

BASEMENT (6/7)

OCCASIONAL PAPER NO. : 130

**THEORIES OF WORSENING NORTH-SOUTH TERMS
OF TRADE FROM PREBISCH-SINGER TO
EMMANUEL : A SURVEY AND SYNTHESIS**

PRABIRJIT SARKAR

NOVEMBER 1991



CENTRE FOR STUDIES IN
SOCIAL SCIENCES, CALCUTTA

CENTRE FOR STUDIES IN SOCIAL
SCIENCES, CALCUTTA.

~~Theories of worsening North-South
terms of trade...~~

sn = 105776

PUBLICATIONS OF
CENTRE FOR STUDIES IN SOCIAL SCIENCES CALCUTTA
OCCASIONAL PAPER SERIES

Some recent papers in the series : reference to subsequent publication is given in brackets

- 93. Nationalism as a Binding Force : The Dialectics of the Historical Course of Nationalism—I.
BARUN DE
- 94. The Nationalist Resolution of the Women's Question.
PARTHA CHATTERJEE
- 95. Gramsci's Concept of Commonsense : Towards a Theory of Subaltern Consciousness in Hegemony Processes.
ARUN K PATNAIK
- 96. Industrialization to Indigenization : A Study on Cultural Reformulation of a Tribe in Orissa.
GOVINDA CHANDRA RATH
- 97. Technological self-reliance and underdevelopment.
AMIYA KUMAR BAGCHI
- 98. An Appraisal of the Indo-British Commodity Trade : 1871— 887.
DEBDAS BANERJEE
- 99. Feminist Literary Criticism : A New Look at Old Things.
SANJUKTA DAS
- 100. The Local State and Rural Policies : A Study of Digapahandi Block 1957—1983.
ARUN KUMAR PATNAIK
- 101. Some Quantitative Aspects of the Changes in Manufacture in India 1880-1900.
DEBDAS BANERJEE
- 102. Agricultural Price Policy A Survey with Reference to the Indian Foodgrain Economy.
N. KRISHNAJI
- 103. The Story of Kassimbazar : Silk Merchants and Commerce in the Eighteenth Century
RILA MUKHERJEE
- 104. The Mentality of Subalternity : Kantanama or Rajdharma.
GAUTAM BHADRA
- 105. Keynes, India the Gold Standard.
AMIYA KUMAR BAGCHI
- 106. Representation and Class Politics in the Theatre of Utpal Dutt.
HIMANI BANERJEE
- 107. The Structure of Structure or the Appropriation of Anthropological Theory.
ANJAN GHOSH
- 108. Bankimchandra and the Making of Nationalist Consciousness I : Signs of Madness.
SUDIPTA KAVIRAJ
- 109. Bankimchandra and the Making of Nationalist Consciousness II : The Self Ironical Tradition.
SUDIPTA KAVIRAJ
- 110. Bankimchandra and the Making of Nationalist Consciousness III : A Critique of Colonial Reason
SUDIPTA KAVIRAJ
- 111. Caste and Subaltern Consciousness
PARTHA CHATTERJEE
- 112. The Limits of 'Economic Man.'
ASOK SEN
- 113. Technological Diffusion : A Study Based on Indian Agriculture.
INDRANI GHOSH
- 114. Trends in Peasant Indebtedness and Dispossession : West Bengal Districts (1901-41)
MANOJ KUMAR SANYAL
- 115. Peasant Indebtedness and Dispossession : A Study in the Registered Debt and Sale of Land in West Bengal Districts (1901-41)
MANOJ KUMAR SANYAL
- 116. Problems of the Study of Indian History : With Particular Reference to Interpretation of the 18th Century.
BARUN DE
- 117. The Decline of India's Cotton Handicrafts : 1800-1905 a Quantitative Macro-Study.
AMALENDU GUHA
- 118. Reification of Intellect.
ARUN PATNAIK
- 119. Public Sector Industry and the Political Economy of Indian Development.
AMIYA KUMAR BAGCHI

205786

BN 97862

Occasional Paper No. 130

Theories of Worsening North-South Terms
of Trade from Prebisch-Singer to
Emmanuel : A Survey and Synthesis.

IDS Information Resource Unit
University of Sussex
Falmer, Brighton BN1 9RE, UK

PLEASE RETURN BY

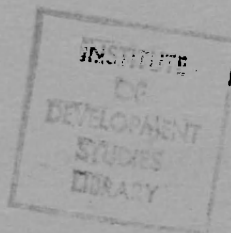
~~31/8/93~~

~~31.09.96~~

~~31-1-96~~

26/06/06

Prabirjit Sarkar



November, 1991

Centre for Studies in Social Sciences, Calcutta
10, Lake Terrace
Calcutta-700029.

IDS



046663

(sn = 105776)

PUBLICATIONS OF
CENTRE FOR STUDIES IN SOCIAL SCIENCES CALCUTTA
OCCASIONAL PAPER SERIES

Some recent papers in the series : reference to subsequent publication is given in brackets

93. Nationalism as a Binding Force : The Dialectics of the Historical Course of Nationalism—I.
BARUN DE
94. The Nationalist Resolution of the Women's Question.
PARTHA CHATTERJEE
95. Gramsci's Concept of Commonsense : Towards a Theory of Subaltern Consciousness in Hegemony Processes.
ARUN K PATNAIK
96. Industrialization to Indigenization : A Study on Cultural Reformulation of a Tribe in Orissa.
GOVINDA CHANDRA RATH
97. Technological self-reliance and underdevelopment.
AMIYA KUMAR BAGCHI
98. An Appraisal of the Indo-British Commodity Trade : 1871— 887.
DEBDAS BANERJEE
99. Feminist Literary Criticism : A New Look at Old Things.
SANJUKTA DAS
100. The Local State and Rural Policies : A Study of Digapahandi Block 1957—1983.
ARUN KUMAR PATNAIK
101. Some Quantitative Aspects of the Changes in Manufacture in India 1880-1900.
DEBDAS BANERJEE
102. Agricultural Price Policy A Survey with Reference to the Indian Foodgrain Economy.
N. KRISHNAJI
103. The Story of Kassimbazar : Silk Merchants and Commerce in the Eighteenth Century
RILA MUKHERJEE
104. The Mentality of Subalternity : Kantanama or Rajdharma.
GAUTAM BHADRA
105. Keynes, India the Gold Standard.
AMIYA KUMAR BAGCHI
106. Representation and Class Politics in the Theatre of Utpal Dutt.
HIMANI BANERJEE
107. The Structure of Structure or the Appropriation of Anthropological Theory.
ANJAN GHOSH
108. Bankimchandra and the Making of Nationalist Consciousness I : Signs of Madness.
SUDIPTA KAVIRAJ
109. Bankimchandra and the Making of Nationalist Consciousness II : The Self Ironic Tradition.
SUDIPTA KAVIRAJ
110. Bankimchandra and the Making of Nationalist Consciousness III : A Critique of Colonial Reason
SUDIPTA KAVIRAJ
111. Caste and Subaltern Consciousness
PARTHA CHATTERJEE
112. The Limits of 'Economic Man.'
ASOK SEN
113. Technological Diffusion : A Study Based on Indian Agriculture.
INDRANI GHOSH
114. Trends in Peasant Indebtedness and Dispossession : West Bengal Districts (1901-41)
MANOJ KUMAR SANYAL
115. Peasant Indebtedness and Dispossession : A Study in the Registered Debt and Sale of Land in West Bengal Districts (1901-41)
MANOJ KUMAR SANYAL
116. Problems of the Study of Indian History : With Particular Reference to Interpretation of the 18th Century.
BARUN DE
117. The Decline of India's Cotton Handicrafts : 1800-1905 a Quantitative Macro-Study.
AMALENDU GUHA
118. Reification of Intellect.
ARUN PATNAIK
119. Public Sector Industry and the Political Economy of Indian Development.
AMIYA KUMAR BAGCHI

BN 97862

Occasional Paper No. 130

Theories of Worsening North-South Terms
of Trade from Prebisch-Singer to
Emmanuel : A Survey and Synthesis.

IDS Information Resource Unit
University of Sussex
Falmer, Brighton BN1 9RE, UK

PLEASE RETURN BY

~~31/8/93~~

~~31.1.96~~

~~31-1-96~~

~~26/06/06~~

Prabirjit Sarkar



November, 1991

Centre for Studies in Social Sciences, Calcutta
10, Lake Terrace
Calcutta-700029.

IDS



046663

A B S T R A C T

This paper traces the development of ideas from Prebisch-Singer to Emmanuel - from relations between types of commodities to relations between types of countries. It then seeks to synthesize all these to explain that the factorial and commodity terms-of-trade of the South vis-a-vis the North have been deteriorating since the last quarter of the nineteenth century till today in spite of changes in the pattern of North-South trade from sale of manufactures for primary products to sale of manufactures for manufactures.

ACKNOWLEDGEMENT

This is a revised version of the paper presented at the Nordic Researcher Training Course, Oslo (June 8-15, 1991). I am grateful to Professor Amiya Kumar Bagchi for helpful comments. But the usual disclaimer applies.

The issue of terms of trade between the North and the South surfaced in the early 1950s. The credit for raising the issue goes to Prebisch (1950) and Singer (1950). They postulated that the commodity terms-of-trade (hereafter called simply 'terms of trade')¹ of the primary product exporting South (the Periphery) vis-a-vis the manufacture exporting North (the Centre) have a long-term tendency to decline in spite of the fact that the rate of cost-reducing technical progress is higher in the manufacturing sector of the North than in the primary sector of the South. This implies that the factorial terms of trade² also turned against the South. Thus this postulate questioned the validity of the classical mechanism of distribution of the fruits of technical progress through trade in the form of lower prices and challenged the international division of labour in which the South specialised in primary production and the North specialised in manufactures. The policy prescription that followed from this postulate is import substituting industrialisation through suspension of free play of international market forces (Prebisch, 1959, Myrdal, 1956).

The factual base of the postulate was found in the report of the United Nations (1949) prepared mainly by Hans Singer on the basis of the series constructed by Folke Hilgerdt (League of Nations, 1945) and Schlote (1938). The United Nations (1949) report published a series on the terms of trade between primary products and manufactures and another series on the inverse of the British terms-of-trade. Both of these series exhibit a declining trend over the period, 1876-1938. As British exports consisted mainly of manufactures and imports of primary products, the inverse of

the British terms-of-trade was taken as a proxy of the terms of trade between primary products and manufactures. Long before Prebisch (1950), Keynes (1912), Robertson (1915), Clark (1945) and Lewis (1949) used the proxy and observed the validity of the classical law, found in the writings of Smith (1776, pp.173-206), Ricardo (1817), Torrens (1821, pp.93-8, 115-6, 288-9) and Mill (1848, p.218), namely the long-term improvement in the terms of trade of primary products vis-a-vis manufactures due to the operation of the inexorable classical law of diminishing returns in agriculture against the operation of increasing returns in manufactures. But Prebisch (1950) used the proxy to support the opposite hypothesis, one of falling terms of trade of primary products. From the 'fact' of trend deterioration in the terms of trade of primary products, both Singer (1950) and Prebisch (1950) inferred a trend-deterioration in the terms of trade of the primary product exporting South vis-a-vis the manufacture exporting North:

The factual basis of the Prebisch-Singer postulate came under severe attack from different corners (for detailed references see Spraos, 1980 and Sarkar, 1986b). But some recent studies refuted all the major statistical points raised against the postulate (Sarkar, 1986a,b). Moreover, some current data have been analysed to show that if we exclude petroleum exports of the South after the rise of OPEC in 1973, their terms-of-trade would exhibit a deteriorating trend in the post-Second World War years, 1950-80 along with the terms of trade of primary products (Sarkar, 1986b, c; see also Singer, 1984 and Thirlwall and Bergevin, 1985).

In this perspective, the present paper examines the theories behind the trend-deterioration in the terms of trade of the South vis-a-vis the North (Section II).

II

THE PREBISCH-SINGER THESIS

A number of explanations of the phenomenon of worsening terms of trade can be found in the writings of Prebisch (1950, 1959, 1964) and Singer (1950, 1987). As they did not present any explicit theoretical construct and wrote somewhat loosely, critics pounced on them, particularly on Prebisch. Examining the two papers by Prebisch (1950, 1959), Flanders (1964) commented that there is not a single 'Prebisch thesis' or model but many which are not consistent with one another. Johnson (1967) examined the theoretical explanation contained in Prebisch (1964) and found it to be 'confused and obscure'. However, with some qualifications, some theoretically sound explanations can be identified in the writings of Prebisch and Singer.

One explanation offered by both Prebisch (1950, 1964) and Singer (1950, 1987) is the asymmetry in the mechanism of distribution of the fruits of technical progress among the producers and the consumers in the North and the South. They pointed out that in the industrial centre (the North), the income of entrepreneurs and of productive factors increased more than productivity whereas in the periphery (the South), income increased less. Therefore, while the prices of Southern exports declined with the improvements

in productivity, the export prices of the North did not decline with productivity improvements. As evidence, Prebisch (1950) cited the case of the USA where during the forty years preceding the Second World War, manufacturing production costs declined regularly but the movement of prices did not follow this pattern at all.

This diverse mechanism of distribution of the fruits of technical progress operated as the structures of both commodity markets and labour markets are different in the industrial North and the developing South (Singer, 1987, p.627). As Prebisch (1964) observed, a major proportion of the economically active population of the South is engaged in agriculture and other branches of primary production; besides a significant part is engaged in artisan activities and personal services at very low scales of remuneration. 'All these sectors of the population exert constant pressures on the real level of wages in the developing countries (constituting the South) and make it extremely difficult for this level to rise in direct proportion to productivity as the latter improves with technical progress (Prebisch, 1964, p.15). In the industrial countries constituting the North, on the other hand, labour is organised in trade unions and producers in strong monopolistic firms and producers' organisation. So the fruits of technical progress and increased productivity are largely absorbed in higher factor incomes rather than in lower prices for the consumers.

However, there is one gap in the analysis. As Spraos (1983, pp.25-26) showed, the asymmetry between a competitive structure in primary commodities translating increases in productivity into lower prices and a monopolistic

structure in manufactures causing increases in productivity to be matched by increases in wages and profits creates excess demand for primary products and excess supply of manufactures. This can be explained as follows :

Consider a world economy divided into two sectors (North and the South) both of which face an equal rate of growth in labour productivity. Given the levels of employment in the two sectors, output of the two sectors and so global income rise at the same rate. Granted unit income elasticity of demand for output of the two sectors, their demand will also grow at the same rate so that the flow balance of the two sectors will take place at an unchanged terms of trade. If now due to the asymmetry hypothesis, the cost of production and so price in the South falls, there will be excess demand in that sector. By Walras Law, the other sector (the North) will face excess supply. This situation might have become aggravated, granted the general presumption (supported also by Prebisch, 1950) that the rate of technical progress and the rate of growth of output and productivity was higher in the manufacturing sector of the North than in the South. Then absorption of output requires fall in employment and output in the manufacturing sector of the North. Thus looking for the explanation of the secularly deteriorating trend in the terms of trade of the South in the process of technical progress leads to the absurd conclusion, namely, a secularly increasing unemployment in the Northern manufacturing sector.

The way out is to bring in the question of demand for the two categories of products. From the very beginning, Singer (1950, p.479) considered income inelastic demand for export goods of the South as an important factor behind the

trend-deterioration in the terms of trade of the South. Later on, Prebisch (1951, 1959) also joined. Due to income inelasticity, demand for food and related items expands less than demand for manufactures in the process of growth of the world economy. Moreover, some part of technical progress consists of economies in the use of raw materials (raw-material saving technical progress) or development of manufacturing substitutes (e.g. synthetic substitutes has been a striking feature of economic development which has markedly accelerated since it was first emphasised by Singer, 1950).

Prebisch (1964) mentioned another factor highly relevant in the present-day world economic scene: the protection enjoyed by primary commodities of the North encourages the declining tendency of the terms of trade of the South as it accentuates the disparity between demand for Southern primary products in the North and demand for imports of Northern manufactures in the South.

The asymmetry in the responsiveness of demand for exports of the North and the South interacted with the asymmetry in the structures of markets for their exports. Granted the dominance of the former asymmetry over the latter, there would be no realisation problem for the output of manufactures in the process of deterioration in the terms of trade of Southern exports. Theoretically speaking, the asymmetry on the demand side is sufficient to explain the trend-deterioration in the terms of trade of primary products and the primary-product-dominated exports of the South. But this factor cannot explain the operation of the classical law, namely, improvement in the terms of trade of primary products, in the first half of the nineteenth century and its subsequent reversal as indicated by

the terms-of-trade experience of Britain (see Sarkar 1986a). So in order to explain this reversal, the role of changes in the market structures from competition towards monopoly and changes in the mechanism of distribution of the fruits of technical progress from the classical to the Prebisch-Singer mechanism should be brought into the analysis as done in Sarkar (1986a) and in the later part of the present paper.

LEWIS THESIS

Lewis (1969, pp.17-22) gave an alternative mechanism of deterioration in the terms of trade of the South. His explanation is based on the presumption that the growth of productivity in the food-growing sector of the South is lagging behind that in its export sector so that the prices of Southern exports fall in terms of food. On the contrary, the growth of productivity in the food growing sector of the North is not lagging behind (rather exceeds) the growth in the productivity in the Northern export sector. Therefore, the intersectoral terms of trade in the North do not turn against (rather turn in favour of) Northern export goods. This asymmetry in the behaviour of the intersectoral terms of trade within the South and the North explains the terms-of-trade deterioration of the South vis-a-vis the North; the prices of Southern exports fall in terms of food whereas the prices of Northern exports in terms of food rise or remain constant.

In academic circles, there is some support for the basic premise of Lewis (1969). For example, Bardhan (1982, p.169) observed that since the 1940s 'productivity in agriculture has increased very rapidly in the rich countries,

indeed noticeably faster than in their manufacturing industries'. Evans (1987, pp.668-9) cited some case studies which show a bias in technical change in the South towards export goods. Moreover, Bardhan (1982), Evans (1987) and many others formalised the framework of Lewis (1969) and arrived at similar conclusions. In the words of Evans (1987, p.669) :

'.... it is the change in the pattern of biased technical change which provides a powerful part of the explanation of the observed adverse movements in the prices of primary commodities against manufactures'.

The political economy implications of Lewis' analysis are strikingly different from Prebisch's. For Prebisch, the problem of deteriorating terms of trade of the South is fundamentally associated with the specialisation in primary production inherited by the Southern countries from the days when they were colonies and semi-colonies (Spraos, 1983, p.41). For Lewis (1969), the problem arises because of the slow growth of productivity in the food producing sector of the South. Hence, it is not the pattern of international specialisation but the internal conditions in the South which explain its terms-of-trade decline. The policy implication of the Lewis analysis is some kind of Green Revolution in order to improve productivity in the Southern food producing sector, not the 'inward looking' commercial policy protected industrialisation prescribed by Prebisch (1959). There is one important merit in the analysis of Lewis (1969) : he explains the deterioration in the terms of trade of the South without bringing in the nature of commodities traded between the North and the South. That means, even if the Southern countries

export manufactures to the North, they will face a terms-of-trade deterioration. Surprisingly, this shift of emphasis from the relations between types of commodities to relations between types of countries found its first empirical support from the works of one mainstream economist, Kindleberger (1956, 1958).⁴ He found no trend in the terms of trade between primary products and manufactures although he observed :

'Between 1913 and 1952, the net barter terms of trade of Western Europe.... declined 20 per cent vis-a-vis the United States and improved 50 per cent vis-a-vis the underdeveloped areas of the world outside of Europe' (Kindleberger 1955, p.290). Singer (1958, pp.87-88; 1975, p.159; 1984, pp.283-293) accepted this shift of emphasis and tried to assemble some data in its support. He found some data to show that during the period 1954-72, the prices of primary commodities of the North fell by an annual average rate of about 1 per cent but those of primary commodities of the South fell by about 2 per cent per annum (both significant at 1 per cent level). This means the prices of primary products of the South deteriorated in terms of those of the North (Singer, 1987, p.628).⁵

Recently, Sarkar and Singer (1991) assembled some data to show that the terms of trade of the manufactured exports of the South deteriorated during 1970-87 vis-a-vis the manufactured exports of the North at the statistically significant rate of 1 per cent per annum. Observing that the growth of labour productivity is higher in the manufacturing sector of the North than in the South, it was concluded that even in the exchange of manufactures between the North and the South the factorial terms of trade turned against the South.

Prebisch, on the contrary, continued to emphasise the terms-of-trade deterioration due to the Southern specialisation in primary production. So 'with an effort of imagination', Prebisch (1965, p.15) visualised a situation in the distant future when adverse terms of trade would disappear 'as a result of the worldwide process of industrialisation'. This prompted the proponent of the unequal exchange thesis, Emmanuel (1969, p.266) to criticise Prebisch and to comment :

'.....what worsens is not the terms of trade of certain products but those of certain countries, regardless of the kind of products they may export or import'.

UNEQUAL EXCHANGE THESIS OF EMMANUEL

The core of the unequal exchange thesis of Emmanuel (1969) relates not to a deteriorating trend in the terms of trade of the South over a period of time but to the level at which exchanges between the North and the South are taking place at a point of time. He argues that commodity exchange between the North and the South at any point of time is unequal as the difference between the real wages of the two regions is greater than what can be accounted for by productivity difference so that the prices of the Northern goods in terms of Southern goods are always higher than the ratio of the amount of homogeneous labour embodied in them.⁶ Bacha (1978) summed up the essence of unequal exchange thesis in the language of neo-classicism :

'Unequal exchange arises from the fact that real wages are higher in the developed North than in the developing South. Trade under these conditions is unequal to the South in the normative sense that its terms of trade (and income levels) are lower than they would be under a Pareto efficient trade arrangement allowing for perfect international labour mobility'.

The stylised fact behind the unequal exchange thesis of Emmanuel (1969) is that the capital factor is mobile but the labour factor is immobile on the international plane. Perfect capital mobility ensures uniform rate of profit all over the capitalist world.⁷ Then it can be shown that the double factorial terms of trade of the South are just the wage ratio.⁸ Granted the assumption that Southern wages are less than Northern wages, the double factorial terms of trade of the South are less than one. Due to immobility of labour, the wage gap persists and the factorial terms of trade remain unfavourable to the South (assuming a value less than one). This is static unequal exchange. However, Emmanuel (1969, p.265) had in mind a widening wage gap which exceeds any gap in profitability; this leads to a regular decline in the commodity and factorial terms of trade over a period of time. This dynamic unequal exchange idea was explicit in Amin (1976) and in the later writings of Emmanuel (1979). Lewis was also concerned with the movements of the factorial terms of trade against the South. It is this unfavourable movement in the factorial terms of trade which was the essential concern of Prebisch (1950) and Singer (see Sarker and Singer, 1991). Therefore, in a sense, the dynamic unequal exchange idea can be taken as the core of the Prebisch-Singer thesis.

A SYNTHESIS

Let us now synthesise different explanations of the trend-decline in the terms of trade of the South, found in Prebisch (1950, 1959, 1964), Singer (1950, 1987), Lewis (1954, 1969) and Emmanuel (1969, 1979). There is some empirical support for the proposition of an increasing North-South wage gap, put forward by Emmanuel (1979). Raffer (1987, p.32) quoted a UNIDO source to point out that average wages per hour in the North were almost 5 times as high as in the South in 1970 and about 8 times as high in 1978. Besides this rising wage gap, there is the question of an increasing degree of monopoly power exerted by Northern manufacturers in setting their prices, raised by both Prebisch (1950) and Singer (1987), and accepted by writers such as Helleiner (1980) and Streeten (1981, p.217). Recently, Bloch and Sapsford (1990) made an econometric study to explain the behaviour of the terms of trade between primary products vis-a-vis manufactures over the period, 1946-1986 in terms of factors such as the North-South wage gap and the mark up of Northern manufactures. They observed that a declining trend in the primary sector wage of the South relative to the manufacturing wages of the North compounded by a strongly rising trend in the manufacturing mark up in the North depressed the terms of trade by about 3 percent per annum (the actual rate of decline in the terms of trade series was about 1 percent per annum due to the strong growth in manufacturing output). With this empirical support, the story of declining terms of trade of the South can be developed as follows.

The phenomenon of deteriorating terms of trade started in the last quarter of the 19th century with the transformation of capitalism in the North by the appearance of monopolies as noted by Amin 1976, p.170). This transformation started with the spread of technical progress from traditional manufactures such as cotton textiles towards newer manufactures as noted by Sarkar (1986a). In the early days of the industrial revolution in the North, technological progress meant (in most cases) higher labour productivity in producing old (traditional) goods (new processes for production of old goods). So there was a competition between the products produced in new processes and those produced in old processes (e.g. competition between machine-made textiles of the North and handloom textiles of the South). As noted in Sarkar (1986a), these were the days of colonial patterns of trade and de-industrialisation in the South (see also Bagchi, 1976). So the monopoly-sale of machines and diffusion of technological knowledge from the North to the South (as noted in the product-cycle literature starting with Vernon, 1966) did not start in a big way.

In the later stage of the industrial revolution, technological change was increasingly concentrated on product innovations. As these new products had no indigenous counterpart in the South, the Northern producers could sell these at monopoly prices. In fact, the new industries in the North were organised on monopoly lines from the very beginning because of patent rights of the innovators and other legal institutions. Now it became possible for the Northern workers to negotiate higher wages as the Northern firms with their monopoly power could pass on higher wage costs to the consumers. In the words of Krugman (1979, p.254):

'Wages will be higher in North, even if labour in the two countries is equally productive in comparable occupations, because of North's monopoly position in new goods'.

That means, Northern wages reflect in part a rent on the North's monopoly of new goods. This monopoly rent, in which Northern labour has a share, is continuously regenerated from one product cycle to another and is thus, an important source of wage gap between the North and the South (Bardhan, 1982, p.167). However, for dynamic unequal exchange, one has to explain a rising wage gap. This can be explained with the help of the ideas contained in Lewis (1954 and 1969).

In the early stages of the industrial revolution, the Northern manufacturing sector could draw labour from agriculture at a cheap rate (apart from the supplies of labour or slaves from the South). This is the early stage of the Lewisian development process (Lewis, 1954), when trade unions were less powerful and wages did not rise much with productivity improvements. But with rapid industrialisation this stage was crossed and relative labour shortage made trade unions powerful. So money and real wages of the Northern workers started rising (Mitchell, 1962, pp.343-5). As noted earlier, appearance of monopolies in the process of product innovations helped the process - the Northern workers with their trade union power started to share the monopoly rent from product innovations.

The South is still in the early stage of Lewisian development process - the existence of surplus labour and migration from the low-productivity subsistence sector to the modern export enclaves keep real wages low; money and real

wages cannot rise much in spite of productivity improvements or introduction of new goods (compared to earlier export items of the South) in the list of export items after an imitation lag or a lag in diffusion of technological knowledge. Thus in the process of continuous innovations in the North combined with relative shortage of labour and powerful trade unions, the wage gap between the North and the South becomes wider and wider as postulated by Emmanuel.

Relative shortage of labour and rising relative costs of labour induce the Northern firms to innovate more and more capital-intensive products. At the same time, there is a tendency towards the transfer of technology from the North to the South in the field of production of older goods innovated earlier. Capital mobility from the high-wage North to the low-wage South in search of higher rates of profit emphasised by Emmanuel (1969 and 1979) takes largely the form of North-South technology transfer and a profitable dumping of obsolete machines of the North into the South.⁹ The South thereby witnesses a particular form of industrialisation that precisely suits the time path of obsolescence in the North (Sau, 1978, p.60). It implies that the labour surplus South continues to be labour surplus as its production process becomes increasingly capital-intensive over different product cycles. This strengthens the process of a widening wage gap.

Thus one can expect a wide and rising North-South wage gap. This wage gap is likely to exert a dominating influence on the time path of the factorial terms of trade so that they turn against the South even if the profit-mark-up in Northern export goods is lower than its Southern counterpart.

However, the profit mark-up on unit cost is likely to be higher in the North as the rate of technical change and introduction of new goods is expected to be higher in the North leading to a higher rate of obsolescence of machines: therefore the 'pay off' period (within which the producers seek to raise the full cost of machines installed) or the economic life span of machines is likely to be lower in the North and the Northern capitalists will try to apply a higher mark-up rate to cover the cost of machines within a shorter span of time. Given the pay-off period and the level of production, the higher the capital requirements per unit of output, the higher will be the mark-up rate to cover the higher amount of economic depreciation (cost of machines divided by the pay-off period). Thus, ^{with} the rising capital intensity in Northern production, the Northern mark-up rate rises over time. Given the higher capital requirements per unit of output in the North, the profit rate may still be lower in the North. Hence in the process of capital mobility and equalisation of the rate of profit, the mark-up rate in the North can show a rising tendency as noted by Bloch and Sapsford (1990).

of
Using the data on profit mark-up/Northern manufacturing collected by Bloch and Sapsford (1990), a regression analysis of the UN series on terms of trade between the South and the North has been made over the period 1950-80 (Table 1). It shows that there is a highly significant negative relationship between the profit mark-up and the terms of trade of the South over the period 1950-72. Such relationship can be found over the longer period 1950-80 if an intercept dummy is used to net out the effects of oil crisis years 1978-80. Thus the long-term deterioration in the terms of trade of the South (observed in Sarkar, 1986b and c;

Table 1

Trends and Regression Analysis of Terms of Trade
of the South vis-a-vis the North
1950-1980.

C	t	Estimates*		R ²	F	D-W
		log(1+m)	D			
<u>1950-72</u>						
4.79	-0.012			0.70	26.28	1.66
(129.1)	(-3.74)					
5.27		-1.97		0.73	31.30	1.72
(37.54)		(-4.26)				
<u>1950-80</u>						
4.75	-0.010		0.53	0.73	41.89	1.71
(105.4)	(-2.20)		(7.46)			
5.25		-1.92	0.50	0.78	54.67	1.91
(31.24)		(-3.51)	(10.3)			

Notes to Table 1

In each case a linear regression equation has been fitted to the log-values of the terms of trade index. Here C is the intercept, t stands for time (0, 1, 2 ...), m is the markup rate in Northern manufacturing and D is the intercept dummy assuming the value 0 for the period, 1950-72 and the value 1 for 1973-80. Figures in parentheses are values of the t -statistic (all significant at 5 per cent level or less).

Sources

Terms of trade data are available in different UN yearbooks, compiled in Sarkar (1986c), Appendix. Data on markup of Northern manufacturing has been collected by Bloch and Sapsford (1990) and made available to the present author by David (Sapsford).

see also Table 1) can be explained by the rising mark-up rate in Northern manufactures. This confirms the findings of Bloch and Sapsford (1990) which were related not to the direct series on the terms of trade of the South (vis-a-vis the North) but to the indirect series, one on the terms of trade of primary products (vis-a-vis manufactures).

On the demand side, new goods introduced in the North are likely to have a higher income elasticity of demand. Moreover, in the North, there is a tendency to protect their relatively labour-intensive industries dying in the face of competition from the cheap labour in the South. This affects the demand for Southern manufactures in the North. All this leads to a deterioration in the commodity terms of trade of the South along with its factorial terms of trade.

The above discussion makes clear that irrespective of whether the South exports primary products or manufactures to the North, its commodity terms of trade along with the factorial terms of trade will deteriorate.¹⁰ For countries relying on primary product exports, additional factors such as raw material-saving technical progress in the North, the operation of Engel's law in the process of economic growth etc., noted in the initial version of the Prebisch-Singer thesis, also contribute towards this decline. In the process, higher and higher amounts of Southern labour exchange for lower and lower amounts of Northern labour. This is what can be called dynamic unequal exchange.

CONCLUSION

In the 'modern' neoclassical trade theory (the Heckscher-Ohlin framework), it has been shown that free trade in commodities can equalise factor rewards (including wages) and thus act as a substitute for factor mobility (Factor Price Equalisation Theorem). This factor price equalisation result is based on the two major assumptions of identical technological knowledge of the trading countries and their incomplete specialisation (i.e. all the traded commodities are produced in the trading countries in the post-trade equilibrium). These assumptions do not hold good for trade between the North and the South as noted in the product-cycle literature.¹¹ Granted the technological superiority of the North and technological dependence of the South on the North, increasing manufactured exports in the process of export-substituting industrialisation do not give the South any escape from unequal exchange - free trade in goods does not generate any tendency towards equalisation of wages. Thus there is no hope in any foreseeable future for equalisation of standards of living of the North and South as a result of trade between them.

What is the policy implication of the foregoing analysis? The first best policy is to open the borders for labour mobility. In the words of Findlay (1984, p.193) :

'Free migration of labour is the only economically viable, though of course politically and socially very difficult solution'.

Free mobility of labour will create a tendency towards equalisation of wages and equalisation of the standard of living all over the globe. This policy is also the logical extension of the stand taken by the Northern countries led by the USA at the Uruguay round of GATT negotiations for freer mobility of trade related services one of which should be labour service. Of course, it is against the interest of the Northern workers. To protect the standard of living of the Northern workers, the Northern countries have introduced rigorous immigration laws and high tariff barriers defending the labour-intensive sectors. This hurts the interests of the Southern workers. It is this clash of interests between the workers of the North and South which has been highlighted in the unequal exchange thesis of Emmanuel.

NOTES

1. The commodity terms of trade or the net barter terms of trade is defined as the ratio of price or unit value indices.
2. The double factorial terms of trade is defined as the commodity terms of trade multiplied by the ratio of labour productivity indices. For single factorial terms of trade, only the numerator contains the labour productivity index.
3. There is a fresh wave of raising questions against the trend-deterioration of the terms of trade between primary products and manufactures with the publication of the Grilli-Yang (1988) series (see Cuddington & Urzua 1989). Recently, Sapsford, Sarkar and Singer (1990) re-examined the Grilli-Yang series and found a declining trend over a long period, 1900-1986. The study of Boughton (1991) supported this over the longer period, 1854-1985.
4. Kindleberger (1943) was also the first to turn the classical proposition upside down. He wrote explicitly: 'Inexorably the terms of trade move against agricultural and raw material countries as the world's standard of living increases as the Engel's law of consumption operates' (p.349).
5. This observation of Singer (1987) was not supported by the study of Sarkar (1986c).
6. This discrepancy between the price ratio and the ratio of the amounts of labour embodied in the exports of the North and the South may also follow due to higher capital intensities of Northern products. But Emmanuel (1969) ignores it as it is not a phenomenon peculiar to foreign trade - it may happen in the intersectoral trade of a closed economy.
7. Perfect capital mobility is not the crucial assumption. Emmanuel (1969) assumed very high North-South wage gap which dominates the scene of North-South trade so that any disparity in the rates of profit can be neglected.

8. Let l and l^* be the labour requirement per unit of output of the South and the North (respectively), P and P^* be the respective prices, W and W^* the wage rates and r and r^* the rates of profit. Then the commodity terms of trade between the North and South is:

$$P/P^* = lW(1+r)/l^*W^*(1+r^*)$$

Granted that $r = r^*$, $P/P^* = lW/l^*W^*$ whence follows the double factorial terms of trade (DFTT):

$$DFTT = P/l/P^*/l^* = W/W^*$$

9. In the process of capital mobility and machine-embodied technology transfer, the composition of exports of the North to the South is increasingly dominated by machines: available data for the post-Second World War period show that the share of machines in total exports from the North to the South was 30% during 1950-54 and by 1975-79, the figure touched 47%. About 3/5 of Northern manufactured exports to the South was accounted for by machines during 1950-54; subsequently this proportion rose steadily and became 5/8 of Northern manufactured exports during 1975-79 (Sarkar, 1986c, Table3). It was also noted that the terms of trade of the South deteriorated most in the case of importing machines from the North during 1950-80 (ibid).
10. There is one relief for changing the export composition towards manufactures. It has been noted in Sarkar and Singer (1991) that the purchasing power of Southern manufactured exports (income terms of trade) rose at a rate, ~~xxx~~ higher than that of the North's during 1970-87 although the manufacture commodity terms of trade of the South deteriorated during the same period. On the contrary, Sarkar (1986c) noted that the purchasing power of primary-product dominated total exports of the South deteriorated in relation to its Northern counterpart during 1950-70.
11. Some enthusiastic followers of Heckscher-Ohlin kind of analysis tried to accommodate the North-South technological gap in the Heckscher-Ohlin framework by introducing skill as a capital intensive produced input required to produce the new goods exported by the capital abundant North (see Marjit, 1989). But there may be wide difference in factor abundance between

the North and the South leading to a complete specialisation. Thus one of the essential conditions for factor price equalisation may be violated (admitted by Marjit, 1989). However, even after granting the incomplete specialisation, it can be argued that the monopoly element in pricing of Northern goods due to the product cycle scenerio violates one of the essential assumptions of the Factor Price Equalisation Theorem.

References

Amin, S., 1976, Unequal Development, Delhi, Oxford University Press.

Bacha, E., 1978, 'An Interpretation of Unequal Exchange from Prebisch-Singer to Emmanuel', Journal of Development Economics, Vol.5

Bagchi, A.K., 1976, 'De-industrialisation in India in the Nineteenth Century', Journal of Development Studies, Vol.12.

Bardhan, P.K., 1982, 'Unequal Exchange in a Lewis-type World', in Gersovitz, M. et. al. (eds.), The Theory and Experience of Economic Development, London, Allen & Unwin.

Bloch, H. and Sapsford, D., 1990, 'Real Commodity Prices: Imperfect Competition, Relative Wage Growth and the Prebisch-Singer Terms of Trade Hypothesis', Mimeo: University of Tasmania.

Boughton, J.M., 1991, 'Commodity and Manufactures Prices in the Long Run', Mimeo: IMF.

Clark, C., 1942, The Economics of 1960, London, Macmillan.

Cuddington, J. and Urzua, 1989, 'Trends and Cycles in the Net Barter Terms of Trade: A New Approach', Economic Journal, Vol.99.

Dollar, D., 1986, 'Technological Innovation, Capital Mobility and the Product Cycle in North-South Trade', The American Economic Review, Vol.76.

Emmanuel, A., 1969, Unequal Exchange, New York, Monthly Review Press (Eng. Trans., 1972).

_____, 1979, 'The Dynamics of Unequal Exchange/Unequal Development', paper presented to a conference on Dependence at the London School of Economics.

Evans, D., 1987, 'The Long-run Determinants of North-South Terms of Trade and Some Recent Empirical Evidence', World Development, Vol.15.

Findlay, R., 1984, 'Growth & Development in Trade Models', in Jones, R.W. & Kenen, K.B. (eds.), Handbook of International Economics, Vol.1, Amsterdam, North Holland.

Flanders, M.J., 1964, 'Prebisch on Protectionism : An Evaluation', Economic Journal, Vol.74.

Grilli, E.R. and Yang, M.C., 'Primary Commodity Prices, Manufactured Goods Prices and the Terms of Trade of Developing Countries : What the Long-run Shows', World Bank Economic Review, Vol.2, No.1.

Helleiner, G.K., 1980, International Economic Disorder, London, Macmillan.

Johnson, H.G., 1967, Economic Policies Towards Less Developed Countries, London, Allen & Unwin.

Keynes, J.M., 1912, 'Official Papers', Economic Journal, Vol.22, Dec.

Kindleberger, C.P., 1943, 'Planning for foreign Investment', American Economic Review, Vol.33, March.

_____, 1955, 'Comment', American Economic Review, Vol.45, May.

_____, 1956, The Terms of Trade: A European Case Study, New York, Wiley.

_____, 1958, 'The Terms of Trade and Economic Development', Review of Economic and Statistics, Vol.40.

Krugman, P., 1979, 'A Model of Innovation, Technology Transfer and the World Distribution of Income', Journal of Political Economy, Vol.87.

League of Nations, 1945, Industrialisation and Foreign Trade, Geneva.

Lewis, W.A., 1949, Economic Survey, 1919-1939, London, Allen & Unwin.

_____, 1954, 'Economic Development with Unlimited Supplies of Labour', Manchester School of Economic and Social Studies, Vol.22.

_____, 1969, Aspects of Tropical Trade, 1883-1965, Stockholm, Almquist & Wickshell.

Marjit, S., 1989, 'The Product Cycle Hypothesis and the Heckscher-Ohlin-Samuelson Theory of International Trade', Journal of International Economic Integration, Vol.4.

Mill, J.S., 1848, 'Principles of Political Economy, Vol.II, Book IV, New York : Colonial Press (reprint 1900).

Mitchell, B.R., 1962, Abstract of British Historical Statistics, Cambridge, University Press.

Myrdal, G., 1956, An International Economy, New York, Harper & Row.

Prebisch, R., 1950, The Economic Development of Latin America and Its Principal Problems, New York, United Nations.

_____, 1951, 'The Spread of Technical Progress and the Terms of Trade', in UN, Economic Survey of Latin America (1949), New York, UN Department of Economic Affairs.

_____, 1959, 'Commercial Policy in the Underdeveloped Countries', American Economic Review, Vol.49, May.

_____, 1964, Towards a New Trade Policy for Development New York, United Nations for UNCTAD.

Raffer, K., 1937, Unequal Exchange and the Evolution of the World System, London, Macmillan.

Ricardo, D., 1817, On the Principles of the Political Economy and Taxation, London.

Robertson, D.H., 1915, A Study of Industrial Fluctuations, London, King.

Sapsford, D., 1985, 'The Statistical Debate on the Net Barter Terms of Trade between Primary Commodities and Manufactures', Economic Journal, Vol.95.

_____, Sarkar, P. and Singer, H.W., 1990, 'The Prebisch-Singer Terms of Trade Controversy Revisited', Mimeo : University of East Anglia, England (forthcoming in Journal of International Development, 1992).

Sarkar, Prabirjit, 1986a, 'The Terms of Trade Experience of Britain Since the Nineteenth Century', Journal of Development Studies, Vol.23, No.1.

_____, 1986b, 'The Singer-Prebisch Hypothesis: A Statistical Evaluation', Cambridge Journal of Economics, Vol.10, No.4.

_____, 1986c, 'Patterns of Trade and Movements of Interregional Terms of Trade between the Developing and the Developed Market Economies, 1950-1980', ESCAP Bulletin, Vol.37.

_____ and Singer, H.W., 1991, 'Manufactured Exports of Developing Countries and Their Terms of Trade Since 1965', World Development, Vol.19, No.4.

Sau, R., 1978, Unequal Exchange, Imperialism and Underdevelopment, Calcutta, Oxford University Press.

Schlote, W., 1938, British Overseas Trade from 1700 to the 1930s, Oxford, Basil Blackwell.

Singer, H.W., 1950, 'The Distribution of Gains between Investing and Borrowing Countries', American Economic Review, Vol.40.

_____, 1958, 'Comment', Review of Economics and Statistics, Vol.40.

_____, 1975 The Strategy of International Development, London, Macmillan.

_____, 1984, 'Terms of Trade Controversy and the Evolution of Soft Financing: Early Years in the UN: 1947-1951', in Meier, M. and Seers, D. (eds.), Pioneers in Development, Oxford, Oxford University Press.

_____, 1987, 'Terms of Trade and Economic Development', in Eatwell, J., Milgate and Newman, P. (eds.), The New Palgrave: A Dictionary of Economics, London, Macmillan.

Smith, Adam, 1776, An Inquiry into the Nature and Causes of the Wealth of Nations, London, George Routledge (reprint 1890).

Spraos, J., 1980, 'The Statistical Debate on the Net Barter Terms of Trade between Primary Commodities and Manufactures', Economic Journal, Vol.90.

Spraos, J., 1983, Inequalising Trade ? Oxford, Clarendon Press.

Thirlwall, A.P. and Bergevin, J., 1985, 'Trends, Cycles and Asymmetries in the Terms of Trade of Primary Commodities from Development and Less Developed Countries', World Development, Vol.13, No.7.

Torrens, R., 1821, An Essay on the Production of Wealth, New York, Kelley (reprint 1965).

United Nations, 1949, Relative Prices of Exports and Imports of Under-developed Countries, New York.

Vernon, R., 1966, 'International Investment and International Trade in the Product Cycle', Quarterly Journal of Economics, Vol.80.

120. Is there any Transfer Burden of Debt ?
PRABIRJIT SARKAR
121. New Technology in Indian Newspaper Industry—A Critical Appraisal.
RANABIR SAMADDAR
122. The Chandernagore—Jugdia Letters : A Look at the Feic's East Bengal Trade from 1750 to 1753.
RILA MUKHERJEE
123. Some Aspects of the Policy on Technical and Industrial Education in India under Colonial Rule : From late Nineteenth Century to Independence.
SAUGATA MUKHERJI
124. Silk Production in West Bengal : A case of Stunted Commercialization.
DEBDAS BANERJEE
125. The Slave of Ms. H. 6
AMITAV GHOSH
126. The Lengthening shadow of new Technology over the Institutionalised Process of wage settlement.
RANABIR SAMADDAR
127. The Bindery Workers of Daftaripara : 1. Forms and Fragments
ASOK SEN
128. The Bindery Workers of Daftaripara : 2. Their own life-stories.
ASOK SEN
- 129 Sepoy Mutiny and The Uprising of 1857 in Bundelkhand.
TAPTI ROY

PUBLISHED PROCEEDINGS OF SEMINARS

1. Change and Choice in Indian Industry, ed. by Amiya K. Bagchi and Nirmala Banerjee (Calcutta, K. P. Bagchi & Co., 1981)
2. Tribal Polities and State Systems in Pre-Colonial Eastern and North Eastern India ed. by Surajit Sinha Calcutta, K. P. Bagchi & Co., 1987).
3. The Indian Nation in 1942, ed. by Gyanendra Pandey (Calcutta, K. P. Bagchi & Co., 1938)

PERSPECTIVES IN SOCIAL SCIENCES

1. Historical Dimensions (Calcutta, Oxford University Press, 1977)
2. Three Studies on Agrarian Structure in Bengal, 1850-1947 (Calcutta, Oxford University Press, 1982)
3. Economy, Society and Polity Essays in Honour of Professor Bhabatosh Datta (Calcutta, Oxford University Press, 1988).

ABSTRACTS OF ARTICLES

Abstracts of all articles written by CSSSC academic staff :

- I. 1973-1977 (CSSSC, 1979)
- II. 1977-1980 (CSSSC, 1981)

MONOGRAPHS

1. SUNIL MUNSI : Geography of Transportation in Eastern India under the British Raj. Calcutta, K. P. Bagchi & Co., 1980
2. NIRMALA BANERJEE : Demand for Electricity, Calcutta, K. P. Bagchi & Co., 1979.
3. SOBHANLAL DATTA GUPTA : Comintern, India and the 'Colonial' Question : 1920-1937. Calcutta, K. P. Bagchi & Co., 1980.
4. PARTHA CHATTERJEE : Bengal 1920-1947, The Land Question. Calcutta, K. P. Bagchi & Co. 1984
5. সুধীর চক্রবর্তী : কৃষনগরের মুৎশিল্প ও মুৎশিল্পী সমাজ (কলিকাতা, কে, পি, বাগচী গাণ্ড কোং, ১৯৮৫)
6. তিতেশবঞ্জন সন্ন্যাস : বাংলা কৌশলের ইতিহাস (কলিকাতা কে, পি, বাগচী এণ্ড কোং, ১৯৮৯)
7. দেবেশ রায় : উপনিবেশের সমাজ ও বাংলা সাংবাদিক গড় : উনিশ শতকের প্রথমার্ধ নিয়ে কিছু অনুমান (কলিকাতা, প্যাপিরাস, ১৯৯০)
8. AMALENDU GUHA : Medieval and Early Colonial Assam : Society, Polity, Economy, Calcutta, K. P. Bagchi & Co., 1991

PUBLIC LECTURES

R. C. Dutt Lectures on Political Economy

(Published by Orient Longman, Calcutta)

1. ASHOK MITRA : Terms of Exchange and Accumulation : The Soviet Debate. 1977.
2. KRISHNA BHARADWAJ : Classical Political Economy and Rise to Dominance of Supply and Demand Theories. 1978.
3. B. N. GANGULI : Some Aspects of Classical Political Economy in the Nineteenth Century Indian Perspective. 1979.
4. I. S. GULATI : International Monetary Development and Third World : A Proposal to Redress the Balance. 1980.
5. V. M. DANDEKAR : Peasant-Worker Alliance : Its Basis in the Indian Economy. 1981.
6. SUKHAMOY CHAKRAVARTY : Alternative Approaches to a Theory of Economic Growth : Marx, Marshall and Schumpeter. 1982.
7. AMIT BHADURI : Domination, Deterrence and Counterforce : An Analysis of Strategic Objectives and Doctrines in the Superpower Arms Race. 1985.
8. ASHOK RUDRA : Some Problems of Marx's Theory of History. 1988.
9. PRABHAT PATNAIK : Time, Inflation and Growth : Some Macro-economic Themes in an Indian Perspective. 1988.
10. A. VAIDYANATHAN : India's Agricultural Development in a Regional Perspective. 1988.
11. KANTA RANADIVE : The Political Economy of Poverty, 1990.

S. G. Deuskar Lectures on Indian History and Culture

(Published by K. P. Bagchi & Co., Calcutta)

1. MAHESWAR NEOG : Socio-Political Events in Assam Leading to the Militancy of the Mayamariya Vaisnavas. 1982.
2. SUMIT SARKAR : 'Popular Movements' & 'Middle-Class' Leadership in Late Colonial India : Perspectives and Problems of a History from Below. 1983.
3. SATISH CHANDRA : The 18th Century in India : Its Economy and the Role of the Marathas, the Jats, the Sikhs and the Afghans. 1986.
4. TAPAN RAYCHAUDHURI : Three Views of Europe from Nineteenth Century Bengal. 1987.
5. ROMILA THAPAR : The Mauryas Revisited. 1987.
6. RANAJIT GUHA : An Indian Historiography of India : A Nineteenth-Century Agenda and its Implications. 1988.
7. BIMAL KRISHNA MATILAL : Confrontation of Cultures, 1988.
8. BRAJADULAL CHATTOPADHYA : Aspects of rural settlements and Rural Society in Early Medieval India, 1990.



This work is licensed under a
Creative Commons
Attribution – NonCommercial - NoDerivs 3.0 License.

To view a copy of the license please see:
<http://creativecommons.org/licenses/by-nc-nd/3.0/>