Recent Economic Events in India
Author(s): J. M. Keynes
Source: *The Economic Journal*, Vol. 19, No. 73 (Mar., 1909), pp. 51-67
Published by: Wiley on behalf of the Royal Economic Society
Stable URL: http://www.jstor.org/stable/2220507

RECENT ECONOMIC EVENTS IN INDIA.

INDIA'S unfavourable trade balance during 1908 has attracted a good deal of attention on account of the effect on the London Money Market of the Secretary of State's action in supporting exchange. The period of unprecedentedly high prices in India during the previous year, which excited some controversy there, had a less direct influence on affairs in this country, and was not so closely studied. It will be worth while to trace the connection between the two occurrences, and to examine the course of events in its successive phases. Amongst a number of comments on the situation which have appeared in various financial journals in this country, there have been criticisms of the Indian Government's action which seem to the present writer to show a mistaken view of the connection of events; and, on the other hand, those who have tended to support the official policy have treated the question of exchange and the balance of trade as an isolated problem rather than as part of a complex phenomenon presenting other sides of far-reaching importance. Apart from the practical side of the matter, India's intricate and highly artificial system presents problems of special interest to the student of the theory of currency.

I.

It will be convenient first of all to describe the recent rise of rupee prices and the explanations of it which have been suggested. It is recognised in India that there was, *prior* to the famine of 1907–8, a fall in the food-purchasing power of the rupee, at least comparable to that which preceded the closing of the mints, and only slightly exceeded during the famines of 1897 and 1900. The rise of prices which began in 1903 was at first a normal recovery from depression. But in 1905 the movement became, in the case of many important commodities, altogether abnormal. The cost of living in almost all parts of the country was palpably affected, and the matter became one of universal comment and complaint, requiring in the eyes of native politicians exhaustive inquiry and drastic administrative action. Between 1905 and the early part of 1907 prices of food grains rose from 20 to 50 per cent., with the result that the scarcity period, which commenced in the autumn of 1907, found prices already approaching a famine level.

The rise was most marked in rice and least in wheat, the two principal grains of export. In the case of the former, foreign exports were considerably checked, and there were for the first time large consignments from Burma to Bengal; but wheat, which tends in years when there is a surplus to follow without much influencing world prices, did not join in the general movement until the failure of the monsoon of 1907 in Northern India. In the local food grains—barley and the various maizes and millets—the rise after 1904 was large and universal.

The upward tendency was not confined to food grains. The prices of the other principal articles of export were equally affected, while those of imports moved steadily upwards, though to a somewhat less extent. The official index numbers are for many reasons unsatisfactory, but the following table, which is based upon them, gives a fairly accurate account in a succinct form; Sauerbeck's index number for the United Kingdom is added for purposes of comparison.

	Imports[1]	Exports and principal articles[2] consumed.	Food grains.	Prices in United Kingdom.
1903[3]	100	100	100	100
1904	106	101	93	102
1905	109	114	117	105
1906	119	137	142	111
1907	132	144	143	116

The index number for exports hardly gives sufficient weight, perhaps, to the extraordinary fluctuations in the price of jute, of which India possesses a virtual monopoly. Between 1904 and 1907 the price doubled, falling with a rush at the end of the latter year, but rising again during the early part of 1908, and fluctuating during that year at a level considerably below that of 1906 and 1907, but above what was normal before 1905. During these years jute products represented nearly a quarter of the total

[1] I give the official index number of the prices of imports for the sake of completeness, but it is constructed on so bad a principle as to be almost useless. It probably exaggerates the rise of price; for it makes the price of imports rise almost as fast as their total value, whereas it is certain that there has been a considerable increase in the volume.

[2] This index number includes the food grains which are considered separately in the next column.

[3] This, it must be remembered, was a year of exceptionally *low* prices.

value of exports of merchandise, and the effect which a commodity of this importance exercises on the external trade of a country, when its price doubles in the course of two years while the quantity increases at the same time, is manifest.

The index number for 1907 is somewhat affected by the scarcity period which commenced towards its close. But it is no exaggeration to say that non-exported food grains and the principal exports in which India has some degree of natural monopoly rose in price between 1903 and 1907 by 30 or 40 per cent., this rise occurring in a period of comparative plenty *before* the scarcity and famine of 1907–8.

There are a number of possible explanations of these circumstances. They may have been occasioned by decreased productivity on account of poor harvests, or a lessened area of cultivation; or, on the other hand, they may have been due to increased consuming power on the part of the people following on an increased demand for Indian commodities in the world's markets. They may reflect fluctuations in gold prices throughout the world, or they may arise from the working of the Indian currency and credit systems.

(1) The evidence regarding decrease of productivity cannot be reviewed here in detail; it may be true that there has been on the whole no appreciable increase, and in the case of some districts or some crops even a small decrease. In a country with a growing population and growing needs this may be sufficient to cause some upward movement of prices. For the assertion, however, which is frequently made, that there has been a substantial fall in the output of rice, it is difficult to find much support. In any case the reduction of foreign exports, and the unprecedented movement of rice from Burma to Bengal must have left for consumption in India proper an amount little, if at all, below what is usual. There does not seem to have been anything in the circumstances of recent rice crops prior to 1907 outside the ordinary fluctuations of the seasons; and it seems almost certain that the increased price was not balanced by diminished consumption. Taking food grains as a whole, there is no sufficient positive ground for believing that the high prices were, prior to the recent famine, wholly or even principally due to shortage of supply; but much of the statistical evidence relating to areas under cultivation is unreliable.

The increased cost of living is often attributed by Indian politicians to the substitution of non-food crops for food crops. The Government, they say, requiring large exports to enable it to meet its liabilities, encourages the cultivation of raw materials for export rather than that of food-stuffs for internal consumption. This substitution, it is argued, drives up prices and impoverishes the people, and, as a counter-agent to this deleterious trade, there is a demand for the prohibition of the export of rice and wheat in times of scarcity or high price. We may doubt the value of this reasoning as an argument for administrative action without denying that the explanation of high prices on which it is based may possess some value. There is no doubt that some of the raw materials of Indian export have, for various reasons affecting world markets, commanded very high prices in recent years. This has naturally led to some increase in the cultivation of the crops, which have become specially lucrative, and to the possibility of a corresponding decrease in the cultivation of less lucrative food crops. But it is difficult to believe that this cause of high prices has been the predominating influence. There is nothing to hinder the extension of cultivation; the high prices of certain commodities seem to have led to some increase in the total area under cultivation; and there is no tangible evidence that the area under food crops has been materially reduced. Recent reports from Bengal even suggest that the high price of rice is now leading to its encroachment on ground previously occupied by jute.

(2) The argument, that the rise is due to an increased consuming power on the part of the people, maintains that they are unusually prosperous on account of the good prices which for one reason or another they have obtained for their exports, that they have been enabled on this account to consume more food, and that this in the absence of increased supply has rapidly driven up the price of grain for all classes. There may be in this an element of truth. It is said that the extraordinary jute prices of 1906–7 led to a clear profit of £10,000,000 to the cultivators in the jute districts of the Bengal provinces. The increased consumption of rice on their part, consequent on this, will have led to higher prices everywhere. But there is no evidence of analogous circumstances in other parts of India, and it seems difficult to believe that the prosperity of the jute cultivators can have had so astonishing an effect upon the prices of a great variety of commodities all over India.

(3) The rise in gold prices in other parts of the world may, through the agency of foreign trade, account for a part of the rise in rupee prices in India. But a comparison with Sauerbeck's index number for the United Kingdom shows that the change in India is much greater than can be accounted for by changes occurring elsewhere.

The period under review has been that which preceded the failure of the monsoon of 1907, as the exceptional conditions of the year 1907–8, and the absence, at present, of official statistics make it unsuitable for comparison; but it may be noted that the satisfactory monsoon of 1908 did not lead, up to the end of that year, to such a fall in price as might have been expected. We may suppose that high prices in India have been partly due to harvests which, leaving out of account the scarcity of 1907–8, were neither specially unfavourable nor specially abundant, partly to exceptional prices in the world's market of some of India's staple commodities of export, and partly to changes in the purchasing power of gold not peculiar to India. Although it is impossible to speak with confidence respecting the quantitative effect of each of these agencies, it is reasonable to doubt whether they can have had sufficient influence between them to produce the observed results.

(4) We must turn, therefore, to considerations of currency and to the circulation of rupees, hoping to work backwards from the *data* which we can obtain to a knowledge of other possible agencies. In any case, causes (2) and (3) above could only come into operation by aiding an expansion of the circulation. Attention was called to the rupee issues in an unsigned article entitled "India's present monetary condition," which appeared in the ECONOMIC JOURNAL for March, 1907; and in the Budget debate of March, 1908, in the Viceroy's Council the question was raised by Mr. Gokhale in a moderate and well-reasoned speech.

II.

The facts briefly are these: Immediately after the closing of the mints in 1893, coinage entirely ceased for three years; there were small issues in 1896 and 1898 on account of the stringency of the money market; but taking the period from 1893 to 1900 as a whole the issues were negligible. The rupee then touched par, and since that time rupees have been issued in a steady stream. In 1898 the total number of coined rupees in the country was estimated at about 1,200 million. The total gross issues of coinage since 1900 have exceeded 1,000 million rupees. From this enormous total as affecting the circulation it is necessary to make deductions, on account of re-coinage and of transfers to the gold standard and paper currency reserves, and additions on account of the increased circulation of notes, and in certain years of the replacement of rupees by gold in the paper currency reserve. The following table gives the approximate figures [1] in £ million sterling:—

	£ million sterling.		
	Net issue of coinage.	Net increase of average circulation of notes.	Total net. increase or decrease to circulation during year.
1902–3	1½	2½	4
1903–4	9	2	11
1904–5	5	1½	6½
1905–6	11	2	13
1906–7	8	2½	10½
1st April, 1907—31st Dec., 1907 [2]	7	1	8

The increase during the financial year 1907–8 amounted to no more than four millions sterling; but during 1907 issues were on a scale commensurate with that of the preceding years. In the autumn of that year the crisis came, and during the first quarter of 1908 rupees were withdrawn from circulation to the value of perhaps four millions sterling, to replace gold in the currency reserve. We may conclude, therefore, that between April, 1903, and the end of 1907 the net increase in the circulation of coins and notes amounted in value to not less than 49 millions sterling, or 735 million rupees, and that the increase subsequent to 1900, making allowance for the increase of coins and notes between that year and 1903, exceeded 1,000 million rupees.

When we inquire whether the increase of currency is connected with increased prices, there is one sense in which no other answer than an affirmative is reasonable. That prices would be lower if the coinage of rupees had been restricted is certain; and it cannot be supposed that official apologists wish to deny this when they ascribe the rise solely to considerations unconnected

[1] It is hoped that these figures, with which care has been taken, are approximately correct. They are not given in any compact form officially and the lack of them led to some misunderstanding in the Viceroy's Council between Mr. Gokhale and the Financial Member. They are arrived at as follows: the net issue of coinage is found by adding to or deducting from the gross issue of silver and bronze coins, less the amount of recoinage, the amount of decrease or increase in the average reserve held in rupees against notes; in 1906–7 a further deduction was necessary on account of the transfer of 60 million rupees into the newly formed silver branch of the Gold Standard Reserve. In the case of notes, the figures give the increase in the average circulation during the year, excluding those in Government Treasuries but including those in Presidency Banks. By this means we avoid counting both the increase of paper money and the corresponding increase of rupees held against them, and we do not neglect the increase of the rupee circulation due to the recent policy of increasing the gold in the Paper Currency Reserve and decreasing the silver. No deduction has been made for the export of rupees; but on the other hand no allowance has been made for the quite appreciable number of sovereigns in circulation.

[2] Estimate.

with currency. Nor can anyone dispute that the price level has been affected by the policy adopted by the Government of India in 1893, or that prices might be different if another policy had been preferred. These obvious considerations being kept in mind, we may continue our analysis of the facts.

The available statistics appear to show that, whether the phenomena are connected or not, the rise of prices has been nearly proportional to the increase of currency. The figures are given below, but too much reliance must not be placed upon

	General index number of prices.		Estimated total volume of currency on 1st April of each year.
1903	100		100
1904	102		110
1905	112		115
1906	131		127
1907	140	1st April	136
		31st Dec.	143

their remarkable agreement. The index number of prices is not well constructed, the volume of currency can only be estimated,[1] and the agreement may be due to the fortuitous balancing against one another of causes unconnected with the present discussion, some of which must certainly have been in operation.

It is at least true that there was a substantial rise in the general level of prices in India during the three years preceding 1908, accompanied by correspondingly large issues of currency. It will now be argued that the recent weakness of exchange and the inability of the Secretary of State to sell his bills has been the natural result of these circumstances.

To what causes should we expect an increase of currency to be due, and by what process would it affect exchange? In a time of active trade and expanding exports the supply of Indian currency at demand to anyone possessing credit or resources in England is unlimited; for he can always obtain it by the purchase of Council bills in London and their encashment in Calcutta. During such a period, therefore, the sale of Council bills is large, and they can only be met by fresh issues of corresponding magnitude from the Mint. This naturally assists the rise of prices which the activity of trade has already initiated. The higher prices cause a demand for increased currency, and so for a time the inflation goes on. Eventually, however, the high prices stimulate imports and retard exports; the demand for bills on Calcutta is thus reduced, their price in London falls, and ultimately, if nothing intervened, it

[1] Mr. F. C. Harrison's estimate of the rupee circulation as being 1,200 million in 1898 has been accepted, and 487 million have been added to this on account of paper money and of the net issues between 1898 and the end of 1902.

would become profitable to exchange rupees for gold and to export the gold. Before this point is reached the Government of India bring into use their reserves, and, if necessary, their credit; the Secretary of State withdraws from the sale of bills in London, and offers bills in Calcutta. Each of these methods accumulates rupees in the Treasury which, by transfer into the reserves, are withdrawn from circulation, and the process of driving prices down again begins, as the issue of rupees is restricted. During the whole of this period the exchange value of the rupee may have remained steady in the neighbourhood of 1*s*. 4*d*., but the purchasing power of the rupee in India will have suffered the widest fluctuations.

The cycle of events which theory would anticipate has been realised in fact. A period of active trade, probably maintained though not initiated by the high price of jute, was readily financed from abroad, and the unprecedentedly large issues of Council bills, purchased in London beyond the necessities of the balance of trade, could only be met from the Mint. The abundance of rupees removed a possible hindrance to further expansion and permitted a rise of price amongst commodities generally, which again increased the demand for rupees. It is well known that when an upward movement of prices has been started, it is not easily stopped until difficulty arises in obtaining fresh supplies of currency. In this case the process continued for about three years, until, in fact, the normal balance of trade had been upset by the new level of prices and the failure of the harvest, so that the means of obtaining fresh currency was thus brought to an end. These circumstances may now be explained in greater detail.

It is necessary to premise that the circumstances of the Indian export trade are such that exports are not so rapidly checked by rising prices as they would be in many other countries. As India possesses a partial monopoly of many of her staple exports, she can in the first instance reap a considerable profit; whether or not exports are reduced in quantity, the fall in total value will not be proportional to this, and it is possible that she may obtain as much or even more than before in exchange for them. The exports of rice, for instance, fell between 1904–5 and 1905–7 in bulk by about 22 per cent., and in value by not more than 5 per cent.; and in the case of other commodities, oilseeds, hides, and jute, the monopoly element has exerted its full influence. We should expect rising prices, therefore, to act more rapidly in increasing imports than in diminishing exports. The statistics of foreign trade, *including* Government transactions, are given below. It may be added that compared with former years

	£ million sterling.		
	Imports.	Exports.	Balance in favour of India.
1902–3	74	92½	18½
1903–4	87½	112½	25
1904–5	96	116	20
1905–6	96	118	22
1906–7 [1]	108	121½	13½
1907–8 [1]	119	122	3
1908–9 [2]	71	67	−4

the balance of trade from 1903 to 1906 was exceptionally favourable, partly on account of the circumstance that Government were then exporting as much treasure as they were importing.

The increase in the total value of exports between 1902–3 and 1906–7 seems to be mainly due to the increase of price, and the figures for the principal articles [3] of trade, which are of some interest, are given below. With the single exception of seeds,

Commodity.[5]	Percentage increase or decrease of exports of 1906–7 [4] over those of 1902–3. Quantity.	Value.
Grain and pulse [6]	− 7 per cent.	+ 9 per cent.
Seeds	−11 ,,	− 13 ,,
Cotton	+22 ,,	+ 49 ,,
Jute	+23 ,,	+141 ,,
Cotton twist, and yarn	− 2 ,,	+ 22 ,,
Hides and skins, raw and tanned	+65 ,,	+ 82 ,,
Opium	− 1 ,,	+ 16 ,,
Tea	+29 ,,	+ 34 ,,
Gunny bags	+14 ,,	+ 58 ,,
Gunny cloth	+41 ,,	+ 91 ,,
Lac	+13 ,,	+ 90 ,,

the increase of value is very much greater than the increase in quantity, and in some important classes of goods the quantity has been nearly stationary or has even decreased. In the case of imports of merchandise, the increase is due more to an increase of quantity and less to an increase of price than in the case of exports; but cotton goods have risen a good deal more in value than in quantity, and this has had a considerable influence on the figures.

[1] The volume of imports was abnormally affected in these years by Government transactions in treasure. This will be allowed for later in reckoning the balance of trade against which Council bills are drawn.

[2] First eight months.

[3] The value of these articles was about 80 per cent. of the total export trade in 1902–3 and 84 per cent. in 1906–7.

[4] The latest year for which details are available.

[5] The commodities are arranged in the order of their importance in 1902–3.

[6] The figures under this head are dominated by rice, and to a less extent by wheat.

It will be noticed that the movement of the balance of trade since 1905–6 has been progressive, occurring during the same period as the rise of prices and the increase of currency, and that its disappearance had begun before the failure of the monsoon in 1907. It may be questioned, therefore, whether a too exclusive importance has not been attributed to the famine in producing the observed results. That the famine had a predominant influence is undeniable; but it must not be forgotten that the exports for 1907–8 exceeded in value those of any previous year, and that the total for 1908–9 may not be very much lower than £115,000,000. With regard to imports, the value in 1907–8 greatly exceeded that of any earlier year, and for the first eight months of 1908–9 the falling off was in purchases of treasure only and not of merchandise. This is very remarkable. India's purchasing power over foreign goods, during the recent famine, has been greater than at any previous period, however prosperous. This is most naturally explained by a high level of local price combined with a rupee artificially maintained at the usual exchange.

The unfavourable balance of trade has been rendered much greater than it would otherwise have been by the failure of crops in Northern India, although the element of monopoly has had some influence in decreasing the fall in the value of exports; and cheap silver has swollen the imports of treasure. But when these circumstances have been allowed for, an important part of the explanation is to be found in the high level of local prices. Imports were overtaking exports long before the failure of the harvests, and even since their failure the unfavourable balance has been caused by the unprecedentedly large volume of imports rather than by a diminution in the value of exports.

We must now proceed to the next link in the chain of circumstances. We have argued so far that a large increase in the volume of currency rendered possible a rise in the general level of prices, and that this rise of price has been *one* element in reversing the balance of trade. We may now inquire by what means the volume of currency was so rapidly expanded. For this purpose the sales of Council bills by the Secretary of State in London must be examined, since it is through these bills that claims can be created against the Treasuries in India for the satisfaction of which there must be new issues of coinage from the Mint.

The ultimate balance, which is settled by the sale of Council bills depends chiefly upon (A) the balance of private trade; (B) various payments due to remittances from private persons in India of part of their earnings, to freight and insurance, and to interest on industrial or banking investments; and (C) the volume of capital loaned to India during the year from abroad. If the balance of trade (A) is reckoned positive when it is favourable, and the sale of Council bills (D) becomes negative when Government bills are sold in Calcutta on London in excess of the sales in London on Calcutta, we shall have approximately $D = A + C - B$. It must be remembered, however, that the balance of trade, A, against which the Council bills are drawn, is the balance of *private* trade, excluding Government transactions, that the remittances exclude all remittances effected through Government, and that the new investments C are not affected by any loans which may be raised by the Secretary of State. The statistics of D and A are known, so that we can arrive at the difference $C–B$. The balance of private trade and the sales of Council bills[1] in recent years are given below, the excess of capital loaned to India over the various payments due from her being given in the last column.

	In £ million sterling.		
	Balance of private trade.	Council Bills.	Invisible balance for or against India.
1902–3	23	19	−4
1903–4	29½	24	−5½
1904–5	24	24½	+ ½
1905–6	29½	31½	+2
1906–7	31	33½	+2½
1907–8	13½	15	+1½
1908–9[2]	−1	−4[3]	−3

These statistics show that during 1902–4 the remittances on account of interest, &c., considerably exceeded the new investments from abroad, that in 1904–5 they nearly balanced, and that during 1905–8 the investments exceeded the remittances. We see, therefore, that two distinct causes were responsible for the increasing volume of Council bills—a large favourable balance of private trade and an increased influx of capital from abroad—and that during 1903–7, the period of abundant coinage, the second of these causes was the more influential in causing the increase.

[1] These appear as a negative quantity in 1908–9 because the Secretary of State's withdrawal from the sale of bills on India being insufficient to maintain the rupee at par, it became necessary to sell in Calcutta bills on London, between March and August, 1908, to the value of £8,000,000.

[2] First eight months.

[3] During December, 1908, and January, 1909, however, the demand for Council bills was keen.

The value of Council bills sold in 1906–7 exceeded the value of those sold in 1903–4 by £9,500,000, of which £1,500,000 was due to a more favourable balance of trade and £8,000,000, apparently, to capital transactions gaining upon remittances. The unfavourable balance of 1908–9, although primarily due to the turn in the balance of trade, is to be accounted for to the extent of £5,500,000, in comparison with 1906–7, by a diminution of the inflow of foreign investments.

The verification of this inference regarding the flow of foreign capital is not very easy. It is certain that investment from abroad in industrial or other joint-stock companies[1] has been at a comparatively low rate throughout the period under consideration, and the considerable borrowings for railways, having been mainly effected through the Secretary of State, do not affect the present calculation.[2] The facts reviewed in the preceding pages would, however, lead us to look elsewhere for the principal part of the explanation.

The increased volume of imports suggests that some part of the new capital has entered the country in the form of goods, but the heavy demand for Council bills shows that a large part has come in the form of what is, in effect, money. This agrees with other parts of the argument. The Indian trader has been doing a larger business at higher prices, and the credit which has enabled him to do this must have increased correspondingly. This can only have been made possible through the professional lenders increasing their loanable resources in India by the purchase of Council bills in London. A good deal would be explained, therefore, if we could find evidence that banks and others had been importing loanable capital at a greater rate than formerly, on account of the greater demand for it occasioned by rising prices and expanding trade.

Such evidence is peculiarly difficult to obtain, and is not likely to be within the knowledge of any one person. We know the total resources of the chief banks which have offices in India and raise their funds from without, and we know that the

[1] Foreign investments of this kind in India are surprisingly small. In 1905 the ordinary and debenture capital of sterling companies, exclusive of railways, working in India amounted only to £28,500,000, of which £13,500,000 was invested in tea plantations. By 1906 the amount had increased by £2,250,000; so that this factor, though not important, is appreciable and would account for some part of the increased imports.

[2] Most of the more important railways have some kind of guarantee and borrow through Government. There are about nine private enterprises who raise loans on their own account. During the last few years the aggregate borrowings of these companies have amounted, perhaps, to one million sterling annually.

increase to their capital, deposits, and reserve rose from an annual average of about £3,000,000 from 1900 to 1902 to an annual average of £13,000,000 from 1903 to 1906. This tendency is in entire accordance with our other facts. But these banks include some vast establishments doing business all over Asia, and the present writer has no means of knowing what proportion of their total resources they employ in India. If, however, we take the three principal exchange banks, namely, the Chartered, Mercantile, and National Banks of India, the bulk of whose business is probably Indian, the figures of their total advances, discounts, &c.,[1] given below, show that their

	£		£
1900	19,800,000	1905	22,100,000
1901	18,100,000	1906	24,100,000
1902	18,200,000	1907	27,500,000
1903	20,200,000	1908	27,300,000
1904	20,300,000		

business was, between 1900 and 1904, almost stationary, that from 1904 to 1907 it was very rapidly advancing, and that in 1908 not only was this expansion checked, but there was a slight contraction.[2] Assuming that this gives a fair sample of the action of the other banks and of the great private traders, we have an explanation adequate to the facts. Apart from the figures, there is strong reason for supposing that the principal banks *must* have increased their resources very largely, and that the great exporting firms found it necessary and remunerative to bring more money from abroad into their businesses. Those, therefore, who doubt the validity of the explanation must show by what other means the enormous trade of 1905–7 can have been financed.

There is one small point which may be alluded to briefly. Although the failure of the harvests was known by September, 1907, the figures show no very considerable reflux of capital before the beginning of the financial year 1908–9. It is possible that this may be explained by the fact of the accumulation of stocks in the hands of importers who had given orders in advance which they were unable to cancel, although the market for their goods had been temporarily destroyed. The holding of these stocks necessitated borrowing, and thus absorbed a part of the loanable capital set free by the failure of the harvests and the

[1] There was a corresponding increase in the cash in hand and money at call and short notice, which affects the argument equally in so far as it is held in India.

[2] The figures refer to the early part of the year. If we had returns up to October, 1908, covering the period during which the demand for bills was weakest, we should probably find the contraction very much more marked. The mere check to increase, however, would, in the case of these three banks alone, account for a decrease of £3,500,000 in the demand for Council bills.

consequent contraction of the export trade. Not until these debts were being liquidated did the stream definitely turn its course.

We are now in a position to complete a conjectural narrative of the course of events, so far as it can be understood from an analysis of the statistics of currency, price, and foreign trade. A great increase in the value and volume of exports in 1901–2 was followed up by a further and greater increase in 1903–4. This movement, which followed on a number of years during which the value of exports had remained on the whole stationary, was due to prosperous activity and to rising prices in the case of several important commodities, raw and manufactured cotton, wheat, rice, and seeds being, at this stage, the most important. Since 1903–4 the rise has not been great, but a decline in the export of seeds and some reaction in the cotton trade have been more than counterbalanced by the greater value of jute. At the earlier stage imports, though steadily progressing in value, did not leap forward so rapidly, with the result that a larger balance of trade remained to be met by the sale of Council bills. The new wave of prosperity seems, not unnaturally, to have required and attracted foreign loanable capital in a more ample stream than during the years immediately preceding it, and this circumstance, combining with a large excess of exports over private imports, swelled the sale of Council bills to an unprecedented extent, the influx of new capital being, on the whole, the more important factor of the two.

Subsequent developments have followed inevitably. When the Secretary of State sells bills beyond his necessities, the Mint is the source from which they are regularly met[1]; and the increased sales had, as their necessary corollary, an expansion of the currency. The greater volume of trade required, no doubt, an increased currency to maintain prices at their former level; for this reason there was not immediately any great rise of price. But when in the following years the favourable balance of trade and the influx of capital combined to *maintain* the sale of Council bills high, without there being an expansion at the former rate in the total volume of trade, the new currency, which was still finding its way into circulation, could not help but raise the level of price. Indian experience during the years which followed the closing of the mints served to show that there are no peculiar circumstances in the monetary customs and organisation of the

[1] The bills which pay for his current expenses abroad are met by the rupees brought in by taxation; bills in excess of these can only be met by increased taxation, by a loan in India, or from the Mint. The third method is alone used in practice.

country which tend to hinder the natural operation of the quantity theory of money, and that the influence, which we should expect the volume of currency to exert upon the relative value of exports and imports, is actually present. This experience was beginning to be repeated after 1905–6 in the tendency, following upon an increased currency and a higher level of price, of imports to overtake exports. But before this process could go very far a season of scarcity swamped and concealed the effect of this and other agencies tending to reduce the demand for Council bills. These agencies, however, caused the demand to fall far more than had been the case in the famines of 1897 and 1900, and the Secretary of State was face to face with an embarrassment which he had not had to meet before. At the high level of price obtaining in the country imports were attracted in such volume as actually to exceed the exports; and the abnormal influx of capital was immediately checked by the depression of trade and by other circumstances in the internal condition of the country. The great volume of imports and the decreased flow of foreign capital have been almost as important factors in depressing the sales of Council bills as the check to exports caused by the unfavourable rains.

The means by which the Secretary of State has been able to diminish and for a time even to suspend the sale of bills, to cash drafts on London, and yet meet his enormous liabilities in England, amounting to nearly £20,000,000 annually, are easily explained. His first line of defence is the "Currency Reserve." This is the reserve held against paper currency; it is held partly in India, partly in London, and may be composed of gold and silver indifferently.[1] On March 31st, 1907, £10,688,841 was held in gold, chiefly in London. This gold can be used to meet current expenses, rupees to an equivalent nominal value being transferred at the same time into the reserve in India. The second line of defence is the "Gold Standard Reserve," which has been built up out of the profits from the coinage of rupees. On March 31st, 1908, this amounted to £18,350,000, of which about £14,350,000 was held in gold or invested in British Government securities in London.[2] These investments can be sold in London, rupees to an equivalent amount being transferred into the silver branch of the reserve in India. The third and last line of

[1] The reserve also contains securities, some part of which are sterling bonds; but I am not aware that this source of funds has been or will be utilised for the support of the rupee.

[2] The remaining £4,000,000 was, through mistaken policy, converted into silver during 1906–7 and thus made useless for the purpose for which the reserve had been created.

defence depends upon the Secretary of State's credit and ability to borrow on the London Money Market.

So far as can be seen the resources of the Currency and Gold Standard Reserves had been drained by December, 1908, as low as safety permitted, and authority was obtained from Parliament to borrow, if the necessity for it should arise. Since that time the revival in the demand for Council bills has rendered such steps unnecessary.

These means of obtaining cash in England for immediate purposes result, it will be noticed, in the withdrawal of rupees, to an equivalent value, from circulation in India. By March, 1908, nearly 115 million rupees had been withdrawn into the currency reserve by the release of gold, and by December, 1908, the figure had risen to 154 million. In March, 1908, it had not been necessary to trench upon the Gold Standard Reserve; but by the end of November about 130 million rupees had been withdrawn by the sale of gold and securities. Altogether, therefore, these measures had the effect of annulling, approximately, the issues of 1906–7 and the first half of 1907–8, and of reducing the total circulation to the figure at which it stood in 1906.

It may be added that a railway loan, raised by the Secretary of State in this country, in so far as it is not immediately expended on importing rails and rolling-stock, is equally efficacious in enabling him to meet his current expenses. But it withdraws no rupees from circulation in India; in fact, it disseminates them; and is, therefore, an unsafe procedure at such a time as the present, unless its results are very carefully watched. During the last year railway loans have filled up, to some extent, the deficiency in the receipts from bills, and they seem likely to do so to a greater extent in the future.

III.

The whole of the preceding argument may be briefly summarised. We have seen a large increase of coinage, accompanied by rapidly rising prices, followed on the one hand by an increase of imports relatively to exports, and, on the other, first by unprecedented sales of Council bills and then by a collapse which would have led to a fall in the exchange value of the rupee but for the drastic action of the Secretary of State. We have argued that all these circumstances are only different sides of the same economic event. A prosperous export trade and a movement of capital towards India stimulated the sale of Council bills. By their encashment the volume of currency was increased and the tendency to rising prices, due in its origin to a variety of causes, thus permitted to continue. Finally, a failure of the harvest served to precipitate what might in any case have occurred later. Exports could not keep pace with the fast expanding imports, the inward stream of capital ceased to flow, and, as India had no ready supply of gold with which to meet her debts, her coinage must have become depreciated if it had not been for the Secretary of State's resources.

The objects of this paper have been entirely those of analysis and no attempt will be made here to propose remedies. The Indian Government have not yet hit on an ideal system, and they should not rest content with the knowledge that many of their newspaper critics are wide of the mark. One point may be recommended to the notice of the latter. The flow of capital into India, which is admittedly of the first importance for the country's economic development, is always likely to be followed by rising prices; and it is not at all improbable that present circumstances are largely due to such a cause. Indian politicians are fond of ascribing high prices in India to the "drain" through which the Government meets its liabilities in England. As a matter of fact, the reverse is the case; the Secretary of State's need for remittances tends to keep prices low, and it is the influx of foreign capital, the "drain" from England *into* India, which drives them up.

With regard to the immediate future, it is not easy to prophesy. It must not be forgotten that recent circumstances have been exceptional, and due to the addition of seasonal troubles to more permanent influences. It is quite likely that prices will not fall appreciably for the present, and that as trade recovers the rupees now accumulated in the reserves will find their way again into circulation. Whether or not this will occur chiefly depends upon how far the flow of capital into the country revives. If the writer were asked to name the principal cause of the recent rise in the cost of living, he would point to the rapid influx of foreign capital, stimulated in the first instance, no doubt, by activity of trade. Apart from the fluctuations of the seasons, the Indian level of prices is most influenced at the present time by the extent to which Europe makes her investments there.

J. M. KEYNES