

Nonetheless, it is certain that the divergence between the mint ratio and the market ratio under a bimetallic system must be smaller than may be the case where there is no bimetallic system. Whenever the market ratio diverges from the mint ratio the compensatory action under the bimetallic law tends to restore the equilibrium, and even where it fails in restoring it, it does succeed in abridging the gulf between the two ratios. That being the case, it is safe to argue that had there been no demonetization of silver after 1873 the ratio between gold and silver would have probably been preserved as it was during the monetary disturbances of the earlier period. At any rate, this much is certain, that the market ratio between the two metals could not have diverged from the mint ratio to the extent it actually did.*

It is therefore a sad commentary on the monetary legislation of the seventies that if it did not actually help to create, for no purpose, a problem unknown before, it certainly helped to make worse a bad situation. Prior to 1870, not all countries had a common currency. There were India and countries of Western Europe which were exclusively on a silver basis, and others, like England and Portugal, which were exclusively on a gold basis, and yet none of them felt the want of a common standard of value in their mutual dealings. So long as there existed the fixed-ratio system in France and the Latin Union the problem was really provided for, for under it the two metals behaved as one and thereby furnished a common standard, although all countries did not use the same metal as their standard money. It was therefore a matter of comparative indifference to most countries which metal they used so long as there was some one country which used either at a certain defined ratio. With the destruction of this fixed ratio what was thus a matter of comparative indifference became a matter of supreme concern. Every country which had before enjoyed the benefits of a common international standard without having a common currency was faced with a crisis in which the choice lay between

* Fisher, *Purchasing Power of Money*, 1911, pp. 134-35.

sacrificing its *currency* to securing a common standard or hugging its currency and foregoing the benefits of a common standard. That exigencies of a common standard ultimately led to its accomplishment was as it should have been, but it was not a fact before a great deal of harm and some heavy burdens had brought home to people what the want of it really meant to them.

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CHAPTER III

THE SILVER STANDARD AND THE EVILS OF ITS INSTABILITY

The economic consequences of this rupture of the par of exchange were of the most far-reaching character. It divided the commercial world into two sharply defined groups, one using gold and the other using silver as their standard money. When so much gold was always equal to so much silver, as was the case previous to 1873, it mattered very little, for the purposes of international transactions, whether a country was on a gold or on a silver standard; nor did it make any difference in which of the two currencies its obligations were stipulated and realized. But when, owing to the dislocation of the fixed par, it was not possible to define how much silver was equal to how much gold from year to year or even from month to month, this precision of value, the very soul of pecuniary exchange, gave place to the uncertainties of gambling. Of course, all countries were not drawn into this vortex of perplexities in the same degree and to the same extent, yet it was impossible for any country which participated in international commerce to escape from being dragged into it. This was true of India as it was of no other country. She was a silver-standard country intimately bound to a gold-standard country, so that her economic and financial life was at the mercy of blind forces operating upon the relative values of gold and silver which governed the rupee-sterling exchange.

The fall increased the burden of those who were under an obligation to make gold payments. Amongst such, the most heavily charged was the Government of India. Owing to the exigencies of its political constitution, that Government has been under the necessity of making certain payments in England to meet: (1) interest on debt and on the stock of the guaranteed railway companies; (2) expenses on account of the European troops maintained in India; (3) pensions and non-effective allowances payable in England; (4) cost of the home

administration*; and (5) stores purchased in England for use or consumption in India. England being a gold-standard country, these payments were necessarily gold payments. But the revenues of the Government of India out of which these payments were met were received in silver, which was the sole legal-tender money of the country. It is evident that even if the gold payments were a fixed quantity their burden must increase *pari passu* with the fall in the gold value of silver. But the gold payments were not a fixed quantity. They have ever been on the increase, so that the rupee cost of the gold payments grew both by reason of the growth in their magnitude, and also by reason of the contraction of the medium, i.e. the appreciation of gold, in which they were payable. How greatly this double levy diminished the revenues of India, the figures in Table XI give a convincing testimony.

TABLE XI
INCREASE IN THE RUPEE COST OF GOLD PAYMENTS†

Financial Year	Average Rate of Exchange for the Year	Total Excess of Rupees needed to provide for the net Sterling Payments of the Year over those required to meet the Sterling Payments of 1874-75	Amount of this Excess due to	
			(1) Fall in the Rate of Exchange over that of 1874-75	(2) Increase in gold payments over those of the Year 1874-75
	s. d.	R	R	R
1875-76	1 9.626	86,97,980	41,13,723	45,84,257
1876-77	1 8.508	3,15,06,824	1,44,68,234	1,70,38,590
1877-78	1 8.791	1,30,05,481	1,14,58,670	1,15,46,811
1878-79	1 7.794	1,85,23,170	1,04,16,718	81,06,452
1879-80	1 7.961	39,23,570	1,65,37,394	-1,26,13,824
1880-81	1 7.956	3,12,11,981	1,92,82,582	1,19,29,399
1881-82	1 7.895	3,18,19,685	1,98,76,786	-1,19,42,899
1882-83	1 7.525	62,50,518	1,86,35,246	2,48,85,764
1883-84	1 7.536	3,44,16,685	2,33,46,040	1,10,70,645
1884-85	1 7.308	1,96,25,981	2,48,03,423	51,77,442
1885-86	1 6.254	1,82,11,346	2,54,95,337	-4,37,06,683
1886-87	1 5.441	4,69,16,788	4,46,68,299	22,48,489
1887-88	1 4.898	4,63,13,161	4,96,60,537	- 33,47,376
1888-89	1 4.379	9,00,38,166	6,59,71,998	2,40,66,168
1889-90	1 4.566	7,75,96,889	6,06,98,370	1,68,98,519
1890-91	1 6.090	9,06,11,857	4,65,48,302	4,40,63,555
1891-92	1 4.733	10,44,44,529	6,54,52,999	3,89,91,530

* Since the Reform Act of 1920 that part of this cost which was "political" has been placed upon the British Estimates.

† Compiled from figures in Appendix II, p. 270, of the Indian Currency Committee of 1843.

The effect of such a growing burden on the finance of the Government may well be imagined ; the condition of the Government, embarrassing at first, later became quite desperate under this continuously increasing burden. It enforced a policy of high taxation and rigid economy in the finances of the Government. Analysing the resource side of the Indian Budgets from the year 1872-73, we find that there was hardly any year which did not expire without making an addition to the existing imposts of the country. In 1872-73, there commenced the levy of what were called Provincial Rates. The fiscal year 1875-76 witnessed the addition of R. 1 per gallon in the excise duty on spirits. In 1877-78 the Pass Duty on Malwa opium was raised from Rs. 600 to Rs. 650 per chest. An addition of a Licence Tax and Local Rates was made in the year 1878-79, and an increase of Rs. 50 per chest took place in the Malwa Opium Duty in the following year. With the help of these imposts the Government expected to place its finances on an adequate basis. By the end of 1882, it felt quite secure and even went so far as to remit some of the taxes, which it did by lowering the customs duties and the Patwari Cess in the North-Western Provinces. But the rapid pace in the fall of the exchange soon showed that a resort to further taxation was necessary to make up for the increased cost of the sterling payments. To the existing burdens, therefore, was added in 1886 an Income Tax, a duty of 5 per cent. on imported and also on non-illuminating petroleum. The Salt Duty was raised in 1888 in India from Rs. 2 to Rs. 2½ and in Burma from 3 annas to R. 1 per maund. The Patwari Cess of the North-Western Provinces, repealed in 1882, was re-imposed in 1888. The rates of duty on imported spirit and the excise duties on spirits were not only raised in 1890, but were afterwards added to in every province. An excise duty on malt liquor was levied in 1893, and another on salted fish at the rate of 6 annas per maund. The yield of the taxes and duties levied from 1882-83 was* as follows:—

Sources			1882-83	1892-93
			Rs.	Rs.
Salt	...	...	5,67,50,000	8,14,90,000
Excise	...	...	3,47,50,000	4,97,90,000
Customs	...	...	1,08,90,000	1,41,80,000
Assessed Taxes	...	...	48,40,000	1,63,60,000

* *Report of the Indian Currency Committee, 1893, App. II, p. 263.*

All this additional burden was due to the enhanced cost of meeting the gold payments, and “would not have been necessary but for the fall in the exchange.”*

Along with this increase of resources the Government of India also exercised the virtue of economy in the cost of administration. For the first time in its history, the Government turned to the alternative of employing the comparatively cheaper agency of the natives of the country in place of the imported Englishmen. Prior to 1870, the scope of effecting economy along this line was *very* limited. By the Civil Service Reforms of 1853† the way was cleared for the appointment of Indians to the posts reserved by the Statute of 1793‡ for the members of the covenanted Civil Service. But this reform did not conduce to any economy in the cost of the administration, because the Indian members carried the same high scale of salaries as did the English members of the Civil Service. It was when the Statute of 1870 (33 Vic. c. 3) was passed permitting the appointment by nomination of non-covenanted Indians to places reserved for the covenanted Civil Service on a lower scale of salary, that a real scope for economy presented itself to the Government of India. Hard pressed, the Government of India availed itself of the possibilities for economy held out by this statute. So great was the need for economy and so powerful was the interest of the Government in reducing its expenditure that it proceeded, notwithstanding increased demands for efficient administration, to substitute the less expensive agency of non-covenanted civilians in place of the more expensive agency of the covenanted civilians. The scale on which this substitution was effected was by no means small, for we find that between 1874 and 1889 the strength of the covenanted service recruited in England was reduced by more than 22 per cent., and was further expected to be reduced by about 12 per cent., by the employment of unconvenanted Indians to the posts usually reserved for covenanted civilians.§ Besides substituting a cheap for a dear agency in the administration, the Government also sought to obtain relief by applying the pruning knife to the rank growth in departmental

* J.E.O’Conor, *Report of the Indian Currency Committee*, 1898, App. II, p. 182.

† Cf. *Report of the Public Service Commission*, C 5327 of 1887.

‡ This provision of the Act has been re-enacted by the Act of 1861.

§ Cf. evidence of Mr. Jenkins, Q. 12. Mil. of Evid. of the Select Committee on East India (Civil Servants), H. of C. 327 of 1890.

extravagences.* Even with such heroic efforts to increase the revenue and reduce the expenditure the finances of the Government throughout the period of the falling exchange were never in a flourishing state, as is shown in Table XII.

Much more regrettable was the inability of the Government, owing to its financial difficulties, to find money for useful public works. The welfare of the Indian people depends upon turning to best account the resources which the country possesses. But the people have had very little of the necessary spirit of enterprise in them. The task, therefore, has fallen upon the Government of India to provide the country with the two prime requisites of a sustained economic life, namely a system of transport and a network of irrigation. With this object in view the Government had inaugurated a policy of developing what were called "Extraordinary Public Works," financed by capital borrowings. For such borrowings India, as was to be expected, hardly offered any market, the people being too poor and their savings too scanty to furnish a modicum of the required capital outlay. Like all governments of poor peoples, the Government of India had therefore to turn to wealthier countries that had surplus capital to lend. All these countries unfortunately happened to be on the gold standard. As long as it was possible to say that so much gold was equal to so much silver, the English investor was indifferent whether the securities of the Government of India were rupee securities or sterling securities. But the fall in the gold value of silver was also a fall in the gold value of the rupee securities, and what was once a secure investment ceased to be so any more. This placed the Government in a difficult position in the matter of financing its extraordinary public works. Figures in Table XIII are worth study.

The English investor would not invest in the rupee securities. An important customer for the Indian rupee securities was thus lost. The response of the Indian money market was inadequate. To issue sterling securities was the only alternative to enable the Government to tap a bigger and a more constant reservoir for the drawing of capital to India; but as it was bound to increase the burden of the gold payments, which it was the

* Cf. *Calcutta Civil Finance Committee's Report*, 1886; also *The Report of the Civil Finance Commissioner* (1887), who completed the work of the Committee after it was dissolved.

TABLE XII
REVENUE AND EXPENDITURE OF THE GOVERNMENT OF INDIA

Year.	Average Rate of Exchange.	In India.			In England.		Final Result.
		Net Revenue.	Net Expendi- ture excluding Exchange.	Surplus Revenue.	Net Sterling Revenue.	Exchange.	
	d.	R.	R.	R.	£	R.	R.
1874-75	22.156	39,564,216	25,897,098	13,667,118	12,562,101	1,045,239	59,778
1875-76	21.626	40,053,419	24,541,923	15,511,496	12,544,813	1,377,428.	1,589,255
1876-77	20.508	38,253,366	25,355,285	12,898,081	13,229,646	2,252,611	—2,584,176
1877-78	20.791	39,275,489	27,658,021	11,617,468	13,756,478	2,123,030	—4,262,040
1878-79	19.794	44,415,139	25,778,928	18,636,211	13,610,211	2,891,902	2,134,098
1879-80	19.961	45,258,197	29,384,030	15,874,167	14,223,891	2,878,169	—1,227,893
1880-81	19.956	44,691,119	34,880,434	9,810,085	11,177,231	2,264,848	—3,031,394
1881-82	19.895	45,471,887	27,717,249	17,754,638	11,737,688	2,421,499	3,595,451
1882-83	19.525	42,526,173	25,500,437	17,025,736	13,299,976	3,050,923	674,837
1883-84	19.536	43,591,273	23,566,381	20,024,892	14,770,257	3,375,158	1,879,477
1884-85	19.308	41,585,347	24,763,779	16,821,568	13,844,028	3,363,986	— 386,446
1885-86	18.254	42,635,953	27,352,132	15,283,821	13,755,659	4,329,888	—2,801,726
1886-87	17.441	44,804,774	25,124,335	19,680,439	14,172,298	5,329,714	178,427
1887-88	16.898	45,424,150	25,968,025	19,456,125	15,128,018	6,356,939	—2,028,832
1888-89	16.379	46,558,354	25,051,147	21,507,207	14,652,590	6,817,599	37,018
1889-90	16.566	50,005,810	26,367,855	23,637,955	14,513,155	6,512,767	2,612,033
1890-91	18.090	49,403,819	25,579,727	23,824,092	15,176,866	4,959,055	3,688,171
1891-92	16.733	50,023,142	27,013,618	23,009,524	15,716,780	6,825,909	467,535

strongest interest of the Government to reduce, the resort to the London money market, unavoidable as it became, was somewhat restrained,* with the result that the expansion of extraordinary public works did not proceed at a pace demanded by the needs of the country. The effects of this financial derangement, consequent on the fall of the exchange, were not confined to the Government of India. They were immediately felt by the municipalities and other local bodies who were dependent upon the Government for financial aid. So long as the cash balances were overflowing in the treasury of the Government, "one of the most useful ways" to employ them was found in lending a portion of them to these local institutions. As they had just then been inaugurated under the local self-government policy of Lord Ripon's regime, and were looked upon only as an experiment, their taxing and borrowing powers were rigidly limited. Consequently, this financial aid from the Central Government by way of temporary advances was a resource of inestimable value to them. When, however, the cash balances of the Central Government began to diminish owing to the continued losses by exchange, these facilities were severely curtailed,† so that the very vitality of these institutions was threatened just at the moment when they needed all help to foster their growth and strengthen their foundations.

Addressing the Secretary of State, the Government of India, in a despatch of February 2, 1886, observed‡:—

"10. We do not hesitate to repeat that the facts set forth in the preceding paragraphs are, from the point of Indian interests, intolerable ; and the evils which we have enumerated do not exhaust the catalogue. Uncertainty regarding the future of silver discourages the investment of capital in India, and we find it impossible to borrow in silver except at an excessive cost.

"On the other hand, the Frontier and Famine Railways which we propose to construct, and the Coast and Frontier

* During the period of falling exchange the distribution of the debt of India was as follows:—

		Sterling Debt	Rupee Debt
End of 1873-74	...	41,117,617	66,41,72,900
End of 1898-99	...	124,268,605	1,12,65,04,340

Indian Currency Committee (1898), Appendix II p. 179

† Cf. *Financial Statement*, 1876-77, p. 94.

‡ See C. 4868 of 1886, p. 8.

defences which we have planned, are imperatively required and cannot be postponed indefinitely.

“We are forced, therefore, either to increase our sterling liabilities, to which course there are so many objections, or to do without the railways required for the commercial development of the country, and its protection against invasion and the effects of famine.

* * * * *

“11. Nor can the difficulties which local bodies experience in borrowing in India be overlooked. The Municipalities of Bombay and Calcutta require large sums for sanitary improvements, but the high rate of interest which they must pay for silver loans operates to deter them from undertaking expensive works, and we need hardly remind your Lordship that it has quite recently been found necessary for Government to undertake to lend the money required for the construction of docks at Calcutta and Bombay, and that when the Port Commissioners of Calcutta attempted to raise a loan of 75 lakhs of rupees in September, 1885, guaranteed by the Government of India, the total amount of tenders was only Rs. 40,200, and no portion of this insignificant amount was offered at par.....”

The importation of capital on private account was hampered for similar reasons, to the great detriment of the country. It was urged on all hands, and was even recommended by a Royal Commission,* that one avenue of escape from the ravages of recurring famines, to which India so pitifully succumbed at such frequent intervals, was the diversification of her industries. To be of any permanent benefit, such diversified industrial life could be based on a capitalistic basis alone. But that depended upon the flow of capital into the country as freely as the needs of the country required. As matters then stood, the English investor, the largest purveyor of capital, looked upon the investment of capital in India as a risky proposition. It was feared that once the capital was spread out in a silver country every fall in the price of silver would not only make the return uncertain when drawn in gold, but would also reduce the capital value of his investment in terms of gold, which was naturally the unit

*Cf. *The Report of the Famine Commission of 1880*, Part II, C 2735 of 1880, pp. 175-76.

in which he measured all his returns and his outlays. This check to the free inflow of capital was undoubtedly the most serious evil arising out of the rupture of the par of exchange.

Another group of people, who suffered from the fall of exchange because of their obligation to make gold payments, was composed of the European members of the Civil Service in India. Like the Government to which they belonged, they received their salaries in silver, but had to make gold remittances in support of their families, who were often left behind in England. Before 1873, when the price of silver in terms of gold was fixed, this circumstance was of no moment to them. But as the rupee began to fall the face of the situation was completely altered. With every fall in the value of silver they had to pay more rupees out of their fixed salaries to obtain the same amount of gold. Some relief was no doubt given to them in the matter of their remittances. The Civil Servants were permitted, at a sacrifice to the Government, to make their remittances at what was called the Official Rate of Exchange.* It is true the difference between the market rate and the official rate was not very considerable. None the less, it was appreciable enough for the Civil Servants to have gained by $2\frac{1}{2}$ per cent. on the average of the years 1862-90† at the cost of the Government. The Military Servants obtained a similar relief to a greater degree, but in a different way. Their salary was fixed in sterling, though payable in rupees. It is true the Royal Warrant which fixed their salary also fixed the rate of exchange between the sterling and the rupee for that purpose. But as it invariably happened that the rate of exchange fixed by the Warrant was higher than the market rate, the Military Servants were compensated to the extent of the difference at

* As was explained by Mr. Waterfield before the Select Committee on East India (Civil Servants), H. C. Return 327 of 1890, Q. 1905-17, it was first instituted in 1824 and was arrived at as follows : In December of each year a calculation was made at the India Office of the cost of sending a rupee to India, based on the market price of silver in London, and of the cost of bringing a rupee from India, based on the price of bills on London in Calcutta. A mean between the two was struck and taken as the adjusting rate for the coming official year between the India Office and the British Treasury in regard to such transactions or payments undertaken by one Government as the agent of the other. It was fixed anew for each and formed a fair average rate, although it was sometimes above and sometimes below the market rate of exchange.

† *Ibid*, Q. 1925-26.

the cost of the Indian Exchequer.* This relief was, comparatively speaking, no relief to them. The official or the warrant rates of exchange, though better than the market rates of exchange, were much lower than the rate at which they were used to make their remittances before 1873. Their burden, like that of the Government, grew with the fall of silver, and as their burden increased their attitude became alarmist. Many were the memorialists who demanded from the Government adequate compensation for their losses on exchange.† The Government was warned‡ that

“the ignorant folk who think India would be benefited by lowering present salaries are seemingly unable to comprehend that such a step would render existence on this reduced pay simply impossible, and that recourse would of necessity be had to other methods of raising money.”

Such, no doubt, was the case in the earlier days of the East India Company, when the Civil Servants fattened on pickings because their pay was small,§ and it was to put a stop to their extortions that their salaries were raised to what appears an extra-ordinary level. That such former instances of extortions should have been held out as monitions showed too well how discontented the Civil Service was owing to its losses through exchange.

Quite a different effect the fall had on the trade and industry of the country. It was in a flourishing state as compared with the affairs of the Government or with the trade and industry of a gold-standard country like England. Throughout the period of falling silver there was said to be a progressive decline relatively to population in the employment afforded by various trades and industries in England. The textile manufactures and the iron and coal trade were depressed as well as the other important trades,

* Cf. F. S. 1887-8, pp. 39-40. This cost was as follows :—

1847-75	...	Rs. 6,40,000	1885-86	Rs. 4,00,000
1884-85	...	Rs. 18,43,000	1886-87	Rs. 5,15,000

† Cf. *Report of the Indian Currency Committee*, 1893, App. I, pp. 185-90 and p. 202, for memorials of the European Civil Servants.

‡ Cf. Col. Hughes-Hallett, M.P., *The Depreciation of the Rupee: its Effect on the Anglo-Indian Official—the Wrong and the Remedy*, London, 1887, p. 14.

§ The connection between the rapacious conduct of the early European Civil Servants and the smallness of their salaries was well brought out by Clive in his speech dated March 30, 1772, during the course of the debate in the House of Commons on the East India Judicature Bill, *Hansard*, Vol. XVII, pp. 334-39.

including the hardware manufactures of Birmingham and Sheffield, the sugar-refining of Greenock, Liverpool, and London, the manufactures of earthenware, glass, leather, paper, and a multitude of minor industries.* The depression in English agriculture was so widespread that the Commissioners of 1892 were “unable to point to any part of the country in which [the effects of the depression] can be said to be entirely absent,” and this notwithstanding the fact that the seasons since 1882 “were on the whole satisfactory from an agricultural point of view.”† Just the reverse was the case with Indian trade and industry. The foreign trade of the country, which had bounced up during the American Civil War, showed greater buoyancy after 1870, and continued to grow throughout the period of the falling exchange at a rapid pace. During the short space of twenty years the total imports and exports of the country more than doubled in their magnitude, as is shown by Table XIV.

TABLE XIV

IMPORTS AND EXPORTS (BOTH MERCHANDIZE AND TREASURE)§

Year	Exports R.	Imports	Year	Exports R.	Imports
1870-71	57,556,951	39,913,942	1881-82	83,068,198	60,436,155
1871-72	64,685,376	43,665,663	1882-83	84,527,182	65,548,868
1872-73	56,548,842	36,431,210	1883-84	89,186,397	68,157,311
1873-74	56,910,081	39,612,362	1884-85	85,225,922	69,591,269
1874-75	57,984,549	44,363,160	1885-86	84,989,502	71,133,666
1875-76	60,291,731	44,192,378	1886-87	90,190,633	72,830,670
1876-87	65,043,789	48,876,751	1887-88	92,148,279	78,830,468
1877-78	67,433,324	58,819,644	1888-89	98,833,879	83,285,427
1878-79	64,919,741	44,857,343	1889-90	105,366,720	86,656,990
1879-80	69,247,511	52,821,398	1890-91	102,350,526	93,909,856
1880-81	76,021,043	62,104,984	1891-92	111,460,278	84,155,045

§ From Appendix II (Nos. 1 and 2) to the *Report of the Indian Currency Committee of 1898*.

* Report by Dunraven, Farrer, Muntz, and Lubbock in the *Final Report of the Royal Commission on Depression of Trade and Industry*, par., 54, C. 4893.

† *Final Report of the Royal Commission on Agricultural Depression in England*, C 8540 of 1897, par. 28.

TABLE XV. NATURE OF INDUSTRIAL PURSUITS IN ENGLAND AND INDIA *

	Distribution of <i>Indian</i> Exports exclusive of Treasure.					Distribution of <i>English</i> Exports exclusive of Treasure.				
	Manufac- tured Arti- cles.	Raw Materials.	Food Articles.	Unclasi- fied Arti- cles.	Total.	Manufac- tured Arti- cles.	Raw Materials.	Food Articles.	Unclasi- fied Arti- cles.	Total.
1857	11	34	22	23	100	90.9	4	4.9	.2	100
1858	6	35	26	33	100	91.4	3.4	5.1	.1	100
1859	6.5	40	15.5	38	100	91.5	3.8	4.6	.1	100
1860	5.7	43.6	17.7	33	100	91.9	3.6	4.4	.3	100
1861	5.8	46.5	15.3	32.4	100	90.4	4.8	4.8	—	100
1862	5	52	16	27	100	90.3	4	4.8	.9	100
1863	3.7	58.7	10.6	27	100	91.0	4	4	1.0	100
1864	4	69.2	9.3	17.5	100	92.5	3.7	3.7	.1	100
1865	3.5	68	12	16.6	100	92.1	3.6	3.6	.7	100
1866	4.2	67.2	10.3	18.3	100	92	3.7	3.7	.4	100
1867	4	58	11	27	100	92.2	3.8	3.7	.3	100
1868	4	58.5	11.5	26	100	92	4.4	3.4	.2	100
1869	4.8	60.5	14	20.7	100	92	4.2	3.1	.7	100
1870	4.4	63.6	9	23	100	91	4	4	1.0	100
1871	3.7	65.3	11	20	100	90	4.4	4.9	.7	100
1872	3.3	61.4	13.5	21.8	100	91.2	5.4	3.5	.9	100

* The figures for India are calculated from the *Statistical Abstract for British India*, Second Number (1857-866), Table No. 34, and the Eighth Number (1864-1873), Table No. 24. Figures for England are taken from Appendix C (Statement 6) to the *First Report of the Royal Commission of the Depression of Trade and Industry*, 1885, with this alteration—that the separate figures in the original under “Manufactured” and “Partially Manufactured” are here grouped under “Manufactured.” The “Unclassified Articles” under Indian Exports are for the most part “Jewellery.”

TABLE XVI
CHANGES IN INDUSTRIAL PURSUITS OF INDIA*

Years	Imports		Exports	
	Manufactured	Raw	Manufactured	Raw
	Rs.	Rs.	Rs.	Rs.
1879	25,98,65,827	13,75,55,837	5,27,80,340	59,67,27,991
1892	36,22,31,872	26,38,18,431	16,42,47,566	85,52,09,499
Percentage of increase	39	91	211	43
Total Annual	2.8	6.5	15	3

Not only had the trade of India been increasing, but the nature of her industries was also at the same time undergoing a profound change. Prior to 1870, India and England were, so to say, non-competing groups. Owing to the protectionist policy of the Navigation Laws, and owing also to the substitution of man by machinery in the field of production, India had become exclusively an agricultural and a raw-material-producing country, while England had transformed herself into a country which devoted all her energy and her resources to the manufacturing of raw materials imported from abroad into finished goods. How marked was the contrast in the industrial pursuits in the two countries is well revealed by the analysis of their respective exports in Table XV.

After 1870, the distribution of their industrial pursuits was greatly altered, and India once again began to assume the role of a manufacturing country. Analysing the figures for Indian imports and exports for the twenty years succeeding 1870, (*see Table XVI*) we find that the progress in the direction of manufactures formed one of the most significant features of the period.

This change in the industrial evolution was marked by the growth of two principal manufactures. One of them was the

* From Ranade's *Essays on Indian Economics*, p. 104.

manufacture of cotton. The cotton industry was one of the oldest industries of India, but during 100 years between 1750 and 1850 it had failed into a complete state of decrepitude. Attempts were made to resuscitate the industry on a capitalistic basis in the sixties of the nineteenth century and soon showed signs of rapid advance. The story of its progress is graphically illustrated in the following summary in Table XVII:—

TABLE XVII

THE DEVELOPMENT OF INDIAN COTTON TRADE AND INDUSTRY

	Growth of Trade (Average Annual Quantities in each Quinquennium)				
	1870-71 to 1874-75	1875-76 to 1879-80	1880-81 to 1884-85	1885-86 to 1889-90	1890-91 to 1894-95
Imports of raw cotton— thousands or cwts.	23	52	51	74	89
Exports of raw cotton— thousands of cwts.	5,236	3,988	5,477	5,330	4,660
Imports of twist and yarn	33.55	33.55	44.34	49.09	44.79
	Growth of Industry (at end of each fifth year)				
Number of mills	48	58	81	114	143
Number of spindles—000— omitted	1,000	1,471	2,037	2,935	3,712
Number of looms—000— omitted	10	13	16	22	34
Number of persons employed	...	39,537	61,836	99,224	...

Another industry which figured largely in this expansion of Indian manufactures was jute. Unlike the cotton industry of India, the jute industry was of a comparatively recent origin. Its growth, different from that of the cotton industry, was fostered by the application of European capital, European management, and European skill, and it soon took as deep roots as the cotton industry and flourished as well as the latter did, if not better. Its history was one of continued progress as will be seen from Table XVIII.

This increasing trend towards manufactures was not without its indirect effects on the course of Indian agriculture. Prior to 1870 the Indian farmer, it may be said, had no commercial outlook. He cultivated not so much for profit as for individual self-sufficiency. After 1870 farming tended to become a business and crops came more and more to be determined by the course of market prices than by the household needs of the farmer. This is well illustrated by figures in Table XIX.

Such was the contrast in the economic conditions prevalent in the two countries. This peculiar phenomenon of a silver-standard country steadily progressing, and a gold-standard country tending to a standstill, exercised the minds of many of

TABLE XVIII
DEVELOPMENT OF JUTE INDUSTRY AND TRADE

Growth	Average Annual of each Quinquennium				
	1870-71 to 1874-75	1875-76 to 1879-80	1880-81 to 1884-85	1885-86 to 1889-90	1890-91 to 1894-95
Exports-					
Raw, million cwt.	5.72	5.58	7.81	9.31	10.54
Gunny bags, millions	6.44	35.96	60.32	79.98	120.74
Cloth, million yds.	...	4.71	6.44	19.79	54.20
Growth of Industry					
Number of—					
Mills	...	21	21	24	26
Looms, 000 omitted	...	5.5	5.5	7	8.3
Spindles, 000 omitted	...	88	88	138.4	172.4
Persons employed, in thousands	...	38.8	38.8	52.7	64.3

its observers. The chief cause was said to be the inability of the English manufacturers to hold out in international competition. This inability to compete with the European rivals was attributed to the prevalence of protective tariffs and subsidies which formed an essential part of the industrial and commercial code of the European countries. Nothing of the kind then existed

TABLE XIX
GROWTH OF AGRICULTURAL EXPORTS OF INDIA

	1868-69	1873-74	1877-78	1882-83	1887-88	1891-92
Wheat	100	637.41	2,313.47	5,152.36	4,914.37	11,001.44
Opium	100	118.38	123.83	122.47	120.20	116.82
Seeds	100	111.26	305.87	239.97	403.60	480.99
Rice	100	131.66	119.84	203.28	185.55	220.36
Indigo	100	116.91	121.57	142.17	140.76	126.33
Tea	100	169.35	293.17	507.25	775.09	1,075.75
Coffee	100	86.04	69.98	85.31	64.59	74.11

in India, where trade was as free and industry as unprotected as any could have been, and yet the Lancashire cotton-spinner, the Dundee jute manufacturer and the English wheat-grower complained that they could not compete with their rivals in India. The cause, in this case, was supposed to be the falling exchange.* So much were some people impressed by this view that even the extension of the Indian trade to the Far East was attributed to this cause. Already, it was alleged, the dislocation of the par of exchange between gold and silver had produced a kind of segregation of gold-using countries and silver-using countries to the exclusion of each other. In a transaction between two countries using the same metal as standard it was said the element of uncertainty arising from the use of two metals varying in terms of each other was eliminated. Trade between two such countries could be carried on with less risk and less inconvenience than between two countries using different standards, as in the latter case the uncertainty entered into every transaction and added to the expense of the machinery by which trade was carried on. That the Indian trade should have been deflected to other quarters† where, owing to the existence of a common standard the situation trade had to deal with was immune from uncertainties, was readily admitted. But it was contended that there was no reason why, as a part of the segregation of commerce, it should have been possible for the Indian manufacturer to oust his English rival from the Eastern markets to the extent he was able to do (see Table XX, p. 432).

The causes which effected such trade disturbances formed the subject of a heated controversy.‡ The point in dispute was whether the changes in international trade, such as they were, were attributable to the monetary disturbances of the time. Those who held to the affirmative explained their position by arguing that the falling exchange gave a bounty to the Indian producer and imposed a penalty on the English producer. The

* Cf. *The Final Report of the Royal Commission on Gold and Silver* Part I, pars. 99-101, for a summary of the argument.

† The distribution of Indian trade during this period was as shown on the page 432 footnote.

‡ See the evidence and memoranda by Profs. Marshall and Nicholson before the Royal Commission on Gold and Silver (1886); also Prof. Lexis, "The Agio on Gold and International Trade," in the *Economic Journal*, Vol. V, 1895.

TABLE XX
EXPORTS OF COTTON GOODS TO EASTERN MARKETS

Years	Yarn, lbs. 000 omitted		Piece-goods, yds., 000 omitted	
	From India	From U. K.	From India	From U. K.
1877	...	7,927	33,086	15,544
1878	...	15,600	36,467	17,545
1879	...	21,332	38,951	22,517
1880	...	25,862	46,426	25,800
1881	...	26,901	47,479	30,424
1882	...	30,786	34,370	29,911
1883	...	45,378	33,499	41,534
1884	...	49,877	38,856	55,565
1885	...	65,897	33,061	47,909
1886	...	78,242	26,924	51,578
1887	...	91,804	35,354	53,406
1888	...	113,451	44,643	69,486
1889	...	128,907	35,720	70,265
1890	...	141,950	37,869	59,496
1891	...	169,253	27,971	67,666
				595,258

† DISTRIBUTION OF INDIAN TRADE

Annual Average for each Quinquennium in Millions of
rupees

Countries	1875-76 to 1879-80			1880-81 to 1884-85		
	Imports	Exports	Total	Imports	Exports	Total
United Kingdom	...	323.68	278.15	601.83	434.45	344.22
China	...	14.05	132.27	146.32	19.23	134.94
Japan	...	.02	.33	.35	.19	2.09
Ceylon	...	5.74	22.97	28.71	5.35	16.37
Straits Settlement		10.83	26.11	36.94	15.88	33.65
						49.53

Annual Average for each Quinquennium in Millions of
rupees

Countries	1885-86 to 1889-90			1890-91 to 1894-95		
	Imports	Exports	Total	Imports	Exports	Total
United Kingdom	...	510.47	360.59	871.06	526.24	338.40
China	...	21.64	134.54	156.18	28.69	133.30
Japan	...	.25	7.27	7.52	1.51	14.44
Ceylon	...	5.86	20.56	26.42	6.42	31.18
Straits Settlement		20.09	42.54	62.63	23.32	52.56
						75.88

existence of this bounty, which was said to be responsible for the shifting of the position of established competitors in the field of international commerce, was based on a simple calculation. It was said that if the gold value of silver fell the Indian exporter got more rupees for his produce and was therefore better off, while by reason of the same fact the English producer got fewer sovereigns and was therefore worse off. Put in this naive form, the argument that the falling exchange gave a bounty to the Indian exporters and imposed a penalty on the English exporters had all the finality of a rule of arithmetic. Indeed, so axiomatic was the formula regarded by its authors that some important inferences as to its bearing on the trade and industrial situation of the time were drawn from it. One such inference was that it stimulated exports from and hindered imports into the silver-using countries. The second inference was that the fall of exchange exposed some English producers more than others to competition from their rivals in silver-using countries. Now, can such results be said to follow from the fall of exchange? If we go behind the bald statement of a fall of exchange and inquire as to what determined the gold price of silver the above inferences appear quite untenable. That the ratio between gold and silver was simply the inverse of the ratio between gold prices and silver prices must be taken to be an unquestionable proposition. If therefore the gold price of silver was falling it was a counterpart of the more general phenomenon of the fall of the English prices which were measured in gold, and the rise of the Indian prices which were measured in silver. Given such an interpretation of the event of the falling exchange, it is difficult to understand how it can help to increase exports and diminish imports. International trade is governed by the relative advantages which one country has over another, and the terms on which it is carried on are regulated by the comparative cost of articles that enter into it. It is, therefore, obvious that there cannot be a change in the real terms of trade between countries except as a result of changes in the comparative cost of these goods. Given a fall in gold prices *all round*, accompanied by a rise in silver prices *all round*, there was hardly anything in the monetary disturbance that could be said to have enabled India to increase her exportation of anything except by diminishing her exportation or increasing her importation of something else. From the same view of the question of the falling exchange it follows that such a monetary disturbance

could not depress one trade more than another. If the falling or rising exchange was simply an expression of the level of *general* prices, then the producers of all articles were equally affected. There was no reason why the cotton trade or the wheat trade should have been more affected by the fall of exchange than the cutlery trade.

Not only was there nothing in the exchange disturbance to disestablish existing trade relations in general or in respect of particular commodities, but there was nothing in it to cause benefit to the Indian producer and injury to the English producer. Given the fact that the exchange was a ratio of the two price-levels, it is difficult to see in what sense the English producer, who got fewer sovereigns but of high purchasing power, was worse off than the Indian producer, who got more rupees but of low purchasing power. The analogy of Prof. Marshall was very apt. To suppose that a fall of exchange resulted in a loss to the former and a gain to the latter was to suppose that, if a man was in the cabin of a ship only ten feet high, his head would be broken if the ship sank down twelve feet into a trough. The fallacy consisted in isolating the man from the ship when, as a matter of fact, the same force, acting upon the ship and the passenger at one and the same time, produced like movements in both. In like manner, the same force acted upon the Indian producer and the English producer together, for the change in the exchange was itself a part of the more sweeping change in the general price-levels of the two countries. Thus stated, the position of the English and Indian producer was equally good or equally bad, and the only difference was that the former used fewer counters and the latter a larger number in their respective dealings.

A bounty to the Indian producer and a penalty to the English producer, it is obvious, could have arisen only if the fall of silver in England in terms of gold was greater than the fall of silver in terms of commodities in India. In that case the Indian producer would have obtained a clear benefit by exchanging his wares for silver in England and thus securing a medium which had a greater command over goods and services in India. But *a priori* there could be no justification for such an assumption. There was no reason why gold price of silver should have fallen at a different rate from the gold price of commodities in general, or that there should have been a great difference between the silver prices in England and in India. Statistics show that such *a priori* assumptions were not groundless. (See Table XXI).

TABLE XXI. MOVEMENTS OF PRICES, WAGES AND SILVER BETWEEN INDIA AND ENGLAND *

Net Imports of Silver into India.		Index No. for Gold Price of Silver.	Years.	Index No. for Silver Prices of Commodities in India.	Index No. for Wages in India.	Index No. for Gold Prices of Commodities in England.	Index No. for Wages in England.
Years.	Amount Rs.						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1871-72	6,587,296	99.7	1871	100	—	100	100
1872-73	739,244	99.2	1872	105	—	109	105.8
1873-74	2,530,824	97.4	1873	107	100	111	112
1874-75	4,674,791	95.8	1874	116	101	102	113
1875-76	1,640,445	93.3	1875	103	97	96	111.6
1876-77	7,286,188	86.4	1876	107	98	95	110
1877-78	14,732,194	90.2	1877	138	97	94	109.8
1878-79	4,057,377	86.4	1878	148	99	87	107
1879-80	7,976,063	84.2	1879	135	100	83	105.8
1880-81	3,923,612	85.9	1880	117	99	88	106.5
1881-82	5,381,410	85.0	1881	106	99	85	106.5
1882-83	7,541,427	84.9	1882	105	100	84	106.5
1883-84	6,433,886	83.1	1883	106	102	82	108
1884-85	7,319,581	83.3	1884	114	101	76	109
1885-86	11,627,028	79.9	1885	113	106	72	108
1886-87	7,191,743	74.6	1886	110	105	69	107
1887-88	9,319,421	73.3	1887	111	114	68	108
1888-89	9,327,529	70.4	1888	119	112	70	109.8
1889-90	11,002,078	70.2	1889	125	112	72	113
1890-91	14,211,408	78.4	1890	125	113	72	118
1891-92	9,165,684	74.3	1891	128	118	72	118
1892-93	12,893,499	65.5	1892	141	110	68	117.4
1893-94	13,759,273	58.5	1893	138	119	68	117.4

* Col. (2) is from Appendix II, Table No. 2 of the I.C.C. of 1898. Cols. (3), (5), (6), and (7) are from Atkinson's "Silver Prices in India," in the *Journal of the Statistical Society*, March, 1897. Col. (8) is based on the figures given by W. T. Layton in his *Introduction to the Study of Prices* (1912), Table I, Col. 1, p. 150, re-scaled to 1871 as 100.

It is obvious that if silver was falling faster than commodities, and if silver prices in India were lower than silver prices in England, we should have found it evidenced by an inflow of silver from England to India. What were the facts? Not only was there no extraordinary flow of silver to India, but the imports of silver during 1871-93 were much smaller than in the twenty years previous to that period.* This is as complete a demonstration as could be had of the fact that the silver prices in India were the same as they were outside, and consequently the Indian producer had very little chance of a bounty on his trade.

Although such must be said to be the *a priori* view of the question, the Indian producer was convinced that his prosperity was due to the bounty he received. Holding such a position he was naturally opposed to any reform of the Indian currency, for the falling exchange which the Government regarded a curse he considered a boon. But however plausible was the view of the Indian producer, much sympathy would not have been felt for it had it not been coupled with a notion, most commonly held, that the bounty arose from the *export trade*, so that it became an article of popular faith that the fall of exchange was a source of gain to the *nation as a whole*. Now was it true that the bounty arose from the export trade? If it were so, then every fall of exchange ought to give a bounty. But supposing that the depreciation of silver had taken place in India *before* it had taken place in Europe could the fall of exchange thus brought about have given a bounty to the Indian exporter? As was explained above, the Indian exporter stood a chance of getting a bounty only if with the silver he obtained for his produce he was able to buy more goods and services in India. To put the same in simpler language, his bounty was the difference between the price of his product and the price of his outlay. Bearing this in mind, we can confidently assert that in the supposed case of depreciation of silver having taken place in India first, such a fall in the Indian exchange would have been accompanied by a penalty instead of a bounty on his trade. In that case, the exporter from India would have found that though the Indian exchange, i.e. the gold price of silver, had fallen, yet the ratio which gold prices in England bore to silver prices in India had

* Cf. figures for imports of silver in Chap. I. It will, however, be noted how closely the flow of silver into India between 1872 and 1893 followed the fall in gold price of silver.