

UNIHP: Volume 2: Trade, Finance and Development

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Chapter 3: The Early Terms of Trade Controversy

By the late 1940s, one of the main political results of the Second World War had become apparent, an increasing differentiation of the power relations of the countries of the world. Europe was now divided, and Western Europe needed massive foreign aid for reconstruction. The Marshall Plan, followed by the establishment of NATO, “began in earnest an era of American military, political and economic dominance over Europe”¹. The Soviet Union, having demonstrated its atomic capability, had just joined the US as the second ‘Super-power’. Japan, defeated, was only just beginning to switch its energies from military to economic efforts. The other countries of the world, in the rest of Asia, in Latin America and in what was still colonial Africa², were not ‘Powers’ of any sort, and were for the most part wretchedly poor. The new UN fora had allowed them to find their voice in international economic affairs, and to begin to articulate a view of their own situation. This modest progress was, however, far out-distanced by the great leap in the exercise of worldwide power made by the United States. In this broader context of growing imbalance in the power of nations, it is possible to discern in the controversy over the trend in the terms of trade not only a lively academic debate, but also the emergence of an economic metaphor for these changing political realities.

Despite the increasing political differentiation of the time, the UN still represented the idealism of its wartime origin, and was indeed the most advanced institutional embodiment of mankind’s aspiration to unity. As Hans Singer later recalled, “the UN was the home of mankind . . . it was then at the centre of the international organisations, (while) the Bank and the Fund were very much on the periphery in

¹ S. E. Ambrose, *Rise to Globalism: American Foreign Policy since 1938*, New York, Penguin, 7th revised edition, 1993, p. 101.

² The whole of colonial Africa continued to be dealt with by the UN Trusteeship Office, under Ralph Bunche. This was quite separate from the UN Economics Department, whose work on terms of trade is discussed in this chapter.

those days”³. In the years before the advent of McCarthyism in early 1950, the UN Secretariat still had the self-confidence to raise issues and concerns about forces that might undermine the path towards that unity. On the economic side of the Secretariat, economic issues and economic methodology were naturally to the fore. This sadly did not last long. The publication of the Prebisch-Singer thesis coincided with the start of Senator McCarthy’s anti-Communist scare. The Secretary-General of the UN, Trygve Lie, then caved in to US pressure to allow UN employees who were US nationals to be investigated by the Committee on Un-American Activities. This failure to defend the independence and integrity of the UN had a profound effect⁴. The organisation was cowed, and the expression of ideas repugnant to McCarthy and his followers was discouraged. In this atmosphere, the debate about the movement of the terms of trade, although too academic to cause official displeasure, could serve as a lightning conductor for more general anxieties about the intellectual consequences of the United States’ new economic and political dominance.

Although its first confident vigour was gone, the UN still provided a good platform. Hans Singer himself has claimed that “the Prebisch-Singer-Myrdal thesis of ‘inward-looking’ industrialization (through a suspension of the free play of international market forces) provided academic support to the growth of economic nationalism in the newly independent countries and got much publicity through the UN connections of Prebisch, Singer and Myrdal”. He notes also that this trio was known in the UN as “the Golden Triangle”. As a result, the dissemination of the academic ideas was powerful, and there are few development economists who have never written a passage about the Prebisch-Singer thesis⁵. The self-appointed defenders of economic orthodoxy were, for their part, not slow to respond, producing a fierce and multi-faceted controversy that still continues.

The Terms of Trade in Classical Political Economy

The UN provided the medium, but the message itself was arresting. In effect, though without any explicit recognition of it, the Prebisch-Singer thesis contradicted a long tradition of contrary belief amongst economists, including Keynes. The C19th

³ Hans Singer interview with Richard Jolly, October 11, 1995.

⁴ “The UN Secretariat has never recovered from those three or four years . . . The self-confidence went out of the Secretariat. Before that, we were a civil service of the world . . . After that the Secretariat became a technical thing, servicing committees, the development of new ideas became discouraged.” Hans Singer in interview with Richard Jolly, October 13, 1995.

⁵ H. Singer with D. Sapsford and P. Sarkar, ‘The Prebisch-Singer terms of trade controversy revisited’, in H.W. Singer, *Growth, Development and Trade: Selected Essays of Hans W. Singer*, Cheltenham, Edward Elgar, 1998, p. 141.

English political economists believed that the terms of trade of industrial manufactures relative to agricultural produce would tend to decline. This belief, largely forgotten by the mid-twentieth century, under-pinned their pessimism about the sustainability of rapid population growth. That manufactures' terms of trade would decline, and that rapid population growth was therefore unsustainable, were two propositions that caused economics, early in its history, to be dubbed 'the dismal science'. The link between the two was the doctrine of the tendency to diminishing returns in agriculture, while industry was subject to increasing returns. Economists generally held the view that agriculture (and mining) was essentially different from all other kinds of economic activity. The difference was taken to be that both extension of the cultivated (or mined) area, and the more intense cultivation (or mining) of an existing unit of land, were operations in which *ceteris paribus* increasing applications of labour and capital would necessarily produce diminishing returns. The classical political economists took land to be the only factor of production whose supply was fixed. This supposition justified their long held distinction between agriculture (and mining) and manufacturing industry, and led the great economic thinkers to develop a problematic which included the expectation of declining terms of trade for industry. One may describe this expectation as "the Cambridge doctrine of the terms of trade"⁶.

The classical doctrine envisaged that agricultural technology could improve, and that any technical improvements had the effect of offsetting the cost increases caused by diminishing returns. Industrial operations, by contrast, had no tendency at all to diminishing returns. Even in the absence of technical progress, scale expansion brought increasing returns. An "old" economy, whose main economic sectors operated in this way, however, seemed to face potentially serious welfare problems if the growth of its population began to accelerate. This was because, once the land was fully settled, further increases in the population could be accommodated only by the expansion of manufacturing sector employment. This would then depress the sector's terms of trade *vis à vis* the agricultural sector. Since agricultural products, in the form of food, were the major component of the consumption basket of the industrial labour force, rapid population growth would prevent a rise in the standard of living of the mass of the people. Then the excess population would sooner or later fall prey to the positive checks of famine and disease. If these positive checks were held in abeyance by the import of cheap food from abroad, the expedient could be only temporary, as the supply of cheap imported food was bound to dry up, as the

⁶ The justification for this usage is that the doctrine originated with Malthus, and continued to flourish among Cambridge economists, including Keynes and several of his junior colleagues, when abandoned by others. For more extended discussion, see John Toye, *Keynes on Population*, Oxford, Oxford University Press, 2000, Chapter 1.

exporting countries themselves industrialised and absorbed their own food supply. Ultimately, there was, it was held, no way to avoid a crisis of immiserisation.

Before examining how, at the end of the 1940s, Hans Singer together with Raúl Prebisch came to contradict the Cambridge doctrine, it is worth noting that the basic framework of ideas remained remarkably stable throughout the entire century and a half from Malthus to Keynes. However, the degree of anxiety expressed about the consequences of rapid population growth, did vary, on the whole becoming less acute throughout the nineteenth century, mainly in response to the historical unfolding of key developments in the economic relations of Europe and America⁷. The particular positive influences were the increasing availability of cheap American cereals, and the capacity of America to absorb large and increasing numbers of European migrants. Then Keynes, just before the First World War, sounded the alarm once again about the vulnerability of European growth and accumulation to the drying up of cheap imported food supplies.

Malthus's *Essay on the Principle of Population* already asserted the law of diminishing returns in agriculture⁸. By 1803, Malthus had raised the question of the balance between the agricultural and industrial sectors in Britain, suggesting that the latter had become disproportionately large. The idea that the two sectors of the national economy should be "balanced" led Malthus to support the Corn Laws, in order to protect agriculture. Others disputed the notion of sectoral balance. Why not break the constraint on the supply of the means of subsistence by importing food, and then use the food to expand the population working in the manufacturing sector and reap the benefits of a consequent increase in the international division and specialisation of labour? Malthus believed that America would inevitably industrialise in its "natural progress to wealth", and absorb its own food supplies⁹. Then the "retrograde movements" that would afflict Europe would include, he expected, a decline in the manufacturing terms of trade.

Hans Singer, in his own later writings, drew attention to the line of classical political economists who believed that growth in already developed countries would sooner or later succumb to some kind of obstacle, or come up against some kind of ceiling.

⁷ In English classical political economy, a recurring contrast is made between the economics of "old countries", meaning long settled and having population and capital accumulation closely adjusted to natural resources, and "new countries", meaning in the process of settlement and therefore without that close adjustment. The geographically vague terms "Europe" and "America" were often used to exemplify this contrast. "England" was sometimes used in this sense instead of "Europe".

⁸ James, 1989: I, 13.

⁹ James, 1989: II, 64-5.

However, one should not exaggerate the unanimity of their views. Ricardo, for example, was exceptionally optimistic about the availability of cheap importable food, and that led him to oppose the Corn Laws¹⁰. John Stuart Mill firmly relied on the law that “the produce of the land increases, *ceteris paribus*, in a diminished ratio”, which he regarded as “the most important proposition in political economy”¹¹. He taught that, when population growth exceeds the current optimum, the terms of trade of manufactures against raw produce have “a certain and decided tendency to fall”.

Keynes’s Revival of the Cambridge Doctrine

Malthus's “unquestionable truth” that an industrialising America would withdraw its corn from Europe was re-introduced into public debate before the First World War. It was the young Keynes who, above all, sounded this particular alarm. Keynes believed that Europe was over-populated, and that the evidence should be sought in statistics of the unit values of manufactured exports, relative to the unit values of food imports. Moreover, he thought that he had found it, in the UK Board of Trade’s annual return of export and import statistics for 1900-11 showing that “the operation of the law of diminishing returns for raw products” had been “setting in sharply in quite recent years”¹². Citing A. L. Bowley’s ‘ratio of export index to import index’, Keynes identified the beginning of the twentieth century as the starting point of the adverse trend¹³. According to him, the period of grace foreseen by Marshall had already come to an end.

After the First World War, in *Economic Consequences of the Peace* (1919), Keynes discussed the pre-1914 economic system, and in particular Europe’s economic relations with America. He granted that, from 1870 to 1900, population increase in Europe and America was more than validated by growth in the available food supply - “as numbers increased, food was actually easier to secure”. He then repeated the claim that, after 1900, “a diminishing yield of nature to man’s effort was beginning to reassert itself”, as evidenced by the rising real cost of American cereals. No figures to validate the claim of a rising real cost of North American cereals appear in the published version of *Economic Consequences*. Keynes initially included a table purporting to show an upward trend, but then he omitted it¹⁴.

¹⁰ This view, however, goes somewhat counter to that expressed by Hans Singer (1975: 1-2).

¹¹ This quotation is taken from Hollander, 1985: I, 212.

¹² JMK, xi: 221.

¹³ A. L. Bowley, ‘The Price of Imports and Exports of the United Kingdom and Germany’, *Economic Journal*, 12, 1903, p. 628

¹⁴ Toye, *Keynes and Population*, p. ?

This very issue was the subject of Keynes's debate with Sir William Beveridge in 1923-4. Although Beveridge's general reaction to *Economic Consequences* was favourable, he objected specifically to Keynes's statements on the declining manufacturing terms of trade and their implication for the future welfare of the population. So in 1923, Beveridge publicly demonstrated that Keynes's result followed from his splicing of two indices which were not equivalent, which neglected the change in the composition of manufactured exports, and which covered only between 65 and 50 percent of all UK manufactured exports. The "1900 turning point" was thus shown up as a statistical artefact¹⁵.

More importantly, Beveridge pointed out that Keynes's argument confused the falling purchasing power in terms of food of a manufactured item with the falling purchasing power over food of a unit of labour applied to manufacture. He correctly argued that a downward drift in the former was compatible with an upward drift in the latter when technical progress was achieving increasing returns to labour in manufacturing¹⁶. Keynes's argument could not be sustained¹⁷. The essential point was that, even if the commodity terms of trade were to move in favour agricultural products, this would be more than offset by faster technical progress in manufacturing, and the consequent movement of the double factorial terms of trade in favour of industry.

What was Keynes's own position on the terms of trade in the 1930s? Hans Singer later recalled that by this time Keynes "shared the idea that primary prices would have a long-run downward trend", in the context of his advocacy in 1938 of buffer stocks of primary commodities¹⁸. It was because of his belief in the downward price trend, Singer argued, that Keynes thought that industrial countries "had nothing to worry about in (schemes for) reducing instability and fluctuations around the trend"¹⁹. The buffer stock proposals (another was made in 1942²⁰) do not explicitly say this, however. The 1938 proposal is to subsidise commodity storage costs in the UK, to induce Empire governments to hold their stocks in Britain, rather than abroad, as a form of insurance against wartime disruption of supplies. Moreover, it would, to say the least, detract from the originality of Singer and Prebisch if Keynes had already had the idea of a long-term downward trend in primary prices.

¹⁵ W. Beveridge, 'Mr Keynes' Evidence for Over-population', *Economica*, 4: 1-20.

¹⁶ *Ibid.*, p. 14-16.

¹⁷ D. E. Moggridge, *Maynard Keynes: An Economist's Biography*, London and New York, Routledge, 1992: 345, including note o.

¹⁸ "The Policy of Government Storage of Foodstuffs and Raw Materials", a paper delivered to the British Association in Cambridge, see JMK xxi: 456-70.

¹⁹ H. Singer, "Early Years in the UN" in G. M. Meier and D. Seers (eds.), *Pioneers in Development*, New York, Oxford University Press, 1984, p. 279.

²⁰ JMK, xxvii: 136.

Nevertheless, it is not implausible that Keynes by now thought that the supply position of food and raw materials was easier than in the previous decades. He had recognised the possibility of fast technical progress in the agricultural sector. In *Economic Possibilities for our Grandchildren* (1930), he had forecast in a surprising burst of optimism that “in our own lifetimes . . . we may be able to perform all the operations of agriculture, mining and manufacture with a quarter of the human effort to which we have been accustomed”²¹. Subsequently, he had noted that technical progress in agriculture was in fact rapid in the 1930s. This would offset the tendency of diminishing returns in the sector.

The failure of effective demand in the Great Depression of the early 1930s was a second major factor in putting downward pressure on the prices of food and raw materials. Moreover, the analysis of the *General Theory* suggested that the failure of effective aggregate demand was a chronic problem of capitalist or monetary production economies, and to that extent created an expectation the recovery would be weak and that depressed conditions would periodically recur.

Thirdly, Keynes in common with most other British economists accepted the likelihood of a sudden decline in the British population starting in the 1940s. The Cambridge doctrine implied that a fall in population in a country specialising in manufactured exports would turn the terms of trade in its favour, allowing it to purchase its imports of food and raw materials from abroad on a more advantageous relative price basis. Keynes’s Galton Lecture (1937) had not discussed this, because he had used a closed economy assumption. However, subsequent analyses of the same problem by his younger Cambridge colleagues, such as Brian Reddaway²² and Joan Robinson²³ made that implication explicit.

None of these three reasons for expecting an easier commodity supply position—technical progress in agriculture, depressed aggregate demand or population decline in the industrialised country dependent on imported food – is inconsistent with the underlying theoretical suppositions of the Cambridge doctrine of the terms of trade. They merely represent temporary countervailing forces. It is a fine point, which may not have been in sharp focus when Hans Singer later recalled Keynes’s position.

²¹ JMK, ix. 325.

²² W. B. Reddaway, *The Economics of a Declining Population*, London, George Allen and Unwin, 1939, p. 218.

²³ J. Robinson, *Collected Economic Papers*, vol. 1, Oxford, Basil Blackwell, 1978, p. 132.

Other Pre-war and Post-war Discussion of the Terms of Trade

The Cambridge doctrine, inherited from Malthus, had in fact been challenged theoretically as early as 1923. F. D. Graham denied its underlying logic, on both the demand and the supply side²⁴.

“It may well be disadvantageous for a nation to concentrate in production of commodities of increasing cost despite a comparative advantage in those lines; it will the more probably be disadvantageous to do so if the world demand for goods produced at decreasing costs is growing in volume more rapidly than that for goods produced at increasing costs, while at the same time competition in the supply of the former grows relatively less intense as compared with competition in the supply of the latter. For in this case the operation of the law of reciprocal demand will throw the terms of exchange of commodities more and more to the disadvantage of the country producing the goods of increasing costs’²⁵.

The conventional wisdom rested too easily on the assumption that the demand for manufactures would weaken with every extension of the marketing of manufactured exports. It assumed a weak demand for luxuries, whereas the demand for manufactured luxuries, particularly if they are consumption novelties to the importing country, can be strong. On the supply side, the Cambridge doctrine also failed to notice sufficiently that there could be an asymmetrical change in the conditions of competition. The manufacturing sector’s falling unit costs could act as a deterrent to competition, while agriculture’s rising unit costs conversely could act as an incentive to competition, thereby widening the gap between average industrial and average agricultural prices and turning the terms of trade in industry’s favour. Thus there cannot be any presumption that improving agricultural terms of trade will automatically compensate for the declining productivity of land.

Alongside the first stirring of theoretical doubt, in practice the depression of the 1930s had created exceptionally unfavourable terms of trade for exporters who relied on agricultural products and raw materials. By 1932, export prices had fallen in Argentina to 37 percent of what they had been in 1928, and her net barter terms of trade were down to 68 from a 1928 value of 100, indicating a less precipitous fall of import prices²⁶. This had been documented by Raul Prebisch, when was he was

²⁴ Graham’s views are discussed by K. Raffer, . . . 1994, p. 75-87.

²⁵ F. D. Graham, . . . 1923, p. 213-4.

²⁶ R. Thorp, *Progress, Poverty and Exclusion: An Economic History of Latin America in the 20th Century*, Baltimore, Johns Hopkins University Press, 1998, p. 105, Table 4.1.

Director of Research at the National Bank of Argentina. He published an article in 1934 pointing out that “agricultural prices have fallen more profoundly than those of manufactured goods”, and that Argentina had to export 73 per cent more than before the Depression to obtain the same quantity of manufactured imports²⁷. At this stage Prebisch was merely noting a fact, not offering a theoretical analysis of that fact²⁸. He also saw it as a fact of depression economics, that is, as a short-run cyclical problem. He believed that the remedy was to be found in expansionary economic policies, not that it would inevitably continue unless major changes occurred in the structure of the international economy. Prebisch was an observer at the World Economic Conference in 1933, and his hitherto orthodox thinking was powerfully affected by *The Means to Prosperity*, which Keynes published at this time²⁹.

Primary commodity exporting countries like Argentina were already beginning increasingly to see their future economic security in terms of promoting industrialisation. The war years intensified the resolve of many countries that had concentrated on producing agricultural exports to industrialise their economies in order to substitute domestic production of manufactures for those that they imported. Meanwhile the experience of the war had raised their confidence that an industrialisation drive, particularly if organised by the government, could succeed. During the war, Charles Kindleberger had suggested that industrialisation was the path of the future, invoking Engel’s law of demand against the classical orthodoxy on the terms of trade. In 1943, he wrote that “inexorably . . .the terms of trade move against agricultural and raw material countries as the world’s standard of living increases . . .and as Engel’s law of consumption operates”³⁰.

(For Kindleberger’s influence on Prebisch, see Love)

²⁷ “De esto se desprende una conclusión de gran significado: que para adquirir una cantidad determinada de mercaderías extranjeras, este país necesita vender en el mercado internacional un 73% más de productos agropecuarios que ante de la crisis.” R. Prebisch, ‘La inflación escolástica y la moneda argentina’, *Revista de Economía Argentina*, 17, 193 (July 1934), p. 11-2 and 17, 194 (August 1934), p. 60. This article is re-printed in Raúl Prebisch, *Obras 1919-1948*, vol. II, Buenos Aires, Fundación Raúl Prebisch, 1991, p. 337-50, and the citation is from p. 341.

²⁸ M. Margarinos, *Dialogos con Raul Prebisch*, Mexico, Banco Nacional de Comercio Exterior/Fondo de Cultura Económica, 1991, p. 63-4.

²⁹ “Yo, como hombre que siempre tiende a creer en las soluciones optimistas, tenía grandes esperanzas porque pocas semanas antes de la conferencia, o más bien dicho, pocos días antes, Keynes publicó una serie de artículos, en el *Times* de Londres, de una herejía económica tremenda. Después volvió un clásico . . .hizo aceptar sus ideas. Artículos que tuvieron en mí una enorme influencia” in Margarinos, *Dialogos*, p. 100. In March 1933, *The Times* published four articles by Keynes, which, expanded by an introductory and concluding chapter, was published in pamphlet form as ‘The Means to Prosperity’. The slightly enlarged American edition is in JMK ix: 335-366.

³⁰ C. P. Kindleberger, ‘Planning for foreign investment’, in *American Economic Review*, 33, p. 341.

This growing enthusiasm for the industrialisation of backward areas, as they were called at the time, set off alarm bells in already industrialised countries. In Britain, economists were concerned about its impact on the extremely fragile post-war balance of payments. In 1938, the last 'normal' year before the war, Britain was still one of the three countries (along with the US and Germany) that accounted for half of the world's output of manufactures. This seemed to imply that she must be one of the major losers from a rapid diversification of the sources of that output. Yet it hardly seemed either reasonable or realistic to resist a more widespread industrialisation. The problem was pointed up when Kurt Mandelbaum (later Martin) and others at the Oxford Institute of Statistics developed a model of how the backward areas of south-eastern Europe might industrialise. The immediate reaction was to recognise the existence of an acutely uncomfortable dilemma. The *Economic Journal* reviewer of Mandelbaum's book commented:

"The proposition is widely accepted that there is no moral or economic justification for permanently retarding the industrial progress of the many millions of people now inhabiting the backward areas of the world; but neither is it compatible with human progress to develop industries in all these countries in such a way that the remnants of the nineteenth century division of labour are destroyed without an attempt to re-establish an improved system of an international division of labour."³¹

One of the assumptions that underlay this anxiety was the belief that, not only would generalised industrialisation reduce the export volumes of the traditional exporters of manufactures, but that the purchasing power of a unit of manufactures in terms of primary products would also decline.

In the United States, a different problem was giving rise to debate among economists of trade. The country, having resorted heavily to protectionism in the early 1930s under the Smoot-Hawley tariff legislation, was preparing for a move to trade liberalisation on a multilateral basis. The question of the day was who would suffer from the loss of tariff protection? Classical free traders, like Harberler, argued that no-one would suffer, except in the very short run, because resources would be quickly re-absorbed into more productive uses.

³¹ B. A. Rahmer, 'A Note on the Industrialization of Backward Areas', *Economic Journal*, 56, 1946, p. 657-62, reviewing K. Mandelbaum, *Industrialization of Backward Areas*, Oxford, Oxford University Press, 1945.

Others, like Paul Samuelson and Wolfgang Stolper, reasoned from the Heckscher-Ohlin theory, namely, that countries export goods that use intensively their most abundant factor of production. If that is so, they argued, the removal of tariffs and the move to freer trade would benefit the owners of the abundant factor, assumed to be capital, and reduce the welfare of the owners of the scarce factor, which was assumed to be labour. If the opening up to more trade caused the US wage rate to fall, and the trading partner's wage rate to rise, it would bring about a partial equalisation of factor prices between the trading partners. This new theorem seemed to give support to the belief that the standard of living of US workers was indeed threatened by cheap foreign labour, and could be protected by tariffs³². It also laid the ground for some misunderstanding between North American economists and Latin American economists in the UN some years later.

The Latin American discourse was different again. The claim was already being heard that primary product exporters were at a disadvantage in international trade, compared to exporters of industrial products. Roberto Simonsen, reflecting on the historical reversal in the economic fortunes of Brazil and the United States, saw the nineteenth century industrialisation of the latter as the crucial development. This had reinforced an international division of labour between exporters of food and raw materials and exporters of industrial goods. More importantly, there was a built-in bias against the former, which included Brazil.

“A thorough examination of the remuneration for production in various regions of the globe fully discloses that international trade, controlled by industrialized nations, did not in the past accord to the merely agricultural, as compensatory reward for their labour, the same margin of profit as obtained by those devoting themselves to industrial activities”³³

(REFS in Inter-American Affairs, 1944, 1945. Article by Sanford A. MOSK asserting that terms of trade for primary products deteriorated in 1920s. ‘There is a strong current of LA opinion that asserts disadvantage of primary producers.’ Cites article by Eugenio Gudín in *Revista de Ciencias Económicas* (not yet found)
Bogotá Conference resolution, similar to that passed at 1948 ECLA)

The Contribution of Hans Singer

³² W. F. Stolper and P. A. Samuelson, . . . , 1941.

³³ Roberto Simonsen, *Brazil's Industrial Evolution*, 1939, p.15.

The Report of first session of the Sub-Commission on Economic Development, in considering problems of economic development in under-developed countries, contained the following comment:

“The recent rise in the prices of capital goods and transport services has made the task of economic development particularly difficult in the case of the under-developed and the least developed countries. The Sub-Commission therefore considers it important that a careful study be made of the prices of capital goods and of the relative trends of such prices and of prices of primary products, so that it may be in a position to make appropriate recommendations concerning the problem.”³⁴

Thus the UN as an organisation began to study the terms of trade to address a short-term problem. The original objective was not to discover the historical drift of the terms of trade, or what had happened in the long run. The problem was that, during the war, a number of under-developed countries had run export surpluses that they subsequently wished to use to import capital goods for development. In the interval, the prices of capital goods had risen, so the export surpluses were worth less in terms of imports than they had been when they were earned. This provoked the question of whether under-developed countries’ terms of trade could be expected to continue to deteriorate in this way, and the implication of this for their development. This was the ostensible purpose of the research that Hans Singer embarked on, under the general direction of Folke Hilgerdt, then the Director of the UN Statistical Office.

David Owen had recruited Hans Singer to the United Nations. He knew Singer from pre-war days, when they had worked together on the Pilgrim Trust Unemployment Enquiry that produced *Men without Work*³⁵. By 1945, Owen was an assistant to Sir Stafford Cripps, and in this capacity was involved in the Preparatory Conference to establish the UN at Church House, London. In early 1945 Singer met Owen on the steps of Church House. Owen told him that he had been chosen to head the Economics Department at the UN, and asked him to join the Department. In 1946, Owen sent a formal request to this effect to Glasgow University, Singer’s employer, and Singer quite reluctantly agreed to go on a two-year leave of absence, one that ultimately turned into a twenty-two year period of UN service³⁶.

³⁴ Cited in E/CN.1/Sub.3/W.5, p. 1

³⁵ CUP, 1938.

³⁶ “I was not very happy . . . I went – though I really didn’t want to go. For me that was a step down and I was quite looking forward to settling down in Glasgow.” Hans Singer interview with Richard Jolly, October 13, 1995.

Singer's previous experience at the universities of Manchester and Glasgow, and the British Ministry of Town and Country Planning did not make an obvious route to a career as an international civil servant dealing with underdeveloped countries. Singer himself has more than once pointed out the possible confusion between the British and American understanding of the term "country planning" as a factor in his recruitment to the UN³⁷. Be that as it may, it is clear that his background was no particular preparation for addressing trade issues. He had acquired an interest in technical progress and technical innovation from his time in Bonn as a student of Schumpeter, and his Cambridge PhD supervisor, Colin Clark, fed his appetite for questions of long-run economics. His dissertation had been on the topic of urban land values during the British industrial revolution, covering a period of a hundred years.

He arrived in New York in April 1947, knowing there only Michal Kalecki and Sidney Dell, while Owen was away at the Havana Conference. He immediately began to work on trade problems. Although a reluctant recruit, he found the ideas of colleagues who were also working on trade issues within the Department of Economic Affairs worthwhile and stimulating. It was his UN colleagues who provided the right intellectual environment to spark his work.

"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 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. Discussions with these four must have drawn my attention quickly to problems of terms of trade"³⁸

However, unlike Hilgerdt and Wright, Singer was not interested in cyclical effects on the terms of trade produced by booms and slumps in industrial countries. He, being also influenced by Gunnar Myrdal, focused on structural differences between industrial and non-industrial countries, and their long-term effect on the evolution of the terms of trade between them. His over-arching concern was that of distributive justice. His question was not whether gains from trade existed, which he did not

³⁷ Singer, *Early Years*, 275-6.

³⁸ *Ibid.*, p.280.

doubt, but the “fairness” of the distribution of those gains between the countries that traded. If there were power differences between countries – disparities in market power or in technological power- did trade, and changes in the terms on which it was conducted, become a mechanism of in-equalising growth between countries globally? His interest in the commodity terms of trade was thus a derivative of the larger question of world-wide in-equalising growth.

Singer did not explicitly oppose the Cambridge doctrine of declining terms of trade for manufactures. It is possible that he was not much aware of it³⁹. Nor did he explicitly engage with the US debate on the welfare effects of the removal of protective tariffs. This had just taken a fresh turn, as Samuelson moved from the doctrine of partial factor price equalisation to that of complete factor price equalisation. This was later taken by UN ECLA economists to be typical of neo-classical unreality⁴⁰. As F. H. Cardoso later remarked:

‘The ideological consequences of that theorem were startling: following Samuelson’s logic, one could in effect maintain that, if international trade reduces the economic inequalities between nations, then under-development would disappear, thanks to the international division of labour⁴¹,

This was a proposition that was seemed paradoxical to those who were more impressed by the historical record than by mathematical analysis. Trade based on the international division of labour between exporters of manufactures and exporters of primary products had, after all, been taking place for the previous hundred years. The move to equality in the rewards of American car workers and Brazilian coffee plantation labourers had, by contrast, hardly been in evidence.

This view of Samuelson, as a theorist who relegated under-development to the status of an economic ‘imperfection’, recurs in Furtado’s memoirs of his involvement with

³⁹ It began to be mentioned again in the course of the resulting controversy. Jacob Viner mentioned it in general terms, in *International Trade and Economic Development*, Oxford, Clarendon Press, 1953, p. 113-4. The concern of Ricardo, Marshall and Keynes about declining terms of trade for industry was noted in Gottfried Haberler’s second Cairo Lecture in 1959, see *International Trade and Economic Development*, San Francisco, International Center for Economic Growth, 1988/1959, p. 39-40. Only much later, was Keynes’s 1912 paper cited in H. Singer with D. Sapsford and P. Sarkar, ‘The Prebisch-Singer terms of trade controversy revisited’, in H.W. Singer, *Growth, Trade and Development: Selected Essays of Hans W. Singer*, Cheltenham, Edward Elgar, 1998, p.140. This suggests that there was some truth in the view that neither Singer nor Prebisch was aware of the classical terms of trade doctrine, and therefore did not engage with its arguments.

⁴⁰ P. Samuelson, “International Trade and the Equalisation of Factor Prices”, *Economic Journal*, Vol. LVIII, No.230, June 1948, p. 163-84.

⁴¹ F. H. Cardoso, *Les Idées à Leur Place*, Editions A. M. Métailié, Paris, 1984/1980, p. 23, author’s translation. On the impact of Samuelson’s theorem, see also Cristóbal Kay, *Latin American Theories of Development and Underdevelopment*, Routledge, London and New York, 1989, p. 4-5.

ECLA⁴². It is, however, based on a misunderstanding of the article. Samuelson recognised that “important differences in wages and prices have persisted” despite freedom of trade. He accounted for this by the existence of transport costs and, more importantly, by the fact that his theorem did not extend to the case of complete geographical specialisation of production. This is the relevant case for trade between Britain, which was highly specialised in manufactures, and Latin America, which was highly specialised in food and raw materials. It is also most intriguing to note that Samuelson did not deny the tendency of the terms of trade of the latter to decline. On the contrary, he himself asserted it. At the end of the article, he wrote:

“(Now) the terms of trade are abnormally favourable to agricultural production. Without venturing on rash prophecy, one can venture scepticism that *this abnormal trend of the terms of trade, counter to historical drift, will continue.*”⁴³

Nevertheless, the abstract, theoretical quality of neo-classical trade theory evoked a strong adverse reaction, which created a fertile ground for alternative thinking. It was in the UN that the seeds were sown and sprang to life.

Having begun this research, Singer put it aside in the summer of 1947, for about six months⁴⁴. By that time, Singer had already made a first contact with Prebisch.

“I was very much absorbed with this (study of Terms of Trade), as it established my first links with Prebisch. Prebisch at that time was not yet in the UN. He had just started moving from Argentina to Santiago, to the Economic Commission of Latin America. I had just established my first link and my mind was full of this . . .”⁴⁵

(What was the extent and nature of the S-P contact?)

The results of his research were presented in the UN publication *Relative Prices of Exports and Imports of Under-developed Countries* (1949). The sub-title was *A Study of post-war terms of trade between under-developed and industrialized countries*. *Relative Prices* was remarkable for at least two reasons. It included an attempt to see what *historical* statistics indicated about the long-term trend in the agriculture *versus* manufactures terms of trade, although its origin lay in developing countries’ concern with future price relativities as industrialisation drives gathered pace. By and large, it

⁴² C. Furtado, *La Fantaisie Organisée. Le développement est-il encore possible?*, Publisud, Paris, 1987, p.101.

⁴³ P. Samuelson, “*Equalisation*”, p. 178-80, and 183-4 (with added emphasis).

⁴⁴ This was done in order to undertake work for UNICEF on “The Role of Children in Economic Development”.

⁴⁵ Hans Singer in interview with Richard Jolly, October 13, 1995.

showed that the terms of trade of under-developed countries had improved between 1938 and 1946-8. This improvement was, however, to be seen in an historical perspective that was distinctly less favourable.

The historical section contained the report's most dramatic finding. It was that "from the latter part of the nineteenth century to the eve of the Second World War, a period of well over half a century, there a secular downward trend in the prices of primary goods relative to the prices of manufactured goods"⁴⁶. The new doctrine of secular decline in the terms of trade of primary commodities was thus announced. This was an empirical finding flat contrary to the expectation that had pervaded most economic opinion since Malthus, and the one that Keynes, in particular, had striven so hard to establish empirically. The cumulative effect of secular decline was calculated to be substantial.

"By 1938, the relative prices of primary goods had deteriorated by about 50 point, or one-third, since (the 1870s) and by about 40 points, somewhat less than 30 per cent, since 1913"⁴⁷.

The statistical evidence for this downward trend was given in Table 5 of the report⁴⁸, from which the figures below are extracted. To avoid confusion, note that these ratios are ratios of an import price index to an export price index, so that a declining ratio is beneficial to the UK, while a rising ratio is unfavourable.

⁴⁶ *Relative Prices of Exports and Imports of Under-developed Countries*, Lake Success NY, United Nations (Department of Economic Affairs), 1949, p.7.

⁴⁷ *Ibid.*, p. 23.

⁴⁸ *Ibid.*, p. 22.

TABLE X. RATIOS OF U.K. IMPORTS TO EXPORTS, 1876- 1948 (1938 = 100)

Period (or year)	Current yr. Weights	Bd. Of Trade index
1876-1880	163	
1881-1885	167	
1886-1890	157	
1891-1895	147	
1896-1900	142	
1901-1905	138	
1906-1910	140	
1913	137	143
1921	93	101
1933	98	96
1938	100	100
1946		108
1948		117

A. J. Brown, who reviewed the study for the *Economic Journal*, perceptively described its findings as “exceedingly interesting and not a little surprising”⁴⁹. The evidence of secular decline was a considerable shock in Britain, in the light of the beliefs of the classical political economists. The marked fluctuations in this downward trend also had their own interest. For the UK, the index of its import values relative to its export values fell by 36 per cent between 1876 and 1913, and by 1921 it was somewhat below its 1938 level. From 1921 to 1938, the fluctuations were much smaller. So Marshall was right to see the effect of diminishing returns in agriculture being dominated by productivity improvements in cultivation and transport of primary produce. Keynes, on the other hand, was quite wrong to imagine any turning point in the 1890s or 1900s in the downward trend. Something very dramatic happened during and just after the First World War, which gave rise to one strand of the controversy that followed, the debate about the existence of structural breaks in the series.

The upward turning point in the UN series occurs from 1933 onwards. Perhaps this is not entirely surprising, given Roosevelt’s bold economic recovery programmes in

⁴⁹ A. J. Brown, in *Economic Journal*, p. ?

the US and the impetus of rearmament and stockpiling in Europe. After the war, rehabilitation and reconstruction while normal supply routes were still disrupted would have worked in the same direction. This raised the question whether secular decline was a thing of the past, or whether, as Samuelson had suggested, it should be expected to continue in the future, and serve as a stable assumption for the making of development policies.

What was the significance of this secular decline? The report was careful not to suggest that if a country's terms of trade improved, its welfare necessarily increased. It might or might not, depending on the circumstances in which the rise in export prices takes place. If the price rise was a result of a failure of supply, it might not leave the exporting country better off. Nevertheless, in general, an improvement in terms of trade would increase the availability of resources for development. A secular decline for under-developed countries meant a loss of capacity to absorb foreign financing for development, and thus to respond to the "added incentive towards industrialization"⁵⁰. This, in turn, implied that "the under-developed (had) helped to maintain . . . a rising standard of living in the industrialized countries, without receiving, in the price of their own products, a corresponding equivalent contribution towards their own standards of living"⁵¹. This carried a clear message of historical injustice⁵².

In its policy recommendations, the report notes that "the controlling factor . . . in economic development of under-developed countries- from which all others must derive their effectiveness – lies in the domestic effort". However, it supports some kind of international action "in order to improve, or merely stabilize, price relations of under-developed countries"⁵³. It points to UN efforts to promote international commodity agreements, noting that some types of commodity agreements (presumably producer cartels) "have dangerous aspects"⁵⁴. The desirability of stabilising or improving the price relations of under-developed countries is assumed rather than demonstrated, and the vastly different implications of stabilising on the one hand, and improving on the other, are not discussed. The report was written with the expectation that the ITO would assume responsibility for promoting international

⁵⁰ Ibid., p. 16 and 127.

⁵¹ Ibid., p.126.

⁵² ". . . I thought if you look at foreign trade from the point of view of the poor countries, exporters of primary products, what does it look like? And it appears an unequal system that is weighted against them." Hans Singer in interview with Richard Jolly, October 11, 1995.

⁵³ Ibid., p.18.

⁵⁴ Ibid., p. 18, note 2.

commodity agreements, since the US failure to ratify the Havana Agreement had not yet occurred.

In a paper delivered to the American Economic Association in December 1949, Singer explored factors that had “reduced the benefits to under-developed countries of foreign trade-cum-investment based on export specialization in food and raw materials”. The first was that the secondary and cumulative effects of foreign export enclave investment were felt in the investing country, not the country where the investment was made. The second was that countries were “diverted” into types of economic activity offering less scope for technical progress and internal and external economies. The third factor, “perhaps of even greater importance”, was the movement of the terms of trade. Singer, conceding that the statistics in *Relative Prices* were open to doubt and objection in detail, regarded the general story that they told as “unmistakable”⁵⁵.

The main contribution of this paper was to theorise the deterioration in the terms of trade of primary products. It identifies an asymmetric process whereby (a) the gains from technical progress in manufacturing are distributed to the producers in the form of higher incomes, while (b) the smaller gains from technical progress in primary commodity production are distributed to the consumers in the form of lower prices. On this basis, the industrialised countries have the best of both worlds, as producers of manufactures and as consumers of primary products. The under-developed countries have the worst of both worlds, as consumers of manufactures and as producers of primary products. Thus the benefits of foreign trade are shared unequally, and traditional foreign investment in plantations and mines did, after all, “form part of a system of ‘economic imperialism’ and of ‘exploitation’”⁵⁶.

Its minor contribution was an answer to the question that had exercised all the adherents of the Cambridge doctrine, including Keynes, of whether food imports from America to Europe and migration from Europe to America acted as safety valves for excessive population growth in Europe. His solution was that

“the supplies of food and raw materials pouring into Europe as a result of the investment-*cum*-trade system and the favourable terms of trade engendered by this system enabled Europe to feed, clothe, educate train and equip large numbers of emigrants sent overseas . . . Thus the benefits

⁵⁵ “The Distribution of Gains between Investing and Borrowing Countries”, *American Economic Review, Papers and Proceedings*, vol. 11, no. 2, May, 1950, reprinted in H. W. Singer, *The Strategy of International Development: Essays in the Economics of Backwardness*, London, Macmillan, 1975, p. 43-57.

⁵⁶ *Ibid.*, p. 49-51.

to the investing countries of Europe arising out of the system described above were in turn passed on . . . and were the main foundation of the enormous capital formation the result of which is now to be observed in North America.”⁵⁷

Thus he could remain sceptical that benefits of foreign investment normally accrue to the country where the investment is made, while explaining how the industrialisation of America was possible. Only when migration from the investing country is taking place concurrently does the receiving country capture all the benefits of the investment, and avoid turning the terms of trade against itself.

Prebisch’s Contribution

Prebisch’s contribution to this debate was published in English within a few months of the appearance of Singer’s *American Economic Review* paper of May, 1950. The English publication dates of the two authors’ articles were so nearly simultaneous that posterity has not found it worthwhile to sift claims to intellectual priority. It has always been the Prebisch-Singer thesis or the Singer-Prebisch thesis. Kay, for example, has told the story of simultaneity as follows.

‘Singer, like Prebisch, was a United Nations functionary but at the New York headquarters. He reached his conclusions independently from Prebisch and around the same time. Thus the thesis on the deterioration in the terms of trade is known in the economic literature is the ‘Prebisch-Singer thesis’.’⁵⁸

This is somewhat misleading, because it confuses two separate things. One is the statistical hypothesis of a secular decline in the terms of trade of primary products. The other is the theoretical interpretation that is put on such a secular decline, given that it exists. Prebisch’s contribution on the terms of trade controversy belongs to the latter area, but not the former. Moreover, the dates of the two English articles of Prebisch and Singer are a poor guide to the chronology of this episode. The key publication events did not take place in 1950, but in the previous year of 1949. As Furtado has noted: “the Spanish original and the English translation were eventually published in New York by the United Nations, and circulated with the slowness characteristic of official documents”⁵⁹. Prebisch’s contribution was written between February and May 1949, and published in Portuguese in September 1949. That was when the debate, at least in Brazil, really began.

⁵⁷ Ibid., p. 55.

⁵⁸ Kay, *Latin American Theories*, p. 32.

⁵⁹ Furtado, *La Fantaisie*, p. 80, author’s translation.

Prebisch arrived in Santiago late in February 1949, as a short-term consultant with the task of writing an introduction to the first *Economic Survey* that ECLA was to present to its governments. He worked at it for three months, in order for it to be ready for the ECLA Conference in Havana in May 1949.⁶⁰ The result was *Economic Development of Latin America and its Principal Problems*⁶¹. Celso Furtado later recalled how, a month after his arrival in Santiago, which would be late March 1949, Prebisch circulated a first draft within ECLA. It was a digest of the papers that he had brought with him, covering disequilibria in the balance of payments, the declining US import coefficient, capital controls, low saving leading to domestic inflation and the limits of industrialisation.

“We had hardly started to discuss the document, when it was suddenly discarded, without any explanation. Prebisch’s new text was not circulated for discussion. I suppose that it was ready on the eve of the Havana Conference, because it was sent to us typewritten, in its final version, shortly before we left. It was a much longer text including tables and charts. The tone had changed, now it was a manifesto urging Latin American countries to launch into industrialisation. One could discover there a definite taste for a polished and polemical style.”⁶²

The first of the tables incorporated in this second and final draft was of the terms of trade, and it was the fruit of Singer’s study. The reason for this was that the statistical abilities of the fledgling Economic Commission for Latin America were very weak. One of the justifications for establishing a regional commission in Latin America was to provide better information about the economic conditions in the region as a whole. Originally, it was assumed that merely collating statistics submitted by the individual Latin American governments could achieve this. When most governments failed to provide the required figures, the Commission realised that it would have to collect what was needed to fill the tables of the first *Economic Survey of Latin America*, for the year 1948. It became clear late in 1948 that this task was beyond the unaided capacity of the ECLA office in Santiago.⁶³

⁶⁰ *Dialogos*, p. 129-30.

⁶¹ Its first incarnation was in Spanish, as UN document E/CN.12/89, dated 14 May 1949. At the instance of Furtado, it was published in Portuguese in the *Revista Brasileira de Economia* in October 1949. It was re-published in Spanish in Santiago in April 1950, and again in English later in 1950 in Lake Success, NY, as UN Sales No. 1950. II. G.2.

⁶² C. Furtado, *La Fantaisie*, p. 64-6, author’s translation.

⁶³ Celso Furtado tells the story of how, as a new recruit to ECLA in late 1948 or early 1949, the Executive Secretary, Dr Martínez Cabañas, urged him to bring with him to Santiago as many documents as he could for the purpose of preparing the Survey. See C. Furtado, *La Fantaisie Organisée*, p. 54-6.

Accordingly, Louis Shapiro, a statistician in the Department of Economic Affairs, was sent from the UN office in New York on deputation to Santiago for several weeks in December 1948 and January 1949, in order to organise this task. It was during this period that he arranged to make the results of Singer's study on the terms of trade available for use by Prebisch. It looks very much as if Prebisch incorporated wholesale, late in the day, the long-run terms of trade statistics sent from New York in January, 1949, citing them as they appeared in a UN working paper dated February 1949⁶⁴. These figures are the same as those that were published in *Relative Prices* in December 1949.

Another indication that the terms of trade statistics were a late addition to his text is that Prebisch deals with the whole issue of secular decline only very briefly in *Economic Development*. It does not appear at all in the Introduction that summarises the argument of the paper and it is then despatched in the first three pages of Chapter II. Prebisch's only comment on these statistics, one that was to resonate through the subsequent critical debate, was that "it is regrettable that the price indexes do not reflect the differences in quality of finished products"⁶⁵.

Prebisch did, however, put forward his own interpretation of the phenomenon of secular decline. He departed from Singer's purely structural interpretation, based on institutional differences that permit or fail to permit the retention of productivity gains by labour. He argued that "the existence of this phenomenon cannot be understood, except in relation to trade cycles and the way in which they occur in the centres and at the periphery, since the cycle is the characteristic form of growth of the capitalist economy, and increased productivity is one of the main factors of that growth"⁶⁶. He showed that even though, in the boom, primary product prices typically rise faster than industrial prices, deterioration in the commodity terms of trade of the periphery is nevertheless possible, if, in the slump, primary commodity prices decline steeply enough, compared with industrial prices. The explanation offered of why primary product prices declined severely in the slump compared with industrial prices was "the well-known resistance to a lowering of wages" at the centre. By contrast, "the characteristic lack of organization among the workers employed in primary production prevents them from obtaining wage increases comparable to those of the industrial countries, and from maintaining the increases to the same extent"⁶⁷.

⁶⁴ "Post War Price Relations in Trade Between Under-developed and Industrialized Countries", document E/CN.1/Sub.3/W.5.

⁶⁵ *Economic Development*, p. 8-10.

⁶⁶ *Ibid.*, p. 12.

⁶⁷ *Ibid.*, p.13.

However, instead of leaving matters there, Prebisch made a further argument that seemed to undermine his first explanation. He makes an identification of industrial production and primary production with groups of countries, christened as “centre” and “periphery”, which was the origin of these terms in print⁶⁸. He then argues that the differing strength of organised labour at the centre and the periphery was not the crux of the matter, because even if workers at the periphery were able to resist wage decreases as strongly as industrial workers were, adjustment would take place by another process. The high prices of primary products would force a contraction of industrial production, which in turn would cut the demand for primary products. “The forced readjustment of costs of primary production during the world crisis illustrates the intensity that this movement can attain”, Prebisch commented⁶⁹. This is the germ of the idea that the “centre” was able to drain resources from the “periphery”, whatever their respective states of labour organisation.

Prebisch’s interpretation of the secular decline, although with its own ambiguities, was both more concrete and more dynamic than that of Singer. Instead of two sets of countries defined by the types of products that they exported and imported, Prebisch’s concept of centre and periphery seemed to have a spatial, even geographical, reality to it. The introduction of economic cycles into the analysis allowed the short and medium term to be integrated with the long term, and countered the static quality of the purely structural approach. In general, this more complex schema opened the door to broader analyses of the economic conjuncture and policy recommendations on the issues of immediate concern to Latin American economists. Although fertile in many ways, Prebisch’s interpretation itself was still very succinct, perhaps reflecting the novelty of the secular decline thesis even to him, and it therefore remained obscure on a number of crucial questions.⁷⁰ These obscurities quickly provoked controversy.

When controversy came, it was the more piquant because Prebisch had spiced his text with a provocative footnote. It said:

‘One of the most conspicuous deficiencies of general economic theory, from the point of view of the periphery, is its false sense of universality. It could hardly be expected that the economists of the great countries, absorbed by serious problems of their own, should devote preferential attention to the study to those of Latin America. The study of Latin America’s economic life is primarily the

⁶⁸ Refer to Love and to *Dialogos* where Prebisch says that he had been using them in his lectures.

⁶⁹ Ibid., p. 13-4.

⁷⁰ Cardoso, *Idées*, p. 27 and 29-30 and Furtado, *La Fantaisie*, p. 66-7.

concern of its own economists . . . An intelligent knowledge of the ideas of others must not be confused with that mental subjection to them from which we are slowly learning to free ourselves⁷¹.

From one angle, this was a note about the need for Latin American economists to apply economic theory to the problems of their own countries, just as North American and European economists use theory to tackle their countries' problems. In other words, it is a platitude. From another angle, it was a suggestion that general economic theory makes false claims to universality, which had placed Latin Americans in a position of mental subjection and from which they needed to be liberated. In other words, it was a call for an intellectual revolution.

Such ambivalence was characteristic of Prebisch. Indeed, his words were understood in both senses. In ECLA, Latin American economists, many with North American or European economics training, came together to formulate the economic problems of their own region and seek solutions. ECLA also started a training programme to augment the cadre of suitable economists. However, in addition, although he had never directly confronted classical and neo-classical trade theory, he was understood as proposing that it should be superseded. The hint that a new *methodenstreit* was looming engaged the interest of North American trade economists, who promptly waded into debate to defend neo-classical trade orthodoxy against the South American heretics.

Let us anticipate a little. By the early 1960s, the course of this controversy had pushed the intellectual radicals to a declaration of the duality of economic theory. The economics of development was proposed to represent the general theoretical case, while the economics of industrial countries was reduced to a special case where alone the assumptions of neo-classical theory were fulfilled. Out of the terms of trade debate, then, the theory of duo-economics was born.

The Critical Onslaught

As in any debate, there were simple muddles. Some of the critics failed to understand what was being asserted. Neither Singer nor Prebisch was saying that foreign trade was disadvantageous to developing countries or recommending wholesale withdrawal from it. Both recommended increased trade, but on better terms for developing countries, that is, terms that would loosen constraints on their internal capital

⁷¹ Prebisch, *Economic Development*, p. 7, n.1. See also Furtado, *La Fantaisie*, p. 66.

accumulation⁷². Neither man thought that technical progress in agriculture was impossible or undesirable, rather that it was harder for developing countries to benefit from it and base their development strategy on it. Nobody ever claimed that a decline in the commodity terms of trade for primary products *necessarily* involved a welfare loss for primary commodity exporting countries⁷³. Quite a lot of ink was spilled before these points were clarified.

Whereas the ideas of the ECLA economists, summed up by the term ‘structuralism’, were criticised by both the political left and right, the onslaught on the thesis of the secular decline in the terms of trade of primary producers came almost exclusively from the right. In this quarter, orthodox liberal belief in the economic benefits of free markets sat all too comfortably with political conservatism, and both were clearly jolted by the disrespect shown towards the established international division of labour. Muddles apart, the orthodox critics made two main types of rejoinder to Singer and Prebisch. One was to assert that the terms of trade of primary commodities had not, in fact, experienced a secular decline, and that the statistics were misleading. The other was to admit that a secular decline had taken place, but to reject the interpretations that had been given to it. For good measure, some critics followed both lines of defence at the same time.

Jacob Viner was the first major North American economist to deliver a broadside. The Fundação Getúlio Vargas of the National University of Brazil, Rio de Janeiro, invited him to give a set of lectures in the July and August of 1950. His main attack on the views of the UN economists was directed to their support for the policy of industrialisation, but he also denied that there had been a secular decline in the terms of trade of primary products. “As far as the data go, no such uniform trend can be found . . . For comparisons over long periods, moreover, the available data are largely irrelevant”. Following Prebisch’s own statistical comment, Viner pushed the point much harder, arguing that the increase of prices of manufactures reflected both the incorporation of newly invented products into the index, and a marked increase in the quality of the manufactures that existed when the index began.

“It may take more pounds of coffee, or of cotton, to buy a lamp than it did in 1900, but today’s coffee and cotton are, I presume, not appreciably better in

⁷² Viner was wrong to attribute to “the technical staff of the United Nations” the view that “the exchange by (underdeveloped) countries of primary products for the manufactures of developed countries, while especially profitable for the latter, is *positively injurious* to the former”, in *International Trade*, p. 43, with emphasis added.

⁷³ Viner nevertheless felt obliged to assert the opposite, *ibid.*, p. 112.

quality than those of 1900, whereas today's electric lamp is incomparably superior to the kerosene lamp of 1900",⁷⁴.

This was a point that had already been made by Prebisch, but also discussed in *Relative Prices*, with the rider that the quality of industrial products could go down as well as up, and there was not much empirical evidence with which to correct the series⁷⁵.

In *Relative Prices* Singer had made an *a fortiori* argument that, given the greater technical progress in manufacturing than in agriculture, a secular movement of the terms of trade against agriculture must imply that the benefits of technical progress were not being passed on to importers of manufactures. Prebisch in *Economic Development* had reproduced this argument⁷⁶. This was an argument that Viner failed properly to address. He contented himself with denying that technical progress was necessarily any faster in industry than in agriculture, and with asserting that if technical progress had caused the real cost of manufactures to fall, it would have (presumably, necessarily) caused a favourable movement in the relative prices of agricultural products. That in reality it had not done so was precisely the point that Singer and Prebisch had already made. In this instance, it is hard not to sympathise with the comment of Furtado that Viner's implied message was "let us ignore reality, and look at this empty box"⁷⁷.

Professor P. T. Ellsworth of the University of Wisconsin found the argument about the failure of terms of trade statistics to reflect quality changes, especially in industrial products, a highly convincing one, and congratulated Viner on writing with "his usual acumen"⁷⁸.

1. There was no secular decline because:
 - The statistics were faulty
 - The measured effect resulted from falling transport costs
 - There was no downward trend, only a structural break in the series
 - It is wrong to infer a fall in udc tot from a rise in UK tot
2. There was a secular decline *but*:

⁷⁴ Viner, *International Trade*, p. 113-4.

⁷⁵ *Relative Prices*, Appendix A, p. 133-4.

⁷⁶ *Ibid.*, p. 126 and Prebisch, *Economic Development*, p. 10, note 3.

⁷⁷ Furtado, *La Fantaisie*, p. 154, author's translation.

⁷⁸ P. T. Ellsworth, "The Terms of Trade Between Primary Producing and Industrial Countries", *Inter-American Economic Affairs*, Vol. X, No. 1, Summer, 1956, p. 48.

It merely reflects faster technical progress in agriculture, and the passing on of its benefits in the form of lower prices

It was wrong to think that it would continue, this is unjustified 'export pessimism'

Position of udc's cannot be deduced from changes in commodity tot, because dcs do not produce only non-primary commodities and udc's do not produce only primary commodities

3. The explanation of the mechanism of bias in distribution of the gains from trade is fallacious

Pleas in Mitigation

Both Singer and Prebisch had to face the same line of critical attack as Beveridge had unleashed on Keynes with such devastating success, that the empirical result that they rationalised was a mere statistical artefact. Numerous highly skilled statisticians have supported them, unlike Keynes, since 1980. The consensus belief is that a small but cumulative fall (perhaps somewhere between 0.5 and 1.0 per cent per annum) has been occurring for most of the twentieth century in the terms of trade of primary products (Thirlwall, 1995). Singer and Prebisch between them have thus left the underlying theory on a broader base. That positive impacts on the terms of trade of manufactures can and do occur because of systematically different institutional features of product and factor markets, such as cost-plus pricing and the unionisation of labour in industry, is now widely entertained. The positive influence of technical progress, both from the asymmetric distribution of its fruits, but also from its asymmetric impact on future demand, favourable to that of industry while unfavourable to that of agriculture, is now in wide currency.

As Hans Singer reported in a passage written in 1960:

"The terms of trade of underdeveloped countries . . . presented a rather mixed picture during the postwar period. The more pessimistic assumptions of a steady long-term deterioration in the terms of trade were not borne out; the terms of trade of underdeveloped countries throughout the postwar period have been more favourable than during the 1930s . . . (but) commodity prices did show a weakening tendency from their Korean boom level throughout the 1950s. Thus it was possible for both sides to claim some confirmation for their views . . . (Singer, 1975 (1950):15-6).

This may have been one reason why the critique of the Cambridge doctrine remained controversial for so long, and has taken nearly fifty years to be assimilated by mainstream economists.

Postscript: Singer Looks back on 1950 in 1975

After twenty-five years, Singer looked back on 1950 views on the terms of trade. Revisiting his 1950 analysis, he became convinced not just that the Cambridge doctrine was incomplete and its empirical prediction was therefore wrong, but that to focus on the terms of trade was itself misleading. He now took the view that it was not the distinct characteristics of particular categories of commodity (manufactures *versus* raw materials) that were important in understanding why some countries developed, while others did not. The essence of that understanding was now taken to lie in the distinct characteristics of different types of country. If types of countries, and the structures of their economies, radically differ, then the terms of trade of B-country's exports of X-type commodities can continuously deteriorate against A-country's exports of X-type goods. It is no longer a matter of economies that export X-type goods becoming progressively more different from economies that export Y-type goods *because they export X-type goods*.

What was it then that created radical differences between type-B countries and type-A countries? Singer proposed that it was the concentration of technology generation within already developed countries and the role of multinational companies in organising the global division of labour. These were the real keys to solving the puzzle of persistent economic backwardness and growing global equality, the puzzle that he had set out to solve when he began his investigations into the commodity terms of trade.