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TERMS OF TRADE, INTERNATIONAL TRANSFERS OF VALUE AND UNEVEN DEVELOPMENT

PLAN

ABSTRACT

It has been shown in this paper that, under contemporary economic circumstances, the "terms of trade" in their traditional form are rather inadequate as an indicator of the distribution of the gains from trade and the international division of labour. From a Marxist point of view, the investigation of transfers of value, which are considered as different forms of unequal exchange in its broadest sense, is proposed as an alternative and more pertinent way in addressing international distributional issues. This alternative approach allows an analysis more specific to the capitalist charachter of production and exchange and takes into account the tendency for internationalization of production and capital. It is moreover argued that international transfers of value are important because they tend to enhance the uneven development effects of free international trade.

1. INTRODUCTION

It has been widely recognized that standard international trade theory offers neither a specific mechanism nor an adequate analysis of the distribution of the gains deriving from free international trade. Moreover, it does not provide an adequate approach to the distribution of the benefits obtained from the multifarious and rapidly developing international division of labour (IDL). Under the contemporary conditions of rapid internationalization of production and capital, the issue of the distribution of the gains from participating in the IDL and its impact on development arises even more sharply.

According to conventional "comparative advantage" theory, all countries benefit from participating in free international trade. The relevant neoclassical theory stresses the importance of various technological parameters or supply-demand conditions which are considered as the main factors determining the specific terms of trade (TT) and hence the distribution of the gains from trade. There are, however, serious methodological inadequacies and analytical indeterminacies in this approach (see Diakosavvas-Scandizzo, 1991) which will not be discussed in this paper.

Despite the difficulty in defining the gains from trade (see also Shaikh, 1980) and the IDL, we will attempt in this paper to clarify and analyze the basic distributional forms of these gains. More specifically, we will analyze the relationship between the "terms of trade", as an index of the gains from trade, and international transfers of value. The methodological differences of the approaches emphasizing the "terms of trade" and the international transfers of value need also to be analyzed. The question regarding the impact of the distribution of the gains from the IDL on uneven capitalist development will also be addressed, as will the significance of international transfers of value for uneven development.

Section 2 provides a brief overview of the main radical approaches concerning the terms of trade (TT) and the relationship between developed and developing countries. The main emphasis will be on the structuralist approach starting with the work of Prebisch-Singer and the "unequal exchange" thesis associated with A. Emmanuel. As is well-known, the unfavourable terms of trade and "unequal exchage" are considered in these approaches as a major cause for the economic backwardness of developing countries. The weaknesses and shortcomings of these approaches will also be pointed out. In section 3 a conceptual and analytical framework regaring the internationalization of production and the formation of international values and prices will be presented. This framework is necessary in order to investigate the possibilities and the mechanisms of international transfers of value. These value transfers will be analyzed in section 4, where they will be examined in relation to the variation of the "terms of trade".

2. TERMS OF TRADE AND UNEQUAL EXCHANGE

Contrary to the postulates of the dominant neoclassical approach, some authors, starting in the 1950s, have stressed the secular deterioration in the TT of the developing countries and the widening development gap between the "center" and the "periphery". The works of R. Prebisch (1950) and H. Singer (1950) offered the starting point for this new tendency.

Based on emprical evidence, Prebisch first pointed to a long-run tendency for the TT between industrial and primary products to deteriorate at the expense of the latter. This distinction between industrial and primary products is broadly used and serves not only the investigation of the relations between the industrial and agricultural sector within each country but also of the exchange relations between advanced and developing countries, given that within the existing framework for international specialization the developing countries are considered to produce mainly primary products (see Sarkar, 1986; Diakosavvas-Scandizzo, 1991). The tendency for the TT to deteriorate at the expense of the primary commodity-producing countries is attributed by Prebisch to the greater bargaining power of workers in the advanced countries (resulting in higher wages) and also to defferences in the income elasticity of demand for industrial and primary products (see Bell, 1979; Ocampo, 1986). It is argued that in the developing countries the surplus labour force (see also the Lewis model) reduces workers' bargaining power, and hence wages, and that as a result any technological progress in the export sector leads to a decline in export prices proportional to the relevant productivity gains. The reverse is deemed to hold in the export sector of the industrial countries where labour union pressure ensures that wages increase proportionally to productivity and so a decline in prices is avoided. In the long-run, therefore, the TT turn against primary producers.

An extensive literature has developed aroung these issues after Prebisch and Singer. Its pivotal characteristic is the perception that unequal exchange and the rising inequality between the advanced countries of the center and the developing countries of the periphery follow as a result of the deteriorating TT of the latter. However, the authors following this approach employ a variety of different methodologies and the borders between this and the conventional neoclassical approach are not very clear. Here, one could include authors using essentiallly a neoclassical methodology, structuralists of various persuations, neo-ricardians, and even "neo-marxists" (see Bell, 1979; Evans, 1987).

In general, authors following Prebisch's lead search for the factors determining the TT in the conditions of labour supply, the demand conditions for exports, the organization of the labour rofce (degree of unionization) and more generally in market structures (market power).

The contribution of J. Spraos (1983) is a more recent attempt within the Prebisch tradition. It aims primarily at a review of the relevant literature and an improvement of the conceptual and statistical expression of the TT. Spraos does not deal with the unequal exchange associated with wage differences but rather attempts to interpret the changes in the relative standards of lining (p. 7). Thus, he addresses the question of whether the traditional pattern of specialization has contributed to an alleviation or to an aggravation of inequality between developed and developing countries as far as standards of living are concerned. There is an attempt to identify the determinant factors of the TT, which within the context of the traditional pattern of specialization lead to a distribution of the gains from trade at the expense of the developing countries, and to an "incremental inequalizing". The hypothesis of "incremental inequalizing" is founded on the relatively low income and price elasticity of primary commodities (p. 11).

In this search for a conceptual and statistical improvement of the TT, as an index for the distribution of the benefits from trade, Spraos proceeds from the "net terms of trade" (P=relative prices of exports/imports) to the "double factorial terms of trade" (DFTT). This factorial form takes into account, beside the relative prices, differences in productivity. Thus, the TT are expressed as

$$DFTT = P\,(\Pi c/\Pi m^{*}) \qquad (1)$$

where $P=Pc/Pm$, and Pc, Πc stand for the export prices and productivity in the primary commodity-producing sector of the South, while Pm and Πm^{*} stand for the export prices and productivity of the manufacturing products of the North. A further correction is made in order to take into account the employment effects resulting from a change in the TT, since this also concerns the standard of living. So, we end up with the following expression of the employment-corrected TT.

$$ECDFTT = V/(Pm\,\Pi m^{*}) \qquad (2)$$

where $V=Pc.\Pi c.Nc$ is an index of output ot exportables valued at current prices. This corrected index of the TT is argued to consitute an improvement of the relevant indices used in the past since it comprises all three dimensions - relative prices, productivity, and employment (p. 118). As this index declines, North-South inequality increases and vice versa. It is recognized, however, that this index cannot account for the overall variation of "inequality" but concrens only those sectors which are moulded by the traditional pattern of specialization (p.10). Facing what he identifies as an "incremental inequalizing", Spraos ends up with the following conclusion:

> In the longer run developing countries need a policy of accelerated diversification into manufacturing and/or domestically oriented food production to bring about a more rapid erosion of the traditional pattern of specialization and its inqualizing effects (p. 141).

The TT can be used in two different ways in analyzing the distribution of the gains from trade. In the first case, by comparing TT at different points of time, one can have an indication of the direction of change in the distribution of the gains from trade. This is the most common use of the TT, where a simple TT index is utilized. In the second case, the TT can be compared, at a point of time, with domestic cost ratios (a la Ricardo), or any related index, in order to indicate the particular distribution of the gains from trade. The composite TT indices discussed above (DFTT or ECDFTT) come close to this type of consideration and are more revealing since they are not restricted to the sphere of exchange alone. However, even this way of using the TT suffers from serious weaknesses or conceptual indeterminacies (see Diakosavvas-Scandizzo, 1991) and is characterized by a limited scope when we come to consider the IDL. It will be argued below that the labour theory of value, which consitutes the core of our alternative approach focusing on value transfers, offers a more comprehensive and conceptually coherent basis for analyzing the gains from trade and the IDL.

The significance of the TT should not, of course, in general be overlooked. In this respect, some Marxist-oriented approaches place the emphasis on class anallysis and on the integrated reproduction of the spheres of production and exchange. The existing property and class structure in a given society is considered of primary importance for the determination, partly through the intermediation of state power, of the specific TT. A given change in the TT, following a certain shift in class contradictions and political alliances, is considered to have a definite impact on income redistribution among classes and nations and a restructuring effect on the existing economic and class structure (Mitra, 1977, p. 5).

Concerning the significance of the TT index, we should point out that the rapid development of various forms of international economic ralations and the expansion of transnational corporations (TNCs) have led many authors (Emmanuel, 1972, pp. 195, 306-307; Sarkar, 1986) directly or indirectly to question the relevance of the TT as a valid indicator of the distribution of the gains from international trade. It is argued that international trade, and, furthermore, IDL itself have under contemporary conditions undergone a significant change in both character and content.

In his seminal book (1972) Emmanuel attempts to extend the Marxian law of value to the international level. Thus, he partly overcomes this particular shortcoming of the TT approach by stressing a particular type of value transfer involved in the formation itself of relative prices (TT). He assumes that there is a tendency towards increased international mobility of capital and rate of profit equalization, while labour power is considered to be immobile. It is argued that "institutional" differences in wages give rise to differences in the rate of exploitation between the center and the periphery. Wages are considered to be the actual independent variable and the author is at pains to establish that prices are determined by wages and not vice-versa. Unequal exchange in the narrow sense, due to wage differentials, is argued to be the major determinant factor of uneven development, while the case of international transfers of value deriving from differences in the organic composition of capital (OCC) —unequal exchange in the broad sense— is essentially rejected. In Emmanuel's own words,

> Even if we agree that unequal exchange is only one of the mechanisms whereby value is transferred from one group of countries to another, and that its *direct* effects account for only part of the difference in standards of living, I think it is possible to state that unequal exchange is the *elementary* transfer mechanism, and that, as such, it enables the advanced countries to begin and regularly to give new impetus to that *uneveness of development* that sets in motion all the other mechanisms of exploitation and fully explains the way that wealth is distributed (1972, p. 265).

From a Marxist point of view, the work of Emmanuel has been ctiricized on several grounds. It has been pointed out, in the first place, that the independent role atributed to wages, the overstatement of their socio-historical determination and the notion of claims for reward of "factors of production" indicate an eclectic and rather inconsistent use of the labour theory of value. At the same time, the Marxian notion that real wages are roughly equal to the value of labour power and their ralation to the specific conditions of production and to the level of development of the productive forces are obscured. A further weak point in Emmanuel's analysis is that, by rejecting unequal exchange in the broad sense (transfer of value due to differences in the OCC), he highly abstracts from the specific conditions of production and focuses primarily on the sphere of distribution and exchange. Although the case of unequal exchange in the strict sense put forward by Emmanuel cannot be disregarded, its overstatement at the expense of other transfer mechanisms and the eclectic methodology used have led the author to a partial explanation of uneven development and to rather misleading political implications.

Because of the weaknesses of the TT approach and aside from the significance of the real terms of trade, an increasing attention has been paid in the relevant literature to various forms of international value transfers and their impact on uneven development. These value transfers, which are usually analyzed by using different methodologies, can be conceived as specific forms of *unequal exchange*. Some authors, using a neo-ricardian (see Mainwaring, 1980; Taylor, 1981; Bell, 1979; and Ocampo, 1986) or even a neoclassical approach (Bacha, 1978), attribute a particularly crucial role to various exogenous technological or distributional factors. However, besides its detached and independent treatment of distribution and technology, the neo-ricardian approach also suffers from the basic weakness that value is identified as the quantity of embodied labour (see Mainwaring, 1980; Gibson, 1980) rather than in its Marxist sense as the quantity of socially necessary "abstract labour".

It is also well known that the Baran-Sweezy school of "neo-Marxism" considers international transfers of "economic surplus" as the major determinant factor of uneven development. These transfers are not related, however, to any specifically capitalist relations of production. Moreover, the concept of "economic surplus" itself consitutes a retreat from the more scientific Marxian concept of surplus value. Thus, the "neo-Marxist" approach fails to provide a specific and adequate analysis of the international distribution of the gains from the IDL and a satisfactory explanation of uneven capitalist development. Within the same context, it should be noted that S. Amin (1976) adopts "unequal exchange" in the sense proposed by Emamnuel and attributes "unequal Development" to wage differences disproportional to the corresponding productivity differences. In other words, while for Emmanuel the counterfactual for "equal exchange" is equal wages, for Amin it is wages proportional to productivity. In the same sense, the counterfactual for Raffer (1987) is equal wages where productivity in making identical products is equal.

In some recent Marxist writings, it has been shown in the first place that free international trade, by itself and independently of any deterioration in the TT or any value transfers, consitutes a mechanism leading to uneven capitalist development (Shaikh, 1980). This direct effect of free trade concerns the distribution of the gains from trade deriving primarily from the expanded limits of production realization. However, the gains from trade and moreover from the IDL also derive from specialization of production and the efficient allocation of resources. The distribution of these gains, too, depends on the structure of specialization and more specifically on market structures. Countries specializing in sectors with a high degree of market organization or in highly monopolistic industries obviously have an advantage in the determination of their TT and hence in their participation in the gains from the IDL. In addition to specialization and market structures, the distribution of the gains from the IDL also depends on the specific price formation of the traded commodities. Partly depending on the specific structure of production and specialization, the potential deviation of market prices from commodity values may give different power to a particular country in commanding a share of the total social product on an international scale. All these factors — market structure, specialization and price formation — as well as state policy may give rise to international transfers of value which are likely to have an effect on uneven development. It is not surprising, therefore, particularly under the contemporary conditions of a rapidly developing IDL, that a rising interest in analyzing various forms of international value transfers appears in the recent Marxist literature (see Kay, 1975; Shaikh, 1980; DeJanvry, 1981; Faulwetter, 1985). It seems, however, that the basic forms and mechanisms of these international transfers of value require further analytical clarification. Moreover, their significance for uneven capitalist development needs to be more clearly specified. In what follows such a specific analysis will be attemted within a Marxist theoretical framework.

3. INTERNATIONALIZATION OF PRODUCTION: INTERNATIONAL VALUES AND PRICES

As Marx has pointed out, in a commodity-producing society production and labour assume an increasing socialized character. This social character of production and labour is realized in the process of commodity exchange. The exchange process leads to an abstraction from the specific characteristics of various types of concrete labour involved in commodity production. In this sense, social labour is reduced into a single quality of abstract ("homogeneous") labour which constitutes the essential common characteristic of all commodities and the real essense of commodity values. According to Marx, the value of a commodity is the amount of abstract labour-time required for its production under *average* productivity conditions. It is a specific characteristic of commodity-producing societies that social labour takes the form of value. Indeed, in the sphere of commodity exchange, "value" is reflected on the exchange-value of commodities constituting its *immanent measure* (Shaikh, 1977). On a more concrete market level, money as a medium of exchange gives exchange-value a monetary expression. The money-price of a commodity is the external reflection of its exchange value. Thus, for Marx commodity prices are the forms of appearance of the corresponding values in exchange.

Under comtemporary conditions of rapid internationalization of production and capital we need a more specific analysis for international capitalist exchange and the international operation of the law of value (see Shaikh, 1980). In order adequately to conceptualize the internationalization of capital and the international operation of the law of value, we need to take into account the extensive development of international trade, the international expansion of capital (foreign direct investment), international financial flows, international operations concerning technology transfers and all possible linkages between all these forms of international exchange. Empirical evidence for the internationalization of capital and its particular forms has been presented elsewhere (Liodakis, 1990). Lack of space prevents a more detailed analysis of all these specific forms of economic internationalization. We need only note that, as Shaikh (1980) has demonstrated, international trade takes place on the basis of "absolute" advantages and not on the basis of any "comparative advantage" (in its Ricardian or neoclassical sense). Free trade between developed and underdeveloped countries results in increasing trade inbalances which, independently of monopoly or value transfers, give rise to or internsify uneven development against underdeveloped countries or regions. It should also be pointed out that the traditional expansion of imperialist capital into the underdeveloped countries has grown out of accumulation and vertical expansion in particular branches of production, or has been motivated by wage rate differentials and the possibility to take advantage of natural resources or domestic markets in the underdeveloped countries. However, there is ample evidence (see Liodakis,

1990) in the post World War II period pointing to a drastic reorientation of international direct investment towards other developed capitalist countries (interpenetration). The rapid international development of financial capital (see Mac Ewan, 1986) has also largely been the consequence of rising trade flows and imbalances, of the expanding global operations of imperialist productive capital and of the financial requirements of technology transfers. The circuits of all the specific forms of capital (commodity, productive and financial) have greatly expanded beyond national boundaries. This internationalization of capital has led to a questioning of the traditional role of the national state which however stops short of suggesting the complete obsolesence of its economic function. The international expantion and integration of all circuits of capital has also implied a rapid internationalization of productive forces and of the capitalist productive process. Capitalist relations of production as well as the corresponding class relations of appropriation have also largely been internationalized. The basic contradiction between the forces and relations of production, and that between capital and labour, have also shifted from the national to the international level. This internationalization drive is, for the moment, no more than a strong tendency. Obviously, it does not completely eclipse the role and significance of particular social formations or national economies. By encompassing all forms of international economic relations it, nevertherless, provides the material basis for the everdeepening and rapid development of the IDL.

Within this internationalized context, the law of value constitutes the underlying factor of the world capitalist economy and the regulating principle of the IDL. Although capital appears flexible and internationally mobile, the relative immobility of labour and the particular monetary or economic regulations of national states modify the international operation of the law of value. These factors lead more specifically to a relative insulation of particular national economies and may give rise to money and real wage, inflation, productivity and exploitation rate differentials among national economies. In the developed capitalist countries, a higher OCC and labour productivity may imply higher rates of exploitation as compared to less developed countries with a lower labour productivity (Marx, *Capital*, Vol. I, p. 560). This may be considered as a counteracting factor of the tendency of the profit rate to fall and a requirement of the tendency for international equalization of the profit rate. In the less developed countries, however, the institutional structure, a relatively abundant labour supply, higher inflation rates and monetary devaluation may in fact imply higher rates of labour exploitation, particularly when the OCC in these countries (or in certain industries) approaches that of the developed countries. This comparison is pertinent to international exchange and it is relevant at this point to mention S. Amin's argument, according to which about 75 percent of the exports of the "periphery" come from modern capitalist enterprises (of high productivity) and not from traditional production (Amin, 1976, ch. 3,II2). Moreover, it is often the case that "...on the world market the more productive national labour reckons also as the more intense, so long as the more productive nation is not compelled by competition to lower the selling price of its commodities to the level of their value" (Marx, *Capital*, Vol. I, p. 560). This modified operation of the law of value obviously raises a possiblility of non-equivalent international exchange discussed furhter below. The dominance of monopoly in the contemporary stage of capitalist development and the expansion of TNCs also modify, albeit they do not essentially upset, the operation of the law of value.

Despite the relative cross-border immobility of labour, the modified operation of the law of value and the great international disparities in the level of productive forces and labour productivity, the extensive internationalization of production (its socialization on a world scale) leads through commodity exchange to a process of labour abstraction at the level of the world economy. The operation of the law of value leads through a dynamic adjustment process to a correspondence between the international allocation of resources on the one hand and the requirements of specialization and the development of the IDL on the other. International commodity exchange and labour abstraction stemming from this particular specialization constitute the essense of the process of international value formation. Within this context, the *international value* of a commodity is indeed determined by the amount of "abstract" international labour required for its production[1]. It is essentially a weighted average of the "national values" of the particular commodity. By increasing labour productivity, technological innovations in the production of a commodity tend to reduce the international value of this particular commodity. Countries with a major share in the world production of a commodity will obviously play a major role in the determination of its international value.

The operation of the law of value at the world economy level also implies a dynamic international process for transforming international values into prices. If we abstract for the moment from complexities concerning national monetary regulations and the determination of exchange rates, we may conceive world prices expressed in a common currency as proportional to the corresponding international commodity values. Shaikh's demonstration of uneven development as deriving from free trade is based on such proportional prices which he calls *direct prices* (Shaikh, 1977, 1980). At this level of analysis, which corresponds to the first volume of Marx's *Capital*, the international exchange of commodities is considered to take place at their values. Abstracting from any deviation of relative prices from relative values draws attention to the direct impact of exchange on capitalist production (the function of value realization) and to the

[1] It could be objected that a process of labour abstraction and value formation presupposes a comparable level of development and labour productivity across countries as well as a similar mode of production and commodity exchange. Differences, however, in the level of the productive forces, technology and labour productivity, as well as different modes of production, are present even within national bounadaries. It can also be noted that the tendency to develop international production and exchange linkages, the replication of production processes and the rising uniformity of efficiency norms across countries are conducive to an international homogeneization of labour.

fact that value and surplus-value are produced exclusively in the sphere of production and not in exchange. As Marx points out,

> ...the starting point is the exchange of equivalents...the formation of capital must be possible even though the price and value of a commodity be the same; for its formation cannot be attributed to any deviation of the one from the other. (*Capital,* Vol. I, Ch. 5, p. 166).
> If commodities are sold at their values, then the magnitude of value in the hands of the buyer and seller remains unchanged...If the commodities are not sold at their values, then the sum of converted values remains unchanged; the plus on one side is minus on the other. (Marx, *Capital,* Volume II, ch. VI, Section 1.1, p. 129).

International capitalist competition and the rate of profit equalization tendency lead, at a more concrete level of analysis, to the formation of *international prices of production.* These prices can be conceived as deriving from international commodity values through a unified (integrated) world-wide transformation process. Alternatively, they could be conceived as a weighted average of the particular prices of production formed at a national level. The international prices of production on the first case will be the limit of the prices as conceived in the second case, in so far as national profit rates approach actual equality and the world transformation process is completely integrated[2]. The formation of international prices of production implies a systematic deviation of these prices from international values, which is associated with a redistribution of the sum-total of surplus-value. Despite this redistribution and the deviation of prices of production from values, the exclusive source of value remains in production which also determines the limits of surplus-value. As Marx emphasises in this case,

> There is no need to waste words at this point about the fact that if a commodity is sold above or below its value, there is merely another kind of

[2] A precondition for this transformation process is that the CMP prevails on a world scale. The existence of non-capitalist relations of production, especially in underdeveloped countries, complicates things but does not obstruct the transformation process. Indeed, the scope of this transformation expands *pari passu* with the international development of capital. Although the value and surplus-value categories are applicable, in a strict sense, only to the full-fledged CMP, the dominance of this mode of production makes the value form also dominant in the exchange between capitalist and non-capitalist production. It should also be noted that, commodified non-capitalist production and especially cases of "near-capitalist" (family) farming come close to the logic of capital and are progressively encompassed within the overall capitalist rationality. So, a potential "value transfer" in the context of this exchange between capitalist and non-capitalist production should be conceived more specifically as an appropriation of surplus product or surplus labour which potentially can be converted into value.

division of surplus-value, and that this different division, this changed proportion in which various persons share in the surplus-value, does not in any way alter either the magnitude or the nature of that surplus-value. (Marx, *Capital,* Volume III, ch. II, p. 43).

International prices of production again constitute a set of theoretical prices, a center of gravity around which the actual *world market prices* revolve. World market prices may diverge from the prices of production due to the particular interplay of supply and demand conditions, due to monopolistic structures in some particular industries, or due to the intervention of individual national states in the formation of market prices directly and indirectly through the regulation of market conditions by protectionist or other means.

In the final analysis, the determination of world market prices, as defined on the basis of the labour theory of value, is essentially based on the corresponding commodity values. The law of value, by regulating the complex process of price formation, simultaneously leads to the determination of the TT between any two industries or countries. According to the preceeding analysis we should expect that the determination of the TT (relative prices) depends primarily on productivity differentials between particular industries of countries and on the specific industrial structure, since industries with a higher than average organic composition of capital (OCC) can have their prices of production set above their values. The monopolistic structure of particular industries, wage differentials and state regulation can also affect the determination of the TT. Specialization is a furhter determining factor either because of the different nature of particular products (e.g. agricultural) or in so far as various industries have inherently different OCC and varying degrees of monopolistic structures. Supply-demand conditions, independent from these factors, also influence the TT determination. (see also Evans, 1987).

The large and more developed capitalist countries play the major role in the formation of world values and prices and hence also in the TT determination. Conversely, small and less developed countries play only a minor or insignificant role in the determination of values and prices, particularly in competitive (non-specific) industries. Such countries, and in these industries in particular, operate in the world market essentially as price-takers. It is also important to note that technological innovations in a particular industry or country will tend to cause the corresponding commodity prices to drop and the relevant TT to worsen, unless the particular industry of country is able to maintain sufficient market control. It is usually the case that the developed countries, which are the most likely technological innovators, succeed in preventing a TT decline thanks to their monopolistic control of the relevant industries. In this case, the rising deviation of commodity prices from the declining values is appropriated by these monopolistic innovating industries in the form of extra profits or technological rent. On the other hand, any extensive technological innovation in developing countries specializing more in primary production may, due to lack of market control and to the low demand elasticities of their export commodities, leads to a deterioration in their TT. This implies that the welfare gains from technological innovation are "exported" and lost for these countries. In the most usual case, large-scale technological innovations in non-specific industries of the developed countries (especially in agriculture) set also the export prices for the developing countries (price-takers) at a lower level, while the prices of imported industrial goods remain high. This definitely implies a secular decline in the TT of the developing countries. In general, it is valid to say that the divergence or convergence of commodity values and the TT of a country depends on the size and the development level of the particular country and, moreover, on its overall command over world markets. This contradictory movement essentially reflects the contradiction between values and exchange-values which is expressed on a world scale and applies differently to each particular country.

In practice, the TT are usually calculated as the ratio of two indices refering to the "mean value" of exports and imports respectively[3]. These indices are determined by world market prices, which implies that the variation of the TT cannot precisely account, in essential value terms, for the actual terms of international exchange because of the systematic and incidental deviations of market prices from values. This important defect of the TT index will be more specifically considered in the following section, where the international ttransfers of value involved in all forms of international exchange are analyzed.

Finally, it should be noted that the international operation of the law of value has further implications for the sphere of distribution and appropriation according to the existing property and economic structure. In the context of the internationalized relations of production and the corresponding class relations of appropriation, it determines the direct distribution of surplus-value and wealth on a world scale. At the same time, the determination of world prices and the TT is also important in this distributional sense. Whatever the weaknesses of the TT index, once it (i.e. the relative prices) is determined, it definitely affects in a significant sense the distribution and appropriation of world production and surplus-value. The analysis of the international transfers of value may be even more helpful in better visualizing this process of international distribution and appropriation of surplus-value.

4. INTERNATIONAL TRANSFERS OF VALUE: A MARXIST APPROACH

As pointed out above, the global expansion of all circuits (productive, commercials, financial) of capital creates the material basis for the increasingly in-

[3] The "mean value" index in turn derives as the ratio of a "value" index and the corresponding quantity index.

ternationalized process of social reproduction. The IDL resulting from this process and the specific operation of the law of value imply various forms of international transfers of value, which we consider here as different forms of unequal exchange. But is unequal exchange theoretically possible in the first place? Some authors seem to reject this possibility by stressing the formal equality of each act of commodity exchange. Namely, the fact that always in exchange the total "value" of the exchanged commodities is equal. For any two commodities i and j, it is always true that

$$p_i q_i = p_j q_j \tag{3}$$

This apparent equality leads some authors to a misconception of the essential terms of commodity exchange in terms of value. It is remarkable that some Ricardians in particular, following Ricardo himself, cannot clearly see the difference between concrete and abstract labout and hence they also miss the difference between value and the form of value in price terms (Shaikh, 1977). In fact, and despite this exchange equality in the sphere of appearances, there are several cases of value transfers (unequal exchange) involved in international exchange. In analyzing these value transfers, it may be useful to distinguish the cases of equivalent and non-equivalent exchange.

Firstly, it should be noted that the *non-equivalent exchange,* deriving from the deviation of relative prices from relative values, implies a value transfer. This case essentially concerns the deviation of prices of production from values – whether due to differences in the OCC or in the rate of exploitation and wages – and has been analytically and formally demonstrated in the relevant literature. For this reason, it is not necessary to elaborate extensively on this point (see Okishio, 1963; Shaikh, 1980; Marelli, 1980; Carchedi, 1989)[4]. Regarding the deviation of prices from values we need only note in general that the exchange of two commodities i and j is equivalent if

$$\frac{P_i}{P_j} = \frac{t_i}{t_j} \tag{4}$$

In this case, prices are proportional to the corresponding commodity values. If however, for some reason $P_i/P_j > t_i/t_j$, then the exchange is not equivalent and more labout involved in the production of the jth commodity is exchanged with less labour involved in the production of th ith commodity. Here the quantities of labour should refer to those quantities of "abstract" labout which are the determinant factor and the essense of international values.

Secondly, it should become clear that value transfers do not exclusively concern non-equivalent exchange. They also concern the case of *equivalent*

[4] For a concise review of the "unequal exchange" literature see also Da Silva (1987).

exchange, the process of value formation itself and other economic processes as analyzed furhter below. Even in the case of equivalent exchange, in its strict sense defined above, there is scope for value transfers (unequal exchange) which essentially regard the process of value formation. Here we are focusing not on the quantities of international "abstract" labour of an average productivity, but on the differences of national labour of lower or higher than average productivity. In this case, if productivity differences are taken statically for granted, then one could argue what seems ideologically appealing, namely that "the more productive are paid more than the less productive". If, however, we consider the determinants of productivity growth and productivity differentials, the accumulation of capital is obviously a crucial condition for this and the terms of international exchange may be of some relevance[5]. It is to this case of unequal exchange that Marx addresses himself when, disregarding the deviation of prices from values, he refers to commodity exchange at values (direct prices). According to Marx,

> "And even according to Ricardo's theory, three days of labour of one country can be exchanged against one of another country ... Here the law of value undergoes essential modification. The relationship between labour days of different countries may be similar to that existing between skilled, complex labour and unskilled, simple labour within a country. In this case, the richer country exploits the poorer, even where the later gains by the exchange..." (*Theories of Surplus-Value,* III, pp. 105-106).

The difference, therefore, in the quantities of labour producing the same amount of social (international) value is obviously not irrelevant as some authors would argue (see also Mandel, 1975, p. 53; Carchedi, 1989). We are speaking in this case of a type of unequal exchange (value transfer) stemming from the value-forming process involved in intra-industry competition and moreover in interindustry competition at the international level. It is obvious that these value transfers can accordingly affect the investable resources, the potential for

[5] What we argue here is not that a certain labour-time of an unproductive labour should (or could) be exchanged with an equal labour-time of a more productive labour. What is argued is that, labour productivity is socially determined (by the amount of constant capital invested in production, the production organization, the level of education, etc.) and that, under similar socio-economic conditions, labour in general has the same value producing capacity. It is for this reason that S. Amin, as already noted, stresses the fact that the greatest part of "peripheral" exports are produced, contrary to what is usually assumed, in high productivity industries. Indeed, the actual extent of the unequal exchange discussed here depends on the question whether accumulation and productivity differences derive primarily from national saving and the domestic conditions of capitalist development, or from the terms and conditions of international exchange. In this latter case unequal exchange is reinforced as an auto-regressive process.

capitalist accumulation and the growth of labour productivity in the countries involved in trade.

It may be usefull at this point to summarize and complete as follows all basic forms of international value transfers, which are essentially ment as possibilities of net value transfers from the less to the more developed capitalist countries.

(A). International transfer of value associated with the process of surplus-value extraction directly from the sphere of production. This transfer concerns the repatriation of profits deriving from direct foreign investment. The systematic transfer in this case can be attributed to improved reinvestment conditions in the developed capitalist countries (due to external and scale economies, technological revolution and capital "deepening"), the need to retain local control of strategic investments and the need to finance a higher standard of living.

(B). Transfer of value in the form of interest payments for loans to LDCs. This transfer essentially refers to a redistribution of surplus-value deriving from inter-state loans or indirect financial investments.

(C). International transfers of value from less to more efficient producers stemming from intra-industry capitalist competition and the process of value formation (Marx, 1967, III, Ch. X, pp. 173-199; and Shaikh, 1980)[6]. These take the form of above-average profits.

(D). Transfer of value involved on the context of the transformation of values into prices of production resulting from the divergence between the two. There are two particular cases for such a divergence between values and prices of production, which imply:

(i) transfers of value from industries with a low OCC to industries with a high OCC, through the inter-industry capitalist competition and in the process of formation of prices of production (see Shaikh, 1980).

(ii) transfers of value due to inter-country differences in the rate of exploitation and in wages. This is Emmanuel's "unequal exchange" in the narrow sense.

(E). Transfers of value deriving from the exercise of monopolistic control and market power —market structures and the formation of market prices are relevant here— and more specifically:

(i) From the autonomous function of merchant capital and the exploitation of its monopolistic position (see Kay, 1975).

(ii) In the form of absolute and differential ground rent of type I and II, deriving from the monopoly on land in the process of prices of production formation in agriculture and their divergence from market prices.

[6] Some authors reject this possibility of value transfer, of unequal exchange in this particular sense, by arguing that commodity values are already formed and given for the sphere of exchange. This abstracted view of the sphere of exchange obviously obscures the real process of exchange and value formation and the specific interlock of production and exchange. For a review and critique of such theoretical positions see also E. Mandel (1975, p. 96).

(iii) In the form of technological rent, as a special case of monopoly superprofits due to technological control.

(iv) From the activity of transnational corporations (TNCs) and their practice of transfer pricing.

(F). Transfers of value in the form of official (visible) state transfers and invisible transfers deriving from state monetary/credit and economic regulations (see Faulwetter, 1985). Tariff protection and trade policy measures in general is an important mechanism in this context (see DeJanvry, 1981, pp. 50-55). The specific operation of the international monetary/credit system, the dialectic between monetary/credit expansion (the privilege of money creation) and production, and the international inflationary process can be considered as a case of value transfers partly independent from state regulation (see also MacEwan, 1986).

(G). Transfer of "value" (or surplus product) as a result of the specific atriculation and the different economic calculation of different forms of production, particularly of family farming, with the capitalist sector (Caballero, 1984)[7].

All these forms of international transfers of value or surplus-value can be considered as constituting unequal exchange in its broadest sense. These transfers (unequal exchange) work on the average in favour of the developed and against the less developed countries, as it will become furthermore clear below. Here we should only point out that this phenomenon of unequal exchange, in its character and content, should not be treated as a "natural law" but rather as a specific feature of the CMP. As such, it is directly related to the underpinings of the tendency for *uneven capitalist development,* to which classical authors have given the status of a *law.* As already noted, the approach of authors like Emmanuel, Amin and Raffer implies a specific counterfactual which would presumably offset unequal exchange and serve as a baseline for the measurement of the value transfer involved[8]. In the same sense, it could be suggested for our approach that an equal development on the productive forces in all countries (see also n.5) would essentically eliminate systematic net value transfers. It would be incorrect, however, to conclude that the transfer of resources required to bring about such an equal development could be a measure of value transfers, since development and productivity differences are not *exclusively* attributable to such value transfers realized in the past. The issue of

[7] Regarding the exchange between capitalist and non-capitalist production, as well as the more specific relation between value (or surplus-value) and surplus product, see also n. 2 above.

[8] A condition such as that of equation (4) above is only a condition for equivalent exchange, but even this condition is not practically attainable under capitalist conditions of production and exchange. Nevertheless, an attempt to make international exchange more equivalent makes sense from both an economic and political standpoint. But of course, unequal exchange, in its broadest sense considered here, encompasses several cases beyond that of non-equivalent exchange.

empirical measurement of value transfers is more complex than that and it cannot be properly addressed here[9].

It is also important at this point to analyze specifically the relationship between the various forms of international value transfers (unequal exchange) and the TT as an index for the distribution of the gains from trade. In the broader context of the IDL, the significance of the international transfers of value for the distribution of the overall gains from this IDL also needs to be further clarified. Regarding the first question, it should be pointed out that some particular forms of international value transfers, especially cases D, E, G and partly F discussed above, are essentially reflected on the TT through the determination of the level of prices. For this reason, the TT index objectively but only partially indicates the actual distribution of the gains from trade. Given the advantage of easy measurability, the usefulness of this index in investigating the distributional implications of international trade and IDL cannot be rejected out of hand. However, the TT index should be used with caution and serious reservations since it does not reflect precisely intertemporal changes of the essential terms of international exchange[10]. This imprecise expression of the essential terms of trade is to a great extend due to the changing degree of deviation of prices (and relative prices) from values (and relative values). To see this more clearly we can denote with P_x and t_x the export price and the value respectively of an exportable commodity of the underdeveloped counries (assuming complete specialization), and with P_m and t_m respectively the price and value of an importable commodity produced in the developed countries (most likely manufactured products). Unequal, or unfavourable TT for the underdeveloped countries imply that

[9] To give just a first hint for an empirical assessment of value transfers, we should rather distinguish intra-branch transfers from inter-branch transfers. In the first case the deviation of the labour expended for the commodities exchanged from that required in industries of an average productivity can serve as basis for assessing empirically the value transfer involved. A measure of inter-branch transfers of value can also be worked out. It can be based on deviarions from conditions of equivalent exchange, which again should be determined by average productivity conditions in each branch of production involved.

[10] The modification of the traditional "net terms of trade" suggested by J. Spraos and others, resulting in indices (1) and (2) presented above, consitutes a real algebraic (statistical) improvement. This becomes evident from condition (4) for equivalent exchange between two commodities x and m, if we consider that the values t_x and t_m of the two commodities are inversely related to the corresponding labour productivities Π_x and Π_m. Thus we have,

$$P_x/P_m = t_x/t_m = \Pi_m/\Pi_x \quad \Rightarrow \quad (P_x/P_m)\,(\Pi_m/\Pi_x) = 1$$

Despite this improvement, however, the problem regarding the lack of an adequate theoretical foundation and the limited scope of these "terms of trade" indices remains.

$$\frac{P_x}{P_m} < \frac{t_x}{t_m} \tag{5}$$

Now, if for a particular period of time the TT for the underdeveloped countries (P_x/P_m) are stable or even improving (increasing P_x/P_m), this does not necessarily mean that the essential TT are actually improving for these countries. If, due to productivity gains in the developed countries, the value of the importable commodity in the underdeveloped countries decreases relatively faster, the relative value of the tradable commodities, the second ratio of inequality (5), may increase faster than the TT. Inequality (5) will become in this case even greater, which means that an even greater quantity of labour producing commodity x in the underdeveloped countries is required to be exchanged for the same quantity of labour producing commodity m in the developed countries, and vice versa.

Moreover, the TT do not precisely reflect the actual distribution of the gains from trade and the IDL for the additional reason that some international transfers of value are not, or are not fully, expressed by the TT since they may be partly or totally independent from the determination of the TT. Such value transfers may concern the process of value formation (case C above) or the international distribution and redistribution of surplus-value (cases A, B, and partly F discussed above). It becomes obvious that the Marxist approach focusing on a specific analysis of international value transfers offers a broader scope compared to the approach focusing primarily or exclusively on the TT. The TT approach is limited to the relations regarding the "nation as a whole" or to secondary contradictions such as North-South, Center-Periphery, etc., while the Marxist approach proposed here emcompasses processes and mechanisms largely independent from the determination of relative prices, i.e. of the TT, which may play an additional significant role in the distribution of the gains from the IDL and in the determination of uneven development. This is particularly important under present-day conditions of a rapid internationalization encompassing all forms of exchane. The Marxist approach transcends secondary or derivative contradictions, which undoubtedly play a certain role in international distribution, by focusing primarily on the fundamental contradictions of capital and those stemming from the specific structure of the prevailing relations of production on a world scale. The question of the distribution of the gains from the IDL is treated within the contemporary historical context, taking comprehensively into account the specific circuits of capital which constitute the concrete forms of operation and expansion of capital on a world scale. Within the Marxist theoretical framework it becomes possible specifically to investigate more fundamental class contradictions as well as the implications of a specific class structure for the inter-class distribution of the gains from the IDL on national and international scale. It should by now have become clear that unequal exchange (net international transfers of value) is inherent in the CMP and is not symptomatic only of the monopolistic or "unfair" determination of the TT, or of any given specialization structure.

It is also to be noted that the TT approach is usually based on a (neoclassical) subjective theory of value, while the Marxist approach rests on the firm and objective ground of the labour theory of value. It seems after all evident that the superiority of the Marxist approach in this particular issue vis-a-vis the TT approach rests on both analytical-methodological and historical grounds.

5. CONCLUDING REMARKS

It has been shown above that the TT in their traditional form are, under contemporary economic circumstances, rather inadequate as an indicator of the distribution of the gains from trade and the IDL. The TT as an expression of relative prices are directly related to the proportions of value regulating national and international exchange and as such they do play a role in the distribution of income and wealth within and among nations. It is plausible, in this sense, to consider that the TT are determined by the existing property and class structure and, in the final analysis, by class alliances or contradictions which are partly mediated by state policy. Any change in the structure and exercise of property rights or shift in political alliances may have, through the respective change in the TT, a considerable impact on the redistribution of income and wealth between classes and countries.

What is more important than relative prices and the proportions of value, however, is the absolute substance of value, as a certain quantity of socially necessary "abstract labour", and the flows (transfers) of value taking place between industries or across national borders. As we have argued, the various forms of international value transfer, which may be conceived as specific forms of unequal exchange in a broad sense, are more significant for the distribution of the gains from trade and the IDL, particularly under present-day conditions of a rapid internationalization of production and capital. Within this context, the international reproduction of capital and the concrete operation of the law of value imply various forms of international value transfers which stem from the process of social value, price of production, and market price formation on a world scale. For this reason, the investigation of all these international transfers of value offers a broader scope and constitutes a superior methodological approach to the issue under investigation.

As we have stressed, the international transfers of value involved in the reproduction of capital and the operation of the law of value have a significant effect on the process of uneven development. It should be remarked, however, that uneven capitalist development primarily depends on the free operation of international trade, the specific conditions of capitalist accumulation and the international flows of capital, independetly of any unequal exchange or international transfers of value in the sense analyzed above. Nevertheless, these international transfers of value play an additional significant role in the distribution of income and wealth on a world scale and in the determination of the specific dynamics of uneven development. It is worthwhile, therefore, to make further efforts in order to clarify analytically and assess empirically the actual transfers of value taking place in the process of international exchange.

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