
1907—					
September ...	...	...	152,000	14	858,896
October ...	...	...	254,000	9,109	921,678
November ...	...	...	532,000	3	427,344
December ...	...	...	338,000	2,501	571,905
1908—					
March 26 ...	500,000	70,000	226,000	...	172,669 (for the whole month)
April 2 ...	500,000	449,000			
" 9 ...	500,000	340,000			
" 16 ...	500,000	441,000	461,000	...	66,834
" 23 ...	500,000	329,000			
" 30 ...	500,000	205,000			
May 7 ...	500,000	81,000			
" 14 ...	500,000	145,000	645,000	...	62,764
" 21 ...	820,000	793,000			
" 28 ...	500,000	500,000			
June 4 ...	1,000,000	755,000			
" 11 ...	1,000,000	70,000	334,000	...	169,810
" 18 ...	500,000	Nil			
" 25 ...	500,000	50,000			
July 2 ...	500,000	470,000			
" 9 ...	500,000	304,000			
" 16 ...	500,000	500,000	16,000	...	186,847
" 23 ...	1,000,000	968,000			
" 30 ...	1,000,000	860,000			
Aug. 6 ...	1,000,000	418,000			
" 13 ...	500,000	310,000	354,000	...	262,217
" 20 ...	500,000	Nil			
" 27 ...	500,000	Nil			
Sept. 3 ...	500,000	Nil	502,000	...	1,431,012
" 10 ...	500,000	Nil			
Total ...	15,320,000	8,058,000	4,394,000	249,942	

II. Redemption in 1914-16

TABLE XLVI

Date				Reverse Councils (in £ 000)	Drawings of the S. of S. (in Lakhs of Rs.)
1914.	April	...	...	Nil	270
	May	...	...	”	61
	June	...	...	”	68
	July	...	...	”	66
	August	...	...	2,778	72
	September	...	...	1,515	25
	October	...	...	1,895	41
	November	...	...	1,044	32
	December	...	...	1,250	30
1915.	January	...	...	225	29
	February	...	...	Nil	181
	March	Total	...	”	287
				8,707	1,162
1915.	April	...	...	Nil	1,53
	May	...	...	”	1,03
	June	...	...	651	17
	July	...	...	3,377	8
	August	...	...	815	23
	September	...	...	50	2,17
	October	...	...	Nil	2,25
	November	...	...	”	2,02
	December	...	...	”	3,28
1916.	January	...	...	”	5,26
	February	...	...	”	6,02
	March		Total	”	6,33
			...	4,893	30,37

III. Redemption in 1920

TABLE XLVII

Sale of Reverse Councils (Figures in Thousands of Pounds)

Date of sale.			Amount offered at each Sale.	Amount applied for at each Sale.	Amount sold at each Sale.	Progressive Total of Amount sold.
1920.	January 2	...	1,000	770	770	770
	" 8	...	1,000	8,499	990	1,760
	" 15	...	2,000	300	300	2,060
	" 22	...	2,000	4,890	2,000	4,060
	" 29	...	2,000	1,334	5,000	5,394
	February 5	...	2,000	32,390	2,000	7,394
	" 12	...	2,000	41,312	2,000	12,394
	" 19	...	2,000	122,335	2,000	14,394
	" 26	...	2,000	78,417	2,000	16,394
	March 3	...	2,000	64,931	2,000	18,394
	" 11	...	2,000	117,185	2,000	20,394
	" 18	...	2,000	153,559	2,000	22,394
	" 25	...	2,000	56,295	2,000	24,394
	" 31 } April 1 }	...	2,000	35,050	1,988	26,382
	" 8	...	2,000	16,721	2,000	28,382
	" 15	...	2,000	48,270	2,000	30,382
	" 22	...	2,000	59,020	2,000	32,382
	" 29	...	1,000	53,210	1,000	33,382
	May 6	...	1,000	89,514	1,000	34,382
	" 13	...	1,000	101,625	1,000	35,382
	" 20	...	1,000	122,279	1,000	36,382
	" 26	...	1,000	85,620	1,000	37,382
	June 3	...	1,000	101,821	1,000	38,382
	" 10	...	1,000	109,245	1,000	39,382
	" 15	...	1,000	122,991	1,000	40,382
	" 24	...	1,000	73,391	1,000	41,382
	July 1	...	1,000	106,751	1,000	42,382
	" 8	...	1,000	63,690	1,000	43,382
	" 15	...	1,000	101,830	1,000	44,382
	" 22	...	1,000	103,960	1,000	45,382
	" 29	...	1,000	75,486	1,000	46,382
	August 5	...	1,000	101,260	1,000	47,382
	" 12	...	1,000	112,230	1,000	48,382
	" 19	...	1,000	114,767	1,000	49,382
	" 26	...	1,000	117,390	1,000	50,382
	Sept. 2	...	1,000	126,425	1,000	51,382
	" 7	...	1,000	117,200	1,000	52,382
	" 13	...	1,000	115,095	1,000	53,382
	" 21	...	1,000	122,590	1,000	54,382
	" 28	...	1,000	120,050	1,000	55,382

Not only did the Government sell reverse councils on a large scale, but it also sold gold for rupees for internal circulation a thing which it seldom did before.

III. Redemption in 1920

TABLE XLVIII

Sale of Gold

No. of Sale	Date of Sale	Minimum Rate of accepted Tenders			Average Rate of accepted Tenders			Quantity sold (in Tolas)	Price of Country Bar Gold in the Bombay Bazaar		
		Rs.	A.	p.	Rs.	A.	P.		Rs.	A.	P.
1	1919. September 3	25	8	0	26	12	1	3,29,130	28	10	0
2	" 17	24	8	0	24	10	0	3,96,640	26	1	0
3	October 6	25	8	0	25	9	8	3,26,000	27	0	0
4	" 20	26	15	3	27	0	2	3,34,000	28	0	0
5	November 3	27	14	6	27	15	6	3,25,000	28	5	0
6	" 17	26	15	0	27	0	11	5,18,500	28	2	0
7	December 8	26	0	6	26	4	6	10,00,650	27	10	0
8	1920. January 5	26	4	3	26	7	9	7,63,300	27	3	0
g	" 19	26	13	3	26	14	7	8,00,000	27	5	0
10	February 5	25	2	3	25	9	7	7,56,450	25	6	0
11	" 19	16	2	3	21	9	1	9,60,590	23	4	0
12	March 3	18	8	0	18	12	4	12,96,125	21	7	0
13	" 17	21	6	0	21	7	7	12,53,325	22	13	0
14	April 7	22	7	3	22	9	4	12,46,200	24	0	0
15	" 21	23	7	4	23	8	6	10,68,175	24	4	0
16	May 5	20	13	3	21	3	2	11,96,750	21	8	0
17	" 19	21	0	3	21	1	7	12,46,050	21	12	0
18	June 9	21	8	9	21	9	8	11,32,350	22	2	6
19	" 23	20	14	10	21	0	5	12,25,250	21	8	0
20	July 7	21	1	4	22	2	2	12,81,500	21	6	0
21	" 21	22	0	1	22	0	11	12,42,000	22	5	0
22	August 4	22	5	6	22	6	3	12,78,950	22	7	0
23	" 19	23	9	4	23	10	2	5,54,500	23	7	0
24	September 1	22	8	3	22	10	8	8,27,700	23	1	6
25	" 14	23	9	4	23	12	11	2,30,500	23	8	0
					Total			2,15,89,635			

During 1920 no council bills were drawn by the Secretary of State on the Government of India.

The success of this mechanism on the two previous occasions had strengthened the belief that it had the virtue of restoring the value of the rupee. But the failure of this mechanism in the crisis of 1920 compels one to adopt an attitude of reserve towards its general efficacy. It cannot be said that exchange gave way because this mechanism was not brought into operation. On the other hand, the view of the Government regarding the sale of reverse councils in 1920 had undergone a profound modification as compared with the view it held during the crisis of 1907-8. In that crisis the Government behaved like a miser, sitting tight on its gold reserve and refusing to use it for the *very* purpose which it was designed to serve. An Accountant-General had "to go on his knees" to persuade the Government of India to, release its gold.* It was probably because it was rebuked by the Chamberlain Commission for failing to make use of its gold reserve in 1907 that in the crisis of 1920 the policy of selling reverse councils was so boldly conceived. There was a great deal of ignorant criticism of that policy from the general public that it was an "organized loot." But the Finance Minister was undaunted, and argued†:—

> "It is an essential feature of our exchange policy... that we should not only provide for remittances from London to India through council bills at approximately gold point, but from India to London in time of exchange weakness also at gold point, through the sale of sterling remittance known as reverse councils. It is simply an alternative to the export of gold. This is no new matter—we have been selling reverse councils for years..... and unless we do so the exchange policy does not become effective..... This is the reason, and the only reason, why we have sold reverse councils..... It is an effort in fact to maintain exchange as near as posssible to the gold point.... What would be the consequence if we yielded to the pressure placed on us and ceased to sell reverse councils at all ? I can understand a demand that reverse councils should be sold by some different method, or at rates different from those at present in force, but I must confess that I cannot understand the demand that the facilities

* Evidence of Mr. F. C Harrison before the Chamberlain Commission, Q. 10,209.

† Speech on the resolution *re* "Reverse Councils," March 10, 1920. *S.L.C.P.* Vol. LVIII p. 1291.

for the exchange of rupees into external currency should be entirely withdrawn. I see that in Bombay it is urged that we should let exchange find its 'natural level.' That is a catchword which does not impress me. Used in the sense in which that phrase has been recently used, there is no such thing as a 'natural level' in exchange, for, when one translates the internal currency into another currency, there must be some sort of common denominator to which both currencies can be brought; it may be gold, it may be silver, it may be sterling or it may be Spanish pesetas, which we take as our basis. The rupee must be linked on to *something** and if it is so linked, then it must be at some definite rate, and this necessarily involves that we must sometimes be prepared to sell reverse councils in order to maintain that rate. If reverse councils be withdrawn entirely, then we should have neither a gold standard, nor a gold-exchange standard, nor any kind of standard at all."

But that only raises the question: If the sale of reverse councils is efficacious in righting the exchange, why was its effect such a disastrous failure ? The Finance Minister answered the point tersely and cogently when he said :—

"If we have failed in narrowing the gap between the market price and the theoretical gold part of the rupee..... it is not because we have sold too many reverse councils ; it is because we have sold too few. I put it to any member of the commercial community here, and I put it without fear of contradiction, that if our resources had enabled us..... to sell straight away 20, 30, or 40 millions of reverse councils, we should probably have had no gap between the market price of the rupee and the theoretical gold price of the rupee at all. One of our difficulties has been, hot that we have sold too many reverse councils, but that we have been obliged to sell too few."†

* By Ordinance III of June 21,1920, the gold coins referred to in Section 11 of the Indian Coinage Act (III of 1906) ceased to be legal tender in payment or on account, but provision was made for their acceptance by Government at the ratio of Rs. 15 during a moratorium of twenty-one days. This Ordinance continued till September 9, 1920, when by Act XXXVI of 1920 the sovereign was again made legal tender. During this period gold had no legal status in India.

† *Ibid., p.* 1301.

There would have been some force in this argument if the smount of reverse bills sold were "too few." Not 20, 30, or 40 millions, but 55½ millions of reverse councils were sold, besides the large issue of gold internally, and the complete stoppage of council bills, and yet the rupee did not rise above 1s. 4d. sterling, let alone reaching 2s. gold. Why did not the sale of reverse councils suffice to rectify the exchange ? This leads us to examine the whole question of the efficacy of this redemption.

It is necessary to premise at the outset that redemption may result in mere substitution of one form of currency by another, or it may result in the retirement of currency. In so far as it results in substitution it is of no consequence at all, for substitution of currency is not a shrinkage of currency.* To the restoration of the value of a currency what is essential is its shrinkage, i.e. its retirement, cancellation. The important question with regard to this mechanism is not to what extent the currency can be redeemed, but to what extent it can be retired. In the prevalent view of this question it seems to be accepted without question that this extent is determined by the magnitude of the gold resources of the Government of India and the Secretary of State. Let us first make it clear how these gold resources are located and distributed. It will be recalled that these gold resources are distributed between (1) the paper-currency reserve, (2) the gold-standard reserve, and (3) the cash balances of the Secretary of State. It has been the habit to speak of these resources as being three "lines of defence" on which the Government can safely rely when an exchange crisis takes place. But are they ? They can be, for the purposes of retirement, only if they were all "free" resources; in other words, if they were not appropriated resources. To what extent are they unappropriated ? Can the Secretary of State take gold from the paper-currency reserve ? He can, but then he must replace it by something else, or must cancel notes to that extent. Can the Secretary of State take gold out of his cash balances ? He can, but then he must either borrow to fill his Treasury or draw upon the Government of India if there is anyone to buy his bills, which is tantamount to issuing rupee currency. The gold in the paper-currency reserve and that in the cash balances is of no use at all, for it does not permit of the cancellation of the rupee

* The most notable example is that of Americal greenbacks. Under the law of 1875 they were by 1879 retired in sufficient numbers to restore parity with gold. But by a counter-law of 1878, 347,000,000 of them have been kept in circulation. As soon as redeemed, they must be reissued ; they cannot be retired.

currency, which is what is wanted in restoring its value when it suffers a fall. It is therefore sheer nonsense to speak of the effectiveness of redemption as being commensurate with the gold resources of the Secretary of State. The matter is important, and an illustration may not be out of place. Suppose A, a holder of rupees, wants to get gold for them. He can go to three counters; (1) that of the controller in charge of cash balances ; (2) that of the controller of currency in charge of the paper-currency reserve ; or (3) that of the custodian of the gold-standard reserve. If A goes to the first, what is the result ? The cash balance is *pro tanto* reduced. On the assumption that the cash balance is at its minimum, as it should be, the controller must reimburse himself immediately to maintain his solvency by drawing a bill on India and thereby releasing rupees received for gold again in circulation, so that in this case there is no shrinkage of currency. If A goes to the controller of currency, what happens ? The controller gives him gold, but on the assumption that the paper-currency account is a separate statutory account he must put the rupees received from A in place of the gold issued from his reserve, so that here again what happens is that the composition of the reserve undergoes a change, but the total paper currency remains the same. It must therefore be borne in mind that to the extent the gold in the paper-currency reserve and the cash balances are operated upon the result is not a retirement of currency. To speak of them as "lines of defences," as is so often done, is to overlook the fact that these two are not free resources but are appropriated resources.

What is, then, the resource left to the Government to *retire* the rupee currency ? Only the gold-standard reserve. That is the only reserve the amount of which is unappropriated for any particular use. It is free cash, and only to that extent is it possible for the Government to restore the rupee currency when a fall in its gold value eventuates. Of course it is important to bear in mind that this is the extent to which it can retire the currency. Not that it will, for it may not, and there is no want of cases in which it has not. Two instances will suffice. During the first period of the Mint closure, 1893-98, it will be recalled how a large number of rupees had accumulated in the hands of the Government, and in the interest of raising the value of the rupee they should have been locked away. Instead the Government of India released that money in circulation in extending railways

and other public works, as though the spending of rupees by itself producedd an effect different to what would have been produced had they been spent by the public. Similarly irresponsible conduct marked the sale of reverse councils in 1920. To meet these reverse councils the Secretary of State took the gold from the paper-currency reserve. But instead of cancelling notes to the extent of the gold that was taken out of the reserve, the Government took powers under an Act XXI of 1920 to fill the gap by manufacturing securities *ad hoc,* so that although there was redemption there was no retirement, and so much gold was merely wasted, for it produced no effect on prices or the exchange. This Act, passed in March, 1920, was of temporary duration, and would have obliged the Government to retire the currency by October, 1920, when it was to expire. Rather than do this the Government altered the paper-currency law, not temporarily but permanently (Act XLV of 1920), changing the provisions in such a manner as to require the Government to cancel the currency to the smallest degree possible by retiring their "created securities." Even this was not done, owing to deficits in the Government Budget.

But even if such indiscretions were not repeated the fact remains that Government cannot effect a greater retirement than is permitted by the gold-standard reserve. If that reserve fails Government has only two resources left: (1) to melt down the rupees and sell them as bullion for gold and to go on further contracting the currency, in this way till its value is restored : or (2) to borrow gold. Both these are evidently costly methods. To sell rupees as bullion is bound to result in loss unless the bullion in the rupee fetched more at the time of sale than what it cost when it was purchased for manufacturing it into bullion. The second process, that of borrowing, cannot be lightly resorted to for the purpose of creating a reserve fund to retire the currency. Indeed, so costly are such methods, and so complete would be the proof they would afford of the instability of the exchange standard if they were resorted to, that Government has never contemplated them as possible lines of defence in an exchange crisis. It seems certain, however, that Government does recognise that the gold-standard reserve by itself cannot suffice for the imaintenance of exchange. For we find that from the year 1907-8 dates a complete change in the distribution of Government balances between London and India. Up to that period it was the policy of the Secretary of State to

draw only as much as necessary to finance his Home Treasury. After that date the practice was originated of drawing as much as the Government of India could provide, and as the Government of India has been supreme in financial matters it provided large sums for council drawings by increased taxation and budgeting for surpluses. The effect of this was to swell the cash balances of the Secretary of State.* No official explanation of a satisfactory character has ever been given for this novel way of financing the Home Treasury† but we shall not be very) far wrong if we say that the object in accumulating these balances is to provide a second gold reserve to supplement the true gold-standard reserve. Whatever strength the Government may derive for the time being from this adventitious resource, it is obvious that it cannot be permanent. Under a more popular control of Government finances the cash balances will have to be kept down to a minimum necessary to work the Treasury, and the gold-standard reserve will be the only reserve on which the Government will have to depend.

The gold-standard reserve is to the rupee what the paper-currency reserve is to the notes. The purport of both is to prevent the respective currencies they support from falling or going to discount. But the treatment accorded by the Government to the rupee and the paper in respect of reserve shows a remarkable degree of contrast. In the case of the paper, as has been previously noted, the reserve is a statutory reserve, and even when the whole basis of Indian paper currency has been changed the provisions as to reserve are none the less strict and cannot be disregarded by the Government without infringing the law. Now, the rupee is nothing but a note printed on silver.‡ As such, the provisions as to reserve should be analogous to those governing the paper currency. Strange as it may seem, any regulation is conspicuous by its absence in regard to the gold-standard reserve.§ Not only is it not obligatory on the

* For figures, *see* Chap. VII.

† Cf. Memorandum on India Office Balances, Cd. 6619 of 1913.

‡ "We have virtually relegated our rupee currency to the position of a token currency, and we are now practically in the position of bankers who have issued a certain amount of fiduciary currency (whether paper or metal is immaterial), and to maintain the value of this fiduciary currency we are bound to be in a position to exchange it for gold when presented to meet legitimate trade requirements," said the Financial Statement for 1903-4, p. 14.

§The Chamberlain Commission said: "There are disadvantages in restricting the freedom of the Government in a crisis, and it is undersirable that the disposition and amount of the reserve should be stereotyped..... We therefore do not regard that the gold-standard reserve should be regulated by statute."—Report, Sec. 101.

Government to redeem the rupee, but it does not seem that the Government is even bound to maintain the reserve. And that it has maintained such a reserve is no guarantee that it will replace it supposing that the reserve was dissipated.* Such differences apart, is the gold-standard reserve an adequate reserve ? Figures of the magnitude of the gold-standard reserve, as usually given in official publications, are a meaningless array. What is the use of displaying assets without at the same time exhibiting the liabilities ? To be able to judge of the adequacy of that reserve we must know what is the total circulation of rupees. When, however, we compare the circulation of the rupees with the reserve, the proportion between the two is not sufficiently large so as to inspire confidence in the stability of the system (see Table XLIX).

How can a reserve so small as this carry through the process of retirement to any sufficient extent ? That it will not always do it the crisis of 1920 gives abundant proof. But the supporters of the exchange standard maintain that the smallness of the reserve is a matter of no consequence, for the reserve is kept only for the purpose of foreign remittances. That being the case, it is said the reserve need not be large. Granting that it is so, what must govern the magnitude of the reserve in order that it may prove adequate in any and every case ? The only attempt made to enunciate a rule of guidance is that by Prof. Keynes. That rule he finds† in the possible variations in the balance of trade of India.. Now, does this make the problem of regulating the reserve more definite ? As has been explained previously, the adverse balance of trade would be due to the depreciation of the currency, so that Mr. Keynes's statement amounts to this, that the reserve should vary with the depth of the depreciation. But how is a Government to do this ? Only by adverting to the movement of the price level. But in all its currency management the Government of India never pays any attention to the price

* In the course of his speech on the Indian Paper Currency (Temporary Amendment) Bill, dated March 17, 1920, the Finance Minister observed :"..... from a practical point of view, it is desirable to leave the gold-standard reserve until the paper-currency reserve has been re-transferred, in case... the Secretary of State finds it impossible to keep himself in funds by Councils for his heavy home liabilities. He will then be able to use the gold-standard reserve, and we can credit the gold-standard reserve out here. There is a third point, and I think a conclusive one. When you operate against the paper-currency reserve you have to operate within the paper-currency reserve ; when you operate against the gold-standard reserve it disappears ; it melts, and we are under no obligation to replace it; whereas we are under a statutory obligation to replace the paper-currency reserve."—*S.LC.P.* Vol. LVIII, p. 1416.

† Op. cit., pp. 166-7.

TABLE XLIX

Distribution of the Gold-standard Reserve and its Proportion to Rupee Circulation (in Thousands of Pounds Sterling)

March 31 in each Year.	In England.					In India					Total Reserve, England and India.	Volume of Rs. in Circulation in Crores.	Percentage of Reserve to Ra. in Circulation (£ = Rs. 15)*
	Purchase Value of Sterling Securities.	Cash at Short Notice.	Temporary Loan to the Home Treasury.	Gold deposited at the Bank of England.	Total.	Coined Rupees in India.	Outstanding Debt Treasury balances.	Temporary Loan to Treasury Balances.	Gold.	Total.			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1901	—	—	—	—	—	—	1,831	—	1,200	3,031	3,031	143	3.1
02	3,454	—	—	—	3,454	—	—	—	—	—	3,454	138	3.7
03	3,810	—	—	—	3,810	—	1	—	—	1	3,811	136	3.4
04	6,377	—	—	—	6,377	—	167	—	—	167	6,544	144	6.8
05	8,377	—	—	—	8,377	—	152	—	—	152	8,529	152	8.4
06	12,165	—	—	—	12,165	—	287	—	—	287	12,452	164	10.7
07	12,519	—	—	—	12,519	4,000	301	—	22	4,323	16,842	178	10.6
08	13,187	—	1,131	—	14,318	4,000	—	—	—	4,000	18,318	191	11.2
09	7,414	—	470	—	7,884	10,587	—	—	—	10,587	18,471	187	7.1
10	13,219	3,011	—	—	16,230	2,534	—	—	—	2,534	18,764	186	13.8
11	15,849	1,477	—	—	17,326	1,934	—	—	—	1,934	19,260	184	14.8
12	16,748	1,074	—	—	17,822	1,934	—	—	—	1,934	19,956	182	14.9
13	15,946	1,006	—	1,620	18,572	4,000	35	—	—	4,035	22,607	191	14.8
14	17,165	25	—	4,320	21,510	4,000	22	—	—	4,022	25,532	187	17.2
15	12,149	8	—	1,250	13,407	—	70	7,000	5,238	13,308	25,715	204	18.9
16	16,219	5,792	—	—	22,011	—	1	4,000	239	4,240	26,251	212	15.7
17	25,406	6,001	—	—	31,407	—	—	—	103	103	31,510	227	20.8
18	28,453	6,000	—	—	34,453	—	—	—	—	—	34,453	219	23.5
19	29,729	6,016	—	—	35,745	—	—	—	—	—	35,745	228	23.5

* In striking the proportion the rupee portion of the reserve has been omitted.

problem. Indeed, as was pointed out above, its conception of the underlying causes of the fall of exchange is totally at variance with the only true conception, nothing but a firm grasp of which can enable it to avert a crisis. Being ignorant of the true conception it blindly goes on issuing currency until there occurs what is called an adverse balance of trade. All it aims at is to maintain a gold reserve, and so long as it has that reserve it does not stop to think how much currency it issues. The proportion of the issues and the reserve not being correlated the stability of the exchange standard, in so far as it depends upon the reserve, must always remain in the region of vagueness, far too problematical to inspire confidence of the system. Nay, the liability of redemption for foreign remittances, small as it appears, may become so indefinite as entirely to jeopardize the restoration of stability to the exchange standard.

But is a gold reserve such an important thing for the maintenance of the value of a currency? All supporters of the exchange standard must be said to be believers in that theory. But the view cannot stand a moment's criticism. To look upon a gold reserve as an efficient cause why all kinds of money remain at par with gold is a gross fallacy.* To take such a view is to invert the casual order. It is not the gold reserve which maintains the value of the circulating medium, but it is the limitation on its volume which not only suffices to maintain its own value, but also makes possible the accumulation and retention of whatever gold reserve there is in the country. Remove the limit on the volume of currency, and not only will it fail to maintain its value, but will prevent the accumulation of any gold reserve whatever. So little indeed is the importance of a gold reserve to the cause of the preservation of the value of currency that provided there is a rigid limit on its issue the gold reserve may be entirely done away with without impairing in the least the value of the currency. The Chamberlain Commission recommended that the Government of India should accumulate a reserve to maintain the value of the rupee because it was by means of their reserves that European banks maintained the value of their currencies. Nothing can be a greater perversion of the truth. What the European banks did

* Cf. in this connection the brilliant paper by F. A. Fetter, "The Gold Reserve: its Function and its Maintenance," in the *Political Science Quarterly,* 1896, Vol. XI, No. 2.

was just the opposite of what the Commission recommended. Whenever their gold tended to disappear they reduced their currencies not only relatively but absolutely. It was by limitation of their currencies that they protected the value of the currencies and also their gold reserves.

The existence of a reserve, therefore cannot lend any strength to the gold-exchange standard. On the other hand, if we inquire into the genesis of the reserve, its existence is an enormous source of weakness to that standard. For how does the Government obtain its gold-standard reserve ? Does it increase its reserve in the same way as the banks do, by reducing their issues ? Quite the contrary. So peculiar is the constitution of the Indian gold-standard reserve that in it the assets, i.e., the reserve, and the liabilities, i.e., the rupee, are dangerously concomitant. In other words, the reserve cannot increase without an increase in the rupee currency. This ominous situation arises from the fact that the reserve is built out of the profits of rupee coinage. That being its origin, it is obvious that the fund can grow only as a consequence of increased rupee coinage. What profit the rupee coinage yields depends upon how great is the difference between the cost price of the rupee and its exchange value. Barring the minting charges, which are more or less fixed, the most important factor in the situation is the price of silver. Whether there shall be any profit to be credited to the reserve depends upon the price paid for the silver to be manufactured into rupees.*

Not only is the reserve an evil by the nature of its origin, but having regard to its documentary character the reserve cannot be said to be absolutely dependable in a time of crisis. There is no doubt that the intention of the Government in investing the reserve is to promote its increase by adding to it the interest accruing from the securities in which it is invested. The critics of the Government want a *large* and at the same time a *metallic* reserve. But they do not realize that having regard to the origin of the reserve the two demands are incompatible. If the reserve needs to be large then it must be invested. Indeed, if the reserve had not been invested it would have remained distressingly meagre.‡ But is there no danger in a reserve of this kind ?

* *See* footnote † page 552.

‡ From 1900-1 to 1920-21 the profits on coinage credited to the gold-standard reserve amounted to £ 28,573,606 only ; while during the same period Interest and Discount gave £ 13,306,847 or nearly one-half the profits on coinage, Cf. *East India: Accounts and Estimates,* 1921-22, *Cmd,* 1517 of 1921, p. 20.

† In answer to Mr. M. L Reddi Garu, the following statement was laid on the table :—

* Statement showing the average cost of silver purchased by the—

Year.	Royal Mint Average Cost for Standard Ounce.	India Office Average Cost for Standard Ounce.	Financial Year.
	d.	d.	
1893 ...	$36^{5}/_{16}$	No purchase	1893-94
94 ...	29¼	”	1894-95
95 ...	$30^{3}/_{8}$	”	1895-96
96 ...	$30^{5}/_{16}$	”	18S6-97
97 ...	$27^{7}/_{8}$	”	1897-98
98 ...	27¼	”	1898-99
99 ...	27½	28	1899-1900
1900 ...	28¼	29	1900-01
01 ...	$27\ ^{15}/_{16}$	No purchase	1901-02
02 ...	$24^{5}/_{16}$	22.80	1902-03
03 ...	$23^{11}/_{16}$	27.19	1903-04
04 ...	26 ½	27.14	1904-05
05 ...	$27^{7}/_{16}$	29.74	1905-06
06 ...	$31^{1}/_{16}$	31.59	1906-07
07 ...	$30^{9}/_{16}$	31.27	1907-08
08 ...	$24\ ^{7}/_{16}$	No purchase	1908-09
09 ...	$23^{11}/_{16}$	”	1909-10
10 ...	$24^{7}/_{8}$	”	1910-11
11 ...	$24^{13}/_{16}$	”	1911-12
12 ...	$27^{15}/_{16}$	28.71	1912-1,3
13 ...	$28^{1}/_{16}$	28.71	1913-14
14 ...	$24^{5}/_{8}$	No purchase	1914-15
15 ...	24¼	33.96	1915-16
16 ...	$30^{5}/_{8}$	33.96	1916-17
17 ...	$39^{15}/_{16}$	42.78	1917-18
18 ...	$47^{15}/_{16}$	48.20	1918-19
19 ...	$49^{5}/_{8}$	52.04	1919-20
20 ...	$50^{7}/_{8}$	Silver purchased at special rates from the Baldwin mines and the Perth mint.	920-21

* *Legislative Assembly Debates,* Vol. II, No. 3. September, 10, 1921, p. 181.

In the absence of information whether the price is F.O.B. or C.I.F. it is difficult to say that the Secretary of State has had to pay higher prices for silver than were paid by the Master of the Royal Mint.

The source of a danger in a reserve such as this was well pointed out by Jevons when he said*:

> "..... good government funds and good bills can always be sold at some price so that a banking firm with a strong reserve of this kind might always maintain their solvency. But the remedy might be worse for the community than the disease, and the forced sale of the reserve might create such a disturbance in the money market as would do more harm than the suspension of payment....."

In the same manner, who can say that all the increase of reserve from interest will not be wiped out by a slump in the value of the securities if put upon the market for conversion into gold at a time when there takes place an exchange crisis ? Supposing, however, the full value of the securities, is realized, the number of rupees the reserve will "sink" when occasion for redemption arrives depends upon what is the price at which the rupees are bought back. If the fall of the rupee is small, it may help to retire a large volume of currency and thus restore its value. On the other hand, if the fall is great, it will suffice to retire only a small part of the currency and may fail to restore its value as it did in 1920, so that what may appear to be a big reserve may turn out to be very inadequate. But, apart from considerations of the relative magnitude of the reserve that can be built up, the point that seems to have been entirely overlooked is *that the process of building up the reserves directly involves the process of augmenting the currency.* The Chamberlain Commission was cognizant of the fact that the gold-standard reserve could not be built up except by coining rupees. Indeed, it cautioned those desirous of a gold currency to remember that if gold took the place of "new rupees which it would be necessary otherwise to mint, the effect is to diminish the strength of the gold-standard reserve by the amount of the profit which would have been made from new coinage."† Rather than recommend a policy which "would bring to an end the natural growth of the gold-standard reserve," the Committee permitted the Government to coin rupees. But is there no danger involved in such a reserve ? What is the use of a reserve which creates the very evil which it is supposed afterwards to mitigate ? Indeed, those who have been agitating for an increase in the Indian gold-standard reserve cannot be said to have been alive to the dangers involved in the existence of such a reserve.

* *Money,* p. 227.

† Report, par. 63.

The smaller the gold-standard reserve the better it would be, for there would be no inflation, no fall in the purchasing power of the rupee, and no necessity for its retirement.

Having regard to its origin, the gold-standard reserve, instead of acting as a brake upon reckless issue of rupee currency, is the direct cause of it and tends to aggravate the effects of an inconvertible currency rather than counteract them. Perversity cannot go further. If the fact that a mechanism like that of the gold-standard reserve, set up for the purpose of limiting the currency, cannot be made to function without adding to the currency, does not render the system an unsound currency, one begins to wonder what would. Great names have been invoked in support of the exchange standard. After trying hard to find authoritative precedents for his plan,* Mr. Lindsay claimed before the Fowler Committee that it was founded upon the Report of the Parliamentary Committee on Irish Exchange.† There he was on firm ground. Among other things, the Committee did recommend that for stabilizing the exchange between England and Ireland the Bank of Ireland should open credit at the Bank of England and sell drafts on London at a fixed price. In so far as the exchange standard rests on gold reserve in London, Lindsay must be said to have faithfully copied the plan of the Irish Committee on exchange. But he totally

* In 1876, when Mr. Lindsay first set out his scheme in the pages of his *Calcutta Review,* he mentions no parallel at all. in 1892, in his *Ricardo's Exchange Remedy,* he uttered the name of Ricardo as an authority for his plan, but in 1898 he shifted his ground, so much so that he blamed (*Economic journal, supra*) Probyn for taking Ricardo's gold bar plan as a basis. The reason why he disavowed Ricardo as his authority most probably lies in the fact that Ricardo's general views of currency were rather damaging to his position. In view of the fact that there are so many people who assert, no doubt, from the title of his *Proposals for an Economical and Secure Currency,* that Ricardo wrote against a metallic standard, it is worth while recording the following passage from his *Proposals,* in which he says : "During the late discussion on the bullion questions, it was almost justly contended that a currency, to be perfect, should be absolutely invariable in value. But it was said, too, that ours had become such a currency, by the Bank Restriction Bill; for by that bill we had wisely discarded gold and silver as the standard of our money..... Those who supported this opinion did not see that such a currency, instead of being variable, was subject to the greatest variations— that the only use of a standard is to regulate the quantity, and by the quantity the value of the currency—and that without a standard it would be exposed to all the fluctuations to which the ignorance or the interests of the issuers might subject it."

† The Report, which is a masterly document, was eclipsed by the Bullion Report, though both contain the same doctrine, by reason of its not being printed till 1826. *See* Lords Paper 48 of 1826.

neglected to give prominence to another and the most vital re commendation of the Committee, in which it is observed :* "*But all the benefits proposed by this Mode of Remedies would be of little Avail and very limited Duration if it* (i.e. Bank of Ireland) *did not promise at the same time to cure the Depreciation of Paper in Ireland by diminishing its over issue*." Indeed, so great was the stress laid on the limitation of issue that when Parnell, in his resolution in the House of Commons on the reform of the Irish currency, regretted the non-adoption of the recommendations of the Committee,† Thornton in his reply pointed out that nothing would help to stabilize Irish exchange so long as the vital condition laid down by the Committee was disregarded. The recent experience in pegging the exchanges well illustrates the importance of that vital condition. Pegging the exchange is primarily a device to prevent the external value of the currency falling along with its internal value. The way in which pegging effects this divorce is important to note.‡ The primary effect of the peg is to permit the purchases of foreign goods by procuring foreign currency for home currency at a fixed price, which is higher than would be the case if it were determined by the general purchasing power parity of the two currencies. By enabling people to buy foreign goods with foreign currency obtained at a cheaper price the peg virtually raises foreign prices more to the level of the home prices, so that if the exchange is stable it is not because there is a peg, but because the price-levels in the two countries have reached a new equilibrium. Essentially the exchange is stable because it is an artificial purchasing-power parity. Whether it will continue to be so depends upon the movements in the home prices. If the home prices rise more than the rise brought about by the peg in the foreign prices the mechanism must break. It is from this point of view that the condition laid down by the Irish Committee on exchange regarding the limitation on issue must be held as one of vital character. In omiting to advert to that condition the Indian currency contradicts what is best in that Report of the Irish Committee.

The reason why Mr. Lindsay paid no attention to the question of limitation in setting up his exchange standard is largely that, notwithstanding the great reputation he has achieved as

* Report, p. 16. Italics not in the original.

† See *Hansard Parliamentary Debates,* Vol. XIV, pp. 75-91.

‡ Cf. the succinct statement by T. E. Gregory, *Foreign Exchanges,* p. 85.

an author of a new system, he was profoundly ignorant of the true doctrine regarding the value of a currency. Neither he nor the hosts of currency-mongers who during the nineties exercised their ingenuity to devise plans for remedying Indian exchange troubles,* understood that to stabilize the exchange was essentially a problem of stabilizing the purchasing power of currency by controlling its volume.† The gold-exchange standard ignores the fact that in the long run it is the general purchasing power of a currency that will ultimately govern its exchange value. Its aim is to stabilize exchange and allow the problem of purchasing power to go hang. The true policy should be to stabilize the purchasing power of the currency and let exchange take care of itself. Had the Chamberlain Commission considered the exchange standard from this point of view it could not have called it a sound standard when in its fundamentals it was the very reverse of it.

Now any one who remains unconvinced of this weakness of the exchange standard may say that in examining its stability we have taken only those occasions on which the standard has broken down. Thinking such a treatment to be unfair, he might say: How about the years during which stability was maintained ? Is there nothing to be said in favour of a system that maintained the gold value of the rupee from 1901 to 1907, or from 1909 to 1914 ? The question is a pertinent one, and the position that underlies it is supposed to be so strong that those who hold it have asked the opponents of the exchange standard either to admit that it is a stable standard or to show that under that standard the rupee has *invariably* failed to maintain its gold value.‡

The validity of this position depends upon assumptions so plausible and so widespread that the argument urged so far against the exchange standard will not be of full effect until their futility is fully demonstrated. The first assumption is that there cannot be a depreciation of a currency unless it has depreciated in terms of gold. In other words, if the excess has not produced

* *See* Chap. IV.

† Cf. evidence of Mr. Lindsay before the Fowler Committee, Q. 4,190-95, where he asserted that exchange had nothing to do with the quantity of money in circulation.

‡ Dodwell, "A Gold Currency for India," *Economic Journal,* 1911; *Report on the Enquiry into the Rise of Prices in India, 1914, p. 94.*