of fine silver, are not far from 15 to 1. For the sake of greater clearness, I give the following example, *viz.* :—

	£	s.	d.
An ounce of gold (containing 440 grains fine) laid down in India costs in London	3	17	10½
Freight and insurance as before at ⅞ per cent. . .	0	0	8
Seignorage at Indian Mint for coinage . . .	0	0	9
	3	19	3½
An ounce of silver containing 444 grains fine costs in London £0-5-1			
Cost of 440 grains, say	0	5	0½
Freight and insurance as before at 1¼ per cent. . .	0	0	0¾
Seignorage at 2 per cent. and loss of interest during coinage	0	0	1½
	0	5	2¾

		£		
Relative value	Gold . .	3 19 3½ =	}	15·16
	Silver . .	0 5 2¾ =	}	1

Again, the relative proportion would only be 15·02 to 1 were sovereigns to the value of an ounce of gold substituted for the bullion, because in this case there would be no seignorage.

I do not offer it as an attempt to solve the reasons why the Legislature of the day fixed on 15 to 1 as the proper adjustment of the ratio of gold to silver ; but I do think that they had not lost sight of the fact that, under the Indian mintage rules, new elements of value attach to the precious metals after being converted into legal tender currency.

Be that as it may, it is clear that the difference between the relative values fixed by the Act of 1835 and the relative values which I have brought out on the basis of Mr. Strachey's example, when the price of silver in London is 61*d.*, is, after all, not very material, and I think that a slight change either in the price of silver or in the charges of shipment will restore the equilibrium.

Having shewn, then, that the relative values of gold and silver, as fixed by the Act of 1835, do not vary much from facts established hereinbefore, I deem it unnecessary to dwell on Mr. Strachey's proposal to reduce the weight of the Indian gold coin from 110 grains of fine gold to 106·76 grains. This valuation is apparently arrived at on the assumption that the relative values of gold and silver in India are precisely the same as they are assumed to be in London, *viz.*, 15·45 to 1. I hope I have clearly enough demonstrated that the proportioned value is not applicable to India, even if the assumption were thoroughly correct.

But before going into other arguments adduced by Mr. Strachey, I notice (1) the statement that the actual cost of coining new gold pieces shews that, including the minting charge of 1 per cent., there will be an absolute loss of 1·42 per cent. on the conversion of sovereigns at 122·5 grains into gold mohurs of ₨15 at 180 grains. Lord Sandhurst has already pointed out that the alleged loss brought out by Colonel Hyde's method of computation is imaginary. I presume to think that I can establish His Lordship's opinion from actual facts.

I must, however, at once admit that the burden of proof lies on the Commission who recommended the rating of the sovereign at ₨10-4 to shew that it does bear, as nearly as possible, the proportion of 15 to 1. This I have done in a former portion of this minute, and I now proceed to test the accuracy of the Mint Masters' method of calculation, supposing sovereigns from England and Australia were melted down, and subjected to the Indian mint charge, thus :

		R
1,000 Sovereigns purchased at R10-4 cost		10,250
1,000 Sovereigns, each containing 113 grains of fine gold	=113,000 grains	
will yield mohurs of 165 grains fine .	= 684·85	
less seignorage at 1 per cent. . .	6·85	
Net mohurs .	678	

shewing that every gold mohur costs only R15-1-10 *after paying mint charge of 1 per cent.*, or a loss of little over ¾ per cent., instead of 1·42 as brought out by Colonel Hyde. Let the following practical tests be tried at the mint :—

I. Let Government purchase 1,000 of the new beautiful dragon sovereigns (which, by the way, sell at 6 pies each under the price obtained for Australian* and other English sovereigns), send them to the mint for re-coinage, deduct the seignorage of 1 per cent., and ascertain how much under 678 gold mohurs the yield is.

* Usual form of remittances from Australia and England in large quantities.

II. Repeat the same process with 1,000 sovereigns from the first remittance received in sovereigns from *Australia* by any of the banks, give credit for the comparatively more valuable alloy, and ascertain how much short of 678 gold mohurs the yield is.

III. Take a mixed sample of sovereigns which find their way, from Egypt and from other quarters, into the bazar, exclude light coins or those *approaching the minimum quantity of gold for which they are legal tender, viz., 122·5 grains,* and ascertain how much short of 678 gold mohurs the yield is.

I say *approaching the minimum quantity of gold* advisedly, for the simple reason that, if loss is apprehended, the sovereign can be laid down advantageously by Government in England where gold is legal tender if *not under* 122·5.

I feel so confident of the results that I hazard the prediction that, in the three instances given, Government would gain, on the transaction, *at least* ½ per cent.

I do not follow Mr. Strachey's argument further on this point, because he makes the admission that, in the event of *bar gold* being purchased, Government could obtain it in that form for coinage 1 per cent. cheaper than the ready money sovereigns, and therefore that no possible loss could arise. I contend, further, that every year that passes conclusively demonstrates the soundness of the conclusion arrived at by Lord Sandhurst's Committee, *viz.*, that R10-4 is a sound, scientific, and conservative rating, inasmuch as if a higher relative value had been fixed, the opposite and grave mistake would have been made of over-valuing gold and driving silver out of circulation. With reduced freight and insurance since 1867, the English sovereign can easily be laid down in Calcutta at ₹10-2-0, instead of at ₹10-4-10, and from Australia at ₹10-2-7·44* against ₹10-2-9, the rate taken by the Commission.

* *N.B.*—Actual cost of shipment, two years ago, to Calcutta.

With the prospect of fuller supplies of gold to our markets, the price of the sovereign has fallen in Calcutta from ₹10-12-0 to ₹10-7-0,† and in Bombay to ₹10-6-9; and it appears clear to me that it will soon fall to ₹10-4.

† *N.B.*—₹10-6-0 on going to press.

It is in this belief that, in my minute of 15th January, I have ventured to say that the present is a very opportune time for Government taking a further forward step towards the realization of what every writer on the subject considers a great boon to India.

If I might venture to offer an opinion on the proposal submitted by Mr. Strachey for the introduction of gold into our currency, I would say that, if adopted by Government, it would be in opposition to the declared opinions of our most eminent authorities against the practice of every European State, and against the course followed by America and France. Even Holland, who first took the alarm after recent gold discoveries, has now reverted to the gold standard. Lastly, the late Mr. Wilson, although he opposed the introduction of gold into the circulation of India, admits (Minute of 25th December 1859, section 25) that if it is desired to have the use of both metals in circulation of full value as coin, the transition period of a double standard is the mode in which the object can best be attained.

Although I have, in former minutes (*see* 7th May 1868,‡ 9th May 1868,‡ 30th May 1868,‡ and minute of 10th August of the same year§), fully dealt with the question of supposed inconvenience to the teeming masses of India which may possibly arise from the adoption of the proposal now under discussion, still, as the Financial Secretary has again drawn my attention to the subject, it may perhaps suffice if I illustrate my arguments by showing the course followed by France and America under circumstances somewhat similar to our own.

Before doing so, however, I may advert to another difficulty in the way of our being able to introduce gold into India through the establishment of international currency.

In England since 1666, the expense of manufacturing the standard coin has been borne by the State‖

‖ See Return from the Royal Mint to an order of the House of Lords, dated 17th February 1870, and embracing a period between 1851 and 1869, inclusive, "Loss on Coinage."

At the Royal Mint in Sydney a charge averaging about one per cent., and a delay in delivery of about 20 days, is made.

In France, the mintage for standard gold is between ¼ and ⅕ per cent., and the delay, which is variable, brings the charge up to from ½ to ⅝ per cent.

At the Mint of America (1867) the law now imposes, on all bullion, a *tax* of the half of one per cent., and a coinage charge of the same amount.

In Prussia, the charge for coining gold is ½ per cent.

At the mints in India, there is a charge of one per cent. on gold and of two per cent. on silver, with a delay in delivery of (say) ten days.

In France, by the law of 1803, five grammes of silver, nine-tenths fine, were constituted the monetary unit, retaining the name of a franc, but the

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‡ Not printed.

§ Page 162 of this volume.

provisions of the law as to gold and also copper coins gave them a *legal currency and value independent of their relation to silver.* The result of this legislation was that a double standard was created by law in France. Silver, however, remained for many years the practical standard; but when, by the increased demand for silver for the East, the value of gold was depreciated in relation to silver, gold became practically the standard of value. The silver coins, of which nearly the whole circulation consisted, were melted down and exported, and the country was put to the expense of a large coinage of gold. If by any increased production of silver, the value of silver should be depreciated, a change would take place in the opposite direction, and similar inconvenience would again be incurred. (Report of Royal Commission, 1868, page 10.) Again in America, the value of the silver dollar has remained unchanged since it was fixed by the law of Congress in 1792; but the value of the gold eagle or 10-dollar piece was reduced in 1834 from 247½ grains to 232, and gold has now become practically the standard of the United States.

Both in France and America, the silver coin and standard are to this day *retained,* according to law, as an alternative measure of value. In England the double standard ceased practically in 1717, and by law, only in 1816. In Portugal, Turkey, and Brazil a single standard of gold prevails. Germany and Holland are at present in a transition stage, while in the Northern States of Europe and in the East, there is a single standard of silver.

As bearing upon the question of the danger arising out of the suggestion to rate gold above R10-4, I may here advert to the fact that in England, during the reign of James the First, the gold coin was *over-valued* by proclamation, and the result was the exportation of the silver coin, to the great inconvenience of the public.

Having the examples of France and America before us, and further experience in guiding us to avoid the errors into which they were led, I need not dwell on this part of the subject much longer. I would only beg the favour of your turning to Minute of 9th May 1868,* in which you will find described the reasons for which, in my humble judgment, it is politic and necessary to leave untouched our present measure of value, *viz.*, the rupee, and its component parts expressed in lower denominations. I only quote the following sentences:—

> "I.—The price of gold and silver is, like the price of every other commodity, subject to the universal law of supply and demand, and it is *impossible* to fix their relative values with *exactitude,* or by an unchangeable decree; but the figures which I sent you yesterday give us a *starting point as near to equality as can be devised.*

> "II.—The proposal for the introduction of gold, by the operation of the double standard, or a double legal tender, or alternative measure of value, under the conditions already adverted to, is not intended to have the effect of bringing about a sudden, violent, or immediate change in the present standard of value. On the contrary, no change whatever will be made in the existing standard, nor will it, in any way, be affected in value by the introduction of gold as a substitute, in part for a silver circulation. It is quite clear

> *N.B.*—See also quotation in Minute of 15th January 1872 beginning "any alteration in the standard of value," etc., page 7.

* Not printed in this volume.

indeed, that for a time to come, silver, owing to the smallness of transactions among the lower classes throughout the interior, must continue to be extensively used."

Every writer of recognized authority, in times past and in our own day, gives the preference to a single gold standard. Should those who administer the finances of India see their way to introduce gold into the currency of India, I know of no safer, sounder, and more just way than that set forth by His Excellency Lord Sandhurst, yourself, and the majority of the members of Council, and which it has been my privilege, from deep conviction of its truly conservative and practical nature, to support to the best of my ability.

The present generation may not see the time when it may be found expedient to demonetize silver in India; but if those who now guide her destinies, lay the foundation of a measure calculated to give to the people a more acceptable metallic circulation than exists at present, they will have done their part wisely and well. I conclude by reminding you that at a time when gold was nowhere a legal tender in India, except on the coast of Coromandel, and, in a limited way, in gold mohurs at the principal British settlements, the relative proportion of gold to silver coined at the Mints in Calcutta and Madras was about one-fourth, whereas, since the Act of 1835, and the prohibition of 22nd December 1852, the proportion has been about 1 in 113·45, down to the end of 1864-65.

I write in the midst of severe official pressure on my time, and, if I have not observed nicety and exactitude of expression, you will, I hope, under the circumstances, make allowances for me. I now conclude as I began, by expressing my admiration of the great ability shown by Mr. Strachey in his handling of the subject, and if I have ventured to differ from him, I trust, should this minute ever come under his notice, he will do me the justice to believe that I take so much trouble in the endeavour to meet his arguments, because they are entitled to more consideration than any others brought to my notice, and because I hold the views to which I have imperfectly given expression, from nature and long conviction.

XXII-D.

NOTE BY E. GAY, ESQ., DEPUTY COMPTROLLER GENERAL, DATED 27TH FEBRUARY 1872.

The proposals of Mr. Dickson appear to be well worthy of consideration, if it be once settled that the introduction of a gold currency into India is to be attempted by Government. The step he suggests, *viz.*, that Government should undertake to exchange gold freely for silver, is probably the safest that could be taken if progress is really desired.

The experiment will not be fairly tried unless some pledge is given that the offer to exchange sovereigns freely for silver will not be revoked without reasonable notice. Importers of bullion will not dare to trust to an article that may be difficult to dispose of without loss; hence arises the danger that, if the measure do not succeed, Government may be compelled to continue to receive gold which cannot readily be paid away to persons having claims on Government.

But Mr. Dickson shows that, in such a case, sovereigns could be sent home at a cost equal to an exchange of 1*s.* 11½*d.* Assuming these figures, Government might well accept the risk to a considerable amount as the present state of the market promises no better rate for the ensuing year. I may add to his argument that the large balances now in Government treasuries make the experiment less hazardous this year than it may be at another time.

The measure would no doubt be acceptable to the banking and trading community in large towns. If the price of sovereigns were guaranteed in India, one element of doubt in cash remittances, *viz.*, the varying comparative values of the standards—gold in England and Australia, and silver in India—would be removed. Coin could be obtained in London which would without charge for seignorage or delay be as good as coin for India. The remittance would be more portable, and give in many ways less trouble. On the other hand Government would lose the profit on coining, and might find the circulation of currency notes affected.

But, regarded from the point of view of the millions whose transactions never reach above a few rupees, it may well be doubted whether any measure tending to bring in gold as the standard of value can be considered an improvement.

XXII-E.

NOTE BY R. B. CHAPMAN, ESQ., FINANCIAL SECRETARY, DATED 27TH MARCH 1872.

I do not feel called upon to add, more than is unavoidable, to the volumes that have been written on this subject already. I have read the whole, carefully and anxiously several times, and I do not flatter myself that I can adduce any arguments of weight which have not already been used. But, with much diffidence, I proceed to record my present judgment as requested by the Financial Member. The subject must be divided into two great questions—

First.—"Is it desirable to make gold the standard of value in India?"

Second.—Will the measures now proposed by Mr. Dickson further that object?

Upon the first great question, which really underlies the whole discussion, I find, strange to say, in all the papers, very little but assumption. All *assume* that, beyond all question, India is ripe for a gold standard; yet I venture to say that even the enquiries of the Commission, though they establish formally the undoubted fact that gold is highly appreciated in India, do not throw much light upon the fundamental question of which I am speaking.

Lord Sandhurst argues that, according to the stage of advancement which a nation has reached, its currency should be iron, copper, silver or gold; but he does not attempt to prove that India has reached the "gold" stage.

No doubt, for a nation the average of whose transactions is sufficiently large, gold is by far the most convenient standard. But it cannot by any means be assumed that gold is the proper standard for a nation whatever its stage of development. The most recent paper by eminent authority that I have seen, is an article on "Money" by Chevalier in the *Journal des economistes*. I find in it nothing more positive than this—"It appears that modern Europe tends to employ as money 'gold,' which is the dearer and rarer of the two metals" (gold and silver).

I cannot help thinking that if we now take any decided steps for introducing a gold currency into India, we shall be taking somewhat of a leap in the dark, and it seems to me that even the advocates of a gold currency do feel some hesitation on the subject, and that this hesitation is manifest in their rather inconsistent advice. They would have gold; but they shrink from any measures involving a very decided drain of silver, though it seems to me clear that we cannot at the same time have both metals.

It may be accepted as an axiom, that gold and silver cannot both circulate in a community, for long, simultaneously as standards of value. So much has been said upon this point in these papers, and the truth is so universally accepted, that I need not take up time in demonstrating it—one metal will oust the other. Supposing that the relative value be very exactly fixed, and that nothing supervene to disturb it, the process may be a long one (even that is not very likely), but it is absolutely certain that, in the long run, both metals cannot circulate as standards each at its full intrinsic value.

Supposing, therefore, that gold become the standard of value in India, it will be absolutely necessary, sooner or later, in order to keep in the country silver coin enough for subsidiary purposes, to debase our silver coin. Our silver coinage must bear a higher nominal than real value, in other words must become a *token* coinage, or we should not keep enough for our wants.

Now, whatever success may attend the introduction of a gold currency, a very large amount of silver will always, or at any rate for a very long time, be required for the purpose of currency in India. It will be very long before the masses of the people will use a gold currency: their transactions are far too small. It follows that we shall have to substitute, for the use of the masses of our population, a token currency for the present full value currency. Are we at all certain what the effect of this will be upon the ignorant population? Or how a silver token currency will work alongside of a full value Native State silver currency? Lord Sandhurst has, at page 113 of the accompanying volume, argued with great force against the attempt to circulate among the people bank notes or paper currency in any form. "The people," he says, "hug the idea of intrinsic value in coins of the precious metals which will last for ever which will be again found, if war sweep over the country and destroy all that is above ground." And again, "of all people in the world the population of India carries practically and keenly into execution the principle that the money actually current is a commodity which must possess the intrinsic value it assumes to represent. To them bangles are convertible into rupees and *vice versâ*. Thus in some Native States the people refuse in their retail operations to take the British rupees without a slight discount, because they declare, whether rightly or wrongly, that the rude rupees supplied from the native mints have more of silver in them, or are freer from alloy, than the British rupee"—and much more, very forcibly put, to the same effect.

Lord Sandhurst was arguing against the paper currency which he evidently felt to be a dangerous rival to gold. I think he overdid the argument in various ways, and that experience has actually proved this. But still there does remain great weight in his observations.

Apparently, however, Lord Sandhurst had forgotten that he had already stated, as a mere truism that "a token coin merely means a metallic bank note." This is obviously true. But then the whole of Lord Sandhurst's strong arguments against a paper currency become to the full as applicable against a silver token currency which must eventually be a *sine qua non* of a gold standard.

I do not think that sufficient attention has been given to this part of the subject; and I would not recommend any very active or effectual steps being taken for the introduction of a gold standard until the effect upon the mind of the natives of substituting "metallic bank notes" for the full-value silver coinage to which they have, from time immemorial, been accustomed, and which they so highly value shall have been carefully considered and, so far as may be, enquired into.

I can find nothing in the evidence given before the Commission to show that the witnesses who favoured gold were aware that it would be necessary sooner or later, if you introduce and keep gold, to depreciate the silver currency which must, for generations to come at any rate, be the ordinary currency of the people. I confess that I myself am so apprehensive of what the effect might be that I should hesitate to take measures for adopting a gold standard until it be really forced upon us. *At present* I venture to maintain that there is no demand whatever for a gold currency by any section of the community.

There *was* a demand when Lord Sandhurst wrote his minute in 1865. During the American war the value of Indian cotton rose so enormously that the balance of the trade of India with the rest of the world was altogether disturbed, and huge importations of bullion became necessary. Moreover, at that time, the paper currency was little developed, and India was still borrowing money largely at home for railways, etc. Lord Sandhurst wrote his elaborate minute under the influence of that abnormal state of things, perhaps under the impression that it would continue.

It may be admitted that *if it had continued*, India would have been very soon driven to take much more gold than silver in payment for her exports. Silver, in fact, would not, for long, have been forthcoming for remittance to the East at the same rate, and a gold currency here would very likely have become a necessity. But the moment the American war came to an end, the excess of our exports over imports fell from 40 to 13 millions, and pressure ceased.

It may be that it is now again slowly coming on; though if we are able to abstain from borrowing, the process will be checked, and, in any case, we are not likely, for the present, to borrow as largely as we were doing. However, sooner or later, it may be that the demand for silver for the East may again cause inconvenience, and the price of silver may rise until imports of gold become more profitable. Whenever that time comes, but not, I think, till then, it will be proper to take up the question of substituting a gold standard for a silver standard.

For the present, though I admit that gold would be pleasant and convenient for the trading classes, I do not believe that the masses of the people have any desire for a gold *currency*, and even the great cities do not really greatly want it. The paper currency has largely supplied their wants. A silver standard is as good a basis for paper as a gold standard.

To turn to the second question—What must be done if it be resolved to introduce a gold standard?

I answer there is really but one way of effecting the object. Gold must be declared a legal tender and rated favourably.

Mr. Dickson's proposals are certainly most moderate. He asks only that the Government shall, without declaring gold a legal tender, undertake to accept sovereigns at R10-4, and Indian gold mohurs at an equal rating, *i.e.*, at par, in payment of all Government dues *and in exchange for currency notes*, *i.e.*, for silver; for currency notes can be exchanged for silver at once. He does not propose to make gold a legal tender.

Sovereigns are already received at our treasuries in payment of Government dues at R10-4, so that the proposed innovation is really confined to making the sovereign exchangeable at the currency offices, and so, freely, for silver.

I cannot recommend this measure being adopted. I agree with Lord Sandhurst, who wrote on the 9th February 1869—

> "There should be no attempt at regulating the value of gold by further notifications unless Government be prepared to concede the legal tender."

I cannot think it likely that Mr. Dickson's proposed measures would have any effect. Even with exchanges exceptionally high as they have recently been, the sovereign has never fallen below R10-7, and no sovereigns whatever have been paid into our treasuries for three years. How should they be with prices as they have been? It is clear, I think, that sovereigns will only come to us at R10-4 when silver is worth in London 62·3*d*. an oz., a price higher than we have seen for a very long time. I think that we should only expose ourselves to ridicule by making any further notification based upon the anticipation that this price will recur.

Mr. Dickson seems to anticipate some great effect from his proposal that the Government should accept sovereigns freely at R10-4 in exchange for silver; but I fail to find in his papers any solid reasons for this expectation, and I cannot but remark that this same high authority originally advocated the 10R rating, now admitted to have been a blunder.

It may be that *some* effect would be produced by the security which Mr. Dickson's proposal would give to importations of gold. Doubtless, a still greater effect would follow if the law should declare sovereigns legal tender at R10-4. But not even then, can I see any good ground for expecting that people will offer to the Government, or to one another, that which is worth R10-7, at R10-4.

There have, no doubt, been times when, with abnormally high exchange, sovereigns have sold at R10 or even less, and, should such a time recur, we should get plenty of sovereigns paid into us at Mr. Dickson's rate; but, first, this is perhaps highly unlikely; and secondly, if it *should* happen, we should have placed ourselves in an awkward position by pledging ourselves to buy for R10-4 what would, in that case, be worth much less.

I agree with Sir C. Trevelyan and with Mr. George Arbuthnot, as quoted by him (page 163 of the volume), that *we ought not to receive gold coin in exchange for currency note unless it is made a legal tender.* I do not consider Mr. Dickson's argument, that we could always remit sovereigns at an exchange of 1*s.* 11¼*d.*, a sufficient answer to the objection taken by Sir C. Trevelyan and Mr. Arbuthnot; for, supposing sovereigns to fall below R10-4 in the market, exchange would approach 2*s.*, so that a remittance at even 1*s.* 11¼*d.* would involve a very heavy loss.

Nor can I agree with Mr. Dickson that we ought to take in all the gold we can get and give out none. As I have said, in my opinion, we should at present get none at Mr. Dickson's rating; but, supposing values to alter and gold to come in, we could only follow Mr. Dickson's counsel by maintaining high cash balances for this express purpose. It is of great consequence that, in the matter of the cash balances, we should embarrass ourselves with no consideration except the one consideration of what is the smallest sum with which we can work the administration. It may be proper, occasionally, to have high balances with reference to loan operations and the like; but if we once begin to keep them for currency purposes, we embark, in truth, on a course involving unlimited cost in interest for very vague purposes. Mr. Dickson, in fact, invites us to a large speculation in exchanges, and I cannot think this advisable.

The figures which I put up show that gold *is* coming into the country very freely as things are. The proportion of gold to silver in our bullion importations of late years has been fully maintained, and the absolute quantities of gold imported have been large. This process is going on naturally and satisfactorily, without the Government committing itself to any dangerous experiments, or to any calculations of value that may be proved (as our past calculations have been proved), by experience, to be wrong. I would not, at present, take any further steps. In time, very likely, the large importations of gold that are going on will tell, and the price of gold in silver will fall until the rating of our coinage Act is reached. When that time comes, or a little before, it would, very likely, be desirable, *if not necessary*, to declare gold a legal tender. But I do not think that the matter is one for empirical treatment. I would leave our present well alone.

Value of gold and silver imported from, and exported to, foreign countries at ports in British India in each year from 1850-51 to 1874-75.

Years.	Gold.			Silver.			Total of net imports of Gold and Silver.
	Imports.	Exports.	Net Imports.	Imports.	Exports.	Net Imports	
	£	£	£	£	£	£	£
1850-51 .	1,155,310	2,016	1,153,294	2,656,498	539,273	2,117,225	3,270,519
1851-52 .	1,338,778	71,165	1,267,613	3,713,280	847,923	2,865,357	4,132,970
1852-53 .	1,341,106	168,805	1,172,301	5,490,227	885,203	4,605,024	5,777,325
1853-54 .	1,078,708	17,265	1,061,443	3,770,643	1,464,899	2,305,744	3,367,187
1854-55 .	882,721	151,431	731,290	1,145,137	1,115,537	29,600	760,890
1855-56 .	2,508,353	2,108	2,506,245	8,792,793	598,418	8,194,375	10,700,620
1856-57 .	2,176,002	84,788	2,091,214	12,237,695	1,164,448	11,073,247	13,164,461
1857-58 .	2,830,084	47,011	2,783,073	12,985,332	766,384	12,218,948	15,002,021
1858-59 .	4,437,339	10,886	4,426,453	8,379,692	651,350	7,728,342	12,154,795
1859-60 .	4,288,037	3,803	4,284,234	12,068,926	921,363	11,147,563	15,431,797
1860-61 .	4,242,441	9,872	4,232,569	6,434,636	1,106,627	5,328,009	9,560,578
1861-62 .	5,190,432	6,007	5,184,425	9,761,545	675,089	9,086,456	14,270,881
1862-63 .	6,881,566	33,410	6,848,156	13,627,401	1,077,244	12,550,157	19,398,313
1863-64 .	8,925,412	27,106	8,898,306	14,037,169	1,240,450	12,796,719	21,695,025
1864-65 .	9,875,032	35,068	9,839,964	11,488,320	1,409,522	10,078,798	19,918,762
1865-66 .	6,372,894	648,418	5,724,476	20,184,407	1,515,734	18,668,673	24,393,149
1866-67 .	4,581,472	739,143	3,842,329	8,655,432	1,692,360	6,963,072	10,805,401
1867-68 .	4,775,924	166,457	4,609,467	6,999,450	1,405,489	5,593,961	10,203,428
1868-69 .	5,176,976	17,624	5,159,352	9,978,978	1,377,956	8,601,022	13,760,374
1869-70 .	5,690,400	98,283	5,592,117	8,264,407	944,070	7,320,337	12,912,454
1870-71 .	2,785,975	500,453	2,285,522	2,662,237	1,720,313	941,924	3,227,446
1871-72 .	3,573,778	8,434	3,565,344	8,007,525	1,487,209	6,520,316	10,085,660
1872-73 .	2,622,371	79,009	2,543,362	1,934,214	1,219,070	715,144	3,258,506
1873-74 .	1,648,807	266,169	1,382,638	4,143,726	1,647,902	2,495,824	3,878,462
1874-75 .	2,089,236	215,700	1,873,536	5,733,776	1,409,608	4,324,168	6,197,704
Total .	96,469,154	3,410,431	93,058,723	203,153,446	28,883,441	174,270,005	267,328,728

XXII-F.

Note by H. Sandeman, Esq., Officiating Comptroller General, dated 28th March 1872.

Putting aside theoretical arguments which can always be made to suit the views of the writer, I think the real consideration in this very large question should be whether, in the event of Government being able to introduce without ultimate loss to itself, a gold currency as a legal standard, alongside of a silver currency, already a legal standard, the general public of the country require such an introduction. If we regard the bulk of the population, I think that the reply to such a question must be negative; they rarely touch silver, and would certainly never touch gold; their wants are few, and (with the exceptions of their apology for clothing, which is supplied to them more cheaply from England than from Native looms, and their few metallic utensils which they purchase once or twice only during their whole lives) are all supplied in their own villages. To meet these wants, copper coin and shell tokens are principally used and found sufficient, while the ordinary wages of labour, even if paid once a month only, would rarely reach the smallest denomination of gold coin; and even if they did so, a payment in gold would but subject the recipient to a loss, as the coin, until converted into silver or copper, would be practically useless to him, and he would be obliged to have immediate recourse to the money-changer, at whose mercy he would be for terms of exchange.

If we go beyond the bulk of the population, and consider those who are sufficiently well off to deal in large sums of money, we have a perfected system of paper money, which enables persons to pass money in a convenient form, and, by the facilities it offers for remittance purposes, serves as a wholesome check upon extravagant rates of inland exchange. I notice this particularly, because one of the strong arguments against a silver currency is its bulk, and consequent inadaptability for remittance, whereas it is urged that gold is easily moved, and involves a smaller cost in transport. Many of the arguments against silver adduced in 1864 have proved to be fallacious: thus, for instance, the present price of the metal in England, as compared with the price in 1864, shows that the fear that Europe would become denuded of silver to supply the East was groundless. My opinion is that it would be unadvisable to introduce gold into India as a legal tender, and that for many years to come we shall be doing as much as the country wants by supplying it to those who wish to receive it for their own convenience. If we go beyond this, we shall, I think, inflict a hardship upon the public at large, and benefit no class except the money-changers.

XXIII.

NOTE BY THE HON'BLE SIR R. TEMPLE, DATED 8TH JULY 1873.

I much regret that His Lordship the Governor General does not find it possible to take up during this year the subject brought forward by my memorandum of the 19th June 1872, regarding the introduction of a legal tender gold currency into India. But I desire to take this opportunity of recording my views as to the course which ought to be adopted by the Government of India in respect to this matter.

I will not attempt to repeat the reasons given in the memorandum of June 1872 to show that a legal tender gold currency is among the real needs of India. The belief or disbelief in the reality of this need is at the root of the matter. If we firmly entertain this belief, then we shall address ourselves to the removal of the difficulties which are more or less inevitable in a question of this sort. If we have not such belief, then it is not to be expected that such difficulties can be successfully combated. Therefore, in June 1872, I began the renewal of the discussion by endeavouring to prove the existence of the need.

After adducing those reasons, I recommended that the Government should decide that a legal tender gold currency is needed; that a Commission should be appointed in order to ascertain definitely what should be the rating or the relative value of gold and silver; that meanwhile certain subsidiary measures should be taken in order to attract gold in greater quantities than heretofore to the treasury in India.

I am still in favour of these steps being taken. I am far from sanguine that the subsidiary measures (which for facility of reference I extract in the margin) would, if adopted, attract any large quantity of gold into our treasury; indeed, I rather fear that they would not, for the present at least. But they are at least safe, and at the worst could do no harm. And in one particular way they could hardly fail to do good. For, either they would attract gold, or they would not. If they did, then the fact would afford proof, in addition to any proof already existing, that the rating of Rs. 10 for the 120-grain gold piece, or of Rs. 10¼ for the sovereign, is a correct and adequate rating, corresponding to 15 to 1, and that by offering this rate we are offering enough silver for the gold. If they did not attract gold, then the fact would afford additional ground for the opinion that the above rate is not quite enough; that instead of the proportion 15 to 1, the proportion should be 15 and a fraction to 1.

"I. To authorize the receipt of English and Australian sovereigns into all the Government treasuries of India without restriction, and whether tendered in payment of Government dues or in exchange for silver.

"II. In conformity with the provisions of the Currency Act, to authorize the issue of Currency Notes in exchange for gold bullion tendered at the mint for coinage into Indian gold sovereigns at the rate of 10 rupees per 120 grains of gold of standard fineness less seignorage."

Even if the Government of India is not prepared to take any other step, I should still ask that these two steps be taken in order to contribute something towards the solution of a difficult question.

In regard to the proposal to appoint a Commission to investigate again the relative valuation of goldand silver, I desire to explain further the object of this enquiry.

A Commission was appointed in 1866 by the Government of India to examine this point among other points relating to the currency of India. They reported that the rating of 10¼ rupees to the sovereign, or Rs. 10 to the 120 grains, was the best that could be arrived at; and that this corresponded with the rating embodied by Act XXVII of 1835 (since incorporated with the Consolidated Currency Act, XXIII of 1870); they cited much important evidence to show that gold from Australia could be laid down in India at this rate.

At that time, 1866, a rate of Rs. 10 was being offered by the Indian treasury for British or Australian sovereigns, but no permanent success was obtained, and the prohibition of 1854 against the receipt in the treasury of gold pieces of Indian coinage was maintained. In 1868, however, the Government of India notified that sovereigns would be received at the treasury in payment of sums due to Government at a rate of Rs. 10½, and that the gold pieces of Indian coinage would be received at the treasury in exchange for their respective sums of silver. These steps were in accordance with the recommendations of the Commission, and the hope was that, by these means, a fairer chance than previously for the influx of gold would be afforded.

At first some slight effect was apparently produced, and some supply, though slight, of gold was obtained at the treasury. But this became less and less, till of late it has almost died away. It may be said in general terms that sovereigns and gold pieces are not, and for some time past have not been, presented at the treasury.

Meanwhile sovereigns to a limited extent have been imported into India and have commanded in the Indian markets prices higher than 10½ rupees; indeed, the average price since 1869 has been hardly less than 10½ rupees.

During the same period the amount of gold imported into India has been less than during the four years previous to 1869; but since 1869 the amount of silver imported has been much less. The general fact indeed has been that the condition of trade has been comparatively adverse to the importation of the precious metal, and the relative proportion of importation of gold to that of silver has been quite as great as, or greater than, ever.

Again since 1869 the amount of silver coined in India has been much less than that coined during the four years previous to 1869. But the coinage of gold has been rather greater since 1869 than during the four previous years; and the proportion of gold to silver coinage, though still small, has been fully maintained. Indeed, it may be said to have slightly increased.

The subjoined table will illustrate the foregoing remarks.

Four years previous to Notification of November 1868.

	Net Imported into India.		Coined in India.	
	Gold.	Silver.	Gold.	Silver.
	£	£	£	£
1865-66	5,724,476	18,669,174	17,665	14,507,049
1866-67	4,188,195	7,936,698	27,725	6,118,857
1867-68	4,607,329	6,157,989	21,534	4,313,285
1868-69	5,159,352	8,601,022	25,156	4,207,031
Four years subsequent to Notification of November 1868.				
1869-70	5,592,117	7,320,337	78,510	7,455,281
1870-71	2,282,122	941,937	3,994	1,606,751
1871-72	3,565,344	6,532,376	15,412	1,735,288
1872-73	2,543,363	715,143	31,795	3,930,751

Thus there has been some coinage of gold pieces even since 1869, and before that year this coinage was somewhat considerable, but at no time have these coins been in active circulation either among Europeans or natives. For the most part they are obtainable with difficulty. Their destination cannot be stated with precision, but it is well known that they are taken up by natives for hoarding or for uses other than circulation, and by natives not only in British territory but also in Native States.

Again it is seen that of the gold imported but a small portion is presented for coinage: the greater portion is used by the natives for purposes other than circulation.

On the whole, the present prospect of gold finding its way into the Indian treasury is not encouraging; and the question naturally suggests itself as to whether the rate offered of 10¼ rupees for the sovereign and 10 for the 120 grains is really sufficient as representing the relative value of gold and silver.

Some authorities have maintained that at this rate it is not sufficient; that gold has for some time been, and will continue to be, worth more than this rate, and the present facts seem to lead to the support of that view. Other authorities, however, maintain that gold has not been in former times, and will not be in the future, worth more than this rate; and it is to decide this question that I should desire to see a fresh Commission appointed.

Doubtless the relative valuation of gold and silver is a subject not admitting of absolute demonstration. Among the difficulties which beset the question there is this, that the relative value fluctuates slightly from time to time. Still, after consideration of all the circumstances, an approximate average valuation should be, and would be, ascertainable. Necessarily the matter is one of opinion, and demands a very impartial inquiry, but after such an inquiry had been made, a trustworthy opinion could be formed. The problem may be difficult, but it must have been solved by every nation that has changed, or may be changing, its standard from silver to gold, and similarly it ought to be capable of solution by the British Government in India.

The question to be propounded for investigation by such a Commission would be this: whether the present rating (Rs. 10¼ and 10 for the sovereign and Indian gold piece respectively) is sufficient for the permanent relative valuation of gold and silver with a view to gold being declared sole legal tender, and if it be not sufficient, then how much higher should it be? Nobody probably would urge that the rate should be less. So far there seems to be no doubt. The existing doubt merely relates to the question whether something more than the ten rupees and four annas, say ten rupees and six annas, or at the most ten rupees and eight annas should be taken. The point is one which ought to be referred to persons of every special experience and such a Commission could be appointed in India as would present a valuable opinion. When such an opinion has been presented, I should desire to address the Secretary of State with a view to a further reference being made to experts in England. The results would be collated of the experience gained in countries where a change from a silver to a gold standard has been recently made, or is being undertaken, as in Germany, Holland, France. By these means I should expect that the Government would be able to arrive at a safe and sound conclusion. It is equally important to avoid fixing too low or too high a relative value for the gold coins relatively to the silver; but as from the nature of the case a just determination must be arrived at, as an indispensable preliminary to our having a gold currency at all, I would endeavour to form a determination by the means above stated, and if we succeeded in reaching such a conclusion, I would act upon it.

Accordingly, gold would be declared legal tender at the rating so determined.

But, in the first instance, gold could not be declared sole legal tender, and silver must for a time continue to be legal tender also, for this reason that there is not now, and probably may not be for some time, enough gold in India to suffice for the circulation of the country if gold were to be declared sole legal tender for every amount above a trifling sum.

Doubtless, if gold were to be sole legal tender, it would become an article of prime necessity, and would within a moderate time be imported in the required quantity, but in the meantime (it might not be for long) there would probably be an insufficiency of gold for the purposes of circulation.

The insufficiency, however, might not be so considerable as would at first sight appear to be the case. For although we seldom see gold at the treasury, we know that it must largely exist in the country. Among the papers appended to my memorandum of the 19th June 1872 will be found a table showing the importation of gold within the last twenty years alone; and the net total (re-exports deducted from imports) amounts to 90 millions sterling. If an antecedent period be taken, a still larger total would be brought out. Of the amount shown above, a portion must have been used up or wasted, and would not be available for coinage; but it is reasonable to anticipate that a considerable portion would be brought out and presented at the mint for coinage if this metal were declared legal tender.

So also the balance in the value of the trade in merchandise is much in favour of India, and is likely to continue to be so. Already gold has a large part in the adjustment of this balance, even when it can fulfil no function in respect to the circulating medium, and might have a still larger part if after reaching India it had an important circulating function to perform.

On the whole, there ought not to be any excessive difficulty in obtaining gold if that metal were declared legal tender.

Still, at the first, it would be desirable to leave silver as legal tender equally with gold, until gold should so establish its position that it might be declared sole legal tender. With its natural superiority, and with the equality of position as legal tender, it is to be expected that gold would ere long assert itself in supersession of silver; and as soon as the country should be assured of this by the actual position of the two metals, there would be no hesitation in declaring gold sole legal tender.

If both gold and silver were for a time legal tender, then, inasmuch as their relative value will fluctuate slightly from time to time, payments would be made in one or the other, according to the circumstances of the time; consequently first the influx of one would predominate and then that of the other. It might be that at the outset silver would maintain its position. For instance, at the present moment it might not be driven out by gold declared concurrently legal tender. But sooner or later the revolving changes would turn in favour of gold, and the moment that such should prove to be decisively the case, gold would be declared sole legal tender for all save trifling sums, and silver would be demonetized.

Of course we must be prepared for the objections usually raised against a "double or alternative standard" of gold and silver. But these objections apply (and justly apply) only to the permanent maintenance of a double standard. It can hardly be denied that if the change from a silver to a gold standard be *per se* necessary or very desirable, then the objections to a double standard must be endured for a season, in the confidence that ere long circumstances would afford the desired opportunity of terminating the double standard and making gold the single standard.

Moreover, if at the outset silver were to hold its own, then for that time the fact of gold being also legal tender could do no harm, for it would be inoperative, and the double standard would not be practically felt by any one, as the only standard in use would be silver. If, from subsequent circumstances gold should flow in, and if it became more advantageous to pay in gold than in silver, then the effect of the double standard would begin to be felt. But that would be the very moment when the occasion would be taken to declare gold sole standard, and thus the effect of the double standard would pass away for ever.

It would be impossible to predict in how short, or how long, a time this result would be accomplished. There might be delay, but in that case no regret need be felt, because a change in the currency cannot be precipitated, but must come about in the due course of circumstances.

On the other hand, no man can foresee how soon circumstances might arise to cause an influx of gold and to render it more convenient to pay in gold than in silver. The event might even supervene suddenly. Then the Government could not avail itself of that opportunity to introduce the legal standard gold currency, unless it had previously arranged after full enquiry, the relative valuation of gold and silver. Such arrangements must take time. When the event was already happening when the urgency was upon us, it would be probably too late to commence arrangements for changing the currency. The Government would be in a position of unreadiness and unpreparedness, and perhaps the opportunity would be lost. Moreover, a time of pressure and urgency, when larger commercial events might be occurring, would hardly be a fitting time for arranging a change of currency. Too much reliance might be placed on the transient facts and circumstances of that particular period, and too little on the considerations which permanently affect the value of the precious metals. Such changes should, I submit, be thought over deliberately beforehand, in times when there is no pressure, and then preparations would be judiciously completed against the day when pressure should arise. In this manner shall we be best able to make full use of the occasion which will in all probability arise ere long, though it may not at this moment be visible.

Herein, then, consists my answer to those authorities who perhaps deprecate any immediate steps being taken by Government, or who are in favour of delay because the matter does not press. It is very true that at this moment no pressure is put upon the Government from any particular quarter. But this circumstance, so far from being a reason for not moving, seems to me to be the very reason why the Government ought to move. At the best, some considerable time must be occupied in making the arrangements and settling the terms. Unless the Government is ready beforehand, it cannot introduce the change when the suitable moment shall arrive. Or, if, when the moment has actually arrived (and perhaps it may come suddenly and unexpectedly), the Government were to take the case up, then the settlement is not so likely to be correct and complete as it would have been had there been previous discussion and determination. Now, therefore, is the time for the adoption of preliminary measures.

XXIV.

RESOLUTION, BY THE GOVERNMENT OF INDIA, FINANCIAL DEPARTMENT, DATED 7TH MAY 1874.

The expediency of introducing a gold currency having been considered the Governor General in Council is not at present prepared to take any step for the recognition of gold as a legal standard of value in India.

XXV.

NOTE,* DATED 13TH JULY 1876, BY MR. R. B. CHAPMAN, SECRETARY, FINANCIAL DEPARTMENT, ON THE CONSEQUENCES TO BRITISH INDIA OF THE RECENT CHANGES IN THE RELATIVE VALUE OF GOLD AND SILVER.

The time is come when it is my duty to invite His Excellency the Viceroy and Governor General in Council to consider the effects upon the finances of British India of the recent rapid changes in the relative value of gold and silver. I deeply feel the responsibility which is thus imposed upon me; and I have not ventured to record this note without anxious thought and study during many months. The future prosperity of India depends upon a proper solution of the questions now presented for discussion: I pray that the Government of India may be led to a right decision upon them.

2. Till lately, the relative value of gold and silver maintained a stable equilibrium. From ancient times, indeed, there had been a manifest tendency for the value of the two metals to diverge; but such divergence† had, generally, been very gradual. For 40 years before 1873, the price in London of an oz. Troy of standard silver was never less than 59*d.*, and, from September 1850 to November 1872, it was never below 60*d.* Since November 1872, there has been a rapid separation of the values of the two metals, so that the present price (47*d.*) of standard silver in gold, in London, is more than 22 per cent. less than the price (60½*d.*) in November 1872. Moreover, the divergence has, of late, been extremely rapid, the price of silver in gold in London having fallen since December last from 56½*d.* to 47*d.*, being nearly 17 per cent. Even since Wednesday, the 5th, there has been a fall of 6 per cent., *viz.*, from 50*d.* to 47*d.*

3. Whatever be the causes of this phenomenon, its effects upon the interests of British India are momentous. India owes, and has to pay, in London, in gold, yearly, the sum of 15 millions sterling. Most of this great yearly charge is permanently fixed. The interest on the sterling debt and on the capital of the Guaranteed Railway and Irrigation Companies (together about 7 millions sterling); the pensions and annuities to our officers and their families; as much of the military expenditure as consists of pay and allowances; the pay of the Home establishments; and a large number of other payments, are fixed and cannot be reduced. Only a comparatively insignificant part of the whole disbursements from the Home Treasury is regulated by the current rate of exchange.

4. Possibly, some little economy may be secured in the optional part of the expenditure at home; but we certainly cannot calculate upon the disbursements from the Home Treasury being less than 14 millions sterling, which must be provided at all costs. Indeed, for the purpose of this enquiry, it is only prudent to calculate on our having to provide in London, year by year, the full 15 millions sterling without any set-off—

If Re. 1 =	20½*d.*	£15,000,000 = in crores of rupees	17,56
	20*d.*		18
	19½*d.*		18,46
	19*d.*		18,95
	18½*d.*		19,46
	18*d.*		20

* Appended to this paper are memoranda of subsidiary arguments and investigations bearing upon the various questions towards the solution of which suggestions are here made.

† An exceptionally rapid divergence followed the discovery of the Potosi mine in Peru in 1545.

That is to say, at an exchange of 1*s.* 8*d.*, the adjusting entry under 25—*Loss by Exchange* must be three crores of rupees; at 1*s.* 6*d.*, no less than five crores.

5. Omitting, on the one hand, *Income Tax* (an asset which we have lost) and the fictitious credits from the *Military Funds* (which add nothing whatever to our resources), and, on the other, the expenditure upon the *Bengal Famine* and the "*Extraordinary Expenditure,*" the following are the amounts which might have been borne, year by year, under 25—*Loss by Exchange*, during the last six years, without producing actual deficit:—

	(Rupees omitting 000.)
1871-72	2,41,8
1872-73	1,71,7
1873-74	2,66,4
1874-75	3,09,0
1875-76	2,91,4
1876-77	2,20,9
Average for the six years	2,50,2

6. Other things being equal, then, the account is in equilibrium, on an average of years, if the adjusting entry under *Loss by Exchange* is not more than R2½ crores, which is the amount that must be set down if a rupee is worth about 1*s.* $8\frac{9}{16}$*d.* (exactly 20·5714*d.*). But, with exchange at this rate, we could bear no abnormal or extraordinary expenditure of any kind, and do nothing, in times of peace, towards reducing burdens, or providing for evil days. If a rupee is worth less than 1*s.* $8\frac{9}{16}$*d.*, there is actual deficit to the amount, roughly, of a crore of rupees for every penny less than this rate.

7. The Secretary of State has, repeatedly, enjoined the Government of India to provide a surplus, even upon the *estimates*, of at least 50 lakhs of rupees, which, if the estimates are framed with due prudence, would mean a surplus, on the *accounts*, of at least a crore of rupees. Common prudence, certainly, requires that the Government of India should not rest satisfied with any financial policy which does not aim at a surplus upon the *accounts*, under normal circumstances, of at least 50 lakhs of rupees.

8. Upon this basis, an average exchange of Re. 1 = 1*s.* 9*d.* is the very lowest compatible with financial safety. If the average falls below this amount, our expenditure should be reduced, or our revenues increased, as follows:—

	s.	*d.*	
With exchange at—	1	8½	The account must be improved by lakhs of rupees—50
	1	8	1,00
	1	7½	1,50
	1	7	2,00
	1	6½	2,50
	1	6	3,00

9. These large improvements would produce a condition of bare financial safety, as represented by an average surplus, *on the accounts, not on the estimates*, of only 50 lakhs of rupees.

10. At present, a rupee is probably not worth 1*s.* 6*d.*; how much farther it will fall I cannot say: but it must not be assumed that because the foregoing table is not carried below 1*s.* 6*d.*, that I feel any confidence whatever that a rupee may not fall to be worth much less than even this sum. If it falls to 1*s.* 5*d.*, 118 lakhs must be added to the improvement necessary to produce bare financial safety, making 418 lakhs in all.

11. Nor, although the main consequences of the disorder, as affecting the finances of British India, may be shown in this simple form, can we, by any

means, conclude that this is all the mischief which the Government of India must recognise as resulting to India, from the disturbance of the old equilibrium between gold and silver.

12. Trade, indeed, will, ultimately, without any interference by the State, adjust itself to the new equilibrium of gold and silver, as soon as it is established with some degree of firmness. The object of trade is the exchange of commodities for commodities: any temporary derangement of the mechanism or instruments of exchange may cause temporary injury, but cannot permanently interfere with the substance of commerce. All that commerce demands is, that the value of the currency or currencies through which it works shall be *stable.* So long as this condition is attained, it is not of primary importance what the values of the currency or currencies are. We may, perhaps, even now, assume that, although the equilibrium of gold and silver has been violently and suddenly disturbed, a fresh equilibrium will, in time, be found. If so, trade will be quickly adjusted thereto: only, if no such equilibrium be found, if the values of gold in silver and silver in gold fluctuate continually and permanently, would trade between Great Britain and India become paralysed or greatly impeded for want of a standard. So far, therefore, as trade is concerned, it seems probable that the disturbance caused by the divergence between the value of gold and that of silver is temporary only, and will in time disappear: if so, though the disturbance is, while it lasts, most mischievous to trade, it need not cause very grave permanent anxiety.

13. But it is not so with other interests. The chief Civil and Military Officers of the State are natives of Great Britain, who are mere sojourners in India, having no intention of adopting the country as a domicile: and a large portion (more than 54 crores) of the rupee debt of India is due either to these officers or to other natives of Great Britain. In other ways, also, much capital belonging to our countrymen is invested in India. It is an absolute necessity to all these persons to remit to Great Britain a substantial part of their allowances, of the interest on their Government securities, and of the proceeds of their investments. The divergence of the values of gold and silver affects all these classes just as it affects the Government; for a given quantity of silver they get a less quantity of gold; for a given quantity of gold they must give a larger quantity of silver. The Government cannot be indifferent to the interests of these classes.

14. Under certain circumstances, the effect of the phenomena which we are witnessing may extend much farther still, even over the whole body politic; and it certainly will quickly so be felt.

15. Such, then, is the formidable disorder for which it is the duty of the Government of India now to seek a remedy.

In order to form a right judgment of what this remedy should be, it is of the utmost importance to make a right diagnosis of the exact causes of the disorder; for according to the causes must be the treatment. A wrong diagnosis, followed, as it must be, by wrong treatment, would only aggravate the evil, already intolerable.

16. The disturbance of the equilibrium of gold and silver from which we are suffering must be due to one of the following causes—

(1) *the value of gold being unchanged, the value of silver is fallen;*
or (2) *the value of silver being unchanged, the value of gold is risen;*
or (3) *the value of gold is risen and the value of silver is fallen;*
or (4) *the value of both metals is risen; but the value of gold is risen more than that of silver;*

or (5) *the value of both metals is fallen; but the value of silver is fallen more than that of gold.*

It is obvious that the treatment indicated, if the disturbance is caused by a fall in the value of silver, is very different from that required, if it is due to a rise in the value of gold.

17. In the former case, simple justice to all interests, including those of the State, would demand a rectification of the standard of value. If more commodities can be procured now in exchange for 122 oz of silver than could be procured last December in exchange for 106 oz., or in November 1872 in exchange for 100 oz., then, considering the intention of a standard of value, justice requires that our standard should be so re-adjusted that debtors should not be allowed to liquidate by the delivery of 100 oz. of silver, obligations which are equitably represented by 122 oz.

18. In this case the only problems for solution would be—

(1) How far back would it be proper to carry the rectification; should the whole 20 per cent., or if not how much, be added to the standard unit of value?

(2) How should the rectification be effected; whether by a simple increase of the weight of the standard unit; or by a change of the substance itself of the standard—as, for instance, by the substitution of gold for silver? and

(3) By what detailed processes should the change in the weight or substance of the standard be effected?

19. The rectification of the standard would, to the extent that it was deemed practicable and expedient, neutralise all the disturbance, and, though at a great cost to the State, rescue from disorder, both the public finances and all private interests. To such rectification no one could, in such case, justly or reasonably object.

20. If, however, the value of silver is not fallen, but the value of gold is risen; if as many general commodities can be procured now in exchange for 100 oz. of silver as could be procured in December last or in November 1872, only less gold can now be procured in change for the same quantity of either silver or other general commodities,—then, whatever the proper remedy may be, it is certain that justice (and in questions of public policy, at least, justice cannot be divorced from expediency) forbids the enhancement of the value of the standard of value. It is true that such enhancement (if it could, in such case, be effected, which is open to very great doubt) would extricate, alike, the Government and the classes who are now suffering, from the loss and distress entailed upon them by the rise in the value of gold; but such relief would be purchased by throwing the whole loss and burden upon the class of debtors, *i.e.*, the class least able to bear it. An enhancement of the standard, under such circumstances, would be equivalent to an increase of taxation, not for the benefit of the whole commonwealth, *but especially for the benefit of all creditors*. Such a measure would be wholly unjustifiable.

21. Nothing would justify the State in adopting any measure involving an alteration of the standard of value, except upon clear evidence either (1) that the standard of value had abruptly lost value, or (2) that such loss of value was imminent. In the first case, measures for the restoration of the value of the standard, in the second case, measures for its preservation, would be proper; but in no other case is any interference whatever with the standard of value, *i.e.*, with all the most intricate relations of society, justifiable.

22. If an enhancement of the standard of value is unjustifiable when the value of the standard is not diminished, *à fortiori* is it utterly out of the question

if the value of the standard is increased—if, for instance, in the present case, more commodities can be procured now in exchange for 100 oz. of silver than could be obtained in December last or in November 1872.

23. If the divergence between the values of gold and silver is found to be due, partly to a rise in the value of gold, and partly to a fall in the value of silver, then the consequence of the fall in the value of silver might and should be remedied by a re-adjustment of the standard ; for the consequences of the rise in the value of gold, other remedies must be sought.

24. The best, in some sense the only, method of ascertaining which of the five possible causes or combinations of causes already recited has disturbed the equilibrium of gold and silver, and so produced the present disorder, is to compare the values of gold and silver respectively, with those of other principal commodities since the disturbance began.

Tables* are, accordingly, appended to this note as follows :—

Table I.† —Half-yearly wholesale prices, in silver, in Calcutta, of certain staple commodities from July 1843 to May 1876, compared with their prices in January 1850.

Table II.†—Wholesale prices, in silver, in Calcutta, of the same commodities, at short intervals, from March 1873 to 26th June 1876, compared with their prices in March 1873.

Table III.‡—Wholesale prices, in gold, in London, of certain staple commodities to January 1876, compared with their average prices from 1845 to 1850.

Table IV.‡—Wholesale values, in London, in silver, of the same commodities, compared in like manner.

Table V.§—Wholesale prices, in gold, in London, to April 1876 of certain staple commodities, compared with their prices in March 1873.

Table VI.§—Wholesale values, in London, of the same commodities, in silver, for the same period, compared in like manner.

25. A careful study of these tables seems to point, beyond all reasonable doubt, to the following inferences :—

(1)—That prices of commodities, in Calcutta, in silver, are generally higher now than they were in January 1850; in other words, that the value of silver in Calcutta is generally lower now than it was in January 1850 :

(2)—But that the prices of commodities, in silver, in Calcutta, are generally lower now than they were in March 1873; in other words, that the value of silver, in Calcutta, is higher now than it was in March 1873. The only commodities that are dearer now than they were in March 1873 are *copper* (slightly) and *spelter*, *gold*, and *rice* considerably :

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* In all these tables (Appendix V) the standard price, or value, for comparison, is shown as 100, the compared prices and values being reduced to this standard.

† Note.—The commodities of which the prices are compared in Tables I and II were selected by me, in consultation with Mr. Wood, the experienced Secretary of the Bengal Chamber of Commerce, as fairly typical of the trade of Calcutta, without any enquiry as to what results the statistics of their prices would show.

‡ The commodities of which the prices are given in Tables III and IV have, for some years past, been selected by the *London Economist* for the purpose of illustrating the course of prices in London. The returns from which these tables are compiled are published periodically in the *Economist*.

§ Table IV is prepared from Table III, and Table VI from Table V.

(3)—That, since December last, the prices of commodities, in silver, in Calcutta, have rather fallen than risen, *gold* and *jute* alone showing any considerable rise. There is no evidence, so far as the tables are carried, *i.e.*, to the 26th June 1876, of any fall in the value of silver in Calcutta since December 1875 :

(4)—That, in like manner, the prices of commodities, in London, in gold, are, generally, considerably higher now than they were from 1845 to 1850 ; in other words, that gold is considerably less valuable now than it was then :

(5)—But that prices of commodities were much lower in April 1876 than they were in March 1873 ; in other words, that the value of gold was much higher in London in April 1876 than it was in March 1873 :

(6)—That the prices of commodities, in London, in April 1876 were decidedly lower than they were in December 1875 ; in other words, that the value of gold was decidedly higher in April 1876 than in December 1875 :

(7)—That, in like manner, the values of commodities, in London, in silver, were much higher in January 1876 than in 1845—50 ; in other words, that the value of silver, in London, in January 1876, was much lower than it was in 1845-50 :

(8)—But that the values of commodities, in London, in silver, were considerably less in April 1876 than in March 1873 ; in other words, that the value of silver, in London, was higher in April 1876 than in March 1873 :

(9)—That the values of commodities, in London, in silver, in April 1876, were less than in December 1875 ; in other words, that the value of silver, in London, in April 1876, was rather higher than in December 1875.

I can thus come to no other conclusions, from an examination of these tables, than—

(1)—That gold is risen largely in value since March 1873, and especially since December 1875.

(2) That silver is also risen in value since March 1873, and not fallen ; and that it was not, on the 26th June 1876, fallen in value as compared with December 1875.

(3)—That, thus, the disturbance of the equilibrium of gold and silver from which we are suffering, was due, up to the 26th of June, to a rise in the value of gold, and not to a fall in the value of silver.

26. The rapid fall of the price of silver in gold, during the last few days, makes it probable that the value of silver is now begun to fall.

27. I turn to examine how far the known facts of the case, *à priori*, tally with these conclusions. I have given reasons in the subsidiary memoranda for the opinion that the values of the precious metals depend entirely upon their use as standards of value, and their consequent manufacture into coin to act as instruments of exchange and for hoarding.

28. The best estimates * that can now be made show the stock of the precious metals won and in possession of the human race in 1848, *i.e.*, at the date† of the Californian gold discoveries, and now, to have been, and to be, as follows in millions of £ sterling :—

	In 1848.	In 1876.
Gold	600	1,200
Silver	1,200	1,200‡
Total .	1,800	2,400

There is ground for assuming that the 1,800 millions sterling of 1848 would have exchanged for as many commodities as the 2,400 millions of 1876, in other words that the stock of the precious metals in 1876 is not, on the whole, more valuable than the stock of 1848. The net 600 millions sterling added in the 28 years have sufficed for the wants of the greatly increased population and extended commerce of the world, and have, moreover, caused a large decrease in the value of the precious metals, as manifested by the great increase of prices.

29. In 1848, England was the only considerable country with a sole gold standard of value and a gold currency. Holland had just then abandoned gold for silver. Wherever, in all the rest of the world, there was a metallic standard, silver was the actual standard; and the 1,800 millions together was not more than enough for the world's machinery of exchange, and for hoarding.

30. Since then the following nations have adopted a gold standard and rejected a silver standard :—

The United States of America	1853
Germany	1873
The Latin Convention—France, Belgium, Italy, Switzerland, and Greece	1874
Scandinavia and Holland	1875

In no part of Europe or America is there now a true silver standard of value.

31. Thus it appears that, since 1848, gold is practically becoming, by degrees, the only material for standard money throughout Europe and America, the duty of supplying standard money to this large and important portion of the whole world having been transferred from gold and silver combined, and imposed upon gold alone. Latterly, this process has proceeded with great rapidity. The appended memoranda contain some statistics of the actual movements of gold during the last few years in connection with this change in the practice of civilised nations.

32. The facts appear to me all to point, *à priori*, to a rise in (or recovery of) the value of gold, and to be quite consistent with the phenomena as to gold exhibited by the appended Tables of Prices.

33. I confess, however, that I should have expected, *à priori*, an earlier fall in the value of silver, as well as a rise in the value of gold. If the

* Mr. Seyd, in his recent book on the Fall of Silver, estimates much smaller amounts: but I think that the evidence is against him.

† At p. 242 will be found a synopsis of the dates of the principal events bearing upon the history of the precious metals since the discovery of America at the close of the 15th century.

‡ The weight of silver has increased by one-fourth; but its value in gold has decreased in at least as high a proportion.

imposition upon gold alone of the duty of supplying standard money throughout Europe and America fully accounts for a rise in the value of gold, still more, I should have supposed, would the exclusion of silver from this large field, and the partial liberation of the large stock hitherto employed in it, have caused a fall in the value of silver; especially as there has been, simultaneously, a decided increase in the production of this metal—an increase which seems very likely to continue.

34. The actual facts, however, seem to show, conclusively, that, to the 26th of June, the value of silver has not fallen as compared with March 1873, or even as compared with December 1875, but rather risen. Decidedly more commodities could be procured for the same weight of silver to the 26th June than could have been procured in March 1873, and some more than could have been procured in December 1875.

35. At the same time, all the circumstances indicate the strongest probability that the value of silver must fall soon, and it is probable that the rapid depreciation of the last few days betokens such a fall—

(1) The field for its employment has been greatly narrowed.
Not only has Europe ceased to use silver as standard money, but one certain effect of the divergence of the values of gold and silver will be, for the present, to turn the balance of trade against India. The whole exports of India on the present scale will not nearly pay for the whole imports plus the £15,000,000 annually due on the public account to England; and no silver will, meanwhile, be wanted for payment to India as hitherto. So that even the Indian field is, at present, lost.

(2) There are, still, large quantities to be expelled from the countries which have recently adopted a gold standard. Germany has, by the latest estimates, 15 millions,* or according to some high authorities, even 34 millions† sterling still to dispose of.
The Latin Convention has not yet begun to expel its silver, though it is passing really as notes for gold, and the continued employment of large masses of silver for this purpose is full of risk, and can, hardly, be tolerated for long. The amount of silver which France has to get rid of is very large, not less, perhaps, than 60 or 70 ‡ millions sterling. The Bank of France alone held on the 10th April last £21,411,000 § of silver. There seems much reason for thinking that if France does not rid itself of this silver, it will, in time, by the Gresham law, expel the gold. On the other hand, the cost of expelling the silver will be great; and France will doubtless be very reluctant to incur it.

(3) The production of silver is increasing, and there seem reasons for thinking that it may yet increase very largely.

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* *Economist*, 27th May 1876.

† *Economist*, 3rd June 1876, page 655.

	£
‡ Coined in silver in France under the law of 1873, besides the token coinage under the law of 25th May 1864	206,650,000
Net imports into France of silver since 1815 (official returns) . .	62,180,000

[See Appendix 16 to the Report of Select Committee on depreciation of silver (1876).]

§ Worth, at 47*d*. an oz. troy, about 16½ millions sterling.

36. In the appended memoranda will be found reasons for the opinion that the present value of gold is likely to be at least maintained, if it do not increase, for a long period, say at least half a century. The adhesion of every new country to the single gold standard, and the complete introduction of a gold currency into the countries of the Latin Convention, must increase the value of gold and reduce that of silver.

37. Thus the *à priori* considerations point to the same conclusion as the experimental facts, *viz.*, that the equilibrium of gold and silver has been disturbed by a rise in the value of gold. But *à priori* considerations further point to the certain expectation of an immediate fall also in the value of silver, which fall is probably begun.

38. I am unable to think of any method of forecasting the extent to which gold may rise, or silver may fall, in value, or the period which must elapse before a new equilibrium is established. Both these things must depend upon future events, which cannot be foreseen with confidence. If no other nations substitute a gold for a silver standard of value, or, when all the nations have made the substitutions, then, by degrees—

(1) Gold will settle down into a condition of stable value again, in its new place in the scale of values.

(2) The disused silver of Europe will eventually be transferred to Asia, and silver will settle down to a new value there; and so a new equilibrium will be established between gold and silver. I believe that it must baffle human ingenuity to say, deeply concerned as we are to know, at what point, and how soon, this equilibrium will be found.

39. I repeat that it is of vital importance that our diagnosis of the causes of the present formidable financial disorder should be right. It is a difficult and responsible task to attempt such a diagnosis at all, and I hope that my statements and arguments, as now set forth, will be subjected to the most searching and rigorous criticisms.

40. If I am right in thinking that the divergence of the values of gold and silver, which is producing consequences so ruinous to India, is due to the general adoption in England and America of gold alone as the standard of value, and to the general exclusion of silver from this office, then it seems plain that the Government of India has no direct power to help itself. The sufferings of India are caused by the proceedings of the great nations of the West, and, unless they can be induced to reconsider their policy, India can only, helplessly, endure the consequences.

41. Is there the remotest possibility of such reconsideration? If there are no stronger grounds to urge than the sufferings of India and other Eastern countries, and the injustice done to them, then I fear that the case must be pronounced absolutely hopeless. If man individually is selfish, much more are nations selfish. The nations of Europe would, with equanimity, see India, or, for that matter, the whole of Asia or the world involved in the widest suffering—ruined, if only they themselves did not suffer from the catastrophe.

42. The only hope is, and there are some grounds for such hope, that the *interests* of Europe and America may induce or compel the Western nations to consider our case.

43. If my diagnosis of the present disorder is right, then it is not India and Asia only which are now suffering, or have grave suffering before them. The rise in the value of gold in Europe and America has already caused a signal

fall in prices there, a vast increase to the burdens of all debtors, a sore stagnation of trade, and widespread commercial and social distress; and there is room for the expectation that these evils are only begun. If France is driven to replace her 60 or 70 millions sterling of silver by gold—if other nations, even India for instance, are *forced*, in self-defence, to adopt a gold standard at all costs, then there must be a further serious increase in the value of gold—in other words, a further fall in prices, bringing ruin upon multitudes of the citizens of Europe and America. It is impossible to say how far this ruin will spread, and how disastrous the social and political consequences may be, before the bitter end is reached.

44. England must, moreover, suffer grievous losses of a special kind.

If Europe and America fold their arms and leave the forces now at work to produce their own natural results, then it is impossible to say how far the value of gold may rise, and how far that of silver may fall: I see no symptoms, as yet, of the end of either process. Now, let the Government of India, fighting for its own hand, make its utmost and most violent efforts to maintain solvency—there are limits to its power. At great risks, and with much distress and cruel loss to all concerned, considerable additions may perhaps be made to the revenues of British India, and considerable retrenchments may be effected from its expenditure; but such measures cannot be carried to an indefinite extent. Doubtless, the Government of India will make heroic exertions to discharge all its obligations, however inequitably their weight may be increased; but I cannot conceal from myself the fear that a point would, even soon, be reached when the Government of India could do no more, when—the word must be spoken—India would be *unable* to meet its obligations—would be *insolvent*.

45. In such case, the losses to Great Britain would be, indeed, grievous. India could not pay her debts to Great Britain, and the British trade with India would be seriously imperilled. Unless Great Britain takes timely measures to prevent the catastrophe, I confess that it appears to me to be imminent in the future.

46. I venture to suggest that it is the first duty of the Governor General in Council, with all the gravity and all the reserve that the occasion demands, yet with unmistakable plainness of speech, to represent to Her Majesty's Government the extremity which threatens British India, with all the consequences to the British Empire itself.

47. Further, it is to be remembered that, if Great Britain has vast interests bound up with the prosperity of India, she is only less interested in the solvency of other countries (Russia for instance), whose power of meeting their obligations will be in like manner undermined by the present currency cataclysm.

48. If Europe and America should see it to be their interest to adopt the remedy, it would, I believe, be both easy and equitable in its operation.

49. If the whole world were one nation, can there be any question what would now be done? The disorder is due entirely to an abrupt change in the values of the two standards of value—the value of one (gold) is risen greatly—the fall of that of the other (silver) is imminent. The remedy for the disorder is, plainly, to reduce the value of the gold standard, and to maintain or restore that of the silver standard. Simple justice to the whole world (and as already said, justice and expediency in such matters always go hand-in-hand) demands the restoration of the *status quo ante* the disturbance. Is such restoration *possible*? Can it be doubted that if the nations set themselves to

it, means could be found of solving the problem in some way equitable to all interests? Can it be right, will it really be possible, for each nation selfishly to take its own course, however ruinous the consequences to the rest? In truth, Germany and England have the matter very much in their own power: if these two nations should see it to be to their interest to agree to admit silver to their currency upon such terms as is necessary to reduce the value of gold to what it was in 1873, France would gladly follow their example, and the other nations of Europe would and could make no objection. America, too, must and would agree.

50. Is it *mechanically* possible to right matters by the admission of silver to be legal tender at a certain relation to gold, say, as proposed by the bimetallists, 15½ times its weight in gold? I believe it to be so, because the supply of silver is, though considerable, still limited, and, therefore, its value could not if it were thus restored to its old field of employment, fall much below this rate.

51. But, while I believe that the only certain, complete, or prompt remedy for the present disorder is an international agreement to restore silver to its place as a standard, and that, unless this is done, not Asia only but also Europe and America will undergo severe sufferings, I cannot but fear that I shall be thought almost mad even to have broached the idea; and, indeed, it does seem a forlorn hope to expect that Great Britain and Germany will see it to be to their interest to give up the sole gold standard upon which they set so high a value.

52. I turn, therefore, with a heavy heart, to consider what the Government of India can and should do if Europe and America hold on their own way, and India and Asia are left to extricate themselves as best they can.

53. It seems clear that the measures called for are of two different kinds. To whatever extent we are suffering, or may hereafter suffer, from a fall in the value of silver, the remedy is in our own hands, and is simple in character. We can, and must, re-adjust the value of our standard, either by increasing the weight, or changing the substance of our standard unit of value. But, in so far as our trouble is due to a rise in the value of gold, no such simple remedy is at the command of the Government, which cannot think of attempting, by any interference with the silver standard, to restore the financial equilibrium disturbed by a rise in the value of gold.

54. It concerns us, therefore, vitally to know what share each influence has in causing the disorder with which we have to deal,—how much of it is due to a fall in the value of silver, and how much to a rise in the value of gold.

The prices of silver, in gold since December, have been as follows:—

January	4th,	price per oz. troy in pence	. . . . .	56
„	27th,	„ „	. . . . . .	55
February	12th,	„ „	. . . . . .	54
March	1st,	„ „	. . . . . .	52¾
„	8th,	„ „	. . . . . .	53
May	23rd,	„ „	. . . . . .	52
June	23rd,	„ „	. . . . . .	51
„	26th,	„ „	. . . . . .	50½
„	30th,	„ „	. . . . . .	50
July	6th,	„ „	. . . . . .	48
„	10th,	„ „	. . . . . .	47
„	11th,	„ „	. . . . . .	46¾

The price was kept up, and the full effect of the forces at work restrained, for part of this time, because the Secretary of State sold no bills during

February and March, and bills for only 50 lakhs in April, 108 lakhs in May, and 113 lakhs in June.

55. Our prices current in London extend only to April, and, in Calcutta, only to the 26th June. They show no fall in the value of silver; and, so far as the facts known to us go, we must, as yet, attribute the whole disturbance of the equilibrium of gold and silver to a rise in the value of gold, and no part of it to a fall in the value of silver. So far, then, the Government of India cannot seek deliverance in any enhancement of the Indian standard of value. Whether the rapid fall in the price of silver (from $50\frac{1}{4}d.$ to $46\frac{3}{4}d.$) since the 26th June may not be found to have included a fall in the *value* of the metal, remains to be seen. Meanwhile, we must treat the whole disturbance to the 26th June as due only to a rise in the value of gold. How much of the subsequent aggravation is due to the same cause, we cannot yet say; but we may proceed with the discussion on the assumption that the fall to the point when Re. 1 = 1*s.* 7*d.*, at any rate, is due to a rise of the value of gold.

56. The injury to our finances hitherto is thus, mainly, if not altogether, due to the enhanced value that we have to pay in gold in England. Our obligations there having been contracted on the understanding that gold was worth about $15\frac{1}{2}$ times its weight in silver, and gold having now risen to be worth about 20 times its weight in silver, the burden of our obligations is proportionately increased. Our creditors in England, who benefit by the change, have no equitable claim to the benefit; but, unless there is some such international rectification as I have suggested, the wrong appears to be, so far, without a remedy. We have no option but to pay the gold that we have contracted to pay.

57. Now, there is no royal road out of this difficulty; it must simply be faced: we must grapple with it and overcome it, or be overcome. The facts and calculations which I have already submitted show that in order to meet the new and grave obligations thus imposed upon it, the Government of India must, upon the assumption that the fall to 1*s.* 7*d.* only is due to a rise of the value of gold, be prepared, by increasing its receipts or reducing its expenditure, to provide, immediately, not less than two crores of rupees a year in excess of what it now has at its disposal; and, it may be, considerably more. We do not yet know the worst, and cannot say when we shall know it.

58. The problem, then, which the Government of India has to solve is *how* to effect an improvement in its financial position of two crores of rupees a year immediately, and of a further indefinite sum hereafter. The task is formidable enough to cause dismay. It will be requisite to give up all administrative luxuries and even some necessaries. Schemes of retrenchment must be reconsidered which have been, in times past, taken up and rejected; and the whole energy and ability at the command of the State will be needed to effect the required curtailments. Resort must, moreover, I fear, be had even to new taxation. But a loyal and combined effort must be made: I see no way of escape from the painful exigency.

59. It would be premature for me to make any detailed suggestions of retrenchments or taxation until I learn whether the Government admits the necessity thrust upon it. Even then we must look to the Departments to suggest retrenchments. I only say, meanwhile, that retrenchments seem to

me to be, *under any circumstances, possible,* only under the following heads :—

	Net grant for 1876-77 (omitting 0000.)
	R
Land Revenue, omitting Settlements	1,881
Post Office	80
Telegraph	198
Administration	1,595
Minor Departments	287
Law and Justice	2,367
Marine	323
Ecclesiastical	162
Medical	184
Miscellaneous	78
Total Imperial Civil	7,155
Provincial Allotments	5,060
Public Works Imperial	2,449
Army (effective portion)	13,334
GRAND TOTAL	27,098

60. If only two crores of rupees is to be made up by retrenchments, this expenditure must on an average be reduced by 7·38 per cent. all round. Such retrenchment will fall much more severely on some heads than on others; for it will be extremely difficult to make any considerable reductions under some heads, as, for instance, "*Law and Justice.*" Upon the whole, I gravely fear that serious extra taxation cannot be avoided.

61. As to organic remedial measures, we may, perhaps, be able, in presence of such an emergency, to induce Her Majesty's Government to consider again the propriety of assisting us with an imperial guarantee so as to reduce the rate of interest on all our sterling loans including the guaranteed railway capital. There are many substantial objections to such a guarantee; but I fear that they must yield now. If I am right in thinking that our trouble is mainly, and immediately, due to an inequitable increase of the weight of our obligations in England, there would be a special claim to relief of this kind. Such assistance would be specially useful in enabling us to take over the Guaranteed Railways, at due date, in accordance with our contracts.

62. This last measure, and every other such measure that may in any way improve our financial position, must be anxiously pursued. And the policy of constructing remunerative works should continue to have full scope. Only, we must be more than ever careful that the works are always really remunerative, and we should not attempt to borrow money in gold again, but confine our reproductive expenditure to the amount that we can borrow in silver in India.

63. It will be right, too, to consider carefully whether we cannot, and should not, adopt a cheaper system of general administration. Mr. Barbour showed, the other day, that the strength of the Civil Service in Bombay is needlessly great. It behoves us to consider, both there and elsewhere, and in every branch of the administration, whether we cannot employ Native agency more largely, in substitution for the more expensive European agency.

64. But I abstain from further remarks in this direction now. If the Government of India accepts, on full deliberation, my conclusions, it will doubtless take early measures to ascertain and consider in detail the remedies that are possible.

65. I have spoken of the interests of our officers and of the English holders of our rupee loans, and of those Englishmen who have capital invested in India. According to my diagnosis of the causes of our trouble such persons, so long as silver does not fall in value, will not, *in theory*, suffer much; because, although they get less gold for their rupees, what they get is more valuable. But I am afraid that this will not be easily recognised, and that, moreover, it will be long before the practice accords with the theory. The fall in wholesale prices in England, which proves the rise in the value of gold, will not quickly extend to retail prices, especially to the retail prices of many necessaries required by our officers and their families in England. Moreover, many of the principal payments which such persons have to make, such as schooling, house-rent, wages, etc., are almost as stereotyped as are the interest payments of the Government. They will, therefore, suffer for a long time, at any rate, and strong pressure will be put upon the Government, and indeed felt by it, to do something for their relief. Already is there a demand made for the Government to pay all furlough allowances, and make all officers' family remittances at the rate of 2*s.* the rupee—a concession that will cost some 13 to 17 lakhs a year at least; and many other claims will arise. The loss entailed upon our European officers is, indeed, for the time at least, equivalent to a substantial reduction of salary which falls hardly upon all, even the highest, and which must throw those on low pay into difficulties.

66. It remains for me to refer again to the almost certain contingency of Government having speedily to re-adjust the standard of value. If silver itself falls in value, as seems inevitable, such re-adjustment will be absolutely necessary, and the Government must be prepared with measures for the purpose. Eventually, it will be for consideration whether the needful enhancement should be effected by the substitution of gold, or by adding to the weight of the silver rupee.

67. It would be greatly to be desired that it should, at last, be found possible to adopt a gold standard; but I am much inclined to fear that it may not be possible; that the gold in the possession of mankind would not be enough for us to take such a step without causing a still further enhancement of the value of gold to a most inconvenient extent, and that the cost would be more than India could bear. If India were to adopt a gold standard, not only would the measure, in itself, tend to enhance the value of gold, and reduce that of silver, but the rest of Asia would almost be forced to follow our example, greatly aggravating the consequences.

68. Whether we adopt a gold standard or increase the weight of silver in the rupee, we shall not be justified in enhancing the value of the rupee beyond what it was when the value began to fall; and the measure will involve fresh anxieties, responsibilities, and costs; for it will not be possible, in either case, to leave the old coins in circulation. By the law of final utility described in the subsidiary memoranda, the value of the whole currency would rise quickly, if not immediately, to the value of the new coin whatever we might make this value, and the risks from the operations of coiners, and of the new coin being always driven out by the old and less intrinsically valuable coin, would compel the Government, at its own charges, to withdraw the old coin. The cost of this measure would be very serious, and, if a gold standard were adopted, more, I fear, than we could undertake.

69. It is not likely that the Government of India will, for a long time, be in a position to decide how, or to what extent, it will re-adjust its standard of value.

70. It will be very undesirable to make such re-adjustment piece-meal, and it will be better, therefore, to delay attempting it until experience shows what is the new equilibrium of gold and silver. Meanwhile, the Government should meet any ascertained fall in the value of silver by a corresponding seignorage on silver coinage which can be increased or reduced from time to time, as circumstances may render advisable, until the desired equilibrium is attained.

71. The standard measure of value, during this intermediate period, would not be silver but silver plus the seignorage from time to time. Such an expedient should only be tolerated temporarily: as soon as the period of uncertainty is over, and the new equilibrium established, all seignorage should cease, and the value of the standard unit of value should be adjusted to the new equilibrium, either by an increase of the weight of silver in it (and we shall probably have to be content with this), or by the substitution of gold. The decision between these two alternatives can and should be deferred till the time comes for the Government to re-adjust the standard of value.

It does not seem necessary to enter more into detail upon this subject at present; but I am prepared to do so hereafter.

72. As throwing a faint gleam of light upon the gloomy prospect before the Government of India, let me refer, in conclusion, to the fact that the whole revenues of India in 1849-50 amounted to only 27½ crores of rupees, as compared with 50½ crores in 1874-75. Assuming, as we, perhaps, may do, that the value of silver fell in the 25 years by one-fourth, we may call the revenues of 1874-75, 40½ crores of rupees of the same value as the Rupees of 1849-50. There are, no doubt, many explanations to be given of the growth of the 13 crores of revenue in these 25 years. But we need not, perhaps, despair yet of the solvency of India, great as is the strain to which the country is now about to be subjected. We must either bring our expenditure within our revenue, however difficult the task; or confess our insolvency. The latter alternative the Government of India will doubtless not readily adopt. At all costs, it must attempt the gigantic task imposed upon it.

XXVI.

MEMORANDUM,* BY MR. R. B. CHAPMAN, OF SUBSIDIARY ARGUMENTS AND INVESTIGATIONS RELATING TO THE QUESTION OF THE EFFECT ON THE FINANCES OF INDIA OF THE CHANGE IN THE RELATIVE VALUE OF GOLD AND SILVER.

I.—VALUE.

The difficulty of defining value is admitted by all writers on political economy. We can grasp with ease and precision such ideas as length or breadth, or weight or material capacity, or heat or cold ; because, although, in each of these cases, the conception is not of anything abstract or intrinsic but relative, we have in each case some tangible and material standard of comparison on which to found our ideas.

But, when we try to fix or define our idea of value, beauty, usefulness, and the like with precision, it seems to elude our grasp. In some sense, indeed, such conceptions would seem to be susceptible of an absolute meaning which is wanting in material things. No conception of abstract length, breadth, and the like is possible, as such ideas involve of necessity a reference to some standard. But an object is useful in the abstract of which any use may be made, and *valuable* in the abstract which is in any degree an object of desire of limited attainment.

It is when we come to compare the value of one object of desire with other objects of desire, that the want of any definite standard of comparison makes itself felt.

Political economy is concerned with *relative* values ; and so much is the want of a standard of comparison felt in the science that some of its professors have proposed to abandon the use of the very word "value," and substitute such a term as "ratio of exchange." Others, again, have anxiously sought for some standard, such as corn, or the wages of unskilled human labour.

But all are now agreed that it is impossible that such a standard can exist. There can be no object which is, everywhere, and always equally desired by all men. On the contrary, the degree of desire felt for every object of desire, varies from time to time, and from place to place even in the same individual.

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* The following is a list of the authorities whose works I have studied or re-studied before writing this paper :—

ADAM SMITH, RICARDO, SENIOR, MCCULLOCH, J. S. MILLS, CAIRNES, FAWCETT, JEVONS (*Theory of Political Economy*), JEVONS (*Money*), CHEVALIER (*On the Probable Depreciation of gold, 1859*), (*Money, 1866*), BONAMY PRICE (*Banking and Currency*), CZERNUSCHI *Bimetallic Standard, 1876*, SEYD (a) *Fall in the Price of Silver* (*1876*), BLAKE (*Precious Metals*), PHILLIPS (*Metallurgy*), Recent Articles in the *Journal des Economists* by BIRNADIKES, DE PARIEU and VICTOR BONNET and in the "*Revue des deux Mondes*" by CHEVALIER. For much interesting information, see also the *Report of the Royal Commission on International Coinage, 1868.*

(a) I read this book after my notes were in type. To the extent to which my conclusions agree with those of Mr. SEYD, they are mainly the result of independent investigation.

All that can be said is that there is what may be called an ideal scale* of values in which every object of human desire occupies at any particular moment, for each individual, a particular place. The place of any object of desire in the scale will vary, at the same time and place, to different individuals, and at different times and places, even to the same individual. A large number of objects near the bottom of the scale would be out of the scale altogether to multitudes of men, not being, to them, objects of desire at all. Other objects, again, which, ordinarily, occupy no place in the scale, may, in special circumstances, occupy the very highest place, be desired with the utmost intensity; as, for example, water by a caravan belated in the desert, or by a ship-wrecked crew, and even air when its supply is limited as it was, *e. g.*, in the Black-Hole in Calcutta. Clearly, it is impossible to define with any kind of precision the place in the scale of any single object of desire, because it does not, perhaps, at any particular time and place, occupy precisely the same place to any two individuals, or, at different times or in different places, even to any one individual.

The first elementary conception, then, to be grasped clearly is that the value of nothing is absolutely fixed. The value of every object of human desire varies continually at different times, at different places, and to different men.

We shall find, presently, that this quality of variableness is really essential to the very idea of value.

II.—Exchanges.

It may appear, on reflection, that the truth just defined lies at the foundation of all human progress and human society; for it is this condition that makes exchanges possible, and, so, enables men to supply their ever multiplying and ever-varying wants.

The growth of human civilisation, which I suppose we must assume to be synonymous with the development of the human race, is accompanied by a constant expansion and multiplication of human wants or desires. If ever a man could supply all his own wants, it must have been when he was very little indeed removed from the condition of the anthropoid ape, from which, if we are to accept Mr. Darwin's theory, the human race last sprang. Perhaps, indeed, one of the first symptoms of the transition from monkey to man may have been the development of wants or desires which could only be supplied by the division of labour, and the concomitant discovery that desires could be mutually satisfied by the exchange of objects, which, in each case, the giver desired less than the receiver, and less than he did the object received in exchange.

It is a far cry to those days of primeval development (if there ever were such days); and man, as he now exists, at least in civilised communities, may be said to supply almost all his wants by the method of exchanging objects of desire in his power for other objects in other men's power, which he desires more, and they desire less, than the objects which he exchanges.

This practice, so indispensable to human progress and human comfort, is possible only because objects are desired with different intensity, at different times and places, and by different men. We need not stay to enquire into the causes of these differences. So long as any object occupies to two men

* Where in these memoranda, or the main note the " value " of any object is spoken of, its place in this ideal scale of values is meant.

exactly the same place in the scale of values, there can be no exchange between them; for the one will offer no inducement to the other to exchange; and if any object could be conceived which should occupy to all men, at all times and in all places, precisely the same position in the scale of values, such object could never be the subject of exchange at all; for, by the hypothesis, no one would offer or could receive any inducement to exchange it. *Such an object would therefore have no value.* The desire to acquire it would not induce any man to make the sacrifices necessary to induce another man to surrender it. The moment this ceased to be true and the general equilibrium was disturbed, the hypothesis also would cease to be true.

Thus we see, *secondly*, that, in order that men should be able to supply their wants by exchanging objects of desire, in order that human society, in short, should progress, or even exist, it is essential that objects should be desired with varying intensity, at different places and different times, and, by different men, at the same time and place; and that such variations are inherent in the very conception of value, which could not exist without them.

It would be easy to shew that it is impossible to conceive of the value of any object being unchangeable without, as a logical necessity, the further conception that the values of all other objects are also unchangeable. For the relative value of one of any two objects cannot change without a corresponding change in the relative value of the other; nor can the relative values of any two objects change without changing also the relative value of one or other of them to any third object whatever, and therefore affecting its relative value.

III.—A Standard of Value.

But, although the very idea of an unalterable standard of value is thus shewn to be logically and mathematically absurd, it by no means follows that no such standard is to be found sufficiently accurate and definite for practical uses of the highest kind. Although the position of any object in our ideal scale of values cannot but vary continually even to each individual man, yet the variations upon the scale, of some objects, even to all mankind, are confined to much narrower limits than those of others; and it may well be that the average exchangeable ratio of some objects against all other objects may be found to oscillate, for long periods, between very narrow limits indeed.

IV.—What constitutes Value.

And here it seems proper to enquire whether it is possible to ascertain the conditions which determine the place of any particular object in the scale of values.

That there may be an exchange of any objects between two individuals, *A* and *B*, the following conditions must be present, it being assumed that *A* and *B* are both perfectly instructed in their own interests :—

(1) Each individual must desire the object which he is to receive, more than the object which he is to surrender.

(2) Each individual must be satisfied that no one else is ready to give him in exchange for the object which he is to surrender, an object which he desires more than what he is to receive, or more of the object which he is to receive.

These conditions, probably, include all that is necessary in order that an exchange may be effected; though their application may appear more simple in some cases, when, for instance, both the objects are present on the spot, and more complex in others, when, for instance, one or both of the objects must be produced or brought from a distance, or both produced and brought from a distance. But the term "object" must be widely interpreted so as to include labour, the use of capital, of skill, of experience, and the like.

We must now go a step further, and enquire what causes any object to be *desired*. The answer seems to be that an object is desired by a man to supply some want or (if any addition to this definition is required) to gratify some sense. However necessary an object may be even to human life, as for instance air or water, it will not be an object of *desire*, if the want of it is, as, *e. g.*, is usually the case with air and water, freely and fully supplied, and therefore not felt. The want of most material things may be, in like manner, sooner, or later, satiated; and then the desire for them ceases. The nearer a man comes to the condition of satiation in respect to any object, the less he will desire more of it. And what is true of individuals is equally true of communities. Communities do not desire air and water any more than individuals, and communities may be, in time, satiated with many, perhaps most, other things.

As to this condition of satiation, there is obviously a great distinction between perishable and imperishable objects. In respect to a *perishable* object, the satiation may be early, and when it occurs, is complete. In respect to an imperishable object, which can be laid aside for future use, satiation is, perhaps, never absolute, and is approached, more or less gradually, according to the character of the object.

Again, human wants are of many kinds. If some wants are not supplied, existence itself is affected; others may be left unsupplied with even positive benefit to a man *suum si bonum nôrit*. But it is probably true that, in civilised societies, an object of general desire is usually wanted, because it is *useful*.

The degree of desire for any object depends then (1) upon the character of the want to be supplied; (2) upon the extent to which the want has been already supplied. This is what has been described by one distinguished Economist* as the "final degree of utility." It is not the general usefulness of the whole of an object that regulates the degree of desire felt for it but that of the portion to be next immediately supplied, the *wanted remainder*.

Such appears to be the law of what Economists call "*the demand*."

Now let us turn to the other side. The wants of a civilised man are almost wholly supplied through the agency of other men; and in order to obtain the supply of his own wants, every man must supply the wants of others. This is the fundamental principle of the economy of society or political economy.

A man can supply the wants of others or his own wants—

(1) by his own contemporaneous *labour*, whether bodily or mental, or both, including, in this term, the use of skill, experience, and all special capacities;

(2) by the produce of his own previous labour or that of other men which he has acquired or inherited (*capital*);

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* JEVONS, *Theory of Political Economy*.

(3) from any exclusive right which he possesses in any part of the earth or its products, *e. g.*, fertile land, mines, forests, fisheries (*rent*).

Usually more than one of these elements are combined; for labour can seldom, if ever, be altogether dissociated from capital; and, often, all three elements are present.

In the economy of Nature, we are told, there is no waste; an end is attained by the best and most direct method possible. So, if we regard the matter scientifically, it is with the economy of society. Assuming, again (as for this purpose we must do), that every man is thoroughly instructed as to his own interests, no man will supply to others more than is just enough to procure the supply of his own wants, whatever they may be. When it is a question of supplying the fruits of labour already in possession or of exclusive rights, this law often operates quickly, directly, and simply. But when it is a question of labour, or labour combined with capital, its operation, though not less real, may be more complex and indirect, may lead a man, for instance, to abandon one form of labour, or one application of capital, for another.

In the long run, however, it may be assumed, as a general law, that a man will apply his labour, capital or exclusive possessions in the manner which will procure for him the greatest supply of his own wants. If one method of applying these things procures for a man a less supply of his own wants than another, that method will be given up, and this substituted; and conversely, if any particular application of labour, capital and exclusive possessions procures a larger supply of human wants than another, more and more men will, as they become qualified, adopt it, until its yield is brought into equilibrium with that of other occupations.

In theory, the tendency of this law would seem to be to produce a dead level of uniformity, and so to bring society into a state of paralysis—just as it has been thought that, ultimately, the operation of the laws of the material universe tends to bring all the material elements into equilibrium, which is *death*.

It seems probable, however, that if this catastrophe is, in either case, to come by the working of known and natural laws, it is too remote to merit practical consideration. So long as labour produces more than the supply of the daily wants of the human race, *i.e.*, so long as capital accumulates, it seems to be certain that human wants will multiply also; and so long as human wants multiply, the operations needful for their supply will cause infinite variations in the condition of the human race. The tendency of the law of economical supply is doubtless ever towards a dead level; but in practice, the varying skill, capacities and abilities of individual men will defeat this tendency, just as it is defeated in Nature. But as Nature's laws in all their efficacy underlie all the beautiful variety of our world and its apparent disorder, so it is with society. We may, we *must*, recognise the law, though we may be glad that its operation is restrained, and its extreme effects neutralised.

We are now in a position to define the conditions upon which depend the place which any object will occupy in the scale of values, *viz.*, *on the one side, the degree of intensity with which the object is desired, on the other, the facility with which it can be supplied.* However urgent the want of any object may be, it will take but a low place in the scale of values, if the supply is abundant and easy; and, even though the object be not much desired, it must, if the supply be scanty and difficult, take a high place in the scale of values.

It is seldom, if ever, possible to say which of the two causes—the urgency of the demand, or the scantiness or difficulty of the supply—contributes the more to determine the place of an object in the scale of values. All that we can say for certain is, that this place is the combined effect of the two; and that, whenever it becomes important to ascertain the causes that affect the place of any object in the scale of values, both elements must be carefully scrutinised.

We do not forget that it has been alleged by high authority that the value of every object is ultimately dependent entirely upon the cost of production—a term admittedly inexact and unscientific, by which, apparently, is meant the amount of labour, capital and exclusive possessions required for supply. This is, so far, true, in theory, that, by the operation of the law which has been stated, no object will be permanently produced which involves the expenditure of more labour, capital, and exclusive possessions than the production of any other object in exchange for which objects of desire of the same value can be obtained; and that every object will be ultimately produced with the expenditure of the least possible amount of labour, capital and exclusive possessions, in ordinary language, at the least possible *cost*. But, after all, it seems obvious that, even so, the degree of demand regulates the value of any object as much as does the cost of supply; and, indeed, inasmuch as it seems quite clear that the demand must ordinarily precede the supply, and that the supply does not, as a general rule, precede the demand, it seems probable that the degree of demand has more to do with the value of an object than the cost of supply.

When, under the operation of the law just stated, it becomes a question whether the production of any object shall be continued or not, the question must be determined by the urgency of the demand. If the demand rises, the object will be produced; if not, it will not be produced. Again, objects may be produced at the same cost, whether there is a demand or not; but clearly, by the same law, no object will be produced unless there is a demand for it; for, otherwise, whatever the cost of production, the object is without value.

Again, when we speak of the cost of production of an object, there is risk of our overlooking the influence upon its value of the stock of the object already produced and in existence, the capital, in short, stored in this form. It seems to be certain that, whatever may be the case with regard to labour and its contemporaneous fruits, the cost at which capital has been produced can have no share whatever in regulating its value at any subsequent time; nor can the cost at which the exclusive possession of some part of the earth has been acquired, in any intelligible way, regulate the value of such possessions. And what are we to say about the cost of producing *labour* itself? *Labour* is an object of undoubted value, so much so that, as already said, Economists have sought to erect it into the standard of value, but failed in doing so.

Skilled labour, at least, is produced at a very considerable cost; and, perhaps, there is scarcely any labour wholly unskilled; the undeveloped raw material of labour scarcely exists. But even such material is, I suppose, produced at some cost.

Yet how can it be said that the cost of producing labour, in any essential degree, regulates its value? Does not its value, and therefore the value of all its fruits, depend, at least as much upon the demand for it as on its supply, which may, perhaps, in some subtle sense, be ultimately regulated by the cost of producing it.

The truth seems to be that even of labour a portion is, virtually, hoarded or capitalised in the shape of acquired skill ready for use on demand, and that the doctrine that the value of an object depends upon the cost of production is only very partially and remotely true.

The production of most objects will, doubtless, sooner or later cease, if the labour, capital and exclusive possessions employed in their production can be more profitably employed otherwise; and will not be resumed until this condition changes; but even this principle is far from being universally applicable. The production of some objects is incidental to the production of others, and cannot be discontinued without loss in other ways: in such cases, the production may, perhaps, be said to cost nothing; and the rule must often be inapplicable to the production of *capital*, which is frequently only the secondary consequence of the employment of labour, capital, and exclusive possessions primarily for other purposes than the accumulation of capital.

At any rate, the fact, so far as it is a fact, has only an indirect bearing upon the value of the stock of an object already in existence. If the object is perishable, its value would not be affected by the discontinuance of its production, until the stock be consumed; and if the object is durable or imperishable, the decline of value which causes production to cease may go far beyond the degree necessary for this effect, and may last for an indefinite time.

Other things being equal, the greater the stock of any object, the longer the period that must elapse before the discontinuance of its production will produce any effect upon its value. If the discontinuance of its production is due to a cessation or diminution of demand, the object may, perhaps, never recover its place in the scale of values.

V.—Money.

Much confusion arises from the use of the word "money" in two senses —the primary and the secondary. It is impossible to have any clear or definite idea upon the subjects dealt with in this paper, until we first eliminate all confusion as to the sense in which we speak of money.

The primary meaning of the word *money* is a measure of value—an instrument of exchange—a mechanical device for facilitating the supply of the wants of men in exchange for objects with which they supply the wants of other men. It is with money in this its primary meaning that we are concerned in this investigation, and we shall presently revert to it; but it is necessary first to clear the field of all reference to the secondary meaning of the word.

As a measure of value, money *represents, is a token of*,* value or wealth.

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* I beg that I may not be supposed to have adopted the fallacy, often exposed, that money is *only* a token having no intrinsic value. I am quite aware that it derives its power from its own proper value; though this value, again, may be derived from the monopoly which money enjoys.