

# H. W. Singer

HANS SINGER was born in 1910 in the Rhineland. He first studied economics and social problems at the University of Bonn where he was much influenced by his teachers Joseph Schumpeter and Arthur Spiethoff.

Singer was able to leave Germany in 1933 and was admitted to King's College, Cambridge, where he actively shared in the Keynesian analysis and Keynesian values. He received his Ph.D. from Cambridge in 1936. He was then engaged in the Pilgrim Trust Unemployment Enquiry and helped to produce *Men without Work* (Cambridge, Eng.: Cambridge University Press, 1938). His interest in unemployment statistics led to a series of articles in the *Review of Economic Studies* and to the Frances Wood Memorial Prize of the Royal Statistical Society. His study of the depressed areas of Wales, Durham, Merseyside, and Lancashire was also to have a relation to his later studies of the regional poverty areas in Northeast Brazil, northern Thailand, and Kenya.

His first academic post was at Manchester University (1938–43). In 1944 he joined the Ministry of Town and Country Planning and in 1946 joined Glasgow University. In 1947 he entered the United Nations during its early days and immediately helped to build up its Economics Department which then had a section of only two persons concerned with underdeveloped countries. He was to remain with the United Nations for the next twenty-two years.

His early development work found expression in *Formulation and Economic Appraisal of Development Projects: Lectures on Special Problems Delivered at the Asian Centre on Agricultural and Allied Projects*, 2 vols. (New York: U.N. Technical Assistance Administration, 1951). Numerous visiting missions, official reports, and consultancies to various governments and international organizations followed, including direction of the establishment of the African Development Bank, the World Food Program, and the U.N. Special Fund.

Since 1969 he has been a Professorial Fellow at the Institute of Development Studies and Professor of Economics at the University of Sussex, now Emeritus.

Among his books are *Unemployment and the Unemployed* (London:

King, 1940); *Economic Development of Under-Developed Countries* (in Portuguese; Rio de Janeiro: Vargas Foundation, 1950); *Economic Development of the Brazilian North-East* (New York: U.N. Technical Assistance Report, 1955); with others, *The Role of the Economist as Official Adviser* (London: Allen and Unwin, 1955); *International Development, Growth and Change* (New York: McGraw-Hill, 1964); with others, *Perspectives in Economic Development* (Boston: Houghton Mifflin, 1970); *The Strategy of International Development* (London: Macmillan, 1975); *Technologies for Basic Needs* (Geneva: ILO, 1977); *Rich and Poor Countries* (London: Allen and Unwin, 1979); and, with others, *The International Economy and Industrial Development* (London: Wheat-sheaf Books, 1982).

Some selected articles are: "The Process of Unemployment and the Depressed Areas, 1935-38," *Review of Economic Studies*, 1938; "Economic Progress in Under-developed Countries," *Social Research*, 1949; "Distribution of Gains between Investing and Borrowing Countries," *American Economic Review*, Papers and Proceedings, May 1950; "International Approaches to Modernization Programmes," *Milbank Memorial Fund Quarterly*, April 1950; "Capital Requirements for the Economic Development of the Middle East," *Middle Eastern Affairs*, February 1952; "Mechanics of Economic Development," *Indian Economic Review*, August 1952 and February 1953; "Obstacles to Economic Development," *Social Research*, Spring 1953; "Terms of Trade—Barter vs. Factorial—and Gains from Trade," *Contribuicoes a Analise do Desenvolvimento Economico*, Rio de Janeiro, 1957; "Comment on C. P. Kindleberger's 'The Terms of Trade and Economic Development,'" *Review of Economics and Statistics*, February 1958; "Trends in Economic Thought on Under-Development," *Social Research*, 1961; "External Aid: For Plans or Projects?" *Economic Journal*, September 1965; "The Notion of Human Investment," *Review of Social Economy*, March 1966; and "Dualism Revisited," *Journal of Development Studies*, October 1970.

Singer's most recent work relates to the New International Economic Order, food aid, appropriate technology, and the problems of newly industrializing countries.

# The Terms of Trade Controversy and the Evolution of Soft Financing: Early Years in the U.N.

THE FIRST PART of this paper is mainly autobiographical, as seems justified by the occasion: How did I come to be in the United Nations during those early years, and why did I do what I did? The second part deals with my 1949–50 paper on the “Distribution of Gains between Investing and Borrowing Countries,” with the benefits of an extra thirty-two years of hindsight.<sup>1</sup> It is argued that the views then expressed have been well vindicated, and that a reformulation in more contemporary terms would now command increasing support. The third part deals with the story of the Special United Nations Fund for Economic Development (SUNFED) and the International Development Association (IDA), the World Bank affiliate, as it appeared to one involved in the discussions of soft financing of development in the 1950s and from the viewpoint of someone on the U.N. side. According to my dictionary, a pioneer is “somebody who prepares the road for the main body”; it is exactly my contention that the “wild men” in the U.N. with their SUNFED prepared the road for the main body, the World Bank.

## Autobiographical

In trying to think about the years 1947–51 and how I first came to concentrate on terms of trade and then afterwards on the need for soft development financing, I must start by being autobiographical.<sup>2</sup>

I had been invited to join the United Nations in 1946. In April 1947 I arrived at the U.N. I have described elsewhere the curious linguistic misunderstanding—a difference between the American and English usage

1. The paper was presented at the annual meeting of the American Economic Association, 1949, and published in *American Economic Review*, Papers and Proceedings, vol. 40 (May 1950), pp. 473–85.

2. This will involve some name-dropping. As Geoffrey Keynes (the younger brother of J. M.) has said in his autobiography, it “sounds too much like performing an exercise in name-dropping, the most unattractive of all occupations, which no-one enjoys” (*The Gates of Memory* [Oxford: Clarendon Press, 1982], p. 1).

of the term “country planning”—which assigned me to the development work within the Division of Economic and Social Affairs.<sup>3</sup> On reflection, I can think of several strands of connection between the new problems that I now had an opportunity to study and my earlier interests.

I had always been greatly interested in the problems of the “depressed areas”—those parts of the United Kingdom such as Wales, Scotland, Merseyside, and the Northeast that had been particularly hard-hit by unemployment and that had distinctly fallen behind the rest of the country in terms of incomes and standards of living. Before the war, I had published, with David Owen and Walter Oakeshott, the Pilgrim Trust unemployment enquiry, *Men without Work* (Cambridge University Press, 1938). I had lived in the depressed areas among unemployed people and thus been able to make proposals for policy based on more than purely academic study of unemployment problems. As a follow-up to the joint book with David Owen and Walter Oakeshott, I produced by myself *Unemployment and the Unemployed* (Allen and Unwin, 1939) and a number of separate papers and articles (many of the latter published in the *Review of Economic Studies*). I had continued this interest in Glasgow University, where I was engaged in a study of differentials in development indicators between Scotland and England, subsequently published (jointly with C. E. V. Leser) as *Industrial Productivity in England and Scotland* (University of Glasgow, Department of Social and Economic Research, 1950). The results were also presented as a paper to the Royal Statistical Society (*Journal of the Royal Statistical Society*, 1950). Clearly this work on depressed areas and unemployment was a forerunner to the work on developing countries. I had already been forced to think about “vicious circles” and “poverty traps.” During the Kenya ILO Employment Mission,<sup>4</sup> in particular 1971–72, I often thought back to my work in the 1930s.

As part of my concern with unemployment problems, I felt involved in the development of a social welfare state immediately after the war. I was an admirer of Sir William Beveridge and an ardent propagandist for the Beveridge report. In 1943 I had written one of the Fabian Society research pamphlets, *Can We Afford Beveridge?* My answer, perhaps predictably, was that not only could we afford it, but we could not afford not to afford it. The same point was made in an article on “Beveridge Plan Economics” published as a special issue of the *Westminster Newsletter* in 1943. Obviously, a partisan of the social welfare state would be attracted by the thought and possibilities of a global welfare state represented by the United Nations in those hopeful first days of naive utopianism.

3. H. W. Singer, “Early Years, 1910–1938,” in Sir Alec Cairncross and Mohinder Puri, eds., *Employment, Income Distribution and Development Strategy* (London: Macmillan, 1976).

4. *Employment, Incomes and Equality in Kenya* (Geneva: International Labour Office, 1972).

There was also a more intellectual link. As my fellow “pioneer” Albert Hirschman has pointed out,<sup>5</sup> in some sense Keynes was the real creator of development economics insofar as he broke with “mono-economics”—the view that economics consists of a body of universal truth applicable in all countries and in all conditions. Keynes showed that, on the contrary, the rules of the game applicable to a condition of unemployment are not the same as those of classical full employment economics. It was a natural step—as Albert Hirschman has shown—to apply this view of different rules of the game to countries at different stages of development. As a student of Keynes during the formative years of the *General Theory* (1934–36) in Cambridge, I was certainly intellectually preconditioned to think in terms of different rules of the game applying to developing countries, and the idea of nonorthodox policies in relation to them. Only a few years later, in 1954, Arthur Lewis published his path-breaking article on “Economic Development with Unlimited Supplies of Labour,” which carried the analogy between the existence of unemployment in an industrial country and the existence of surplus labor in a developing country a decisive step further.<sup>6</sup>

My other teacher before Keynes was Joseph Schumpeter, under whom I had studied in Bonn before he left for Harvard. Thus I had been brought up on economic development from my first student days. Through Schumpeter I had acquired a lasting interest in problems of technical progress and technical innovation as well as in long-run economics. This interest in long-run trends and technical progress was fostered in Cambridge by my supervisor (and another “fellow pioneer”), Colin Clark, to whom I owe a great debt. Even in Keynes’s work, I had always been particularly interested in some of the long-run aspects, such as his essay on “Economic Possibilities for our Grandchildren,” and was never quite happy with the dictum that “in the long run we are all dead.” I would say that this interest in the long run, in technical progress, was another ingredient and guide toward work on long-term trends in terms of trade.

Keynes and Beveridge were both proponents of active state intervention. This preconditioned me to take a direct interest in the problems of development planning, much in vogue in the immediate postwar era with a special focus on India.<sup>7</sup> P. C. Mahalanobis became the prophet (or guru) of the development economists in this respect, and Calcutta became their Mecca.

5. “The Rise and Decline of Development Economics,” in *Essays in Trespassing* (New York: Cambridge University Press, 1981).

6. *Manchester School of Economic and Social Studies* (May 1954). Even earlier, Arthur Lewis had become a key member of the U.N. Committee on Measures for Economic Development.

7. My lectures in Lahore were published under the title *Economic Development Projects as Part of National Development Programmes* (New York: United Nations, 1951).

One of my first operational assignments was to participate in the training courses for Indian and Pakistani officials in connection with the World Bank-financed Indus River Basin scheme. My attention was also directed toward the Indian subcontinent by an early friendship with my fellow student, V. K. R. V. Rao, who during the early years of the United Nations, as chairman of the U.N. Sub-Commission for Economic Development, formulated the first ideas for global soft financing (see below).

The other area of early involvement was Brazil. Here again, personal factors were at work: apart from family links, there was an early friendship with Roberto Campos, then a young Brazilian delegate in U.N. economic committees, and later on through him with a number of other Brazilian economists, including Eugenio Gudin, at that time the minister of finance.

One result of the assignment in Brazil was a series of lectures at the Getulio Vargas Foundation in Rio de Janeiro, subsequently published in Portuguese. But more important were my early visits and studies of the Brazilian Northeast. Here certainly the experiences of earlier work on depressed areas in the United Kingdom came vividly to my mind. One of the first things to establish was that the problem of the Northeast was a development problem and not simply a problem of natural disaster (the "secca" or drought). The latter was the prevailing view, although a group of young Brazilian economists<sup>8</sup> were already hammering at the national conscience that more could be done than simply building roads to get the people out and building some reservoirs to keep them and some of their cattle alive while they were waiting for evacuation. I heartily joined the fray at their side.<sup>9</sup>

The work in the Brazilian Northeast was also linked with the work on terms of trade or distribution of gains which will form the next part of this paper. The Northeast was a major source of all Brazilian primary exports other than coffee—and of course at that time Brazilian exports were almost entirely primary products. The prices obtained by exporters of these Northeastern products were depressed by chronic overvaluation of the cruzeiro, while the prices they paid for domestic manufactures from São Paulo were inflated by heavy protection and resulting inefficiency and high profit margins. Thus the work on this particular case of a depressed area formed a direct link with the concern regarding terms of trade. My work in Northeast Brazil was also directly connected with the establish-

8. These included Roberto Campos, Octavia Bulhoes, Celso Furtado, and Romulo Almeida, all destined to play major roles in Brazilian development.

9. My reports on the Northeast were published in English as a U.N. Technical Assistance Report (1953) and subsequently as a book in Portuguese (*Estudo sobre o Desenvolvimento Economico do Nordeste* [Economic development of the Brazilian Northeast] (Recife: Comissão de Desenvolvimento Economico de Pernambuco, 1962). An English version of some of these reports was also included in *International Development, Growth and Change* (New York: McGraw-Hill, 1964), as pt. 6.

ment of a regional development bank, Banco do Nordeste. This provided a link with work on development financing, and even more specifically with involvement some dozen years later (while stationed with the U.N. Economic Commission for Africa in Addis Ababa) with the establishment of the African Development Bank in Abidjan.

My appointment—simultaneously with the U.N. post—as a member of the Graduate Faculty of the New School for Social Research in New York resulted in regular evening teaching and forced me to place my thinking about development into a more systematic framework. The underlying theory of development for my course in the Graduate Faculty was based partly on the importance of infrastructure—which drew on the earlier work of Rosenstein-Rodan and Thomas Balogh—partly on the idea of the need for balanced growth, where I was most influenced by Ragnar Nurkse, and partly on the ideas of Gunnar Myrdal, with his emphasis on cumulative causation and vicious circles. But the main components of my lectures at the New School were international trade problems on which I had concentrated at the United Nations and to which I now turn.

### Terms of Trade—Distribution of Gains from Trade and Investment

In retrospect, I can see a number of reasons why I selected the problems of distribution of gains from trade and investment as a principal area of study. When I arrived at the United Nations in 1947, the negotiations for the creation of an International Trade Organization (ITO) were proceeding in Havana. Keynes at Bretton Woods had considered the creation of such an organization to increase and stabilize primary commodity prices; it would have been the third pillar, in addition to the World Bank and the International Monetary Fund (IMF), of the international system he envisaged.<sup>10</sup> As early as 1938, in a paper on “The Policy of Government Storage of Foodstuffs and Raw Materials” delivered in Cambridge to the British Association, Keynes had advocated buffer stocks for primary commodities, and he came back to the idea when he started thinking in 1941 about postwar reconstruction. He shared the idea that primary commodity prices would have a long-run downward trend, and that industrial countries like Britain therefore had nothing to worry about in reducing instability and fluctuations around the trend. James Meade played a big part in helping Keynes develop ideas which “contributed notably to the Charter of the ITO.” Keynes’s proposals for a Clearing Union (subsequently, the IMF) included the functions of what later became the UNCTAD

10. For Keynes’s “newly-found enthusiasm at Bretton Woods for the Commercial Policy side of the international plans,” and specifically for the ITO proposals, see R. F. Harrod, *The Life of John Maynard Keynes* (New York: Harcourt, Brace, 1951), p. 620.

Common Fund, that is, financing buffer stocks and “ever-normal granaries.”<sup>11</sup> But this British initiative was shelved in 1942, in view of U.S. resistance, to be revived only in the Havana charter for an ITO.

A strong influence among the early colleagues in the United Nations was that of Folke Hilgerdt, the Swedish economist who had already shaped the League of Nations publications on the Network of World Trade. Working with him was Carl Major Wright, a Danish economist who was particularly interested in the relationship of primary commodity prices to trade cycles and economic growth in the industrial countries. Two other staff members in the trade section were Walter Chudson (United States) and Percy Judd (Australia), the latter being very expert in the economics and details of commodity agreements.<sup>12</sup> Discussions with these four must have drawn my attention quickly to problems of terms of trade. It was natural for me to link development work (a new area in the United Nations) with the well-established and much more highly advanced work proceeding in the field of trade analysis. Through Hilgerdt’s work and then through Gunnar Myrdal—who had been influenced by his countryman Hilgerdt—I also became familiar with the possibility of backwash effects of conditions in industrial countries, certainly cyclical (Hilgerdt and Wright) but possibly also structural (Myrdal), on the trade of the primary exporting countries, with prices and terms of trade acting as a mechanism of transmission. Even though Raúl Prebisch’s terminology of “center” and “periphery” and the phraseology of the “dependency” school were not specifically known to me at that time, the essence of such concepts certainly was in my mind, albeit less articulately.

While mainstream economics concentrated on the problem of allocative efficiency (where comparative advantages ruled supreme), my interest was from the beginning more in the direction of distributive justice, or rather distributive efficiency as I saw it as a follower of Alfred Marshall, R. H. Tawney, and William Beveridge.<sup>13</sup> This reflected a past concern with unemployment and the welfare state, and foreshadowed a future interest in basic needs and problems of children. It seemed to me that to think of

11. *Ibid.*, pp. 531–32, 533, 550. UNCTAD is the acronym for the U.N. Conference on Trade and Development.

12. He was also for many years the secretary of ICCCP, the “Interim” Coordinating Committee on Commodity Problems: *Rien ne dure que l’interim!*

13. The distinction between allocative efficiency and distributive justice has been clearly made on lines coinciding with my own thinking by Detlef Lorenz, most recently in his “Notes on Unequal Exchange between Developing and Industrialized Countries,” *Intereconomics* (January-February 1982), and more fully in “Non-Equivalent Exchange and International Income Distribution,” *German Economic Review*, vol. 8, no. 4 (1970), pp. 280–83. Recently I have learned much on “unequal exchange” from my colleague at the Institute of Development Studies, David Evans. Note, however, that my formulation in the “Distribution of Gains” paper “did not question the likelihood of gains all-round from international trade, only the likely distribution of such gains: a compromise between *laissez-faire* and exploitation.”



the distribution of gains in terms of only the amount of labor saved by specialization was to neglect an essential element. The assumption of equal exchange in impartial "fair" markets seemed in conflict with the facts of unequal market and technological power.<sup>14</sup> The dice were loaded against one of the trade partners. As in other such situations, acts of positive discrimination were called for, hence the attempt to create an ITO.

It should also be remembered that the general assumption around 1946–48 was that the Second World War would be followed by a period of recession and unemployment, just as after the First World War, with expected repercussions on primary commodity prices. Here was a basic assumption predisposing one to some degree of pessimism about primary commodity prices in spite of the rise which had taken place during the war and immediately after.

Anticipating some of the subsequent argument, those who were skeptical about the future underlying trend of primary commodity prices from the 1948–49 levels onward can perhaps claim that their projection was a fortiori justified, since it held even though the industrial countries entered into an unprecedented period of twenty-five years of full employment and steady growth. The stagnation and depression of the later 1970s corresponded more to the broad assumption of 1946–48 as to what would happen, at least periodically, in industrial countries; and this certainly had a depressing effect on the terms of trade on non-oil-producing primary product exporters among the developing countries. It should be emphasized, however, that neither in my 1949 U.N. publication on *Relative Prices of Exports and Imports of Underdeveloped Countries* based on U.K. data,<sup>15</sup> nor in my 1949–50 paper in the *American Economic Review*, did I make any specific analysis or assumption on conditions or cycles in the industrial countries. My interest, different from Folke Hilgerdt's and Carl Major Wright's, was in structural differences between the industrial countries exporting manufactures and exporters of primary commodities. The paper suggested that such structural differences between countries and markets would set up a tendency for primary commodity prices to decline relative to those of manufactured goods, and for asymmetrical changes in demand and volume. The effect would be for the benefits from trade and investment to be increasingly unequally distributed between the two groups of countries, more or less regardless of the state of activity in the industrial countries or the coming and going of trade cycles, short-term or Kondratieffs.

The collapse of the attempt to create an ITO and establish anything like a postwar regime of stabilized and controlled commodity prices, let alone a new international currency system based on commodities, was of course

14. The concept of a "dominant country" was developed by François Perroux within a few years of the delivery of the 1949–50 paper, "Distribution of Gains."

15. New York: United Nations, Department of Economic Affairs, no. 1949, II, B.3.

another element predisposing one to pessimism. Perhaps the 1949–50 paper can take some credit for being influenced not unduly by the rise of the preceding ten years<sup>16</sup> and more by the declining trend of the preceding sixty years,<sup>17</sup> and also for treating the 1870–1939 decline as a structural rather than a cyclical (even long-term cyclical) affair.

Arthur Lewis, in his Nobel lecture, with his long-term perspective on growth and fluctuations since 1870, draws attention to two relevant features: that the coefficient linking primary commodity trade with industrial production in the developed countries has consistently been less than unity (he puts it at 0.87); and that the expected favorable cyclical effect on terms of trade of primary exporters from high levels of activities in the developed countries “did not happen this time.”<sup>18</sup> Both these statements clearly are in line with my thinking.

My paper did not contain an explicit projection—projections were not as popular or as easily quantified then as now. It was based on the historical analysis on which I had worked in the United Nations during 1947–48 and which was published by the U.N. in 1949<sup>19</sup> before the paper for the American Economic Association meeting (December 1949) was written. However, the paper clearly argued that the historical downward trend in terms of trade for primary products from the 1870s to 1939, or even to 1949, was due to general forces and the nature of relations both within and between industrial and developing countries, which could be expected to continue in the absence of major changes (a New International Economic Order as we would now say). Thus the paper was an implicit projection and was generally considered as such. Treated as a projection, one can certainly claim that it has passed the test better than most other economic projections. From 1948 or 1949, when the projection was made, up to 1973, there was a tendency toward further deterioration of the terms of trade of primary products exported by developing countries relative to their manufactured imports. After 1973, of course, a judgment on this projection depends on the treatment of the Organization of Petroleum

16. The paper has a specific subheading, “The False Impression of Recent Changes in Terms of Trade.”

17. The subsequent critics of the Prebisch-Singer thesis have to some extent cast doubt on the statistical evidence of the period 1870–1939 or 1870–1949 by attributing the changes in terms of trade to the differential development of international transport costs and international prices FOB. However, this criticism, pronounced particularly by P. T. Ellsworth (“The Terms of Trade between Primary Producing and Industrial Countries,” *Inter-American Economics Affairs*, vol. 10, [1956], pp. 47–65), as well as the criticism that quality changes would reverse or obliterate the existing trend have been shown by Spraos to be largely irrelevant. See J. Spraos, “The Statistical Debate on the Net Barter Terms of Trade between Primary Commodities and Manufactures,” *Economic Journal*, vol. 90 (March 1980).

18. W. A. Lewis, “The Slowing Down of the Engine of Growth,” *American Economic Review* (September 1980), p. 556.

19. *Relative Prices of Exports and Imports of Underdeveloped Countries*.

Exporting Countries (OPEC) and oil. If oil is excluded as a special case,<sup>20</sup> then the projection would hold true up to 1982.<sup>21</sup>

If oil is *not* excluded as a special case, then of course the projection fails to be true. It can rightly be said that the 1949–50 paper failed to anticipate the rise and power of OPEC after 1973. Even on that basis, however, a projection which turns out to be valid for a quarter century still has some claim to be judged as vindicated.

There is another point in defense of the 1949–50 paper. This was meant less as a projection than as a *policy guide*. The developing countries were advised to diversify out of primary exports wherever possible, by development of domestic markets and by industrialization, either import-substituting (ISI) or export-substituting or a combination of both. (Export-substituting industrialization, in 1949, seemed a long way off for the less developed countries (LDCs), so the emphasis was more on ISI.) To the extent that they succeeded, they would escape the consequences of deteriorating terms of trade and lower productivity growth directly for themselves, and perhaps also enable other LDCs to do so. In fact, there was considerable industrialization of LDCs after 1949, especially after 1960. To that extent, even if—or to the extent that—the empirical data do not support the implicit projection (especially as to terms of trade of *countries* as distinct from *commodities*) this does not necessarily invalidate the paper. It can be argued that the actual data incorporate the result of the remedial or compensatory action taken, in line with the 1949–50 paper. We do not know what the data would have been without such action—the deterioration in terms of trade would presumably have been even sharper than it was.

#### *A Restatement*

In 1971 I had a chance to “revisit” the 1949–50 paper, putting more emphasis on relations between types of *countries* rather than types of *commodities* (following Charles P. Kindleberger) and on the nature and

20. As is also done by Spraos, “Statistical Debate.” Obviously, when oil and OPEC are excluded as a special case, it would also be necessary to exclude the higher oil prices from the import price index of oil-importing primary exporting developing countries, but the above formulation avoids this problem by relating primary product export prices only to manufactured imports, which excludes oil at least directly. Oil prices are included as a cost element in manufactured import prices, and a more refined analysis would have to try to eliminate that element of the rising import prices which is due to rising oil prices (since the latter benefits developing rather than industrial countries). However, a look at the figures will lead to the clear judgment that, even if the effect of higher oil prices is eliminated from increased prices of manufactures imported by developing countries, it would still be true that their terms of trade continued to deteriorate between 1973 and 1982.

21. See the next section below on the empirical trend in the terms of trade.

distribution of technological power.<sup>22</sup> The present occasion seems to call for a restatement in more contemporary terms of the essential points of the paper. I hope that such a restatement will also help to remove some misunderstandings and to answer some of the criticism.

The 1949–50 paper concentrated on the issue of distributive justice or fairness or desirability in sharing out the gains from trade. It did not deny the existence of such gains nor did it claim that deteriorating barter terms of trade are direct evidence of a welfare loss by developing countries. That could have been done only by studying factoral terms of trade, for which the data were not available. The paper did, however, look into productivity trends, and by implication argued that if productivity in manufacturing increases faster than productivity in primary production—surely a justifiable assumption then and now—it must be assumed that the distribution of welfare gains based on double factoral terms of trade (allowing for change in productivity in the production of exports and imports) would a fortiori become even more unequal (unfair, undesirable). Even that, of course, would not mean that no trade would be better than trade, especially if exports of primary products are “vent for surplus” or provide additional employment. Naturally, deteriorating terms of trade mean a welfare loss for the developing countries as compared with a situation in which their terms of trade do not deteriorate while everything else, specifically including export volume and factoral terms of trade, is exactly the same—but that is clearly a hypothetical comparison.

There has been a great deal of discussion about “engines of growth.” The Brandt report,<sup>23</sup> with its story of mutual interests and interdependence, is based on the picture that during the 1950s and 1960s the industrial countries were the engine of growth for the LDCs; but it envisaged a future in which these roles might be reversed and the LDCs could serve as an engine of growth for the rest of the world. The 1949–50 paper throws some doubt on the first part of this story. Its implication is that the LDCs, even during the 1950s and 1960s, by providing the industrial countries with steady supplies of primary commodities (and also, I would now add, of simple manufactures and labor), on terms increasingly favorable to the industrial countries, were an engine of growth for the industrial countries throughout the twenty-five “golden years” after the end of the war.<sup>24</sup>

22. “The Distribution of Gains Revisited,” paper presented to a Conference at the Institute of Development Studies in Sussex, May 1971, and reprinted as chap. 4 of *The Strategy of International Development*, Sir Alex Cairncross and Mohinder Puri, eds. (London: Macmillan, 1975).

23. Report of the Independent Commission on International Development Issues (Brandt Commission), *North-South: A Programme for Survival* (Cambridge, Mass.: MIT Press, 1980).

24. Not least by enabling them to concentrate on high-technology lines of activity and to consolidate their technological leadership.

The 1949–50 paper is based on a view of commodity markets in which less emphasis is placed on the traditional neoclassical competitive market paradigm and more on bargaining power, financial power, and control of marketing, processing, and distribution. More recently this position of the 1949–50 paper has been shared by Gerald Helleiner in his summary of the result of the Refsnes Seminar. He identifies the competitive market paradigm with “Northern analysis” and the paradigm of the 1949–50 paper with the South, and he continues:

There is emerging a relevant literature within the Western tradition which, in effect, is at least partially legitimising the Southern approach by applying the tools of empirical analysis to particular commodity markets. These theoretical “bits and pieces” have not yet percolated through either to introductory Western textbooks or to Western economic policy-makers; but their volume may already be great enough to permit the thought that the dominant paradigm may yet shift to that of the South.<sup>25</sup>

In this sense, as well as in that of empirical verification, the original paper may perhaps be claimed to have been vindicated. At any rate, Helleiner states that the Prebisch-Singer analysis represents “another rich area for theoretical exploration.” Although he thinks it has not proved “persuasive or rigorous enough to have been incorporated into the central core of trade theory,” he does credit it with “an enormous intuitive appeal.”<sup>26</sup>

Helleiner also refers to another aspect of my paper. The paper tried to incorporate foreign investment activity—or, in Helleiner’s more contemporary language, “transnational corporate activity”—into the model (as was indicated by the very title of my paper). It thus implies a concept of the terms of trade based upon the national retained value from exports rather than conventionally measured prices for export products.

A contemporary version of this may be seen in the statement by A. Maizels:

With transfer pricing being used as one of a package of instruments designed to maximize the global profits of a TNC, the neo-classical approach to the process of price formation is invalidated. Moreover, the concept of “export value” (usually measured f.o.b.) of commodities shipped from a developing country itself needs to be modified to take account of remittances abroad, e.g., as royalties or management fees to a parent (TNC) which are, in effect, leakages from domestic incomes.

He then adds the following footnote to this quotation: “The alternative

25. “The Refsnes Seminar: Economic Theory and North-South Negotiations,” *World Development*, vol. 9, no. 6 (1981), p. 545.

26. *Ibid.*, p. 550.

concept of 'retained value' would thus seem to be more relevant than the usual f.o.b. export value, *especially for analysis of the division of benefit*' (my emphasis).<sup>27</sup> Maizels, like Helleiner, feels that:

Analysis which focuses solely on shifts in supply and demand, and thus on changes in market prices, will not reveal the underlying relationships between the TNCs and producers in developing countries. For that, it is necessary to place the supply/demand analysis in the context of the structures of control and decision-making which govern the production and trade of a given commodity, and to show how these structures influence the price outcome.<sup>28</sup>

That is precisely what my 1949–50 paper tried to do, although not as explicitly and articulately as Helleiner and Maizels. The original paper mixed together, without clear distinction, elements in the supply/demand analysis (such as Engel's law and low-income elasticity) pointing to deteriorating terms of trade, and elements relating to market structure and technological-financial power. This may have led to misunderstandings and contributed to criticism. With the benefit of hindsight, I should have avoided the use of "terms of trade," with its narrower professional meaning of net barter terms of trade relating to prices only, and used instead "framework of trade" (or perhaps "Terms of trade" with a capital *T*) or some similar concept. That in fact was the intention in omitting "terms of trade" from the title of the paper and referring instead to "investing and borrowing countries."

To me, the empirical evidence seems convincing, and the intellectual trends indicated by Helleiner and Maizels inevitable. The thesis of deteriorating terms of trade obviously touches raw nerves and rouses strong resistance; hence all the emphasis on the changing quality of manufactures, new commodities, falling transport costs, factoral terms of trade, and so on. To my mind, the study by Spraos, discussed below, has shown convincingly that these difficulties of measurement do not go to the heart of the matter, even empirically.

In the last resort I am quite ready to accept Paul Streeten's conclusion:

While many of the criticisms of the doctrine that the terms of trade of primary producers steadily deteriorate appear to be damaging, the core of the doctrine may well survive the onslaughts. This core is that in the world economy there are forces at work that make for an uneven distribution of the gains from trade and economic progress generally, so that the lion's share goes to the lions, while the poor lambs are themselves swallowed up in the process.<sup>29</sup>

27. A. Maizels, "A Conceptual Framework for Analysis of Primary Commodity Markets," October 1981, p. 4; processed.

28. *Ibid.*, pp. 24–25.

29. Paul Streeten, *Development Perspectives* (London: Macmillan, 1981), p. 217.

The title of "Distribution of Gains" also indicates that I did not question the basic doctrine of comparative advantages that trade is a positive-sum game resulting in gains to the trading partners. But it did seem to be legitimate to ask further questions as to *who* gains. This then led me in the paper to consider the possibility that in a certain institutional and power set-up the longer-term and dynamic impact on one of the trading partners could be negative, and that at least temporary delinking might be preferable until a better basis for trade with more evenly distributed gains could be developed. That, after all, was no more than an extension of the old infant industry argument into an infant economy argument.

If I may analyze the 1949–50 paper in terms that I did not then use, I would take a dual position:

1. That international trade between primary exporting developing countries and industrial countries is as much a question of power relationships as of classical markets and comparative advantages, and that domestic power relationships within industrial and developing countries are as relevant as power relationships between industrial and developing countries.
2. That the impact of trade of the type prevalent in 1949–50 on developing countries includes not only the "engine of growth" effects emphasized by the classical economists and the theory of comparative advantage, but also potential backwash effects related to a more dynamic concept of comparative advantage; and that such effects on developing countries may under certain conditions offset, or more than offset, any engine of growth effects.

Such backwash effects would be strengthened by a further factor which was not directly discussed in the 1949–50 paper but to which I turned immediately after writing the 1949 U.N. study on *Relative Prices of Exports and Imports* and the 1949–50 paper. This was the chronic instability of primary commodity prices and export proceeds. It was thus natural to follow with the study on *Instability of Export Proceeds of Underdeveloped Countries*.<sup>30</sup>

If trade was not the engine of growth, nor was the foreign investment that went with the development of primary product exports, then what *was* the engine of growth? To that, the two answers to which I was pushed were (1) a shift from primary products to manufactured goods and (2) the development of a system of international aid. A shift to manufactured products was mainly by way of import substitution—the development of manufactured exports (export substitution) by developing countries was difficult to visualize in 1949–50 to the extent in which it actually later happened in the newly industrializing countries. The chief argument for giving priority to industrialization seemed to be the dynamic advantages.

30. New York: United Nations, 1952.

With the benefit of hindsight, however, I would agree that the limits of the ISI strategy were not fully realized. Yet today, when LDCs have become large net food importers, import substitution in the name of rural development and promotion of domestic food production has become very popular and part of the established wisdom—an indication that the objections were perhaps more to industrialization than to import substitution.

Still later in the 1960s, I related these problems more to the power relationships created by technical progress. In the original 1949–50 paper, I emphasized the power relationships *within* the developing countries (which prevented their producers of primary products from appropriating productivity gains)<sup>31</sup> and the different power relationships *within* industrial countries (which enabled producers of manufactured goods to appropriate their productivity gains in the form of higher incomes). The power relationship *between* industrial and developing countries I brought in only through investment (transfer pricing and so on). I was not at that time aware of anything like product cycle trade theories, nor had I then studied the unequal distribution of expenditures on research and development (R&D) as a basis for divergent growth of industrial and developing countries. In my 1971 “revisit” I tried to fill this gap and explain tendencies toward deteriorating terms of trade for primary exporters by linking them to technological leadership. This, in a way, brought me back to the teachings of Schumpeter. At Bonn I had been brought up on his theory of economic development and the idea that quasi-monopolistic profits were made by those producing new and sophisticated goods requiring high technological power. It did not then seem such a big step to translate this idea from internal to international relations and from simple divergencies in GNP growth rates to unequal exchange and changes in terms of trade.

One corollary of this shift in thinking was that the argument for tendencies of terms of trade to decline was widened to include the high-technology manufactured goods exported by industrial countries relative to the simpler manufactured goods exported by developing countries, as well as the primary commodities exported by the two categories of countries. This last view is certainly underlined by the statistics which show that in fact the terms of trade of Third World countries have declined in relation to those of industrial countries, even if the analysis is restricted to trade in manufactured goods only or to primary commodities only.

#### *Empirical Recent Trend of Terms of Trade*

The most satisfactory and up-to-date series for our purposes is the index of thirty primary commodities exported by developing countries (excluding gold and petroleum) deflated by the U.N. index of manufactures

31. Soon to be so impressively developed by Arthur Lewis in “Economic Development with Unlimited Supplies of Labour,” *Manchester School of Economic and Social Studies* (May 1954).



exported by developed countries, calculated by the IMF Research Department. The latest information goes back to 1957 and brings the story up to February 1982 (see table next page).

Between 1957 and February 1982, the terms of trade of LDC primary exports in relation to developed-country manufactured exports had deteriorated by 32 percent. This deterioration applied to all four major groups of primary commodities: food by 27 percent, beverages by 28 percent, agricultural raw materials by 45 percent, metals by 28 percent. If we take the four-year average 1957–60 as our base figure, the overall deterioration is reduced from 32 percent to 26 percent and the other subindices accordingly. If we compare 1957–60 with 1978–81, the deterioration is still 14 percent. It is difficult to see how in the face of such data there can be any quibbling over what the tendency of terms of trade has been, provided the exclusion of oil is accepted. And do not these remarkably uniform figures for the four groups suggest some common factor at work? This general impression does not exclude the recognition of cyclical factors that complicate the selection of dates for measuring trade: in 1973 and 1974 the terms of trade improved temporarily beyond 1957, and 1977 again came close to doing so. The temporary improvement was quite spectacular for food in 1974 and for beverages in 1977. But the most recent figures for February 1982 are the lowest on record for all commodities together, as well as for food, agricultural materials, and metals (but not beverages) separately—is not this what a trend means? Looking at the full set of 120 annual data for 1957–81, we find that only 20 show an improvement over 1957, 2 show no change, but 98 show a deterioration.

Whether subsequent events have borne out the implicit projection in the 1949–50 paper of a declining trend in terms of trade, either for primary commodity exports of developing countries or for developing countries generally, is a question that has been specifically raised and answered by Professor J. Spraos.<sup>32</sup> Spraos gives the net barter terms of trade between primary products and manufactures since 1950. According to his data based on U.N. statistics, this index of terms of trade deteriorated between 1950 and 1970 from 114 in 1950 to 85 in 1970, a deterioration of 25 percent. It can of course be objected that 1950 was a year in which primary commodity prices were particularly good. To this it could be replied that (1) the Korean war peak of primary commodity prices and terms of trade was in 1951 rather than 1950; (2) the data are based on 1913 = 100, so that the 1970 figure shows a 15 percent deterioration compared with 1913, reversing the improvement which had taken place between 1913 and 1950;<sup>33</sup> and (3) after all, 1950 is the year following the delivery of my paper to the American Economic Association; and (4) in any case, the

32. "Statistical Debate"; see specifically pp. 121–26.

33. The UNCTAD series, although slightly different, tells essentially the same story as the U.N. figures.

*Price Indices of Primary Commodities*  
(1975 = 100)

Year	<i>All commodities<sup>a</sup></i>		<i>Major groups, deflated<sup>b</sup></i>			
	<i>Nominal<sup>c</sup></i>	<i>Deflated<sup>b</sup></i>	<i>Food</i>	<i>Beverages</i>	<i>Agricultural raw materials</i>	<i>Metals</i>
1957	57	127	90	171	163	131
1958	53	118	84	171	137	123
1959	52	117	85	146	154	121
1960	52	115	83	133	158	121
1961	50	109	79	124	145	119
1962	49	106	80	120	138	115
1963	52	113	96	118	142	114
1964	55	118	90	133	139	139
1965	54	112	82	118	132	149
1966	56	114	81	121	133	157
1967	52	106	81	119	119	132
1968	52	105	79	120	116	137
1969	56	110	82	121	119	145
1970	58	107	82	129	103	145
1971	55	96	78	112	96	118
1972	62	100	83	113	116	109
1973	95	132	110	120	178	137
1974	122	138	144	117	141	140
1975	100	100	100	100	100	100
1976	113	112	81	189	123	105
1977	137	125	72	302	117	104
1978	130	103	71	190	109	95
1979	152	106	71	177	117	109
1980	166	104	86	140	110	108
1981	142	94	79	115	105	99
1982						
Jan.	133	86	66	119	90	95
Feb.	134	86	66	125	90	94

a. Overall index of thirty primary commodities exported by developing countries (excluding gold and crude petroleum).

b. Deflated by the U.N. index of manufactures exported by developed countries.

c. In terms of U.S. dollars.

Source: *IMF Survey* (April 5, 1982), p. 110.

above statements all remain true, albeit to a reduced extent, if 1948 or 1952–53 are taken as starting points.

Between 1970 and 1977, if petroleum is excluded, there was a further deterioration of 9 percent in the net barter terms of trade between primary products and manufactures.<sup>34</sup> Superimposed on a 26 percent deterioration from 1950 to 1970, this would leave a total deterioration between 1950 and 1977 of 33 percent. If petroleum is included, obviously the picture changes dramatically.

Another series given by Spraos is based on World Bank indicators of market prices of primary products divided by a unit value index of total manufactures exported from developed market economics to developing countries. This indicator shows an even greater deterioration of terms of trade between 1950 and 1970 than the U.N. index based on a comparison of unit values: by 36 percent if petroleum is included, and by 33 percent if petroleum is excluded. However, this particular index based on market prices shows no further deterioration between 1970 and 1977, but rather an improvement by 4 percent (even with oil excluded), so that over the total period 1950–77 the two indicators agree very closely.

Looking at the whole period 1900–70, Spraos finds generally negative trends for the different series but finds them “statistically insignificant.” Spraos agrees, however, that “a counter-case [for significant deterioration] could be made” and that anyone finding evidence of persistent deterioration “is entitled to this conclusion.”<sup>35</sup> One may add that, even if the individual trends he calculates are statistically insignificant when taken one by one, the fact that they all point in the same direction surely adds significance. At any rate, there is no hint of any sign that terms of trade have improved (always excluding petroleum). Be that as it may, in this paper we are concerned only with the implicit postwar projection from the 1949–50 paper onward, not with the entire 1900–70 period.

On second thought—and with hindsight of the actual fairly rapid shift in the exports of developing countries in the direction of an increasing share of manufactures—the paper should have given warning of the gradual weakening of the export concentration of developing countries on primary commodities. If there was a continuous tendency for the industrial countries to absorb technical progress in the form of higher producer incomes, and specifically wages (while there was no such tendency in the developing countries, and the pressure of surplus labor would prevent a rise in wages), then the natural consequence would be that developing countries could gain comparative advantages in the export of manufactures, especially where technology was simple and/or labor-intensive. In spite of protectionist tendencies in industrial countries, this is of course what has happened. The 1949–50 paper failed to foresee or emphasize

34. Spraos, “Statistical Debate,” p. 123, column 5.

35. *Ibid.*, pp. 124 and 125.

this; nor did it foresee that the developing countries would become major net importers of food. Hence the prices of primary commodities relative to those of manufactured goods became less and less suitable as an indicator of the terms of trade of developing countries.

The argument should also have logically led me to project that the terms of trade of the poorer low-income developing countries would deteriorate more than the terms of trade of the higher-income developing countries, which shifted more to the export of manufactured goods. For the low-income developing countries, the arguments for deterioration of terms of trade based on the characteristics of primary commodities would have been added to the arguments based on the characteristics of different countries; while for higher-income developing countries they would go in offsetting directions. This seems to be fully borne out by the data.

This is illustrated by data obtained from UNCTAD.<sup>36</sup> The series runs from 1960 to 1978 and shows that the terms of trade of developing countries with per capita income of under \$400 in 1976 have changed distinctly less favorably than those with per capita income of \$400–\$800, and these in turn less favorably than those with per capita income over \$800. Unfortunately, the data are affected by the fact that the better-off groups include the OPEC countries, but we can eliminate this factor by looking at the series from 1960 to 1973 only. We then find that the poorest developing countries (under \$400) show a deterioration in terms of trade between 1960 and 1973 of 11 percent; the middle group (\$400–\$800) shows an improvement of 6 percent, and the better-off group (over \$800) shows an improvement of 3 percent. With the benefit of hindsight, the 1949–50 paper should have pinpointed the least developed countries not breaking into manufactures instead of referring to developing countries generally.

The point first made by Charles Kindleberger, that the tendency toward deterioration is more a matter of the characteristics of different countries than of different commodities, is borne out by a comparison of the unit values of primary commodities exported by developing and developed countries respectively. This series based on 1953 = 100 shows that, between 1953 and 1975, with petroleum excluded, the unit values of primary exports of LDCs fell by 27 percent in relation to the unit values of primary commodities exported by developed countries.<sup>37</sup> Similarly, it can be shown that the unit values of manufactures exported by LDCs also deteriorated in relation to those of exports of manufactures from developed countries.

Thus the deterioration of terms of trade of developing countries can be attributed to the combined effects of three factors: the relative deterioration of unit values for primary commodities exported by developing

36. UNCTAD *Handbook of International Trade Statistics* (New York, 1978), p. 62.

37. The data for LDCs are drawn from the UNCTAD *Handbook of International Trade Statistics* (1976), p. 60; these include, in the Standard International Trade Classification (SITC), 0 + 1 + 2 (except 27) + 4 + 68. The data for developed countries come from the U.N. *Yearbook of International Trade and Statistics*, various issues.

countries in relation to primary export unit values of developed countries; the relative deterioration of manufactured export unit values of developing countries relative to manufactures exported by developed countries; and the lower proportion of manufactures in total exports of LDCs (for which unit values have increased more), and a higher proportion of primary commodities in their exports (for which unit values have increased less). The Kindleberger effect and the Prebisch-Singer effect are both parts of the explanation.

### *Some Policy Matters*

Paul Streeten considers that “the debate over the course of the terms of trade has been shunted onto the wrong track, by disputing the question as to whether they had deteriorated historically. The relevant question is not what are the terms of trade compared with what they were, but what are they compared with what they should and could be.” Moreover, Streeten suggests that *direct* action to improve terms of trade by producers’ associations is very difficult and that such associations “are notorious for their instability, for the more successful the agreement is in raising the price, the stronger the incentive for individual members to defect.”<sup>38</sup>

If such direct action is difficult, we are driven back to other possible alternatives:

*Changing the underlying bargaining relations*, if not by commodity power, then by countervailing power in other directions, for example, pressure on the multinationals and advances in technological dissemination to obtain lower import prices by more balanced bargaining, more effective procurement, or diversification of sources of imports.

*Emphasizing collective self-reliance by more intra-LDC trade and intra-LDC investment*. In intra-LDC trade, terms of trade obviously cease to matter for the collective position of LDCs, since one LDC’s loss must be another LDC’s gain. For agricultural primary commodities (but not metals or manufactures), there has been some progress in reducing the impact of unfavorable relative prices by increased intra-trade, but even in this category the bulk of trade remains between developing and developed countries. The day when intra-trade offers LDCs the same protection against relative price changes as the developed countries now enjoy seems as far distant as ever.

*National delinking (autarky/import substitution)*. This again is not happening. At least up to 1976, exports were still rising faster than GNP even for the low-income LDCs (those with GNP per capita under \$300 in 1975); exports were 13.8 percent of their GNP in 1960 and 15.7 percent in 1976. Hence the importance of unfavorable terms of trade for primary

38. “Approaches to a New International Economic Order,” *World Development*, vol. 10, no. 1 (January 1982), p. 8.

exports has increased rather than diminished.<sup>39</sup> In terms of imports and total trade, the evidence against any national delinking is even stronger.

*Export substitution.* In this sense a good deal of movement has occurred, both in shifting exports of primary commodities to more highly processed stages, and also in shifting altogether to exports of manufactured goods not based on domestic primary production (or at least not replacing primary exports). Manufactured exports from the LDCs in 1979 offset over 25 percent of their manufactured imports, as compared with only 11 percent in 1963. This certainly is a major change that reduces the incidence of unfavorable relative prices of primary exports. It is, however, subject to four major qualifications.

First, the shift was only partial, greatly affecting the medium-income countries and the newly industrializing countries, but much less the low-income countries. Even in the least developed countries, however, the share of manufactured exports to total exports has risen, although less than in other developing countries. The share of processed and manufactured goods in their total exports increased from 12 percent in 1964 to 18 percent in 1977. In exports of food and beverages, the processed share remained at 10 percent from 1964 to 1977, but for industrial materials it increased from 7 percent in 1964 to 14 percent in 1977.<sup>40</sup> However, all these percentages are too small to modify significantly the impact of falling relative prices of primary commodities.

Second, even with the shift to processed and manufactured exports the terms of trade problem did not disappear, although it shifted from factors relating to commodities to factors relating to countries (the Kindleberger case).

Third, further shifts to manufactured exports are threatened by recession and protectionism in developed countries.

The fourth major qualification is that it is a fallacy of composition to assume that what is possible for one or some of the LDCs or newly industrializing countries can work if all, or the great majority, of developing countries seek to pursue export substitution (export-led growth) at the same time. A recent analysis has concluded, on the basis of a simulation exercise, that "generalisation of the East Asian model of export-led development would result in untenable market penetration into industrial countries . . . from approximately one sixth to approximately three fifths of their manufactured imports." The analysis concludes that protectionist response would be inevitable, and hence "it is seriously misleading to hold up the East-Asian G-4 [Gang of Four] as a model for development because that model almost certainly cannot be generalised without provoking protectionist response ruling out its implementation."<sup>41</sup>

39. *Ibid.*, p. 1, notes 8 and 4.

40. United Nations Industrial Development Organization (UNIDO), *A Statistical Review of the World Industrial Situation* (Vienna, 1981), p. 12.

41. William R. Cline: "Can the East Asian Model of Development Be Generalised?" *World Development*, vol. 10, no. 2 (February 1982), pp. 88 and 89.

*Volume increase.* A fifth possible policy response to deteriorating barter terms of trade is to increase the *volume* of trade in primary commodities so as to obtain better income terms of trade (export revenue divided by import prices) and maintain import capacity. This is also a form of export substitution, except that it is not accompanied by diversification into processed products of other manufactures. The fallacy of composition applies here, too. An individual country can protect itself against declining terms of trade in primary products by increasing its world market share in the primary product concerned, but if all exporters of the product tried to do this simultaneously they would only succeed in driving the price even lower.

In any case, the quantum of primary exports from LDCs has in fact increased *less* than the quantum of exports—or even of primary exports—of developed countries. Between 1959 and 1970 the quantum of primary LDC exports (excluding oil) increased by 74 percent, but that of developed countries by 152 percent—more than twice as fast. Thus the *relative* deterioration of income terms of trade has been even more rapid than that of the net barter terms of trade. (The absolute income terms of trade, on the usual definition equating them with import capacity, have improved, of course.) International trade has been a better engine of growth for the developed countries than for the LDCs.<sup>42</sup>

Even in overall terms, and in spite of the group of fast-growing LDC exporters of manufactures, the volume lag of LDCs is clear. Between 1948 and 1970, world trade volume (excluding socialist countries and largely indicative of developed-country trade) increased by 7.3 percent a year, but the export volume of LDCs by only 5.3 percent. In the decade 1970–80 the figures are 5.8 percent and 3.1 percent respectively. For the least developed countries, typically primary exporters, the respective growth rates were only 4.4 percent and a dismal –0.4 percent for 1960–70.<sup>43</sup> At least in this relative sense, volume changes have increased any gap created by the worsening terms of trade, and in that sense trade pessimism has not been proved wrong.

The rapid decline in the prices of primary commodities exported by developing countries relative to the manufactured goods imported by them during the early 1980s has been dramatic. The main factor has been the depression or slow growth of the industrial countries; the elasticity of commodity prices in response to changes in world industry production seems to have sharply increased during the past decade.<sup>44</sup>

42. There is, however, the well-known qualification that, insofar as the growth of developed-country trade is largely due to trade with other developed countries—much of it within the same product with only minor differences—the benefit to the developed countries is less than the quantum figures would suggest.

43. The figures are based on the UNCTAD *Trade and Development Report*, 1982, pp. 26 and 38.

44. See “Commodity Prices in the 1970s,” *Bank of England Quarterly Bulletin*, vol. 21, no. 1 (March 1981), p. 47. According to the calculations based on the Bank of

## Aid Not Trade?

I have listed five possible policy reactions to worsening terms of trade. This leaves the sixth alternative, that is, to compensate for declining terms of trade (and lagging import capacity) by financial transfers. These can be in the form of investments by multinational corporations, bank lending, or official development assistance (ODA).<sup>45</sup> To rely on multinational investments runs the risk of introducing cumulative elements into trade imbalances, if transfer pricing, export restrictions, lack of local training and local capacity for R&D (research and development of products), and repatriation of profits (including profits on locally raised funds) are not controlled by codes of conduct, countervailing power, or enlightened policies. The cumulative factor arises when trade imbalance makes the resources of multinationals attractive, but multinational activities may then contribute to new trade imbalances (most clearly in the case of transfer pricing that directly affects terms of trade). Bank lending leads to indebtedness; the recent rise in indebtedness of LDCs means that some 20–25 percent of export earnings is not available for imports. This is equivalent to declining terms of trade.<sup>46</sup> Hence bank lending, like direct foreign investment, when considered as a remedy for poor terms of trade can be self-defeating; both postpone the problem at the expense of intensifying it.

This leaves ODA, or aid, which was in fact the natural avenue to which the interest of the United Nations, and my own with it, turned in those years as a result of trade pessimism. Hence the idea of the need for soft financing for development was born and developed at the same time as the work on terms of trade, and with a clear intellectual link between the two. It is difficult to realize today how revolutionary, indeed subversive, this idea was considered at the time.<sup>47</sup> The near-commercial operations of the

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England's model, the short-run elasticity of commodity prices in response to changes in world industrial production has increased from 0.39 in 1957–69 to 3.08 in 1970–79. The long-run elasticity has increased from 2.18 in 1957–69 to 4.34 in 1970–79. This increased elasticity also applies to the three categories of primary commodities taken separately: metals, agriculture, and raw materials and foodstuffs.

45. ODA would include direct compensation for insufficient export proceeds, such as the IMF compensatory facility, the newly added food financing facility, and the export earnings stabilization scheme (STABEX system) under the Lomé convention between the European Economic Community (EEC) and ACP countries (Africa, Caribbean, and Pacific).

46. Future calculations of income terms of trade might well be based on export earnings *minus* debt payments.

47. The word "subversive" in this context has a very direct meaning—those were the days of the Hiss trial and the McCarthy committee. Those advocating soft aid for developing countries, specially when suggesting this be done under U.N. auspices, were



World Bank (minus IDA then, of course) were the most that could be permitted, and that only because they came from a respectable, firmly Western-controlled banking institution. By contrast, the United Nations appeared as a hotbed of irresponsible wild men, radical utopians who could at most be entrusted with minor extensions and offshoots from the technical assistance work announced in January 1949 as Point Four in President Truman's inaugural speech. The official policy was "Trade Not Aid" (although in practice the opponents of aid were often opposed to trade liberalization and the proponents of trade liberalization were in favor of aid).<sup>48</sup>

The attempt to create a major soft aid mechanism within the United Nations—unsuccessful in the main—centered around the proposal for SUNFED, the Special United Nations Fund for Economic Development. The story begins in 1949—the same year as the paper on "Distribution of Gains" was presented to the American Economic Association—and seemed to have ended in the late 1950s with the almost simultaneous establishment of IDA and the U.N. Special Fund (the main component<sup>49</sup> of what is now the United Nations Development Programme [UNDP]). Quite recently, however, the proposal has been prominently revived by the Brandt Commission and placed once again on the international agenda.

The story which ended with IDA and UNDP can be described as a battle of acronyms.<sup>50</sup> In 1949, it started with UNEDA (United Nations Economic Development Administration). This was the proposal by V. K. R. V. Rao in his capacity as chairman of the U.N. Sub-Commission for Economic Development, the body which I served as a member of the Development Section of the secretariat (which even by that time had hardly more than a half dozen professionals). The proposal was made during the third session of the subcommission (1949), although I seem to remember a tossing-about of similar ideas during the earlier sessions. Since no quick unanimous support in the subcommission seemed attainable, Rao submitted this as his personal proposal, appended to the report of the subcommission; it was also reproduced in a simultaneous secretariat report on *Methods of Financing Economic Development in Under-developed*

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often treated as outcasts and out to weaken the Free World. Because of its association with aid and its suggestion of unequal exchange, trade pessimism alone was often enough to put you in the "subversive" category.

48. Senator Taft, when asked what he thought of the policy of "Trade Not Aid," is said to have replied: "I agree with the second part of it." *Si no e vero e ben trovato!*

49. The other was the Expanded Technical Assistance Programme (ETAP).

50. In presenting the story, I have the advantage of leaning on the account given by John G. Hadwen and Johan Kaufmann, *How United Nations Decisions Are Made* (Leyden: A. W. Sythoff, 1960), especially chap. 5, "The Story of SUNFED and the Special Fund." Another good account, although more from a Bank perspective, is in Edward S. Mason and Robert E. Asher, *The World Bank since Bretton Woods* (Washington, D.C.: Brookings Institution, 1973).

*Countries*<sup>51</sup> for the U.N. Economic and Social Council (ECOSOC). The UNEDA proposal combined the technical assistance element leading to ETAP, SUNFED, and UNDP with proposals for soft financing for “schemes of development which cannot be financed from the country’s own resources and for which loans cannot be asked on strict business principles.” Special emphasis was laid on financing regional projects which seemed particularly suitable for multilateral financing under U.N. auspices. The Indus River Basin problem arising from the separation of India and Pakistan was then much in our minds as a prototype of such regional projects.

The ETAP part of UNEDA was already on the cards in 1949. But the financing part predictably made heavy weather with ECOSOC and less so with the General Assembly. In the time-honored U.N. fashion—by no means limited to the United Nations—the divisions were temporarily resolved by asking for more secretariat studies. In this way, the Rao initiative was kept alive. Thus it was that my own work, subsequent to the studies on terms of trade, turned toward the problems of soft financing for development—an issue which remained a lively center of debate and (often vicious) controversy for the next decade. The leading protagonists of a new soft aid U.N. agency were then India, Rao’s home country, Chile, and Yugoslavia.<sup>52</sup> (The outlines of the nonaligned movement were beginning to emerge.) I would say that if anybody deserves the title of grandfathers of IDA, it would be V. K. R. V. Rao and Hernan Santa Cruz—but that may not be orthodox World Bank history!

The United States and United Kingdom from the beginning of the debate in 1949 combined hostility to soft financing with hostility to the idea of a rival to the World Bank. In the latter respect they were presumably strongly backed by the management of the World Bank, and at least ostensibly also in the opposition to the general principle of soft loan finance. To what extent the Bank’s opposition to a new soft financing agency (voiced consistently in succeeding years by Eugene Black in his appearances before ECOSOC and elsewhere) was one of conviction or of political tactics is difficult for me to say. It was certainly good political tactics: the cause of soft financing at that point must have seemed hopeless, even dangerous. In the early 1950s the Korean commodity boom and the rising foreign exchange reserves of the LDCs made the cause even more implausible—the 1949–50 paper and the 1948 U.N. study did not look exactly convincing at that moment. In any case, the World Bank could be confident that if the prospects should change, the new agency would come to the World Bank, not the United Nations—certainly some of us in the United Nations never had any illusions on this. So it fell to us in the U.N.

51. Document E/1333/Rev. 1, no. 1949.II (New York: United Nations, 1949).

52. Through their economic representatives, Hernan Santa Cruz for Chile and Leo Mates and Janos Stanovnik for Yugoslavia, the latter now executive director of the U.N. Economic Commission for Europe (ECE).

secretariat to play the role of the “radical,” “politically naive,” “amateurish,” “inexperienced” “utopians,” but in the event we kept the cause alive until it became acceptable, when it was time for the “responsible,” “pragmatic,” “experienced,” “professional,” “well-trying” institution to move in and take over. Mason and Asher not only repeatedly and generously credit the SUNFED movement with preparing the ground for IDA,<sup>53</sup> but they go further in attributing to the wild men in the United Nations the function of frightening the conservative donors sufficiently to look to IDA as a welcome escape from less welcome schemes. Mason and Asher also specifically credit this situation with the earlier establishment of the International Finance Corporation (IFC).<sup>54</sup> Escott Reid, in fact, suggests that “some of the more sophisticated leaders of poorer countries” deliberately put on the pressure for SUNFED in order to induce the rich countries “to counter this pressure by supporting the creation of a soft-loan affiliate of the World Bank and by providing it with ever-increasing financial resources.”<sup>55</sup>

I was and am quite satisfied with this distribution of roles as “fall guys” for Eugene Black and IDA and happy with the respectability acquired by the idea of soft multilateral financing—all the more so since the United Nations got a valuable consolation prize in the form of the Special Fund, a prize made even more valuable because it brought Paul Hoffman in as managing director. I was in charge of the preparatory work for the Special Fund until his arrival. That was the beginning of an unclouded relationship, with unlimited admiration and support on my part.<sup>56</sup> I was always conscious of the link with the Marshall Plan (however precarious) that working with Paul Hoffman provided. The fact that Arthur Lewis came as his deputy and David Owen became his associate administrator when the UNDP was formed was almost too much of a good thing; I felt thoroughly enthusiastic about this addition to the U.N. family.

But I am running ahead of my story. In 1949 the U.S. and U.K. argument that the World Bank was an “experienced,” “well-established” development agency whereas a new U.N. agency would be new and untried was

53. *The World Bank since Bretton Woods*, pp. 347–49; p. 380 on the “persistent peaceful pressure” in the United Nations; p. 386 on how IDA “offset the urge for SUNFED”; on p. 592 they state: “The General Assembly and ECOSOC were severely critical of the Bank during the first post-war decade, but in the process helped to create a climate suitable for the establishment of the IFC and IDA as affiliates of the Bank.”

54. *Ibid.*, p. 347: UNEDA and SUNFED “were so repugnant to conservative Secretaries of the U.S. Treasury that, by comparison, the notion of an IFC came in time to seem positively attractive.”

55. Escott Reid, *Strengthening the World Bank* (Chicago: Adlai Stevenson Institute, 1973), p. 134.

56. I should make it clear that I did not join the staff of the Special Fund but remained in the Department of Economic Affairs. I did, however, undertake a number of assignments for the Special Fund/UNDP, especially the establishment of the first country program, for Kenya.

not in fact particularly convincing. The World Bank then had little experience in development matters, as distinct from reconstruction. Ten years later when the United States and United Kingdom abandoned their opposition to the principle of soft financing, the case for relying on the experience of the Bank had, of course, become much stronger. So the objection to a new U.N. agency was sustained, and Eugene Black could make his "180 degree shift" in favor of soft loan financing.<sup>57</sup> When the objection to soft financing was dropped, the argument for it was first strongly linked with the concept of infrastructure or "non-self-liquidating" projects, necessary to make agricultural and industrial investment productive though not themselves directly productive. For some time, the hope was that a special financing agency for infrastructural investment would be accepted, but this idea never took off.

In 1951 there came weighty support for the UNEDA idea from the expert group submitting a U.N. report on *Measures for the Economic Development of Under-Developed Countries*.<sup>58</sup> This group was a forerunner of the Pearson and Brandt commissions in the wide scope of its terms of reference. In fact, at this point UNEDA became IDA (International Development Authority, not "Association" as in the later World Bank IDA). This U.N. version of IDA was to distribute "grants-in-aid for specific purposes" and to verify their proper utilization. The 1951 group also proposed a target of \$1 billion annually for intensified lending by the World Bank, this target to be reached within five years. Thus the 1951 report, while proposing a new U.N. agency, was anxious to avoid any impression of competition or substitution between the World Bank and the new Authority. But this was not enough to overcome the objections of the main donors at the 1951 ECOSOC and General Assembly, although a majority vote of the General Assembly asked for studies on the detailed plan which would govern the detailed rules and operations of a new "special fund." This then became the origin of the Special Fund, although the latter had quite different functions. As often in the United Nations, the label survived even if the substance did not. UNEDA had become IDA and then became the Special Fund, soon to become SUNFED. My own work for the next few years centered on preparing reports on the Special Fund and working with the various rapporteurs, committees, groups, and bodies concerned with the Special Fund.

SUNFED made its appearance in 1953 in the title of the report of the "Committee of nine distinguished persons."<sup>59</sup> Since the word SUNFED became a highly emotionally charged battle cry and since the "initials had

57. Mason and Asher, *The World Bank since Bretton Woods*, p. 383.

58. Document E/1986, no. 1951.II.B.2 (New York: United Nations, 1951).

59. *Report on a Special United Nations Fund for Economic Development*, document E/2381, no. 1953.II.B.1 (New York: United Nations, 1953).

some appeal” and “played a significant part in the debates which followed,”<sup>60</sup> perhaps a minor footnote to the history of the initials may be permitted. The subject of the report was originally called the “United Nations Fund for Economic Development.” It was only shortly before translation and printing was due that it was realized (I believe by me) that the initials of this new animal would read UNFED. That was too close to the truth and would no doubt be used by critics (including the World Bank) to discredit and ridicule the whole idea. So at the last minute it was decided to come back to the “special fund” (in the lower case) on which the general resolution of 1951 had requested studies. Thus “Special” was rapidly prefixed, and UNFED became SUNFED. SUNFED seemed to have a nice science-fiction flavor (or perhaps we would today call it an environmental flavor). The opponents of the proposal used this science-fiction association to criticize the proposal for its starry-eyed absence of anything down-to-earth. Perhaps it would have been better to stick to UNFED, thus proclaiming ourselves as realists!

Subsequently in 1953–55 the negotiations, at the specific request of the General Assembly, became largely the responsibility of M. Raymond Scheyven of Belgium, at that time the president of ECOSOC. I continued to work under his direction and that of various ad hoc bodies looking into specific aspects. One aspect was the financing of SUNFED by savings from disarmament—a proposal renewed twenty-five years later by the Brandt Commission. During this period, the Nordic countries and the Netherlands emerged as supporters of SUNFED, establishing a special position friendly to that of the LDCs which they have maintained ever since. It was also in casting around for possible financing for SUNFED that I became very interested in 1954 in the establishment, under Public Law 480, of the U.S. food aid program and in the possibility of an international food aid program which had begun to emerge in Rome.<sup>61</sup> This interest led to my involvement in laying the ground for the U.N./FAO World Food Programme,<sup>62</sup> and it has remained an active interest.

After several years of delaying action and play-acting—too tedious to report in detail but essential to keep the idea alive—a stage was finally reached in 1956 when a statute for SUNFED was to be drafted by a

60. Hadwen and Kaufmann, *How United Nations Decisions Are Made*, p. 90.

61. Probably first in the minds of S. R. Sen, then director-general of the FAO, and Mordecai Ezekiel, his economic adviser. I believe Thomas Balogh (Lord Balogh) was also involved. There was also a direct link with the local counterpart funds arising from P.L. 480 and the financing of IDA. See Mason and Asher, *The World Bank since Bretton Woods*, pp. 381–87.

62. As chairman of the committee which prepared the report “Development through Food.” V. K. R. V. Rao, the originator of the UNEDA proposal, was a member of this committee, thus further emphasizing the link between food aid and the soft financing movement.

governmental committee under the chairmanship of U Thant (then Burmese delegate to the United Nations, soon to become secretary general<sup>63</sup>—a treasured relationship for me. Once matters had reached this stage, some kind of action became inevitable, and the little groups of SUNFED activists for the first time felt that all our efforts, and all the abuse, over eight years or so had not been totally in vain. The return for the United Nations itself began to emerge clearly at that time when, as a compromise solution, the financing of project studies and analysis, natural resource surveys, and pilot projects was proposed and accepted. The decisive break was the proposal by Paul Hoffman in 1957 (in an article in the *New York Times Magazine*) proposing a U.N. experimental fund of \$100 million for surveys of natural resources and pilot projects. This represented an emphasis on the borderland between technical assistance and investment, and on this basis I helped develop the concept of pre-investment activities (in a paper entitled: “An Example of the New Pragmatism: Toward a Theory of Pre-investment”).<sup>64</sup> There were some analogies to the infrastructure concept: just as the development of infrastructure is a precondition for agricultural and industrial activities, so pre-investment activities are necessary for any form of investment, including investment in infrastructure. This proposal by Paul Hoffman was readily acceptable to both the proponents and opponents of SUNFED, and both camps could hail it as a victory. In fact, it was more a victory for the opponents. Mason and Asher, with some justification, described the blowing-up of the pre-investment function as “a mystique well beyond its intrinsic importance in the investment process.”<sup>65</sup> However, I would argue that from the point of view of the United Nations rather than the World Bank it was a politically necessary and useful “mystique.” That the United Nations should emerge with the minor prize was inevitable, given the distribution of political support. The proponents obtained the terminological satisfaction of preserving the blessed name of Special Fund for the new mechanism, and they could save face by maintaining that the Special Fund was a step toward SUNFED.<sup>66</sup> Shortly they would obtain the more substantive satisfaction of seeing the principle of multilateral soft loan financing accepted, although not under the umbrella of the United Nations. The day came when this was no longer “unpractical” but became “responsible.” Apparently, what had been

63. *Final Report of the Ad Hoc Committee on the Question of the Establishment of a Special United Nations Fund for Economic Development*, General Assembly document A/3579 and Add.1 (New York: United Nations, 1957). Johan Kaufmann was the rapporteur of this committee.

64. Reprinted as chap. 2 in H. W. Singer, *International Development: Growth and Change* (New York: McGraw-Hill, 1964). Not surprisingly, Paul Hoffman picked this chapter out in his introduction to the book.

65. *The World Bank since Bretton Woods*, p. 592.

66. In fact, on paper this was the case since a U.N. Capital Development Fund was set up.

“unpractical” had never been the principle, but the machinery proposed—though this was not how the matter was put in earlier years. All’s well that ends well? Let us hope that both IDA and the UNDP will survive and grow to give a positive answer to that question.

It would be nice to end on such a happy note, but if I am honest, as an autobiographer should be, I cannot suppress one slightly sour postscript. I have already noted the full—and in my mind correct—emphasis given to the SUNFED pressure in the history of IDA (and IFC) by Mason and Asher in their *World Bank since Bretton Woods*. But when Dag Hammarskjöld, presumably with the U.N. role in creating IDA in mind, asked Eugene Black for a “special institutional link” between the IDA and the United Nations, “President Black politely but firmly rejected this suggestion.”<sup>67</sup> A pity. That could have been the perfect happy ending. Although Eugene Black acknowledged in his reply that “clearly the creation of the IDA will intensify the need for close cooperation at the working level,” the liaison committee established as a result, in the laconic words of Mason and Asher, “is now inactive.” Need I add that since these words were printed (in 1973) this committee has remained inactive? So SUNFED/IDA did not really bring the United Nations and the World Bank together. And now an old pioneer’s memory nerves twitch when he sees the Brandt Commission (Mr. McNamara’s own brainchild) propose a World Development Fund—over the objections of the World Bank. Perhaps the threat of the World Development Fund will once again serve to rescue the ailing IDA? Or will there be other “180 degree shifts”? No projections are ventured.

67. All quotations in this paragraph are from Mason and Asher, *The World Bank since Bretton Woods*, p. 569.

# Comment

Bela Balassa

DR. SINGER'S BEST-KNOWN PAPER is "The Distribution of Gains between Investing and Borrowing Countries," presented at the December 1949 meeting of the American Economic Association and published in the *American Economic Review* of May 1950. The paper has been reprinted in practically all readings volumes on economic development and has been read by an untold number of students. It has also led to the pairing of Singer's name with that of Raúl Prebisch, in referring to the Prebisch-Singer thesis on the alleged tendency for the secular decline of the terms of trade of the developing countries. The terms of trade issue was central to Singer's 1950 article as it is to his present paper.

Singer suggests that "treated as a projection, one can certainly claim that [the historical downward trend in terms of trade for primary products exported by developing countries] has passed the test better than most other economic projections." He further submits that "the terms of trade of Third World countries have declined in relation to those of industrial countries, even if the analysis is restricted to trade in manufactured goods only or to primary commodities only." These differences are said to be reinforced by "the lower proportion of manufactures in total exports of LDCs (for which unit values have increased more), and a higher proportion of primary commodities in their exports (for which unit values have increased less)," with the extent of the deterioration of the terms of trade being greater at lower levels of development. I will submit these propositions to scrutiny.

The first question relates to the choice of the time period. Singer states that "in this paper we are concerned only with the implicit postwar projection from the 1949–50 paper onward, not with the entire 1900–70 period." At the same time, results for a relatively short period are affected to a considerable extent by the choice of the initial and the terminal years. In the present case, the choice of the initial year introduces a bias as, in conforming to the old adage "what goes up, will come down," primary

Bela Balassa is Professor of Political Economy at Johns Hopkins University and consultant to the World Bank.



product prices could not have remained at the lofty levels reached during the early 1950s, the period of the Korean war. At any rate, just as Prebisch has done, in his original article Singer considered long-term tendencies; hence, in judging the validity of the proposition, data for a longer period would be needed.

The only terms of trade estimates pertaining to a longer period that Singer cites are those reported by Spraos for 1900–70. According to Singer, “even if the individual trends [Spraos] calculates are statistically insignificant when taken one by one, the fact that they all point in the same direction surely adds significance.” However, the individual results do *not* point in the same direction. The trend coefficient derived by the use of the U.N. index is positive, representing a terms of trade improvement for the developing countries; a negative result is obtained only if the U.N. index is spliced to the World Bank’s index for the postwar period. We thus have a positive and a negative result, neither of them statistically significant, which hardly establishes a trend.<sup>1</sup>

The U.N. statistics utilized by Spraos uniformly employ unit value indices.<sup>2</sup> Yet, as a succession of writers have pointed out, changes in *unit values* do not appropriately represent changes in *prices*, and lead in particular to an overestimation of increases in the prices of manufactured exports. This is hardly surprising if we consider that, for example, the unit value of machinery is measured as the ratio of value to weight, so that a *shift toward lighter materials ipso facto raises unit values*.

Singer dismisses these objections, claiming that Spraos “has shown convincingly that these difficulties of measurement do not go to the heart of the matter, even empirically.” In so doing, Singer—as well as Spraos—have overlooked the monumental work of Kravis and Lipsey, who painstakingly collected price observations for the exports of metal products by the United States, the United Kingdom, the Federal Republic of Germany, and Japan. The export price indices derived from the data show a 13 percent average increase in the prices of machinery and transport equipment between 1953 and 1964, compared with a 24 percent rise in the U.N. unit value index for the same product categories.<sup>3</sup>

Kravis and Lipsey have subsequently extended the country, commodity,

1. J. Spraos, “The Statistical Debate on the Net Barter Terms of Trade between Primary Commodities and Manufactures,” *Economic Journal*, vol. 90 (March 1980), table 2. Spraos notes that combining the U.N. index with the one constructed by Yates for the 1913–53 period would give rise to an upward adjustment in the prices of manufactured goods, but this index has a low level of reliability and using the calculations made by Maizels would involve a downward adjustment of the same order of magnitude (*ibid.*, pp. 124–25).

2. The World Bank utilized a unit value index for manufactured goods and a price index for primary products.

3. Irving B. Kravis and Robert E. Lipsey, *Price Competitiveness in World Trade* (New York: National Bureau of Economic Research, 1971), table 8.8.

and time coverage of their investigation and have estimated a price index for manufactured goods exported by the developed countries to the developing countries. The index shows a 127 percent increase between 1953 and 1977, the time period covered by the estimates, compared with a rise of 162 percent in the U.N. unit value index for these exports. Deflating by the U.N. price index for the world exports of primary products other than petroleum, the authors find that the terms of trade of manufactured goods exported by the developed to the developing countries, relative to the prices of nonfuel primary products, declined by 6 percent during the period. This compares with an increase of 13 percent estimated from the U.N. unit value indices for manufactured goods and for food and raw materials.<sup>4</sup>

I have adjusted the Kravis-Lipsey estimates by replacing the U.N. price index for the world exports of primary commodities other than petroleum by the price index estimated by the World Bank for thirty-three nonfuel primary commodities, weighted by the exports of the developing countries. The index shows an average price increase of 154 percent for these primary products between 1953 and 1977 compared with an increase of 145 percent in the U.N. index.

Utilizing the World Bank's index, then, we observe a decline of 10 percent in the terms of trade of the developed countries in their exchange of manufactured goods for primary products other than fuels with the developing countries during the 1953–77 period. An even larger decline is shown if adjustment is made for quality change. In the case of the United States, where Kravis and Lipsey made such estimates, a 105 percent rise in the unadjusted price index for machinery and transport equipment in 1953–76 gives place to a 77 percent increase in the adjusted index—a downward adjustment of 14 percent.<sup>5</sup>

The comparison of the U.N. and the World Bank indices points to the conclusion that the prices of nonfuel primary products exported by the developing countries rose more rapidly than average world primary product prices during the period under consideration. This conclusion is confirmed by Michaely's estimates that show unit value indices for primary products exported by low-income countries to have risen by 27 percent between 1952 and 1970, compared with an increase of 10 percent for primary products exported by high-income countries. Michaely's results further show a 27 percent improvement in the terms of trade for primary

4. Irving B. Kravis and Robert E. Lipsey, *Prices and Terms of Trade for Developed-Country Exports of Manufactured Goods*, National Bureau of Economic Research Working Paper no. 774 (Cambridge, Mass., September 1981), tables 1, 5, and 6.

5. Bela Balassa, *Adjustment to External Shocks in Developing Economies*, World Bank Staff Working Paper no. 472 (Washington, D.C., July 1981), table 3.

products in the case of low-income countries, compared with a 23 percent deterioration for high-income countries, during the period.<sup>6</sup>

The unit values of manufactured goods exported by low-income countries also increased more rapidly (45 percent) than those exported by high-income countries (19 percent) between 1952 and 1970. In the same period, the terms of trade for manufactured goods improved by 14 percent in low-income countries and deteriorated by 12 percent in high-income countries.

For all merchandise trade taken together, Michaely has observed an improvement of 19 percent in the terms of trade for the low-income countries, and a deterioration of 15 percent for the high-income countries, during the 1952–70 period. He has further established that terms of trade changes are negatively correlated with income levels in a fivefold classification scheme: the changes between 1952 and 1970 were –26, –11, –8, +11, and +47 percent as one moves from the top to the bottom quintile.<sup>7</sup>

Michaely's results thus reinforce the findings of Kravis and Lipsey and indicate that the developing countries have improved their terms of trade relative to the developed countries in the post-Korean war period. It is further observed that primary and manufactured commodities exported by the developing countries increased more in price than goods in the same categories exported by the developed countries and that improvements in the terms of trade were inversely correlated with the level of economic development.

These results pertain to the post-Korean war period, for which Kravis and Lipsey have collected price observations. Although the period is relatively short, it begins with high primary product prices, as noted above. Kravis and Lipsey have further calculated changes in the terms of trade between "Industrial Europe" and the developing countries, by replacing the world export unit value indices of the United Nations with unit value indices for the manufactured exports of Industrial Europe to the developing countries and for the primary imports of Industrial Europe from these countries in the 1872–1953 period.

The results show no change in the terms of trade of Industrial Europe relative to the developing countries between 1872 and 1953.<sup>8</sup> In view of

6. More exactly, the calculations pertain to price changes for goods classified by income level, when the income level of exports (imports) is derived as an income-weighted average of exports by individual countries. The cited results refer to data for the lower half and the upper half of the distribution. The relevant formulas are provided in Michael Michaely, "The Terms of Trade between Poor and Rich Nations," in *Trade, Income Levels, and Dependence* (Amsterdam: North-Holland, forthcoming).

7. *Ibid.*, table 2.

8. Kravis and Lipsey, *Prices and Terms of Trade for Developed-Country Exports of Manufactured Goods*, table 7.

the upward bias of the unit value indices for manufactured goods, it follows that the use of price indices would show a deterioration in the terms of trade of Industrial Europe, and an improvement in the terms of trade of the developing countries, during this period.

The cited estimates effectively refute the Prebisch-Singer thesis on the alleged tendency for the secular deterioration of the terms of trade of the developing countries. This is not to say that particular countries may not experience a deterioration in their terms of trade. Thus, the oil-importing developing countries have suffered as a result of the tenfold rise of petroleum prices since 1973.

But how about the choice of appropriate policies for the developing countries? Singer suggests "in defense of the 1949–50 paper [that] this was meant much less as a projection than as a *policy guide*. The developing countries were advised to diversify out of primary exports wherever possible, by development of domestic markets and by industrialization, either import-substituting (ISI) or export-substituting or a combination of both." One finds no prescription for export expansion in the 1949–50 article or in any of the contributions to the Prebisch-Singer thesis, however. Rather, the prescription—widely cited in the literature—called for introducing an anti-export bias in the system of incentives, with a view to improving the terms of trade of the developing countries and accelerating their economic growth.

This policy prescription failed to consider that, apart from petroleum, there are few commodities whose prices the developing countries could increase and thereby reduce the volume of their exports. Even in the case of tropical beverages, for which such action may be effective, repeated attempts made by the producing countries have not led to an agreement by reason of their different economic interests.

In regard to the large majority of primary commodities, the anti-export policies applied have led to a decline in the world market shares of the developing countries. Singer takes note of this decline, claiming that "volume changes have increased any gap created by the worsening terms of trade, and in that sense trade pessimism has not been proved wrong," without recognizing that it was the policies many developing countries followed in application of the Prebisch-Singer prescription that led to such a result. He also resurrects the old shibboleth about the possible adverse effects of trade on economic growth in the developing countries. Theoretical considerations as well as the evidence of the last quarter of the century indicate, however, that it is anti-export policies that have adverse effects on economic growth.

Johnson has shown that, in countries that are price-takers in world markets, the protection of the capital-intensive industrial sector under incomplete specialization may lead to immiserization in the event that the

rate of capital accumulation exceeds the rate of growth of the labor force.<sup>9</sup> This possibility becomes a certainty if foreign capital is invested in the protected industry and it receives the full (untaxed) value of its marginal product at protection-distorted prices.<sup>10</sup>

It has further been observed that export expansion and economic growth in the developing countries are positively correlated. This was the case in the pre-1973 period, characterized by the rapid expansion of world trade, as well as in the post-1973 period, characterized by external shocks in the form of the quadrupling of petroleum prices and the world recession.<sup>11</sup> Apart from the gains from international specialization according to comparative advantage, the results reflect the fact that export expansion permits utilizing large-scale production methods and attaining higher levels of capacity utilization, with the “stick and carrot” of foreign competition providing further inducements for technological improvements.

Nor has export expansion been limited to the Gang of Four (the Republic of Korea, Taiwan, Hong Kong, and Singapore) as Singer alleges. In the mid-1960s several major Latin American countries, including Brazil, reduced the anti-export bias of their incentive system, with favorable effects for exports and economic growth. In the mid-1970s Chile and Uruguay, and in the early 1980s Turkey, made the shift from inward to outward orientation.

And although no one would suggest that all developing countries should aim at the high export shares of the four East Asian economies, of which two are city-states, I have shown that an annual rate of growth of 12.5 percent in the manufactured exports of the developing to the developed countries between 1978 and 1990 would not lead to an absolute decline in the production of any of the industries of the latter.<sup>12</sup> At the same time, it should be remembered that developing countries do not tend to accumulate reserves, so that increases in their export earnings are spent on imports, mostly from developed countries. Thus, even though a rate of export expansion in excess of 12.5 percent may lead to temporary disloca-

9. H. G. Johnson, “The Possibility of Income Losses from Increased Efficiency or Factor Accumulation in the Presence of Tariffs,” *Economic Journal* (March 1967).

10. R. A. Brecher and C. F. Diaz Alejandro, “Tariffs, Foreign Capital, and Immiserizing Growth,” *Journal of International Economics* (November 1977).

11. Gershon Feder, “On Exports and Economic Growth,” *Journal of Development Economics* (February–April 1983); and Balassa, *Adjustment to External Shocks in Developing Economies*.

12. “Prospects for Trade in Manufactured Goods between Industrial and Developing Countries, 1978–1990,” *Journal of Policy Modelling* (September 1980); republished as Essay 9 in *The Newly Industrialized Countries in the World Economy* (New York: Pergamon, 1981).

tion in the developed countries, both groups would benefit from increased trade through the exploitation of their comparative advantage.

Comparative advantage is changing over time, with the export structure being upgraded in the course of economic development. In addition to Japan, which has progressed from the exportation of unskilled labor-intensive commodities to high-technology products, the relevance of the "stages approach" to comparative advantage is apparent in developing countries at different levels of industrialization as well as in a cross-section relationship.<sup>13</sup>

The application of the stages approach to comparative advantage also indicates the possibilities for trade among the developing countries. These possibilities are far from being realized today, largely because high protection in many of these countries tends to discriminate most heavily against countries at similar, or at lower, levels of development. The adoption of an outward-oriented development strategy, involving a reduction in the bias against exports and in favor of import substitution, would thus contribute to increased trade among the developing countries themselves.

The adoption of an outward-oriented strategy would also involve reducing the bias of the incentive system against primary activities. Such a change in incentives would promote exports as well as import substitution in primary products, in particular food and fuels. But efficient import substitution may also occur in manufactured goods, such as machinery, that often suffer discrimination in developing countries.

These considerations may explain why, in the 1973–78 period, outward-oriented developing countries not only were more successful in increasing their exports but also did better in import substitution than inward-oriented economies. As a result, their economic growth accelerated while GDP growth rates declined under inward orientation.<sup>14</sup>

It follows that, if appropriate domestic policies are applied, export expansion and efficient import substitution will go hand in hand. At the same time, in industries that need to be promoted as "infant industries," the measures of promotion should extend to exports, lest high-cost import substitution occur in the confines of small domestic markets. But the infant industry argument does not imply that unrestricted trade would lead to losses to one of the partners or that delinking would be an appropriate strategy as Singer suggests.

I now come to the second half of the title and of the paper, the evolution of soft financing. According to Singer, "ODA, or aid . . . was in fact the natural avenue to which the interest of the United Nations, and my own

13. Bela Balassa, "A 'Stages Approach' to Comparative Advantage," in *Economic Growth and Resources*, Vol. 4, *National and International Issues*, Irma Adelman, ed. (London: Macmillan, 1979); republished as Essay 6 in Bela Balassa, *The Newly Industrialized Countries in the World Economy*.

14. Balassa, *Adjustment to External Shocks in Developing Economies*.

with it, turned . . . as a result of trade pessimism.” Although one cannot consider foreign aid as a compensatory measure for a decline that did not in fact occur in the terms of trade of the developing countries, it may usefully complement trade in particular in countries at lower levels of development.

One should, however, put into perspective the relative importance of trade and aid. In 1979 official development assistance amounted to \$28 billion while the nonfuel exports of the developing countries to the developed countries were \$116 billion and nonconcessional flows, largely private capital, \$53 billion. Although some authors have pointed to the possibly adverse effects of foreign aid on production and on savings, these adverse effects can be avoided if appropriate domestic policies are followed.

More generally, as the example of the sub-Saharan African countries discussed in the so-called Berg report indicates,<sup>15</sup> the effective use of foreign aid also presupposes the application of appropriate domestic policies by the developing countries. IDA—and the World Bank in general—can continue to play an important role in this regard, not only because of its professionalism and apolitical character, but also because of the emphasis on improving the domestic policies of the recipients, including the increased outward orientation of their economies.

15. World Bank, *Accelerated Development in Sub-Saharan Africa: An Agenda for Action* (Washington, D.C., 1981).