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Notes and explanation of symbols

The following symbols are used in tables in the *Review*:

Three dots (...) indicate that data are not available or are not separately reported.

A dash (—) indicates that the amount is nil or negligible.

A blank space in a table means that the item in question is not applicable.

A minus sign (-) indicates a deficit or decrease, unless otherwise specified.

A point (.) is used to indicate decimals.

A slash (/) indicates a crop year or fiscal year, e.g., 1970/1971.

Use of a hyphen (-) between years, e.g., 1971-1973, indicates reference to the complete number of calendar years involved, including the beginning and end years.

Reference to "tons" mean metric tons, and to "dollars", United States dollars, unless otherwise stated.

Unless otherwise stated, references to annual rates of growth or variation signify compound annual rates.

Individual figures and percentages in tables do not necessarily add up to corresponding totals, because of rounding.

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The centre-periphery system and unequal exchange

*Edgardo Floto**

The economic crisis that has affected the Latin American countries since the early 1980s and is threatening to expand beyond the present decade has reactivated the debate about trade and development and the role of Latin America in the international division of labour. This paper seeks to contribute to that debate by restating ECLAC's original centre-periphery theory within the framework of the "unequal exchange" discussions. The paper aims to show that the ECLAC theory, after nearly 40 years, still contains the elements for a more satisfactory interpretation of world trade than other trade theories. After a brief introduction on comparative advantages and trade theory, the paper discusses the main elements of ECLAC's centre-periphery model. This model is then contrasted with the views of the main contributors to the unequal exchange debate, with the aid of the price and distribution relations of a two-country two-commodity international trade model in which the two nations are replaced by a "centre" and a "periphery". The last sections incorporate ECLAC's demand elasticity argument into the discussion and analyse the model's policy implications for peripheral countries.

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I

Comparative advantages and trade theory*

Traditional international trade theory, whether formulated in the classical Ricardian form or in the refined framework of neo-classical theory, argues that commodity free trade will always work to the advantage of each trading country and thus will always have a positive effect not only on world welfare but also on the welfare of each individual trading partner.

Ricardo, with the help of his famous example of exchange of cloth for wine between England and Portugal, concluded that it was in the interest of each trading partner to specialize in those products in which they had comparatively¹ lower costs of production, as this would result in higher income levels, in terms of use values, in both countries.

Ricardo's model assumed that resources were mobile nationally but immobile internationally. Labour, the only explicitly considered factor of production, was employed in the two existing branches of production (wine and cloth) and these were assumed to have constant return to scale. The prices at which the countries would be willing to trade (and consequently their comparative advantages) were determined by the technical conditions governing labour inputs in each economy.

Ricardo's theory of comparative advantages has been subject to various lines of development since its initial formulation: some of them still within the classical framework, such as that of J.S. Mill, who broke away from the labour theory of value by introducing the law of reciprocal demand as the determinant of the equilibrium terms of trade in the Ricardian model, and others firmly within the neo-classical tradition, such as those of Heckscher, Ohlin and Samuelson. Heckscher and Ohlin (Heckscher, 1919, and Ohlin, 1933) argued that comparative advan-

*The author is grateful to David Evans and E.V.K. FitzGerald for valuable comments on an earlier version of this paper.

¹As against the absolute cost advantage principle contained in a previous analysis on international trade by Adam Smith in the *Wealth of Nations*.

tages can only exist if the resource endowment or the factor proportion (as against Ricardo's techniques of production) of the trading partners are different. Such differences will result in different relative factor prices and, as each country will export those goods which use up more of its best-endowed resources, trade will tend to reduce differences in relative factor prices. Subsequently, Samuelson (Samuelson, 1948) was to show that under certain assumptions free trade would actually equalize factor prices in the trading partners.

Basically, the neo-classical theory demonstrated that, under certain conditions,² there was a possibility of gainful trade when production techniques were identical in all trading partners but their factor endowments differed. Thus, within the neo-classical framework of analysis, the difference in technical conditions between countries assumed in the Ricardian model became just another reason for having different pre-trade price ratios and consequently gains from trade. Moreover, differences in demand patterns would also lead to differences in pre-trade price ratios even if techniques and factor endowments were the same. International factor immobility, which played a central role in the Ricardian model, was no longer crucial in the neo-classical world, as factor movement could be substituted for commodity movements in attaining the gains from international transactions (Samuelson, 1948).

The conclusions reached on the basis of the neo-classical theory of international trade were not very different from those drawn from the static Ricardian model. In the neo-classical world, given the existence of complete harmony of interest between all countries (and all classes within those countries), the world free trade system had an innate tendency to improve the fate of all trading partners and reduce (if not eliminate³) the inequalities between them. Moreover, as technical progress would merely

happen at random without any systematic geographic, social or economic bias, wherever it took place it would benefit everybody, directly by cheapening products and indirectly by stimulating production of other goods. In other words, free trade would translate an improvement in overall productivity and income in one place into increased productivity and income everywhere in the world.

Despite historical evidence contradicting the neo-classical vision of the world economy, the law of comparative advantages was never seriously questioned as a basic explanation of international commodity trade.⁴ In the late 1940s, however, ECLAC stepped in to challenge the conclusions of the theory of comparative advantages and to attempt to present an alternative view of the effects of foreign trade on trading partners. However, ECLAC was not interested in introducing purely internal modifications⁵ to the then prevailing Heckscher-Ohlin theory, nor did it have the intention of restricting its analysis to the sphere of exchange (as is commonly attributed to ECLAC). Instead, it sought to explain, through the interaction of forces at the centre and the periphery of the capitalist system during the cycle, the processes of accumulation, production and growth in the world economy. Unfortunately, it is only during the last decade, with the rise of the so-called neo-Ricardian critique of the theory of comparative advantage, plus the discussions on "unequal exchange" and the North-South debate, that ECLAC's contribution has become better known. It is our intention to show that by elaborating further the original formulation of the centre-periphery model it can provide a more realistic interpretation of the disposition created by the present world trade structure.

²Albeit rather restrictive assumptions, as Kaldor (1980) has shown.

³Inequalities between trading areas would be eliminated altogether if the countries had identical and "well behaved" production functions, i.e., identical production functions which, apart from being linear and homogenous, have a constant elasticity of substitution irrespective of factor proportions; Kaldor (1980).

⁴Most of the challenges came from the quarter of protectionist theory, but they were subsequently incorporated into the main body of international trade theory. "By directing attention to correcting the malfunctioning of the market mechanisms which operate in one way or another to give incorrect 'signals' as to the direction of comparative advantages, the free-trade argument has in general survived the onslaught"; Evans (1981c), p. 118.

⁵A common temptation among critics of neo-classical theory which makes the analysis more complex but does not fundamentally alter the basic structure of the neo-classical model nor its conclusions.

II

ECLAC's centre-periphery system

As mentioned before, ECLAC's ideas developed as a reaction against the conclusions and policy recommendations based on the orthodox theory of international trade. ECLAC's critical comments were not aimed at any specific formulation of that theory, but were directed towards a rather vaguely defined "out-dated schema of the international division of labour, which achieved great importance in the nineteenth century and as a theoretical concept continued to exert considerable influence until very recently ... (asserting that)... the specific task that fell to Latin America, as part of the periphery of the world economic system, was that of producing food and raw materials for the great industrial centres".⁶ Despite the characteristic lack of references in the early ECLAC writings,⁷ one can safely assume that ECLAC officials had a Heckscher-Ohlin type of model in mind when aiming their criticisms.

As Pinto and Křákal (1972) have pointed out, the concepts of "centre" and "periphery" can give rise to some ambiguity if one takes them out of their original context or meaning. They are certainly not intended as another substitute for the concepts of "developed" and "developing" or "industrialized" and "underdeveloped" countries. In the context of ECLAC's centre-periphery system, a "central" economy must necessarily be developed. In addition to its high level of income and development structure, and the basically endogenous nature of its growth dynamism, however, it also needs a capability to exercise "a perceptible influence upon the course of events in peripheral economies — but not vice versa".⁸ The degree of influence and the means of exerting this influence will be decided by the centre. Furthermore, contrary to the situation last century when Great Britain was unquestionably *the* centre of the world system, in today's world one can distinguish a "principal centre" (i.e., the United States) and "sub-centres" (such as the EEC and Japan) which influence each

other and the periphery to a greater or smaller extent according to their economic capacity. Consequently, although one can use the term "centre" to comprise the "principal centre" and the "sub-centres", it cannot be understood to include every developed country.

ECLAC's explanation of the functioning of the world economic system starts from the premise that capitalist development has not only been unequal from its outset but also that it has an inherent inequality that will widen the gap between the two extremes — the centre and the periphery — rather than narrow it as the orthodox theory of international trade would have us believe. Capitalist development has favoured those countries at the centre of the world economic system where indirect methods of production generated by technical progress were introduced first and distributed rather evenly and rapidly throughout their production system. The rest of the countries,⁹ i.e., those which were peripheral to the world-wide spread of technology, had a late start and "technical progress only affected small sectors of the vast population as it usually only penetrated where it was needed to produce foodstuffs and raw materials at low cost for delivery to the great industrial centres".^{10, 11}

⁹ECLAC's original centre-periphery model reflected a bipolar order of an industrialized capitalist world and an underdeveloped one, in which there was no room for the socialist world, reflecting the very small external economic impact of the USSR before the Second World War. Despite the rapid rate of growth shown by the socialist countries during the post-war period, however, their relatively low level of integration in the world economy (compared to the capitalist industrialized countries) has not changed substantially the conclusions drawn from ECLAC's original model (see Pinto and Křákal, 1972, pp. 72-128). Moreover, apart from few exceptions (e.g., Cuba), generally speaking trade relationships between socialist countries and peripheral economies do not seem to be based on a footing very different from that characterizing trade relationships between the "capitalist centre" and the periphery. In the light of these assumptions the distribution of benefits from trade and technical progress in one case and the other should not be very different either.

¹⁰ECLAC (1951), p. 3.

¹¹Kaldor would argue that unequal development between industrialized and peripheral countries is not just due to the fact that technological progress was introduced first in the former, but also to the presence of increasing returns to industry and the

⁶Prebisch (1950), p. 1.

⁷With the honourable exceptions of J.M. Keynes and H.W. Singer.

⁸Pinto and Křákal (1972), p. 100.

The way in which technical progress spread from those countries where it originated to the rest of the world led to different structures of production in the centre and in the periphery, and to different functions in the world economic system. Thus, in ECLAC's view, centre and periphery can be regarded as the historical outcome of the way in which technical progress was propagated in the world economy.¹² In such a world, the function of the periphery is to produce and export raw materials and foodstuffs, while that of the centre is to produce and export industrial goods for the system as a whole.¹³ Underlying the differentiation of these two groups of countries in the context of the world economy, which is reflected in the structure of international trade, is a basic distinction between their structures of production (Rodríguez, 1977). In order to enable the periphery to fulfil its role of supplier of raw materials and foodstuffs efficiently, technological progress was oriented mainly towards its primary export sector. This led to a highly specialized domestic structure of the periphery, in so far as a large share of productive resources was devoted to expanding the primary export sector. The rest of the economic sectors were left backward, with low labour productivity, as domestic demand for other goods and services was met with imports rather than with domestic production. As a result, the periphery ended up with a productive structure that was both specialized and heterogeneous. In other words, the peripheral economy was characterized by the presence of sectors which had high levels of productivity, comparable to those attained in other parts of the world, but which could offer employment only to a limited number of workers, coexisting with sectors in which the levels of labour productivity were well below those of similar activities in the industrialized countries of the centre. By con-

trast, technological progress in the centre tended to propagate evenly throughout the whole of the domestic production system, creating a diversified and homogeneous structure of production which enabled the centre to assume efficiently its role of producer and exporter of industrial goods for the world system as a whole.¹⁴

Within such a framework, it is argued, the main reasons behind the widening of the differences in income and productivity between the centre and the periphery of the world economic system are not only the dissimilar evolution of technical progress but also the unequal way its benefits are distributed.¹⁵ Technical progress was held to be more rapid in the centre than in the periphery, and increases in labour productivity were assumed to be more intensive in industry than in the primary production of peripheral countries.¹⁶ In theory, the benefits from this technical progress could be transferred either through a reduction in the price of goods (money incomes remain unaltered), reflecting lower production costs, or through an increase in incomes (prices remain unchanged). In practice, however, productivity gains in industry were not reflected in lower prices but in higher incomes at the centre, whereas the opposite was true for raw materials produced in the periphery. This, in turn, was reflected in rates of increase of average productivity and average real income which were higher in the centre than in the periphery.¹⁷ In other words, the pattern of distribution of technical progress between countries resulted in a world economic system which has, at the centre, a diversified and homogeneous structure of production, with an endogenous dynamic and capability to reproduce itself, and at the periphery, a specialized and heterogeneous economic structure, which can only accumulate through exchange with the centre. It is this concern about the differences in the economic struc-

consequent "polarization process" which inhibits the growth of manufacturing activities in some areas and concentrates them in others. The export of these cheap "factory-made goods" eliminated local producers (handcrafts, artisans) in underdeveloped countries as they became uncompetitive and forced these countries to "specialize" in the production of raw materials and minerals. Kaldor (1980), p. 6.

¹²Rodríguez (1977), p. 198.

¹³See Prebisch (1950), pp. 1-2, and ECLAC (1951), pp. 3-4.

¹⁴These concepts of heterogeneity and homogeneity of the production structures were developed at a much later date; see Pinto (1965). The bipolar order of ECLAC's world does not consider the case of the development of new settlement areas such as North America and Oceania, where benefits of high technology and the homogeneous production structure spread as well. This was suggested to me by D. Evans.

¹⁵ECLAC (1951), p. 74.

¹⁶Prebisch (1950), p. 8.

¹⁷Rodríguez (1977), p. 199.

tures of the centre and periphery, their accumulation processes and the role of the means of production what makes ECLAC's analysis not just another theory of trade but effectively an alternative approach¹⁸ to trade theory¹⁹ along the lines suggested by the recent neo-Ricardian critique of the comparative advantages theory.²⁰

Followers of the neo-classical approach to international trade would argue that regardless of where technical progress takes place,²¹ its benefits will be made available to every country in the world, no matter what its line of specialization, through lower prices of the goods.²² According to Prebisch (1950), however, historical evidence seems to indicate that, while this was probably true for industrialized countries, it did not apply to the periphery of the world economy. The enormous benefits derived from increased productivity did not reach peripheral countries in a measure comparable to that obtained by the population of the great industrial centres, and the fact that reveals the impact of this unequal distribution of benefits is the deterioration of the periphery's terms of trade and their secular tendency to get worse.

A deterioration of the terms of trade in the periphery is understood as a decline in the amount of finished manufactured products that

those countries can obtain for a given quantity of primary commodities.²³ It is argued by ECLAC,²⁴ that increases in productivity resulting from technical progress have not been reflected in proportional reductions in nominal prices, but have actually resulted in price (and income) increases, and further, these increases have been larger in the centre's industrial production than in the primary production of the periphery. Moreover, since the terms of trade have moved against the periphery, this has meant that "while the centres kept the whole benefit of the technical development of their industries, the peripheral countries transferred them a share of the fruits of their own technical progress".²⁵

The ability of the industrial centres to retain the benefits of their own technical progress and at the same time absorb part of the benefits accruing to the periphery can be explained, according to ECLAC, by two sets of factors: on the one hand, the way wages and profits evolve, both at the centre and in the periphery, during the course of the economic cycle²⁶ and, on the other, the difference between income-elasticities of demand for imports at the centre and the periphery. The first part of this argument contains the basics of what has become known as the "unequal exchange" theory.²⁷

¹⁸To borrow Steedman's concept: "An alternative approach would... lead to a trade theory which is more concerned with growth and with the role of capital goods than is a trade theory—such as the Heckscher-Ohlin-Samuelsson theory—which starts from exchange and consumption." Steedman (1979), p. 7.

¹⁹As suggested also in FitzGerald (1982).

²⁰See Evans (1981c).

²¹The probability of its occurrence anywhere would be similar.

²²See, *inter alia*, Johnson (1958).

²³A concept used despite its acknowledged limitation that it does not reflect differences in quality of finished products (see Prebisch, 1950, p. 8) which could account for some of the decline in the price relationship between primary and manufactured goods. Commodity terms of trade were used probably because they are relatively easy to measure and were readily available. But ECLAC's argument implies that "factoral terms of trade", rather than "commodity terms of trade", have to decline. Even if the latter

do not deteriorate, the mere inequality of the rate of increase of labour productivity (productivity rises more in the centre than in the periphery) implies a difference in average income levels. If commodity terms of trade deteriorate as well, then the gap between incomes will be even larger (Rodriguez, 1977, p. 200).

²⁴See ECLAC (1951), and Prebisch (1950) and (1951).

²⁵Prebisch (1950), p. 10; this conclusion seems to have shocked Viner, who did not hesitate to dismiss it as "for the most part mischievous fantasies, or conjectural or distorted history"; see Viner (1953), p. 44.

²⁶"Even though the low mobility of factors of production as technical progress spreads suffices to explain the great differences between incomes at the centre and those at the periphery, these differences are created precisely during the cyclical movement" ECLAC (1951).

²⁷The main contributors to that theory are Emmanuel (1972), who first used the term "unequal exchange"; Amin (1974); Braun (1973); and Saigal (1973).

III

Wages and profits in the economic cycle

The cycle has been the mode of growth of the capitalist economy, and increased productivity has been one of the main factors of that growth. Consequently, the distribution of benefits from technical progress cannot be understood except in relation to trade cycles and the way in which they evolve in the centre and at the periphery.²⁸

In the centre, the process of cyclical development creates a continuous disparity between the aggregate demand and supply of finished consumer goods, with the former exceeding the latter in the upswing while the opposite holds true during the downswing phase of the cycle. Profits and their variations are closely related with this disparity (Prebisch, 1950). During the upswing, despite increased productivity, prices rise and so do profits. Therefore, if increased productivity were to bring about an immediate improvement in wages and salaries these would have to rise more than prices. However, during the upswing prices frequently rise more than wages, so that the benefits accruing from technical progress are absorbed by profits and thus remain in the hands of the entrepreneurs. During the cyclical downswing, on the other hand, when profits have to be reduced, the part that had been absorbed by nominal wage increases loses its fluidity and cannot be reduced concurrently. Consequently, during the depression nominal wages decrease less than prices and lose only part of the increase obtained during the prosperity phase, thus establishing a more favourable relation for wages.

So far, however, the mechanism of trade cycle does not explain why industrial countries are in a position to retain the benefits from their own technical progress, and even take possession of part of the benefits from the technical progress accruing to the periphery. To understand this uneven distribution of benefits one has to analyse the inequality in the cyclical movement of prices of primary products and manufactured goods.

During the upswing of the cycle, demand for manufactured goods in the centre is greater than supply. This, as mentioned before, leads to an increase in prices as well as in profits and nominal wages. Eventually through a series of reactions, supply exceeds demand, leading to the cyclical downswing. During the cyclical downswing, stocks of manufactured goods which are temporarily unsaleable are accumulated. As a result of the accumulation of surplus supply, producers of manufactured goods will scale down their demand for the goods of their immediate suppliers, who will in turn reduce their demand for the goods of their own suppliers, and so on until the weakest link in the chain — i.e., suppliers of primary commodities in the periphery — is affected.

Throughout the various stages of the cyclical downswing, there is a decrease in prices, employment and profits. If the decrease in the supply price were proportional to the increases of profits and wages that provoked the initial increase in price, one would simply return to the point of departure, and both the centre and the periphery would share equally in the benefits of technical progress (ECLAC, 1951). Experience has shown, however, that at the centre, despite unemployment, well-organized trade unions tend to offer great resistance to any wage reduction, while entrepreneurs, for their part, tend to resist any lowering of profits. These rigidities will hinder any reduction of the price of manufactured goods to the extent required to balance supply and demand, and consequently surplus stocks will continue to accumulate. The accumulation of stocks leads to greater need to curtail production and, therefore, to reduce demand for primary products. Consequently, the pressure to reduce prices moves towards the periphery with greater force than would be the case if, by reasons of the limitations of competition, wages and profits in the centre were not rigid (Prebisch, 1950). The stronger these rigidities, the larger the fall in the demand for and prices of primary products.

²⁸See Prebisch (1950), p. 12, and ECLAC (1951), pp. 57-8.

In the periphery, on the other hand, the existence of surplus labour coupled with the characteristic lack of labour organizations (or at least, of organizations as powerful as those at the centre) prevents workers, first, from obtaining wage increases comparable to those of the industrial countries during the upward phase of the cycle, and, secondly, from maintaining whatever increases they have obtained to a similar extent during the downswing of the cycle. Similarly, entrepreneurs at the periphery cannot put up a resistance to a reduction in profits comparable to that offered by their counterparts in industrialized countries. Consequently, during the downswing, wages as well as profits are likely to be lower in the periphery than in the centre, while unemployment would be higher in the former than in the latter. If wages and profits at the periphery were to show a larger downward "stickiness" this would merely increase the pressure exerted by the centre on the periphery, and demand for primary products would fall to the extent required to achieve the necessary reduction in income (i.e., profits plus wages) in the primary producing sector.²⁹ As the experience of the Great Depression indicated, the pressure that the centre can exercise on primary producers can be so great as to compel them to devalue their currency in order to adapt themselves to the fall in prices brought about by the decline in the demand of industrialized countries (ECLAC, 1951).

ECLAC's attempt to explain the uneven distribution of benefits from technical progress during the cycle through the relative inflexibility of wages and profits at the centre in the downswing focuses only on one side of the coin. The fact that the centre can make use of that inflexibility not only to retain the benefits from technical progress in its own economies but also to obtain a share of the benefits accruing in the periphery, can only be understood in the context of two distinct systems of price formation. As Kalecki pointed out some time ago³⁰ (and Hicks rediscovered in the mid-1970s),³¹ price changes can be classified into two groups: those dominated mainly by supply and demand conditions

and those which are "cost-determined" or dominated by "costs plus profits".³² Prices of finished goods would be "cost-determined", while prices of raw materials and primary foodstuffs would be "demand-determined" (Kalecki, 1971). One could extend this concept and argue that prices of goods produced at the periphery are "demand-determined" while goods produced at the centre are determined mainly by unit prime costs (i.e., cost of materials and wages) and the gross profit margin, expressed as a mark-up on unit prime costs. These mark-ups are determined by semi-monopolistic and monopolistic factors, or what Kalecki called the "degree of monopoly" of the firm's position, which it would exercise making sure that the price is not too high in relation to prices of other firms in the industry.³³ For any particular firm, these conditions may be represented by the equation:

$$p_i^j = m_i^j u_i^j + n_i^j p_i \quad (1)$$

where p_i^j is the price of firm "j" in industry "i", u_i^j are the firm's unit prime costs, m_i^j and n_i^j are positive coefficients specific to firm "j", and p_i is the weighted average price of all firms in the industry "i". Similarly, the output-weighted average of equations for each firm in industry "i" would be:

$$p_i = m_i u_i + n_i p_i \quad (2)$$

and therefore

$$p_i = u_i \frac{m_i}{1 - n_i} = \lambda_i u_i \quad (3)$$

where

λ_i is the average industry mark-up which, according to Kalecki, reflects the degree of monopoly in the industry. If one assumes that

²⁹To use J. Robinson's terms, see Robinson (1980), p. 8.

³⁰Kaldor objected to this concept, arguing that it was purely tautological (see Kaldor, 1955/1956); subsequently, Kalecki argued that there was no problem of tautology: if prices were not determined by the equilibrium of supply and demand, they were "fixed by the firms on the basis of average prime costs and average price of the product group in question" (M. Kalecki, "Trends and the business cycle", *Economic Journal*, 1968, reprinted in Kalecki, 1971). For another defence of Kalecki's concept see Riach (1971).

²⁹Prebisch (1950), pp. 13-14; see also ECLAC (1951), p. 60.

³⁰See Kalecki (1939).

³¹See Hicks (1976).

the actual level of overheads does not directly influence the determination of price since overhead costs remain roughly stable as output varies, then one can safely equate mark-up to profit ($\lambda_i = r_i$). Moreover, following Mainwaring's analysis,³⁴ if one expresses unit prime costs of industry "i" as

$$u_i = p_p a_{pi} + w a_{oi} \quad (4)$$

where p_p represents the price of commodity inputs, a_{pi} the variable input coefficients, a_{oi} the unit labour, and w the money wage of homogeneous labour, then one could express the profit of an industry at the centre as

$$r_c = \frac{P_c}{u_c} = \frac{P_c}{p_p a_{pc} + w a_{oc}} \quad (5)$$

For reasons of simplicity one could further assume that "c" is a centre industry in the early stages of the production chain whose prime costs consist of wages and the cost of primary products supplied by the periphery. It can thus be seen that during the downswing of the cycle, when prices collapse, capitalists at the centre can retain (or reduce the decline of) their profits only by reducing w or p_p . Since we have already argued that wages at the centre are determined by institutional factors (trade union bargaining power) and show downward inflexibility, the problem can only be solved at the expense of the prices of primary products (p_p) supplied by the periphery. On the other hand, as the periphery is a "price taker" (in contrast with the centre, which is a "price maker"), it has no choice but to accept lower prices and reduce profits and wages accordingly.

IV

ECLAC and the "unequal exchange" debate

Let us now briefly contrast ECLAC's model with the main contributions to the debate on unequal exchange (i.e., Emmanuel, Amin, and Braun). For these authors, unequal exchange arises from the fact that real wages are higher in the developed North than in the developing South. Trade under these conditions is unequal for the developing world in the normative sense that its terms of trade and income levels are lower than they would be under a Pareto-efficient trade arrangement allowing for perfect international labour mobility.³⁵ Their propositions can best be analysed with the help of a two-country two-commodity neo-Ricardian or Sraffian trade model which abstracts from the level of activity.³⁶ The two countries will be C ("centre"), which has high wages, and P ("periphery"), with low wages. Production takes place in self-contained periods and wages are paid at the end of each period. Commodities 1 and 2 will be

produced by means of labour and the same two commodities with given technical coefficients a_{ij} and labour productivity a_i . It will be further assumed that as a result of foreign trade complete specialization of C and P will take place. Thus, in a situation where transport costs can be disregarded, the following price equations could be defined:

$$p_1 = w_c a_1^c + (1+r) (a_{11}^c p_1 + a_{21}^c p_2) \quad (6)$$

$$p_2 = w_p a_2^p + (1+r) (a_{12}^p p_1 + a_{22}^p p_2) \quad (7)$$

where the variables are prices (p_i), wage rates (w_c, w_p), and the rate of profit (r) (which for the time being will be assumed to be equalized through competition), and where the centre is specializing in the production of the manufactured commodity 1 and the periphery in the production of raw materials (commodity 2). If we define the terms of trade as $T = P_2 / P_1$, where the price of manufactures is standardized as $P_1 = 1$, then we have

³⁴Mainwaring (1977), p. 677.

³⁵Bacha (1978), p. 321.

³⁶See Mainwaring (1979) and Evans (1980).

$$1 = w_c a_1^c + (1+r) (a_{11}^c + a_{21}^c T) \quad (8)$$

$$T = w_p a_1^p + (1+r) (a_{12}^p + a_{22}^p T) \quad (9)$$

where wages (w_c, w_p) are expressed in terms of their exchange ratio with the manufactured commodity 1. Consequently, we have two equations and four variables: w_c, w_p, r and T . To solve the equations the system would have to be "closed" by choosing two variables as exogenously determined. The selection of the pair of variables which are assumed to be determined exogenously provides the starting point for a brief discussion about the analytical arguments presented by the various contributors to the "unequal exchange" debate.³⁷

Emmanuel's argument starts by modifying the assumptions about factor mobility made by Ricardo. Emmanuel retains the assumption of labour immobility internationally, but treats capital as internationally mobile, with the consequent tendency towards equalization of the rate of profit in all countries.³⁸ Further, he assumes that nominal and real wages at the centre and the periphery (w_c, w_p) are determined independently by institutional and historical forces, and establishes a direct relationship between the international terms of trade and wages (measured by the bundle of commodities required to maintain labour). Emmanuel goes on to conclude that, in the context of specialized trade and equalized international profits, inequalities of wages internationally would result in an unequal distribution of wage income and an "unequal exchange" associated with unfavourable barter terms of trade. In his model, unequal exchange is defined by comparing international prices of production with *unequal* wages to the prices which would obtain with *equal* wages.³⁹ For Emmanuel, high wages precede and are a cause of higher levels of development at the centre, but they push the periphery farther into "unequal exchange" as a result of the "centre-periphery" differential in worker bargaining power,⁴⁰ which

leads to the objectable conclusion that workers at the centre constitute a labour aristocracy exploiting peripheral workers.⁴¹

Other objections to Emmanuel's analysis refer, on the one hand, to the unsubstantiated hypothesis that higher wages not only improve the terms of trade but also lead directly to higher levels of accumulation and technical change (Evans, 1981c) and, on the other, to the failure to explain why, given the assumed international mobility of capital, there is no massive flow of capital to peripheral countries for the manufacture, at economic costs, of commodities for export to the world markets.⁴² Finally, Emmanuel's theory has been further criticized because, under the conditions of international mobility of capital assumed in his model, an increase in the (nominal and real) wage rate in the short run in one country will lower the rate of profit below the internationally equalized level, leading to a short-run capital outflow and a balance-of-payments crisis. This in turn will create strong competitive pressures leading to a lowering of real wages (either through devaluation of the exchange rate or unemployment) to restore the rate of profit to long-run levels, thus undermining the central mechanism required for Emmanuel's theory to work.⁴³

Braun's analysis has great affinity with the unequal exchange theory of Emmanuel. But, unlike the latter, rather than accepting the assumption that wages constitute the independent variable and prices the dependent one, Braun chooses prices as the independent variable. The price at which peripheral countries exchange their products is determined by the

³⁷This approach was borrowed from Evans (1981d) and Fitzgerald (1981).

³⁸Emmanuel (1972), pp. xxiii-iv.

³⁹Evans (1980), p. 3; emphasis in original.

⁴⁰*Ibid.*, p. 5.

⁴¹"...a *de facto* united front of the workers and capitalists of the well-to-do countries, directed against the poor nations, coexists with an internal trade-union struggle over the sharing of the loot. Under these conditions this trade-union struggle necessarily becomes more and more a sort of settlement of accounts between partners"; Emmanuel (1972), p. 180. But as Braun rightly pointed out, "though the working class of imperialist countries can benefit from the low level of wages obtained in dependent countries, the working classes of the imperialist countries cannot exploit the working classes of dependent countries... (because the former)... have no relations of *domination* with the working class of the dependent countries" (Braun, 1977, p. 111).

⁴²Braun (1977), p. 111; an objection which we share, but would not have expected from Braun, since he also assumes equalization of rates of profit and, therefore, international mobility of capital.

⁴³Evans (1981c), p. 123.

centre countries through a combination of commercial policies and monopolistic bargaining power. The price thus determined is such that, for a given rate of profit r , $w_c > w_p$ and the centre will always benefit through unequal exchange. The possible use of tariffs or other trade restrictions to protect an industry in the centre from import competition would not eliminate the net benefits per worker employed, as at least some of the cost of protection is passed on to the periphery through the mechanism of unequal exchange and w_c (net of protection) would be higher than w_p (Evans, 1981b). The second variable chosen by Braun to close the set of price formation equations is the rate of profit (r), which, following Emmanuel, he assumes to be equalized internationally,⁴⁴ though the implications of international mobility of capital are not analysed in this system. The way the rate of profit (r) is determined is not fully explained by Braun either, but it would seem that it is determined exogenously by the accumulation process at the centre and spread over the world. For any given set of prices (T) and profits (r), the system of equations can be solved for the other two variables (w_c , w_p), leading not only to a set of long-term prices but also to a distribution relationship. Given " r ", the gains of unequal exchange are imputed to the workers at the centre (though not seen as Emmanuel's labour aristocracy),⁴⁵ although it seems more likely that these benefits are "shared" between capitalists and workers at the centre.

Within Braun's model,⁴⁶ demand relationships will constrain the choice of " T " (Parrinello, 1979) but will not necessarily lead to terms of trade unfavourable to the periphery. In order for the periphery's terms of trade to deteriorate, T must be "rigged against the periphery", i.e., prices must be determined by the centre countries in such a way as to lead to unequal exchange benefits for them. This has led to criticisms about the conspiratorial character of such a theory (Evans, 1981b), which despite Braun's denials, is implicitly assumed to be part of the overall character of imperialism.

In his analysis of the relationships between the capitalist centre and the periphery, Amin attempts to present an alternative view to Emmanuel's Unequal Exchange model. In Amin's approach, the selection of the two independent variables w_p and r is the result of the structural specifications he gives of the world economy. Amin introduces the concept of a peripheral mode of production characterized by the presence of modern advanced-technology export sectors (and possibly sectors protected against import competition) which have an internal "unequal exchange" relationship with marginalized or non-capitalist modes of production. Within this framework, wages in the periphery (w_p) are determined by the subsistence requirements of the labour power, influenced mainly by the role of non-capitalist activities, and not by the outcome of an historical, institutional and bargaining process as in Emmanuel.⁴⁷ Further, the low level of wages in the periphery is the result of the social formation of peripheral countries, which permanently generates a surplus labour force. The second independent variable is assumed to be the rate of profit (r), which is determined by the needs of accumulation at the centre.

Amin assumes a long-run international mobility of capital which would ensure an equalization of rates of profit.⁴⁸ He also assumes that the periphery is able to produce non-specific goods (i.e., commodities competing with the centre), thus opening the possibility of autarkic or more "self-reliant" development.⁴⁹ Furthermore, given the assumed international mobility of capital in Amin's model, the productivity of the "periphery" is similar to that of the "centre". As a result, unequal exchange is defined as the exchange of products whose production involves wage differentials greater than those of productivity.⁵⁰ Consequently, in his model, unequal exchange that benefits the centre takes place

⁴⁴D. Evans (1981d), pp. 27-30.

⁴⁵He really assumes that the international mobility of capital will lead to a very small range of profit rates. See Amin (1977), p. 184.

⁴⁶For a discussion on the connections between Amin's views on an "unequal exchange" relationship and those of some dependency writers, such as Frank (1967) and Wallerstein (1974), see Evans (1981a).

⁵⁰Amin (1977), p. 211.

⁴⁴Braun (1977), p. 52.

⁴⁵See footnote 41.

⁴⁶Braun really talks about institutional power, the use of the State to support certain economic policies.

because wages in the periphery, which as we mentioned before are established at subsistence level, are always dragging behind productivity increases. This latter assumption, however, is rather restrictive in that it allows for only one wage, the subsistence wage, at the periphery (FitzGerald, 1981).

Contrary to the views of Emmanuel and Braun, Amin rejects the idea that unequal exchange can automatically benefit the workers at the centre, though no reasons are given for this rejection. Unequal exchange, he argues, can only benefit the centre workers to the extent that it allows for a much speedier development of productive forces at the centre.³¹ But, as Braun points out, despite the fact that the working class at the centre cannot directly extract surplus from the periphery by acting on the commodity markets (i.e., the terms of trade), there is no reason why it should not benefit indirectly from the low prices which the capitalists of the centre can impose on the exporters at the periphery, in the same way that it benefits indirectly from the stronger development of the productive forces at the centre.

There are, however, some shortcomings in Amin's model. As Evans (1981d) and FitzGerald (1981) have pointed out, there seems to be an internal inconsistency in Amin's accumulation model in as far as his theory of peripheral accumulation implies that savings (or the remaining surplus) determine investment, while the opposite would seem to hold at the centre, according to his model. Another weakness of Amin's model is that, as it assumes non-specific goods in world trade, it is not clear why capitalists do not shift from the high-wage centre to the periphery and produce all the goods there at lower cost and export them to the centre. This is only understandable if one accepts Amin's conclusion that "unequal exchange" is a trade régime imposed on the periphery by the centre through the assumed operation of extra-market forces. In other words, Amin's model works if one accepts his suggestion that capitalists are in a position to adopt certain measures to impose their price on the pre-capitalist economy

(the periphery) and thereby prevent the periphery from sharing the benefits of increased productivity generated in the centre. As prices of goods exported by peripheral countries are kept low, so the conditions for accumulation and reproduction are maintained in the centre. In the end, what we have is a theory of imperialist domination of the "peripheral" states by the imperialist "centre" —to use Evans's words— which enforced unequal exchange through extra-market forces, whereas Emmanuel's unequal exchange is the result of the imperialism of free trade (Evans, 1981d).

At this stage of the discussion we can bring in ECLAC's cycle analysis and try to extend it to a long-term framework of analysis and contrast it with the various positions in the unequal exchange debate. Although not explicitly stated in the Commission's writing, ECLAC's model retained Ricardo's assumption of national mobility and international immobility of capital and labour.³² Thus, we now have $r_c \neq r_p$ and therefore have an additional variable in our set of equations. The rate of profit at the centre (r_c) is exogenously determined by the accumulation process (which can be thought of as a "Cambridge closure" of the Sraffian system), while centre wages are determined by the class struggle at the centre. We would still have three variables (r_p , w_p , T) to be solved with two equations. If we go back to our equation (5) of the degree of monopoly, and standardize the price of manufactures as $p_c = 1$, we would have the third equation required

$$r_c = \frac{1}{T a_{21}^p + w_c a_1^c} \quad (10)$$

so that the accumulation process and the class struggle at the centre determine the terms of trade, and consequently the wages and the rate of profits, at the periphery.

Before continuing with our discussion on unequal exchange, we need to make a parenthe-

³¹*Ibid.*, p. 219.

³²Although the conclusions of the ECLAC model will not change if one assumes that capital has *incomplete mobility* rather than *absolute immobility*.

sis to explain the use of a short-run concept such as the degree of monopoly in a long-run argument. While it is true that the cost-price relations that define the degree of monopoly are derived initially from short-run considerations, the analysis, as Kalecki himself argues,⁵³ is also applicable in the long run.⁵⁴ The only parameters which enter the equation (3) are m and n , and these may, but need not necessarily, change in the long run (Kalecki, 1971, p. 52). If the two parameters are constant in the long run, then the only influence on price would come from changes in unit prime costs, as long as the capacity constraint is not reached (Kriesler, 1987, p. 77). The starting point in Kalecki's analysis of price determination (and consequently of the share of profits in national income) is that firms operating outside the primary product sector do so in conditions of imperfect competition and at levels of output below the limits of physical capacity, with average costs of materials and manual labour approximately constant. Therefore, the factors which influence the degree of monopoly, and thereby the mark-up, are not likely to vary substantially with respect to demand and output changes. There are two additional relevant points in Kalecki's writing. The first is that the long run is merely a collection of short runs. Thus, the economy is always operating in some short-run situation, and in that sense short-run factors determine the outcome of employment, income distribution or any other variable. The second is that he argues that the portrayal of economies as being in equilibrium is unrealistic, given that imperfect competition is "deeply rooted in the nature of the capitalist system".⁵⁵ Under those conditions, Kalecki maintains, his analysis of the degree of monopoly has long-run validity.

The choice of variables in the ECLAC model would present various advantages over the rest of the "unequal exchange" choices. First, we maintain Ricardo's assumption of the international immobility of capital, at least between centre and periphery. This would take care of Braun's criticism of Emmanuel on the absence of capital flows from the centre to the periphery in his scheme, as well as of the shortcomings of Amin's model on this same point. The assumption can be lifted for capital mobility between centre countries (i.e., international equalization of r_c) without altering the conclusions of the model. Secondly, the model determines the wage of the modern sector (i.e., export enclave) in the periphery, so that the "subsistence" wage of the "traditional" sector (peasant agriculture) could also be incorporated into the system, thus enabling us to deal with the problems of dualism and internal migration in the periphery.⁵⁶ Finally, it accommodates the dependent character of the periphery's accumulation process.

Evan's criticism of Emmanuel to the effect that "the many mechanisms by which highly mobile finance capital in the short-run and productive capital in the long-run can and do operate to prevent any national money wage bargains from stepping outside acceptable bands of profitability for international capital, destroys any basis for considering wages as the independent variable"⁵⁷ no longer holds good in the case of the ECLAC model. To begin with, ECLAC does not assume "highly mobile" capital, but even if we accept this mobility between centre countries, capitalists at the centre can allow national wage bargains to step out of line as long as they can compensate this by reducing the other component of unit costs, i.e., the price of the raw materials imported from the periphery.

⁵³See Kalecki (1969), Chapters 14 and 15, and Kalecki (1971), Chapter 5.

⁵⁴For a full discussion on the long-run validity of a short-run concept such as the degree of monopoly and on the limitations of the concept, see Kriesler (1987) and Sawyer (1985).

⁵⁵Kalecki (1939), p. 41, as quoted in Kriesler (1987), p. 101.

⁵⁶FitzGerald (1981), p. 3.

⁵⁷Evans (1980), p. 25.

V

ECLAC's elasticity of demand argument

In the early 1950s,⁵⁸ an additional explanation of the decline of the periphery's terms of trade was incorporated, based on both the lack of dynamism of food demand, invoking Engel's law, and the relative decline in demand for new materials as a result of technological innovations. Although this idea was developed only in later works, it became the central argument in the interpretation of the trend towards the deterioration of the periphery's terms of trade (as well as in the justification of protection for import-substituting industrialization).⁵⁹

In general terms, ECLAC argued that technical progress reduces the share of the value of primary products in the total value of finished goods. This phenomenon takes place as a result of i) the creation of new products which require a progressively more complex or refined elaboration of raw materials, consequently leading to a lower contribution of the latter to the value of the finished good; ii) better utilization of raw materials and intermediate goods, resulting in a proportionately higher value of finished product per unit of raw material or intermediate good than before; and iii) the replacement of natural products by cheaper man-made inputs in the production process of manufactured goods.⁶⁰ Moreover, these increases in productivity, and the resulting increment in income which they entail, led to changes in demand which have affected the terms of trade of the periphery. "It is a well known fact a) that when the level of income rises, demand is diversified, and whilst there is only a relatively small increment of the demand for ordinary foodstuffs, the demand for various articles created by modern technical inventions rises sharply after a certain point and b) that within the tendency of total demand to diversify, the demand for personal services increases, therefore lowering the proportion of primary products in the supply of concerted

demand of the population."⁶¹ Although in theory one could argue that the relative decline in demand for foodstuffs could be more than offset by the relative increase in demand for raw materials resulting from increased demand for manufactured goods as incomes rise, thus leaving the periphery better off than before, in practice the opposite is true. Because of the raw material-saving character of technological innovations, the increment in demand for inputs by manufacturing industries is likely to reinforce rather than offset the decline in the growth rate of demand for foodstuffs and consequently lead to a relative decline in the overall demand for primary products.

The combination of input-saving technologies and an extended interpretation of Engel's Law causes imports of primary products by the industrial centres to expand at a lower rate than real income. In other words, technological inventions and changes in demand brought about by increased income result in an income-elasticity of primary imports which is less than unity in the centres (Prebisch, 1951). Income-elasticity of demand for imports by the periphery, on the other hand, is seen as extremely high (at least potentially), given the high import content of new investments and the demonstration effect of the centre on the consumption patterns of the high-income groups in peripheral countries. Hence, if peripheral countries had to rely only on their primary exports for the expansion of their economies, as was the case before the Great Depression and as orthodox theory suggests they should do, their rate of economic development would be considerably lower than in the industrial centres. Moreover, these differences in income-elasticities have impaired the position of primary products on the world market and strengthened that of manufactured goods, thus affecting both the periphery's terms of trade and the possibility of a more even distribution of

⁵⁸See Prebisch (1951).

⁵⁹See, for example, Prebisch (1959).

⁶⁰Prebisch (1951), p. 29.

⁶¹*Ibid.*, p. 30.

benefits from productivity gains.⁶² Under those circumstances, the long-term trend of the gap between the two poles of the world capitalist system would be to widen rather than to narrow.

At about the same time as Prebisch, but independently, Singer developed a similar argument based on the nature of demand for primary and manufactured goods to explain fluctuations of the terms of trade (Singer, 1950). This has led many writers to lump both theories together under the common label of "Prebisch-Singer Theory",⁶³ despite the fact that Singer's theory includes only one element of Prebisch's analysis, namely, the differences in import demand elasticities. Although Singer recognizes that "technical progress in manufacturing industries showed in a rise in incomes, while technical progress in the production of food and raw materials in underdeveloped countries showed in a fall in prices",⁶⁴ he does not explain why and how this takes place and prefers to emphasize the differences in the nature of demand for manufactures and primary products at the centre and the periphery to explain the worsening trend of the latter's terms of trade.

By wrongly combining both theories in one, ECLAC's explanation of the fluctuations of the terms of trade was effectively reduced to only one of its elements (that related to the elasticity of import demand), while over-shadowing what

was probably the most important contribution of Prebisch's analysis, namely, the relationship between the different behaviour of wages and profits at the centre and periphery during the economic cycle and the fluctuations in the terms of trade. It also meant that early critics of ECLAC's views, such as Viner (1953), for example, concentrated their attacks on the demand element. This, however, can also be attributed to the neo-classical economists' inability to cope with institutional problems.⁶⁵ Viner argued, following the orthodox line of thought, that the consequences of Engel's Law would not necessarily have a negative effect upon the economic development of peripheral countries. In his view, the effect of Engel's Law would be a relative rather than an absolute decline in demand for agricultural products,⁶⁶ and therefore it would not prevent but would only lessen the rate of progress in per capita agricultural incomes. Moreover, he argues that, if a relative shift in demand makes employment in agriculture less productive than other employment, resources should be guided out of agriculture to these superior uses. According to ECLAC's analysis, however, this is not feasible precisely because of the characteristics acquired by the structure of production in the periphery during the uneven development of the capitalist world system under free trade.

VI

The "built-in" balance-of-payments disequilibrium

Given the unequal distribution of benefits from technological progress and international trade, the maintenance of the prevailing system of specialization along the lines of static comparative advantages would necessarily lead to a still

wider disparity between the levels of development of the centre and the peripheral countries. Since demand for industrial goods increases more rapidly than that for primary goods, it is inevitable that economies specializing in the

⁶²As Prebisch would rightly argue in a later paper, this difference in income elasticity of demand is frequently accentuated by measures to protect primary commodities in the centres. See Prebisch (1959). This was a central point in Braun's argument, for whom, as we saw earlier, unequal exchange comes about as a result of the imposition of tariffs by the centre and its monopolistic bargaining power.

⁶³See, for example, Hirschman (1961).

⁶⁴Singer (1950), p. 311.

⁶⁵Additionally it led to involuntary unfair criticism by later commentators, such as Emmanuel for example, as rightly pointed out by Amin. See Emmanuel (1972), pp. 80 *et. seq.*, and Amin (1974), p. 83.

⁶⁶Viner seems to have understood that ECLAC's analysis was based, *inter alia*, on the "dogmatic identification of agriculture with poverty" (Viner, 1953, p. 44); the argument does not change, however, if one substitutes primary products for agricultural products.

production of industrial goods will develop faster than those which continue to be dependent upon primary products. Consequently, in absolute terms, the gap between the central and peripheral countries will widen in time unless the original production structure that resulted from the international division of labour is modified.⁶⁷

In addition to this trend towards increasingly unequal development implicit in a system of relationships between centre and periphery based on the traditional international division of labour, ECLAC argues that there is a "built-in disequilibrium" in the balance of payments of peripheral countries. The combination of the two elements described in the previous section, namely i) the failure of primary product prices to keep pace with price increases of manufactured goods, in a world where industrialization of the periphery depends on the import capacity generated by its exports; and ii) the decline (in relative terms) in the demand for primary products exported by the periphery, results in a persistent disequilibrium in the balance of payments of peripheral countries:⁶⁸ a phenomenon which ECLAC considers to be generally inherent in the process of economic development of these countries (ECLAC, 1951). The foreign exchange earnings of a peripheral economy depend mainly on exports of primary products, and therefore the flagging growth of demand for the latter means that export receipts are insufficient to create the import capacity needed to supply the economy with the capital goods required for its rapid development.

This tendency towards a persistent disequilibrium of the periphery's balance of payments is explained in terms of the decline in the import coefficient of the principal centre in the midst of worsening terms of trade of peripheral countries. The lower the import coefficient, the lower the centre's capacity to transmit the impulses received from abroad during the cycle. During the nineteenth century, when Great Britain acted as the principal cyclical centre of the capitalist world economy, the function of exports in the economic life of that country and its high import coefficient rendered it highly sensitive to

any external stimuli, and these were therefore returned to the rest of the world relatively quickly. There was thus no manifest tendency to a chronic unfavourable balance.⁶⁹ Moreover, fluctuations are assumed to have been greater in the principal centre than in the peripheral countries during the last century. Consequently, during the downswing phase of the cycle, the fall in national income, assumed to be larger in the centre than in the periphery, led to a fall in imports of the principal centre which was relatively larger than the decline in imports experienced by the periphery. During this depression period Britain would attract the gold from peripheral countries, since the balance⁷⁰ was unfavourable to the latter. Conversely, during the upswing of the cycle Britain would release gold, which would flow back to the periphery, as a result of the relatively greater increase in Britain's national income and the consequent larger expansion of its imports in relation to increased imports by the periphery.⁷¹ Consequently, "a centre like Great Britain, which through its exports and foreign investments during the cyclical upswing restored a large part of the gold accumulated during the downswing, was bound to contribute greatly to the smooth working of the monetary system in other countries".⁷²

During the twentieth century, but particularly after the Great Depression, Great Britain was replaced by the United States as the principal centre of the capitalist world economy, and the system lost its symmetry. This was a direct result of the fact that the import coefficient of the United States was relatively small and declining, while that of Great Britain remained more or less stable.⁷³ The relatively closed market of the United States economy, together with the decline in its import coefficient, caused the effects of the depression to be felt even more acutely in the rest of the world than would other-

⁶⁷ECLAC (1970), p. xviii.

⁶⁸Di Marco (1972), p. 7.

⁶⁹ECLAC (1951), p. 39.

⁷⁰Assumed to be in equilibrium throughout the cycle as a whole.

⁷¹An argument taken up also by Amin (1974), p. 566.

⁷²ECLAC (1951), p. 41.

⁷³The average import coefficient of the United States fell from 3.7% in 1935-1939, while the corresponding coefficient for Great Britain declined from 19.4% to 17.7% over the same period. See ECLAC (1951), pp. 29-33.

wise have been the case. Moreover, unlike Britain, the new cyclical centre did not possess the same power to release gold, as it was less sensitive to an external stimulus than was the British centre, and far slower in transmitting it to the rest of the world by means of increased imports. The tendency of the United States to concentrate and retain gold hampered the reconstruction of the monetary reserves of the rest of the world. Consequently, it resulted in an international monetary system working on lines very different from those followed before the First World War (ECLAC, 1951), and to an increasing shortage of dollars.

As Amin explains, for the system to retain its original symmetry it would have been necessary for the ratio of fluctuations at the centre to fluctuations in the periphery to increase regularly in proportion to the decline in the import coefficient of the principal centre.⁷⁴ However, what accounts for the chronically unfavourable balance of payments of peripheral countries is the way the respective propensities of the principal centres and the periphery evolve. The general propensity to import displayed by the developed countries (principal centres) increases regularly owing to the increasing trade among themselves. For its part, the propensity to import of the peripheral countries also increases, but as the trade among these countries can be assumed to be marginal, this propensity is equivalent to their propensity to import from the centre. Altogether, the propensity of the periphery to import from the centre has increased more than the propensity of the centre to import from peripheral countries. Therefore, it would seem that the balance-of-payments difficulties of peripheral countries have not occurred because the centre's propensity to import has fallen, but because it has increased less rapidly than that of the periphery.⁷⁵ In

ECLAC's terminology of the time, the volume of gold that leaves the underdeveloped periphery for the centre during the depression exceeds the volume that flows in the opposite direction during prosperity, thus resulting in a chronic balance-of-payments deficit of peripheral countries.

The original development of ECLAC's centre-periphery system was carried out from the standpoint of commercial transactions, i.e., from the viewpoint of specialization (in primary and manufactured goods) either imposed by or derived from the unequal spread of economic and technical progress. Consequently, the characteristics and implications of financial links established by foreign credit and investment were not incorporated into the initial analysis.⁷⁶ Given that foreign credit and investment was small in amount and significance during the 1930s and 1940s, one can understand why ECLAC neglected the international movement of capital in its analysis. This simplifying assumption, however, deprived ECLAC of an additional element to help explain the trend towards a chronic deficit in the periphery's balance of payments during the second and third quarters of the twentieth century. In theory, the chronic tendency of peripheral countries towards balance-of-payments disequilibrium can be offset by the influx of foreign capital. However, inherent in this inflow of capital is the implication that there will be an eventual backflow of profits that must exceed it in volume. Therefore, it is really the combination of this increasing backflow of profits, together with the movement in the trade balance discussed above, that explains the present chronic of balance-of-payments deficit of the periphery: a much-debated subject these days, particularly in Latin America.

⁷⁴Amin (1974), p. 566.

⁷⁵*Ibid.*, p. 568.

⁷⁶These factors were included afterwards, but the main emphasis still remained on their importance for the balance of payments and the saving-investment process. See Pinto and Křákal (1972), pp. 100-108, and Pinto (1965).

VII

Policy implications of ECLAC's model

Economic growth in a peripheral country could be said to depend basically on the increase of per capita income and on population growth. In turn, increase in per capita income in a peripheral economy can be achieved in only two ways: first, through an increase in productivity; and second, if one assumes a certain level of productivity, through an increase in income per person engaged in primary production.⁷⁷ When per capita income rises, imports likewise tend to rise at a greater rate than population. If exports do not follow suit, the peripheral country will face a disequilibrium in its balance of payments, as discussed above. Furthermore, the introduction of technological innovations in the primary sector will result in a steady increase in production with a proportionally lower increase in employment. Consequently, given a certain rate of growth of production, the primary sector will be in a position to absorb a decreasing proportion of the increase in the labour force. Furthermore, since we concluded before that there is a decreasing rate of growth of demand for primary products in the world market, the periphery's possibilities of expanding primary production to absorb the increasing labour force are really marginal. Under those conditions, increased productivity in primary production in peripheral countries will lead to surplus labour in these countries unless other activities offer new employment opportunities. In ECLAC's view, it would be difficult to say what productive activities, other than industry, could absorb the increase in population of peripheral countries.

Let us take, for a moment, the world as a whole and assume that industries or other activities are not developed in the periphery. They would have to be developed in the centres, if we were to absorb not only the surplus labour force of the periphery but also that part of the natural increase in population which could not be absorbed in the centre's own primary production. This would require complete mobility of

population: in other words, it would mean not only that the unemployable surplus of the population must be willing to emigrate from the periphery, overcoming a rooted unwillingness, but also that the countries of the centre must be prepared to admit large masses of immigrants who, accustomed to relatively low wages, would compete to their advantage with the workers of the centre.⁷⁸ This type of mobility of factors of production, which according to Prebisch is one of the essential assumptions of the classical theory,⁷⁹ does not materialize in practice,⁸⁰ however. If the gainfully employed population were perfectly mobile and did not show any reluctance or deliberate opposition to migration, there would be a market tendency towards a levelling of primary and industrial wages and of the distribution of benefits from increased productivity. Under the present structure of the world economy, however, the principal centres limit the process to their own populations. Within their frontiers, industry and its associated activities do not develop in such a way as to absorb the surplus labour of the periphery, and, therefore, "the peripheral countries have no means of absorbing the surplus of their gainfully employed population except by developing their own industrial activity".⁸¹

Hence the fundamental significance of peripheral industrialization in ECLAC's model. Industrialization, however, was not considered

⁷⁷ECLAC (1951), p. 13.

⁷⁹Prebisch (1950), p. 16, though presumably he meant neo-classical rather than classical theory.

⁸⁰As Love (1980) has pointed out, Prebisch's argument "burst upon the scene just after Samuelson (1948, 1949) had raised neo-classical trade theory to new heights of elegance" with his formal demonstration that free commodity trade could be considered a perfect substitute for free international factor movements from one country to another. This argument was certainly ignored by ECLAC, which is not difficult to understand if one takes into account that the assumptions made by Samuelson were, as Haberler says, "so restrictive and so unrepresentative of actual reality that the theory can be said to prove the opposite of what it seems to purport to say —namely, that there is no chance whatsoever that factor prices will ever be equalized by free commodity trade" (Haberler, 1961, p. 13).

⁸¹ECLAC (1951), p. 49.

⁷⁷Prebisch (1950), p. 43.

an end in itself, but the principal means at the disposal of peripheral countries to obtain a share of the benefits of technical progress and to raise the standard of living of the masses.⁸² Improved productivity resulting from the process of industrialization, together with the increased productivity that results from technological innovations in primary production, was expected to increase per capita income and lead to a growing demand for services, which in turn would create new sources of employment (Prebisch, 1951). Consequently, industrialization was seen not just as a means of changing the production structure of peripheral countries with a view to reducing their dependence on the external sector, but also as an essential means of acquiring a fair share of the benefits from technical progress, on the one hand, and absorbing the surplus labour force in productive activities on the other. As such, industrialization could be considered as the cornerstone of ECLAC's development policy, even if there were no restrictions or deficits in foreign trade.⁸³

Had the conclusions of the neo-classical theory of international trade materialized, then the benefits from technical progress would have been distributed alike throughout the world, in accordance with the implicit premise of the scheme of the international division of labour. None of the problems discussed above would have been present, and peripheral countries

would have had no economic advantage in industrializing: indeed, they would have suffered a definite loss, at least so long as they did not achieve the same productivity and efficiency as the industrial countries (Prebisch, 1950). However, since reality has proved the neo-classical assumptions to be wrong, the peripheral countries, in ECLAC's view, must change their pattern of growth from the "outward-directed" development followed in the past, based on the expansion of primary exports, to an "inward-directed" development based on the expansion of industrial production.⁸⁴ In other words, according to ECLAC the development of peripheral countries necessarily involves substituting one focal centre of dynamic development for another.⁸⁵ Basically, it implies developing an activity in the periphery that will generate technical change and absorb the excess supply of labour. By doing so the remuneration of labour will increase and the periphery will be able to retain the benefits of technical change. From what was discussed above, it is clear that, from ECLAC's viewpoint, this activity is industrialization. Rather than concentrating on internal demand for the development of industrial production as in the 1950s and 1960s, however, peripheral countries should put the emphasis on an "outward-looking" industrialization process, if they seriously intend to change the present structure of the world economy.

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⁸²Prebisch (1950), p. 2.

⁸³ECLAC (1970), p. xxi.

⁸⁴Rodríguez (1977), p. 204.

⁸⁵ECLAC (1970), p. xx.

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