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*Economic Integration. An Overview of Basic
Economic Theory and other Related Issues*

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Economic Integration. An Overview of Basic Economic Theory and other Related Issues

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Abstract

This survey provides a broad overview of the theory of economic integration from the standpoint of Customs Union theory. It argues that Customs Union theory, as such, lacks integration and that there appears to be no clear possibility that recent developments in the area will solve this failure. In spite of this, the basic theoretical framework that has been laid down from Viner's seminal work and further developed and perfected by others, is still useful as a tool for empirical research on the topic.

Resumen

Este documento presenta una visión amplia de la Teoría de Integración Económica desde el punto de vista de la teoría de unión aduanera. Se argumenta que dicha teoría carece de integración y que los recientes desarrollos en el tema no parecen resolver esta falla. A pesar de esto, se sugiere que los desarrollos teóricos surgidos a partir del trabajo seminal de Viner y posteriormente desarrollados por otros teóricos, son aún útiles como herramienta de investigación empírica en el tema.

Introduction

Economic integration, in its various forms, has provided a permanent motivation for economic thought. It was a major topic for 19th century economists as it has been for contemporary economists, especially since Viner's (1950) seminal work on Customs Unions. Recently, with the advance of economic liberalization worldwide and the trend towards the formation of economic blocs, economists have devoted considerable effort to the study of the formation and effects of the most commonly used forms of economic integration.

From the viewpoint of economic theory, most of the literature has been developed through the analysis of Customs Unions (CU) while other forms of integration tend to be considered as variations of this basic case. This paper

presents an overview of the main aspects of the theory on CUs as well as some topics of relevance for the particular case of Free Trade Agreements (FTAs). In Chapter 2 the concept of Economic Integration is briefly discussed. A broad overview of the development of CUs theory is the topic of Chapter 3. Chapter 4 develops the basics of CUs theory, starting with the direction of welfare changes arising from economic integration and the determinants of their size, going through the concepts of "trade creation" and "trade diversion", and covering the impact on welfare of including other variables in the economic analysis. Chapter 5 introduces a variety of topics that have importance in current discussions on economic integration. Ranging from the issue of multilateralism versus regionalism to domestic policies harmonization, this Chapter's material focus on the way these issues relate to CUs. With a similar aim than that of Chapter 5, Chapter 6 introduces four "hot issues" in the debate on economic integration. Finally, Chapter 7 provides some limited concluding comments.

1. Economic Integration

Balassa (1987) defined economic integration both as a process and as a state of affairs. This distinction, although lacking theoretical relevance, is useful for empirical purposes. Considered as a process, economic integration comprises the set of political and economic measures "designed to eliminate discrimination between economic units that belong to different national states" (p. 43). Interpreted as a state of affairs, "it represents the absence of various forms of discrimination between national economies" (p. 43). The process of economic integration, then, can be regarded as the path that is followed between decreasing levéis of economic discrimination among countries.

There are several forms of economic integration. They involve different degrees of discrimination between partner countries and between them and third parties. The most common forms referred to in the literature are the following.

Preferential Trade Agreements (FTAs): these are arrangements through which member countries receive reductions in tariffs or preferential treatment within quantitative restrictions on their trade with other member countries while maintaining their normal level of trade restrictions against third parties. This

type of arrangement frequently applies only to a group of products and is unilaterally granted.

Free Trade Areas (FTAs): these are accords by which member countries eliminate trade barriers among themselves while maintaining their individual national barriers against third countries. The disparity in the level of discrimination against third parties makes critical the control of trade flows coming through the different partners into the FTA. Normally, strict rules of origin and expensive customs inspection are necessary to prevent trade deflection.

Customs Unions (CUs): within this type of accord, member countries remove all barriers to trade among themselves and adopt a common set of tariffs to be applied to third countries; consequently, the adoption of intra-CU rules of origin and the need for customs inspection become obsolete. The level of the common tariff is critical in determining the economic outcome of a CU and may be relevant in defining other domestic economic policies given its potential impact on public revenues (although CUs do not imply per se any harmonization of domestic policies).

Common Markets (CMs): these are arrangements that comprise all the characteristics that define a CU, but also allow for full mobility of factors of production. By the same token, member countries within a CM define common policies regulating factor flows with third countries. The need for domestic policy harmonization is more compelling in this case than in the CUs case. However, there is no formal obligation for member countries to move in this direction.

Economic Unions (EUs): these constitute the most complete form of economic integration. Besides comprising the characteristics of a CM, EUs imply the complete harmonization of monetary, fiscal, industrial, and welfare policies, as well as, the establishment of a common pattern of foreign relations.

The incompatibility between the aforementioned forms of economic integration and the long-standing principle of non-discrimination (under the status of the Most Favored Nation -MFN) that has guided the commonly accepted regulation of international trade practices, has been resolved by means of GATT Article XXIV that allows countries entering into any form of trade agreement to

be exempted from fulfilling their obligations under Article I (ruling their commitment to non-discrimination), provided that some criteria (referred to below) are met.

To the already complex group of trade arrangements must be added the set of combinations that result from the interaction among countries participating in different arrangements. Lipsey (1991), has outlined three distinct models to describe these situations. First, the "hub-and-spoke" model, studied by Wonnacott (1990), considers the case in which a country has separate bilateral (or plurilateral) trade agreements with a group of countries that do not have trade agreements among themselves; in this way, the "hub" enjoys free (or preferential) access to the market of the "spokes" while each of them can have free access only to the market of the "hub" and is prevented from realizing gains vis-a-vis other "spokes". Second, the overlapping regional free trade model describes the situation that derives from an "original" bilateral free trade agreement to which subsequent trade agreements are added by means of negotiations comprising only one of the "original" partners and different third countries, producing as a result that each of the former are included in some agreements while excluded from others. Krissoff and Sharples (1993) point out, that the difficulty in enforcing an overlapping free trade area may be high; particularly in aspects related with the transshipment of goods across free trade areas and the application of rules of origin criteria. Finally, in the plurilateral regional model several countries establish a free trade area in which all member countries have (and permit) access to all markets.

2. A General Glimpse on Customs Union Theory

As Viner (1950, p. 41) has pointed out, CUs have more commonly enjoyed a favorable than an adverse opinion about their impact on economic welfare among both free-traders and protectionists. This paradoxical situation is not due to the fact that CUs can exactly meet the requirements imposed by the two kinds of approaches, but instead, is due to the ambiguous net economic result they produce in terms of improving or deteriorating economic welfare.

In either situation, the bottom line in judging the economic convenience or inconvenience of CUs rests on an implicit or explicit comparison between their

results and the optimality provided by free trade in achieving an efficient resource allocation. Leaving aside political or political economy considerations, insofar as CUs may be considered steps towards the accomplishment of global free trade, they can be regarded as beneficial for the economy.

On the liberalization side, the extreme case of CUs, that is a CU that comprises all of the world's economies, corresponds to the situation of free trade. As CUs involve only a few countries and therefore the use of tariffs (or other distortive policies), the resource allocation resulting from their implementation is suboptimal. In this sense, CU theory has been considered as a particular case of the theory of the second best. Lipsey and Lancaster were the first to note this particular feature of CU theory (Balassa, 1987).

Alternatively, observing that CUs are based on the principle of geographical discrimination, Lipsey (1960) has defined the theory of CUs "as that branch of tariff theory which deals with the effects of geographically discriminatory changes in trade barriers" (p. 496).

Since Viner's work and up to 1960 when Lipsey performed a general survey on the topic (Lipsey, 1960), research on CU theory concentrated in the welfare effects arising from the changing trading flows that stem as a consequence of CUs formation. The earlier CU theory, prior to Viner, considered that tariffs reduction implied in CUs were a movement towards free trade and therefore that they increase welfare even if not resulting in an optimum. To some extent, the value of Viner's research rests on the fact that through the introduction of the concepts of trade creation (welfare improving effect) and trade diversion (welfare deteriorating effect) he demonstrated that the net effects of CUs on economic welfare vary and that they may be welfare improving or welfare deteriorating depending on the particular characteristics of the case.

While Viner's analysis focused on the production effects of CUs, the contributions of Meade (1955) and Lipsey (1957) added the consumption dimension to CU theory. Allowing for the consideration of non-zero elasticity demand curves, Meade (1955) introduced the concept of trade expansion as a factor potentially improving economic welfare; this aspect of CU theory, known also as the intercommodity substitution effect, is also explored by Lipsey (1957)

who shows how a trade diverting CU may be welfare improving because of consumption considerations.

Besides considering production and consumption effects, CU theory also covered other important related aspects. Among them, it is worth mentioning the selection of partner countries, the impact of CUs on terms of trade, the role of administrative costs, the loss of tariff revenues, the distinction between nominal and effective tariffs, the role of economies of scale, and the effects of CUs on firms and industry efficiency.

According to Lipsey (1960), welfare gains or losses related with CUs may arise from several sources to which more or less attention had been devoted so far in the literature. In his view, CU theory was almost completely confined to the effects of specialization according to comparative advantage (the classic gains from trade) with slight attention to issues related with economies of scale and terms of trade, while aspects arising from efficiency considerations were ruled out under the assumption that any analyzed production process is technically efficient and the problem of changes in the rate of economic growth is completely dismissed.

In 1972, Krauss published another well known survey on the developments of CU theory. Considering research efforts performed between his and Lipsey's survey, he concluded that the most significant development in this field was the study of the motivation for forming CUs. In Krauss' words, "[t]he question of the 'economic rationality' of customs unions thus has been the theoretical issue of the past decade just as in the previous one the major issue ... was whether a customs union represented a movement towards freer trade or greater protection." (Krauss, 1972; p. 413)

Within this context the works of Johnson (1965) and Cooper and Massell (1965) have a great significance - referenced in Krauss (1972). Both studies extend to its limit the argument that countries participate in trade creating CUs with the aim of reducing the distorting effects of their own tariffs. The conclusion of their analyses is that participation in a CU is inferior to unilateral elimination of tariffs, given that the latter leads to a greater degree of trade creation while avoiding any trade diversion effect (Balassa, 1987). As a consequence, explaining

the motivation that countries have for forming CUs is traced back to non-economic, political, or strategic reasons. National preference for industry (either as a public good or as a long-term objective) is one of the more common examples of this explanation.

The elimination of the resource allocation motivation for forming CUs helped direct economists' attention to both what have been called "dynamic effects" and terms of trade effects (Krauss, 1972). By the time Krauss' article was published, the idea of "dynamic effects" referred mainly to the relationship between protection and efficiency and to the possibility of exploiting economies of scale and employing more up-to-date technology.

From Krauss' point of view, arguments discussing the importance of "dynamic effects" as the motivation for CUs are weak and even tenuous and his opinion partially coincides with criticisms made by authors like Corden (1970, 1972), Johnson (1962) and Pearce (1970) - referenced in Krauss (1972). On the other hand, by this time studies on the potential terms of trade effects of CUs had been extensively analyzed (Krauss, 1972) and results from them were found to vary widely according to the assumptions that were made.

Variations in the terms of trade as a consequence of CUs may affect the economic welfare of the participating country, of the partner country, and of third countries in different directions; therefore, the issue of distributional effects from CUs arises as a controversial topic in the field as well as the appropriateness of judging CUs' results according to their effects on each of the participating countries, on the rest of the world, or on the global economy as a whole. The increased acceptance of the importance of non-economic motivations as the basis for forming CUs plus the diversity of results obtained when terms of trade effects are taken into account, led to the recognition of partner-choosing as a relevant topic in CU theory.

According to Krauss (1972), "[t]here are in essence two approaches to the theory of customs unions depending upon one's assumption as to the nature of the political process. The first assumes government to be "irrational" or "non-economic", and focuses on the economic costs of such irrationality... The second approach assumes that government does desire to maximize the economic

welfare of the community but is ill-informed as to how to do it..." (p. 434). In Krauss' perception, the first approach is the correct point of departure in analyzing CUs because of two reasons; first, governments are not neutral in pursuing economic welfare; they also serve their own interest. Second, economists have failed to develop a general argument to explain the convenience of CUs on economic grounds (allowing for the qualification that, with the exception of Kemp's work (1969) - referenced in Krauss (1972), CU theory had not yet explored the possibility of assuming factor mobility and non-fixed supply of factors of production to the economy).

Research on CU issues is said to have kept pace with developments in CUs themselves (Krauss, 1972). According to Gunter's review of the literature on CUs (Gunter, 1989), this affirmation is still true. Gunter (1989) shows that the current phase in the development of CU theory is characterized by an interest in a series of specific topics that, even though present in the literature long ago, are of great importance for CU theory. The development of multiple commodity models, the study of terms of trade effects, tax unions, economies of scale, and, to some extent, the relationship between CUs and economic development are mentioned as the most salient lines of current research. However, in referring to the latter, Hazlewood (1987) has mentioned that relatively little development of the theory has focused on CUs in the context of economic development.

As has happened since the beginning of the development of CU theory, empirical research has consumed much of the effort devoted to the field in recent years. Perhaps this is the reason why Gunter points out that "[w]hile each individual study attempts to incorporate a more realistic assumption in a particular area, each is so specific that it is difficult to integrate the results of the different specialized models into a guide to how a customs union actually works." (p. 2) According to this view, CU theory is lacking integration not only because of the wide variety of topics, assumptions, and methods of analysis, but also, and most importantly, because of the absence of a systematic linkage between empirical results and theory.

Although Gunter mentions that very little attention has been given to general equilibrium models, with the launching of different initiatives of economic

integration either in the context of the conformation of trade blocks or within multilateral liberalization, an impressive amount of empirical research, including a fair number of general equilibrium models, has been performed in the last fifteen years. To have an idea of the dimension of the process of economic integration it may suffice to mention that between 1990 and 1994 approximately 39 reciprocal regional trading arrangements were subscribed worldwide (Harmsen and Leidy, 1994); this situation has considerably strengthened economic research on the interaction between multilateral and regional (or bilateral) trade liberalization.

Even though dominated by empirical research, there are also theoretical developments in the field of CU theory. For instance, Harrison et al. (1993), developed an alternative welfare decomposition to the use of the concepts of trade creation and trade diversion for analyzing the effects of CUs; Yeh (1992), draws on the differences between tariffs and import quotas when issuing countries enter into CUs; Staiger (1994), discusses the issue of gradual trade liberalization; Feenstra (1990), modeled the dynamics of distributing the gains from trade with incomplete information; Michael and Miller (1992) analyzed the effect of CUs with international capital mobility in the framework of the Harris-Todaro model; and Michael and Hatzipanayotou (1992) considered the effect of variable labor supply and taxes on wages on trade creation and trade diversion under CUs.

In spite of the wealth of economic research in CUs, both at the empirical and theoretical levels, it is apparent that CU theory is not a coherent and integrated unit. The old debate between free trade and protectionism remains a central issue and non-economic considerations prove to be quite relevant in determining the conformation of CUs and in influencing their analysis as well. To some extent, CU theory has been affected by the debate between the "new" and the "old" trade theories. The importance of non-comparative-advantage sources of specialization, even though not new in the economic argumentation, has been increasing since the late 1970s due to both the development of advanced modeling techniques and the rise of "strategic" trade policies (Krugman, 1993). CUs may be regarded as instrumental in maximizing national welfare regardless of their effects on global income and therefore as an appropriate means for

implementing "strategic" trade policies. They may also be perceived as a pertinent vehicle towards generalized trade liberalization and the achievement of an optimal resource allocation. While oscillating between these extremes, the difficulty in reaching an integrated CU theory is not surprising.

3. Customs Union Theory

3.1 Welfare Gains

Independent of the particular emphasis that the different studies on CUs have, at the bottom they all collapse to the common problem of the effect of economic integration on economic welfare. Given the second best nature of CU theory, which prevents a priori assertions of the direction of welfare changes, much of the research attempts to determine the conditions under which it is likely that a CU will improve welfare and whether or not it is a preferable alternative to unilateral tariff policy.

However, there is a great deal of implicit controversy around the purpose and scope of this attempt. As Krauss (1972) described it, there is a viewpoint that considers that the purpose of the analysis ". . . is to establish universal a priori laws..." (p. 414) and that the closer are the theoretical assumptions to the conditions of the "real world" the better is the derived law; in contrast, there is another position according to which "... the proper purpose of a priori reasoning is to highlight, in a disciplined and rigorous manner, the relevant aspects of the problem under investigation..." (p.414). Considering this dichotomy, it is easy to visualize how difficult it is to draw upon a generally acceptable set of conditions that make the CU likely to improve economic welfare.

Almost every significant contributor to CU theory has elaborated his list of conditions for CUs to be welfare improving. Viner (1950; pp. 51-52) provided one that is supposed to be valid whether the CU's effects are appraised in terms of the member countries alone or of the world as a whole; it can be summarized as follows: (1) the CU's economic area must be large, (2) the common external tariff should be lower than the previous individual tariffs before third countries, (3) member countries must rival in the kind of products that are characterized by high-cost production and that were previously protected, (4) there must be

considerable differences in unit costs of production for protected industries of the same kind within the CU, (5) higher tariffs in potential export markets in third countries for products in which CU's members have comparative advantage reduce the risk from decreasing the degree of specialization between the CU and the rest of the world, (6) the wider the range of products for which CU's members can provide lower unit costs for other member countries than third country suppliers, the more likely the CU is to be welfare improving, and (7) the converse of number (6), is the presence of a small range of industries within the CU that do not provide goods at unit costs lower than third suppliers.

Meade's (1955) main conclusion on the welfare effects of CUs is that "... it is impossible to pass judgment upon customs unions in general" (p. 107) and better enumerates a set of generalizations on CUs. Since this author relaxed Viner's assumption about fixed proportions in consumption, his first generalization establishes "... some general prejudice in favor of customs unions ..." (p. 107) because of the trade expansion effect that arises as a consequence of tariff reductions. Then he draws on some conditions that are similar to those enumerated by Viner, including the generalization over the competitive character of partner countries (to which he added the possibility that they may be actually very competitive but potentially very complementary), the economic size of the CU, and the proportional size of trade between member countries in the pre-CU situation (related to Viner's conditions 6 and 7). Finally, Meade adds some other conditions that make CUs more likely to be welfare improving: higher initial tariff rates between member countries; low tariff rates in the rest of the world (that may be contradictory with Viner's condition number 5); extensive use of quantitative restrictions in the rest of the world instead of import taxes; potentially large economies of scale in those industries within the CU that are likely to expand at the expense of other member's industries; and the preference for "... a partial all-round reduction by the partner countries of their duties on each other's trade... [instead of] the subsequent total elimination of those duties" (p. 110), given that this condition reduces the risk of trade diversion before third countries (to which Viner's condition number 5 tries to prevent to).

Meade's last generalization is mentioned by Lipsey (1960) as an example of the only kind of generalization that it is possible to make within CU theory. Its

importance derives from the second best character of CU theory and in Lipsey's terms the key point is that "[i]f the economy is moved sufficiently far past the second-best optimum welfare will be lowered by the change. From this it follows that, if there is a unique second-best level for the tax being varied, a small variation is more likely to raise welfare than is a large variation" (p. 507).

A second generalization that Lipsey considers refers to expenditure proportions between the three kinds of goods that exist within a CU: those purchased domestically, those from partner countries, and those from third countries. CUs tend to move price relationships between products to or away from equality with the real rates of transformation between the corresponding products (equalization of all relative prices and rates of transformation is the condition for optimization); tariff elimination among member countries brings relative prices and rates of transformation to equality while moving in the opposite direction the relationship between imports from partner countries and from third countries. Therefore, imports from partner countries produce gains, because of the first effect, and, simultaneously, losses, because of the second effect; consequently, what matters the most in determining the net effect of a CU is the relationship between purchases of domestic products and imports from third countries. In this sense, "... the sort of countries who ought to form customs unions are those doing a high proportion of their foreign trade with their union partner, and making a high proportion of their total expenditure on domestic trade." (pp. 508-509)

Modifying assumptions upon which the analysis is based or putting more emphasis on non strictly trade effects of CUs, affects considerably the set of conditions forming the economic case for CUs. Some economists attribute big potential gains to economies of scale (that comprise cost-reduction effects and trade suppression effects) or to enhanced efficiency. Others estimate that the order and timing of tariff reductions can be as important to a country as is the agreed final state of the CU. Allowing for increasing returns (and "strategic" trade policy) may also change dramatically the set of generalizations arising from CU theory and makes possible the consideration of the redistribution of world welfare in favor of the countries initiating a CU as the true purpose of CUs.

There is also an empirical issue that generates controversy not only within CU theory but also in the context of international trade theory in general. It is that of the seeming smallness of the estimated welfare gains and losses stemming from CUS, at least as measured as a percentage of GNP. This fact has been extensively used by advocates of the economies of scale argument and the forced efficiency argument to erode the importance of the orthodox resource allocation effects as the motivation for developing CUs. Divergent opinions on this point are easily found in the literature. For instance, McCulloch (1993) mentions that even selective trade liberalization provides larger markets and associated dynamic effects and points out that the new industrial-organization-based theory of trade supports this view and that "... recent empirical studies confirm that welfare gains from regional liberalization can be far greater when markets are imperfectly competitive..." (p. 369). On the other hand, Krugman (1993) asserts that "... we have looked pretty thoroughly into those dynamic aspects and found their policy implications to be limited." (p. 366)

Finally, as McCulloch (1993) has mentioned, trade theory in general tends to dismiss the effects of trade liberalization on distribution and the fact that significant redistribution strongly discourages trade liberalization through political pressure. A related aspect has to do with adjustment costs. Most theoretical arguments overstate the benefits accruing from trade liberalization in that they compare alternative equilibria (pre and post trade liberalization) without taking into account costs involved in going from one to the other. Not only important distributional effects impinge upon the size of adjustment costs but displaced resources that remain idle generate opportunity costs and cause political difficulties. In spite of these shortcomings and considering the unavoidable divergence between "real world" conditions and theoretical assumptions, it is clear that free trade is still considered the best solution for improving economic welfare and that any form of economic integration that helps in moving towards this goal ought to be considered desirable.

3.2 Trade Diversion and Trade Creation

Viner's (1950) concepts of trade creation and trade diversion set the basis for analyzing welfare effects of CUs. According to this perspective, "[t]he analysis will

be directed toward finding answers to the following questions: insofar as the establishment of the customs union results in change in the national locus of production of goods purchased, is the net change one of diversion of purchases to lower or higher money-cost sources of supply, abstracting from duty-elements in money-costs: (a) for each of the customs union countries taken separately; (b) for the two combined; (c) for the outside world; (d) for the world as a whole?" (p. 42)

Trade creation occurs whenever trade shifts from higher to lower cost sources of goods while trade diversion implies the opposite movement. If trade creation is predominant, at least one of the members of the CU must benefit, all of them may benefit, and in the long run the world in general benefits; although, someone must lose in the short run as trade is diverted from old to new suppliers. On the other hand, if trade diversion is predominant, at least one of the member countries must lose, all may lose, and the world as a whole will lose. Whether, in Viner's analysis, trade creation or trade diversion effects will predominate seems to depend on the volume of trade associated with each of them.

This is precisely one of the criticisms that Meade (1955) made of Viner's approach; there is a lack of criteria as to how to weigh the economic gains and losses arising from CUs. Meade established that in order to determine whether a CU is trade creating or trade diverting, not only the volume of trade on which costs have been raised or lowered must be considered, but also the extent to which these costs have changed on a per-unit basis.

Weighting trade volume by the corresponding change in unit costs is a solution that can be applied without trouble in the context of Viner's analysis; however, if the assumptions establishing fixed proportions in consumption and fixed costs of production in each country are relaxed, the use of this rule becomes more complicated. Relaxing the first assumption and maintaining the second one makes it necessary to include welfare changes caused by the trade expansion effect (which are positive) as well as welfare changes arising from losses in tariff revenues as countries enter the CU. The latter could be dismissed if it were possible for the government to replace foregone revenues by means of other taxes without affecting economic incentives while reaching the desired distributional effects.

Meade's analysis set the basis for the standard calculation of economic effects arising from CUs. Figure 1 illustrates the net effects of a CU in a partial equilibrium framework, assuming no transportation or transaction costs. Curves D and S represent good's X demand and supply curves, respectively; P_c is the export price of good X in the lowest cost supplier (that remains outside the CU); P'_c is the import price of good X in country A resulting from the issuing of an import tariff (t); and P_b is the export price of good X coming from partner country B, which is equal to the import price of this product in country A (since no tariffs apply to its imports).

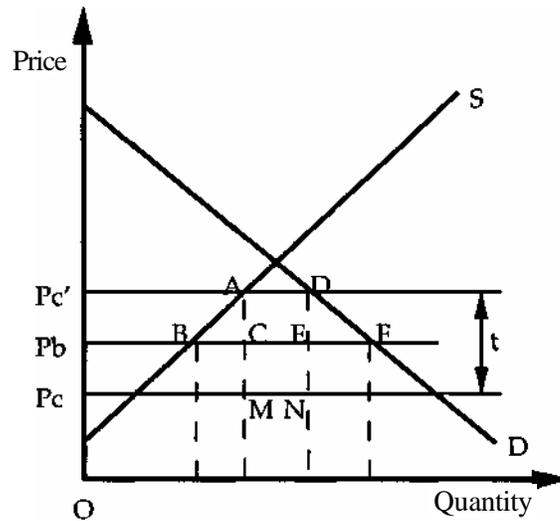


Figure 1 Single Product Partial Equilibrium Welfare Effects of a Customs Union

In the initial situation, before the CU, country A buys good X from country C at price P'_c , consuming quantity P'_cA of product domestically produced and quantity AD of imports. With the functioning of the CU, country A shifts its imports from country C to country B, provided P_b is less than P'_c . In this situation, consumption as a whole increases (trade expansion effect), domestic production decreases to P_bB , and imports (now originating in country B) rise to BF . Consumer surplus increases in area $P_c'DFP_b$, producer surplus diminishes in area $P_c'ABP_b$, and area $ADEC$ is transferred from the government (foregone

revenues) to consumers. Consequently, the trade creation effect from the CU is equivalent to area ABC+DEF while the trade diversion effect is equal to area CENM. Therefore, after the CU, country A might be better off or worse off depending on whether area ABC+DEF is greater or less than area CENM.

However, the partial equilibrium approach takes into account only what Meade (1955; p. 67) called the primary effect of the CU; that is, changes in trade flows stemming from tariff variations affecting a particular product under the assumption that income and all other prices remain unchanged. Further complexities arise from the introduction of secondary effects of the CU (Meade, 1955; pp. 67-68). These effects are produced as a consequence of the substitutive or complementary character of the relationship between the product whose tariff has been modified and other products (whose tariffs may or may not be modified)¹¹. Consideration of all possible (or relevant) secondary effects within the economy requires the use of a general equilibrium approach.

Another assumption in welfare analysis within the partial equilibrium approach is that any increase (decrease) in imports is compensated by an equivalent increase (decrease) in exports, so that the country's balance of payments remains in equilibrium (Krauss, 1972). Mechanisms employed in order to reach balance of payments equilibrium define the scope of Meade's (1955; p. 87) tertiary effects of a CU. These mechanisms comprise (1) direct controls over trade flows, (2) manipulation of the inflation rate, and (3) adjustments of the exchange rate; each of them may have different implications for the nation's economic welfare (increasing or decreasing it), depending on the specific conditions of the economy. In this case, again, it is necessary to resort to general equilibrium models to assess the net effects of CUs.

Relaxation of fixed proportions in consumption and fixed costs of production assumptions not only allows the introduction of trade expansion effects and intercommodity substitution effects but also the elimination of the necessary association between trade diversion (arising from the production side) and

¹ According to Lipsey (1960), these effects, also called intercommodity substitution effects, were discovered independently by Meade (1955), Gehrels (1956), and Lipsey (1957).

welfare losses. Lipsey (1957) shows that a trade diverting CU may be welfare improving for a country and that even in the case in which world production is considered fixed, changes in relative prices modify the pattern of consumption within a country producing consumption effects that may be welfare improving.

Figure 2 shows the case of a trade diverting CU that is welfare improving for a country (Lipsey, 1957; pp. 41-43). In a free trade context, country A produces good Y and imports good X from country C, the lowest cost producer of this good, maximizing welfare at point G along price line DE where indifference curve I is reached. Price line DE describes the terms of trade between goods Y and X, produced in countries A and C respectively. Then, an import tariff equal to EF/OF is issued on all imports of good X and terms of trade between good Y and good X move to line DF. If tariff revenues were returned to consumers, the new equilibrium will be reached along line DE (instead of at point H, at which line DF is tangent to indifference curve I') at a point where an indifference curve with a slope equal to that of DF cuts price line DE. Point K shows the new equilibrium and indifference curve I'' the corresponding maximum welfare level (consumers are not able to reach a higher indifference curve trading along their domestic price line D'F').

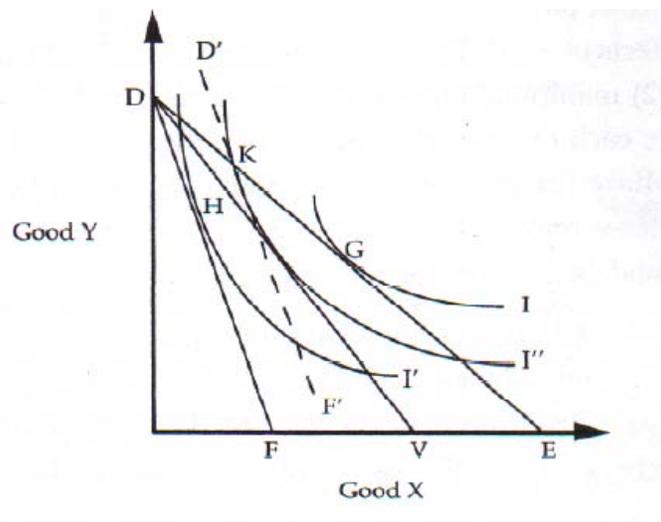


Figure 2 Welfare Improving Effects of a Trade Diverting Customs Union
Source: Lipsey (1957); p. 42

If country A forms a trade diverting CU with country B, the line indicating the terms of trade between good Y and good X and pertaining to trade with country B must lie at any place between lines DF and DE (if trade diversion is to occur, terms of trade with B must be at least equal to DF; similarly, if country C is the lowest cost producer, terms of trade with B must lie to the left of DE). Now, line DV represents the terms of trade that correspond to indifference curve I' and, as a consequence, if terms of trade with country B lie to the left of line DV country A will lose with the existence of the CU, but if they lie to the right there will be gains from the trade diverting CU (an indifference curve higher than I' could be reached in this case)².

Another exception to Viner's rule about the relationship between trade diversion and welfare effects of CUs is found when the assumption of constant costs of production in the home country is relaxed. Krauss (1972) mentions how Melvin's (1969) and Bhagwati's (1971) studies demonstrated that, even allowing for fixed proportions in consumption, the variability in costs of production results in welfare gains that can exceed losses stemming from trade diversion.

These criticisms of Viner's concept of trade diversion as equivalent to a welfare loss have led to the acceptance of the inconvenience of labeling CUs' welfare effects on the basis of production effects and therefore to the inclusion of production and consumption effects in determining whether there is net trade creation or net trade diversion. Another issue arising from this criticisms has been the proposal of labeling CUs' effects by means of concepts other than trade creation and trade diversion in order to avoid potential confusion. Lipsey (1960) proposed the use of inter-country substitution and inter-commodity substitution, the first corresponding to Viner's trade creation and trade diversion effects and the latter to consumption effects. Johnson (1962) recommended a different terminology and defined the terms trade creation and trade diversion in such a way that each contains production and consumption components - referenced in Krauss (1972). More recently, Harrison et al. (1993) proposed to differentiate

² Krauss (1972) pointed out that according to Melvin (1969) the equilibrium terms of trade are equivalent to the partner's marginal rate of transformation only in a special case and that they must lie somewhere in between that ratio and the ratio existing in the importing country. However, this does not invalidate Lipsey's positron.

between home-price effects and tariff-revenue effects as a way to analyze welfare changes instead of the traditional concepts.

In spite of these proposals, the concepts of trade creation and trade diversion continue to be commonly used in analyzing the economic effects of CUs and the standard procedure outlined by Meade (and exemplified here by means of a partial equilibrium diagram), that includes production and consumption effects, provides the basis for much of the economic modeling of CUs and trade agreements in general.

3.3 Terms of Trade Effects

Terms of trade, under the names of commodity or net barter terms of trade (Findlay, 1987), are defined as the relative price of exportable to importable goods and are usually measured as the ratio of an export price Index to an import price Index (their changes being calculated in relation to a given base year). As mentioned before (referring to Meade's tertiary effects of CUs on the economy), when international trade is considered within an economic model there is need to determine equilibrium values of the terms of trade in order to reach balance of payments equilibrium and a stable solution to the system. In Findlay's (1987) words " [t]he determination of the terms of trade is thus technically nothing other than that of finding the equilibrium vector(s) of relative prices for general equilibrium models in which there is a world market for tradeable goods and internationally mobile factors, and national markets for non-traded goods and internationally immobile factors." (p. 624)

Terms of trade, therefore, constitute an important issue in trade theory and play a key role in the determination of welfare effects arising from international trade. For instance, a shift in preferences from domestic to imported products should under normal conditions raise welfare in the partner country as the excess demand generated for imported products produces an improvement in the exporting country's terms of trade; also, in cases where a country has some degree of market power (monopoly or monopsony power), the alteration of terms of trade may become an objective of trade policy inasmuch as gains arising from improvements in terms of trade outweigh losses resulting from the reduction in trade volume (the optimum tariff issue).

The terms of trade effects issue is important in the case in which at least one of the partner countries is a "big" trading country, that is when it is able to affect international prices through trade policy. On the contrary, when partner countries are "small" there are no terms of trade effects and the economy's equilibrium may be re-established by means of any of the mechanisms enumerated by Mead.

3.4 Economies of Scale

Amongst the factors that have been traditionally identified as the dynamic effects of economic integration, economies of scale are probably the most important. Although in the context of economic analysis its formalization and measurement are difficult to achieve, "... many economists believe they are of far greater importance than the more theoretically tractable static benefits from Ricardian comparative advantage" (McCulloch, 1993; p. 369). In fact, the case for economies of scale constitutes one of the foundations for the rise of the new trade theory.

Both in political and economic circles there has been widespread acceptance and support of regional free trade initiatives on the grounds of the economies of scale argument, in spite of the generally ambiguous economic welfare results of such agreements. However, this has not been the common position in CU theory. Viner (1950; pp. 45-47), for instance, based on the assumption that firms located in small economies and operating on a moderate size basis are as efficient or nearly as efficient (in terms of unit costs of production) as large-scale firms, denied any practical importance to the case for economies of scale as an economic motivation for the formation of CUs. Instead, he highlighted the relevance of technological development and supply conditions of factors of production as determinants of output expansion without increase of unit costs, in the context of a constant overall size economy. Johnson (1962) and Pearce (1970) - referenced in Krauss (1972), objected also to the presumable importance of economies of scale in CU theory on the grounds that partner countries' demands cannot be added into a single entity, increasing the effective demand for the commodities in question, because of differences in income levels, culture, and consumption habits.

From a different perspective and considering the existence of economies of scale to be important, Corden (1972) developed the concepts of cost reduction effect and trade suppression effect to capture the economic consequences of this phenomenon. The cost reduction effect refers to the increase in welfare that appears as a consequence of the expanded output and the concomitant decrease in average costs of production after the CU is formed. Similarly, the trade suppression effect refers to the decrease in welfare arising from the replacement of imports from their most efficient sources by less efficient producers within the CU. Noting that the introduction of economies of scale implies relaxing the classical CU theory's assumption of constant costs of production, Krauss (1972) pointed out that, in this case, the concepts of trade creation and trade diversion must not just be complemented but really extended to cover these new effects.

Consideration of economies of scale leads to ambiguous results in terms of the welfare effects of CUs; again, they may be positive or negative according to the particular conditions of the countries entering the CU. There is, besides, another difficulty in analyzing the effects of economies of scale in the context of CU theory. The estimation of these effects rests on a technique developed by Wonnacott and Wonnacott (1967) and further elaborated by Williamson (1971) that, according to Krauss (1972) "... requires the average cost curve to be the firm's supply curve rather than the marginal cost curve, implying an average cost theory of pricing that is inconsistent with traditional profit maximization theory" (p. 432).

An argument that tends to qualify the potential for welfare gains arising from economies of scale is pointed out by Lipsey (1960). It refers to the distinction between the long-run marginal cost of production, which is the relevant variable when talking about economies of scale, and the marginal cost of producing and selling more goods. If markets are growing it is relatively easy for firms to realize gains from economies of scale; however, if markets are static, it is quite possible that decreasing marginal costs of production, associated with economies of scale, may coexist with increasing costs of selling products given that the individual firm's market share has to be increased at the expense of other competitors. In this situation, gains from economies of scale may not be exploited by firms competing in the marketplace.

3.5 Integration vs. Unilateral Tariff Reduction

The debate about economic integration versus unilateral tariff reduction is rooted in two related issues. First, whether the motivation of member countries is to liberalize their economies and therefore to eliminate economic distortions arising from their own tariffs or to protect their economies from third countries competition. Second, whether there are some non-economic motivations for the formation of CUs.

Viner (1950) mentioned the idea that in an early phase of the movement towards the formation of CUs, the extension of high effective protection over expanded economic areas was probably the main motivation in their formation. Actually, he attributed to this feature the failure to effectively achieve the operation of most planned CUs as member countries were averse to open their respective markets to the competition of partner countries' production. The role of non-tariff barriers to trade was an important element in the manipulation of the real degree of openness to trade among partner countries.

In classical CU theory, participation in a trade creating CU is considered a step towards free trade and therefore as a way of achieving enhanced economic efficiency. Under this assumption economic analysis shows that CUs are inferior to unilateral (or non-preferential) tariff elimination in that the latter produces greater levels of trade creation while avoiding completely trade diversion effects. Consequently, from an economic point of view, the rationale for the formation of CUs is weak and unilateral tariff elimination should be the path to increase economic welfare.

Cooper and Massell (1965) and Johnson (1965) -referenced in Balassa (1987) - worked in this direction and established that non-economic purposes should be the real motivation for governments to establish CUs; that is, that some form of protectionism provides the motivation for them. In the perspective of Krauss (1972), what was needed was "... an "economic" theory of protectionism whose development would allow a comparison of non-preferential tariff policy with customs union as alternative protectionist rather than liberalizing mechanisms" (p. 417). As was mentioned before, de-emphasizing resource allocation objectives

as the reason for CUs formation led economists' attention to the study of dynamic gains from trade.

Both Cooper and Massell's and Johnson's research include the consideration of public goods in modeling and evaluating CUs. The preference for industry is the public good that is considered relevant in these studies; in the first case, to try to determine how membership in a CU provides a specific country with an economically better way of achieving industrial objectives than pure protectionism; in the second case, to try to explain why governments follow trade policies that are seemingly irrational from the point of view of economic welfare. The conclusion in both cases is that CUs are superior to pure protectionism in achieving industrial goals at a lower economic cost. This conclusion remains valid as long as countries are, for whatever reason, unable to grant and adjust direct production subsidies which are a more efficient mechanism than CUs in industrial policy. The reasons justifying the preference for industry vary in scope and applicability; among the most common it is worth mentioning long-term economic growth objectives, the pressure of industrial firms and workers to increase their profits and wages, the achievement of positive externalities, and national aspirations and rivalries.

Wonnacott and Wonnacott (1981) -referenced in Balassa (1987) - showed that, even in the absence of a preference for industry, unilateral tariff reductions may not be superior to CUs if it is assumed that tariffs exist in partner and non-member countries prior to the formation of the CU. This is because tariff elimination among partner countries allows the home country to sell a bigger amount of products duty free and at higher prices than before and to reduce the amount of income lost from tariff revenues that arises from trade with third countries.

Other arguments have been raised on the superiority of CUs over unilateral tariff elimination. Floystad (1975) - referenced in Gunter (1989) - argued that, assuming wage fixity and relative capital immobility between exposed and protected industries within a country, CUs are superior to unilateral tariff elimination in that they provide lower levels of unemployment for a given trade deficit. Fries (1984) - referenced in Gunter (1989) - showed that CUs may be

preferable in the case in which there is uncertainty about world commodity prices; although, in his argument at least one of the member countries must be a net loser in the ex post CU situation and therefore incentives for its permanence are weak. In general, the case for the superiority of CUs over unilateral tariff elimination generates opposition from those who consider that this type of argument tends to justify irrational economic behavior on the part of governments and to encourage practicing managed trade policies. Gunter (1989) argues that "[i]f a customs union is entirely a political construct, then the economic effects of the union may not be just irrelevant but actually perverse" (p. 9).

3.6 Partnership Issues

The issue of choosing the set of partners that better serve the purpose of forming a trade creating CU was implicitly discussed when treating the welfare effects of CUs and the concepts of trade creation and trade diversion. However, there are some points that are worth emphasizing. First, countries are not always free to choose the set of partners they want to form a CU with; frequently, political and strategic considerations (or any type of non-economic reason) lead countries to establish trade agreements in spite of potentially adverse economic consequences. Second, finding suitable partners that meet most of the desired characteristics for a CU to be surely trade creating is a difficult task and most probably a conflictive one; as Hirschman (1981) has pointed out, political support for forming a CU is most likely to come initially from those who expect to benefit from trade diversion.

Some of the features that should characterize either partner countries or the relationship between them and the home country are the following. (1) Their economies must be competitive rather than complementary and differences in per unit costs of production in competitive products should be high; (2) pre-CU tariffs between them must be high as compared to those in the rest of the world; (3) member countries must be the main trading partner of each other in the products in which they maintain trade flows; (4) a relatively high proportion of each country's expenditure must be done in domestic trade; (5) member countries' elasticities of excess demand and third countries' elasticities of excess supply must be high and member countries' elasticities of excess supply and third countries' elasticities of excess demand must be low - however, these

conditions vary according to the assumptions of the model employed in the analysis, those presented here apply to Meade's model when analyzing tertiary effects of CUs formation.

Besides these conditions, there are other considerations that are relevant to this topic. Partnerships with the lowest cost producers of goods that are important in the home country's trade flows is likely to increase welfare as the chances of trade diversion are reduced. Similarly, in accordance with Tinbergen's (1957) conclusions - referenced in Gunter (1989) - about the size of the CU, increases in the market size that the CU makes available to member countries are likely to be welfare improving and therefore relatively small countries are likely to benefit proportionally more from their association with large countries than the latter with the former. Transportation costs also help determine the outcome of a CU; *ceteris paribus*, the lower are transportation costs among member countries, the greater the gains stemming from the CU.

Highly controversial and seemingly not extensively researched is the establishment of CUs among countries with wide differences in economic development. The NAFTA appears to be the first FTA between developed countries and a LDC and despite of the impressive number of studies conducted on this particular case there is a lack of both more general and theoretical research in this field. Opposite arguments have characterized an intense debate on the consequences of such an agreement for the three partner countries (specially for the U.S. and México, given the relative importance of their bilateral trade). Wage differentials, which favored the potential location of labor intensive industries in México, are perceived as one of the most relevant comparative advantages of México within the agreement while the gap in technology and efficiency in most economic activities tends to favor U.S. producers. Taking into account the hypothesized differences about the likely impact of the agreement on member countries' economies, perhaps the most significant issue arising from this debate is that of adjustment costs and their implications for the realization of the gains from trade.

The complexity of the elements that have been mentioned as relevant in choosing partner countries when forming CUs, highlights the fact that even if

countries were truly free to choose their preferential partners in trade the selection of the most appropriate may in practice be more a matter of circumstantial conditions than of scientific judgment.

4. Other Issues of Relevance

4.1 Multilateralism vs. Regionalism

CUs and other forms of regional economic integration have been subject to question about their effective interaction with the achievement of free trade on a multilateral basis, which is the optimum solution in terms of resource allocation and economic welfare. What must be clarified is if regional economic integration is a step towards global free trade or, on the contrary, an obstacle to this goal. Once again, in this aspect of CU research there are no conclusive results.

The starting point in this topic is the recognition that maximizing national income is not the same as maximizing global income and, furthermore, that it is possible to maximize national income at the expense of other countries' welfare. The case for the optimal tariff argument is the first theoretical generalization of this issue; deliberately decreasing global output size increases the tariff issuing country's income. In fact, the same conditions that make possible the achievement of an optimal tariff preclude the possibility that a large country undertakes unilateral tariff elimination aimed at achieving global free trade. As McCulloch (1993) pointed out, "[b]ecause of adverse effects on its terms of trade, a large country's unilateral liberalization may raise world welfare yet lower its own. The apparently mercantilistic resort to reciprocal trade liberalization in multilateral negotiations provides needed assurance that each participant will capture part of the gains from the resulting increase in global efficiency" (p. 368).

From the free trade point of view, the danger with regionalism is that trade diversion, while providing gains to participant countries, may block further liberalization attempts inasmuch as they imply risking those economic gains. Various sets of criteria have been established in order to determine whether or not a regional bloc is open - Krueger (1995), Corden (1995), Weintraub (1995). At least two conditions should be matched by a regional trading bloc to be considered as open; first, trade and investment barriers to non-member countries

must not be raised; second, new members willing to join the agreement and prepared to meet the established trade conditions should be easily accepted.

Superficially observed, these conditions are likely to be met by almost every trade agreement; however, both have subtle complications. In the case of CUs, the average common external tariff may be lower than average individual tariffs before the CU while, simultaneously, higher than some particular pre-CU tariffs; as a consequence, increased levels of protection may be granted for some sectors moving them away from international competition. Similarly, under PTAs or FTAs, manipulation of country-of-origin rules may raise levels of protection for certain products or induce decreases in import levels of third countries' goods by partner countries. Also, acceptance of new members into trade agreements may not be as easy a procedure as it seems; lack of clearcut accession rules tends to be a common characteristic in trade agreements and, particularly in the case of the highest levels of economic integration, requirements related to domestic policies (such as social, labor, and monetary) and to political institutions (like the existence of 'western style' democracy) may prove to be highly restrictive.

In the context of GATT's (WTO's) rules, regional trade agreements must comply with a three-part test (Article XXIV). First, third countries that are signatories of the GATT must receive detailed notification about the agreement; second, 'substantially all' trade between partners must be involved within the agreement; and third, the agreement must not raise trade barriers toward third countries. Additionally, in spite of the fact that GATT provisions requiring the regional trade agreement to be on balance trade creating, "... the presumption that an FTA must be more trade creating than trade diverting has been incorporated into GATT working party reviews of FTA notifications, and is now generally considered the key standard by which to judge the value of FTAs to third countries." (Schott, 1989; p. 27)

Most trade agreements that have been studied by GATT's working parties have not reached conclusive results on their compatibility with GATT rules. As expressed by Schott (1989), "[s]ince 1948, a total of 69 FTAs and preferential trade agreements, and subsequent amendments, have been examined by the GATT under the provisions of Article XXIV [. . .] GATT working parties have reported on each of these agreements. Only four agreements were deemed to be

compatible with Article XXIV requirements; on the other hand, no agreement has been censured as incompatible with GATT rules." (p. 27) This ambiguity has often been perceived as a factor encouraging the formation of new regional trade agreements; political considerations and the recognition that most of GATT members take part in such agreements, persuade affected countries of the futility of criticizing them. A large number of countries devote increased efforts to developing and establishing regional trade agreements as a defensive reaction before the strengthening of trade blocs in different parts of the world. The risk of being left aside is too high for a country to remain passive in pursuing some form of integration.

The dynamics of regional integration (and of open or disguised protectionism) have been so impressive that Mussa (1993) suggested a three-fold strategy as a practical device in pursuing free trade. First, free traders should recognize that rents matter, that is that in political processes what is at stake are the "... additional amounts that factors employed in a protected activity are likely to earn in comparison with their next-best alternative" (p. 375); in Mussa's opinion, what free traders can productively do is to call decision makers' attention to losses faced by consumers as the "cost of granting protection". Second, it is necessary to "avoid hysterical multilateralism" and to recognize that multilateralism per se does not assure free trade; bilateral and regional trade agreements have helped effectively to open world's trading system in spite of some negative effects on third countries through trade diversion effects (either accidental or intended). Third, it is convenient to accept the importance that a mercantilistic approach to trade negotiations has in reaching lower barriers to trade and that pure free trade is not always (and perhaps never) the best policy for all nations in all circumstances; in other words, economists "... should be more humble in recognizing the deficiencies of economics in teaching the strategy and tactics through which a relatively open system of world trade may be established and sustained." (p. 376)

4.2 Effects of Protection over Efficiency

Enhanced efficiency through forced competition as trade liberalization occurs is one of the traditionally mentioned dynamic effects of economic integration.

The source of this argument lies in Scitovsky's (1958) affirmation - referenced in Balassa (1987) - that economic integration helps improve effective competition by means of loosening monopolistic and oligopolistic market structures within individual countries. This idea was further extended by Leibenstein (1966) under the concept of X-efficiency. According to this argument, protectionism allows firms to employ their productive resources, including managerial skills, and to use the available technology at a lower level than the optimal in such a way that gains in efficiency stemming from forced competition (through trade liberalization) are expected to be greater than gains from the classical resource allocation effects.

Gains from enhanced efficiency do not appear in the classic literature on CUs because within this framework it is assumed that firms, operating under perfect competition, choose the most efficient production methods and use them efficiently. To a great extent, the attractiveness of the X-efficiency argument lies in the large income gains than are associated with it and that make the idea of the "cold shower" so popular in discussing the integration of the British economy with those of European countries during the sixties and seventies. Lipsey (1960), for instance, admitting the lack of evidence on this topic referred to his "... personal guess that this is a very large potential source of gain, that an increase in competition with foreign countries who are prepared to adopt new methods might have a most salutary effect on the efficiency of a very large number of British and European manufacturing concerns." (pp. 512-513)

Taking into account the Stolper-Samuelson theorem as well as income and substitution effects, Corden (1970) - referenced in Krauss (1972) - showed that if efficiency is assumed to depend on effort and if factor income effects outweigh substitution effects, factors used intensively in the production of exportables grow less efficient than factors used intensively in the production of importables as tariffs are reduced. As Krauss (1972) pointed out, the significance of Corden's conclusion is that in referring to efficiency gains there are also gainers and losers and that the mechanics of efficiency gains is not as straightforward as assumed popularly.

With respect to the measurement of efficiency gains, Krauss (1972) argues that the evidence of X-efficiency effects presented by Leibenstein is no more

than a relatively narrow set of ad hoc experiences without systematic analysis that lacks theoretical support. As was mentioned earlier, the formalization and measurement of efficiency gains (in general that of dynamics effects) continue to be hard to achieve and the dispute on the accuracy and validity of these estimates is far from being settled. Finally, it has been argued that the case for efficiency gains is more an argument in favor of unilateral tariff elimination than one on CU formation; opposing this opinion, some authors claim that this position dismissed income gains arising from increases in output associated with sales of goods to partner countries and that, therefore, forced efficiency provides higher economic welfare gains in the context of CUs (Balassa, 1987).

4.3 Economic Development

The questioning of orthodox CU theory from the standpoint of developmentalism has its roots in the static character of the resource allocation gains that constitute the basis of this type of analysis. Most of the advocates of what Robson (1983) has called a "Developmental Theory of Integration among Developing Countries" assume that the protection of certain economic activities in developing countries (mainly industry) is valid either for reasons of income, the rate of economic growth, or non-economic objectives.

The importance assigned to economies of scale in the developmental approach makes it closer to the dynamic effects approach than to any other perspective within economic integration theory. Simultaneously, consideration of divergences between private and social costs, particularly under the form of wage fixity, lead to the recognition that production gains through economic integration are lower than when no domestic distortions are assumed (an argument that reinforces the importance of long-term gains from integration).

In summary, within the developmental approach it is considered that "... the gains from integration must be exploited by member countries on a mutual basis, by the exchange of markets within the customs union or common market or other preferential area, so that they can be secured without a sacrifice of the structural developmental objectives of individual member states" (Robson, 1983; p. 7). Consequently, issues such as the infant industry argument, the rate of

domestic capital formation, the inflow of foreign investment, external economies (or positive externalities), the rationalization of the structure of new (or post-CU) production, the access to new technology, and enhanced bargaining power for member countries are the main topics within this approach.

From the aforementioned issues it is clear that from the developmental viewpoint the case for CUs is a case for protection instead of economic liberalization. In the formation of CUs the lowest-cost producer among member countries will benefit from enlarged markets and preferential access to them - these benefits include the cost reduction effect (Corden, 1972); on the other hand, high-cost producers face losses from the potential disappearance of their industries but experience consumption gains from lower price imports that may be realized also by means of unilateral tariff reductions. Robson (1983) shows that lowest-cost producer's gains are greater than high-cost producers' losses and therefore that there is a case for integration as a better alternative than unilateral tariff reduction.

If a wide enough range of industries exists in prospective member countries, it may be possible that all of them will obtain gains by exchanging markets in a CU even without resorting to compensation. This is, essentially, the preference for industry argument developed by Cooper and Massell (1965) and further elaborated by Dosser (1972) - referenced in Robson (1983) - that has been attacked as applied to developed economies (on the grounds that direct production subsidies are more efficient) but whose importance has been recognized in the context of developing economies (Krauss, 1972). Since the CU's industry would be a high-cost producer as compared to international competition, the case for CUs in this context is, as was mentioned before, a case for protectionism and the validity of this protection rests on the possibility that sheltered industries are characterized by declining long-run marginal cost curves (the infant industry argument).

An alternative way of characterizing this perspective of economic integration arises when it is taken into consideration that industries developed under these circumstances are mainly import-substituting and therefore trade diverting. The preference for industry, then, may have important economic motivations (not

only non-economic and irrational motives) such as the importance assigned to the achievement of external economies and enhanced introduction of advanced productive and managerial technologies created by industry. In Hazlewood (1987) words, "... the preference may have a long-run, growth oriented basis, rather than a short-run allocation-oriented basis" (p. 744).

An additional consideration on this topic is that larger markets, as provided by CUs, stimulate investment and economic growth. While focusing on the importance of domestic or member countries investment was characteristic of the 1940's to 1970's wave of regional integration (particularly in Latin American countries), currently the emphasis is on obtaining foreign direct investment (FDI). In general, the issue of attracting investment relates to the consideration of factors of production mobility in the context of CUs. Viner (1950) referred tangentially to this topic while discussing his position on the economies of scale issue, basically to point out that unless CUs appreciably increase inter-member countries mobility of factors of production, their impact on the expansion of output of industries without increasing unit-costs would be nil. Meade (1955), analyzed the effects of factor mobility within CUs and considering that restrictions to mobility usually take the form of quantitative immigration quotas or exchange controls, concluded that primary effects of mobility must account for the majority of welfare changes and that the consequent reduction in relative scarcities of factors of production must be beneficial for the economy.

However, if factor mobility between member and non-member countries is taken into account, welfare losses appear as a consequence of resource allocation changes stemming from trade diversion within the CU; in this sense, factor mobility substitutes for trade, producing negative indirect effects on welfare for non-member countries (Balassa, 1987). On the other hand, FDI from non-member countries may have a positive indirect effect on their income arising from the fact that this may be the only available short-run way to have access to member countries' protected markets.

Subtle welfare implications arise when FDI is considered in the context of a member country in which foreign firms have been already established. Tironi (1976) analyzed this problem in the context of a partial equilibrium framework,

considering the existence of rents on factors of production or assets exclusively owned by foreign firms, the presence of positive externalities from FDI³, and the possibility that the stock of capital available in the country may change as a consequence of further flows of foreign capital. Tironi introduces the concepts of "foreign profit diversion effect" and "foreign profit creation effect" to account specifically for the welfare effects arising from the impact of the CU on foreign firms activities. The "foreign profit diversion effect" is the transfer of part of the foreign firms' rents to local consumers that arises as a consequence of the increase in imports because of the CU; analogously, the "foreign profit creation effect" is the increase in foreign firms' rents that have regional comparative advantage and are, therefore, able to expand their production under the CU. Thus, welfare effects of a CU on member countries when foreign firms exist will also depend on the balance between the "foreign profit diversion effect" and the "foreign profit creation effect"; if the latter is likely to be greater than the former, the host country may not gain from the CU unless some policies designed to transfer part of the foreign firms' additional rents are implemented.

Closely related to the FDI issue, the access to modern productive and managerial technologies has been one of the key elements within the developmental approach to economic integration. Both the presence of foreign firms and the increase in competition through the CU may induce the adoption of new technologies and the strengthening of research and development activities; additionally, economic integration may create an appropriate environment for the transmission of technical knowledge by means of academic networks, increased familiarity of consumers with new products, and partnership between producers and traders from different countries.

When CUs are formed by developing countries, their relative smallness, both in economic and political terms, gives rise to a couple of issues that are frequently mentioned in the literature. The first one refers to the limited scope of any trade

³ These positive externalities have been traditionally related to: (1) advanced technologies, new products, and superior entrepreneurial knowledge, (2) employment opportunities and training of local labor force; and (3) taxes paid to host countries. However, Tironi argues that they are apparent and not true economic externalities and agrees with Caves (1974) in that host countries' gains depend upon the spill-over that occurs when foreign firms are not able to capture all quasi-rents stemming from their productive assets (Tironi, 1976).

expansion following the formation of the CU due to low previous integration among them. In this case, weak benefits from integration would be obtained immediately and the impact on resource allocation would be important only in the long-run; as Robson (1983) has pointed out, it is clear that "... the more underdeveloped economies are at the time of their integration, the less important will be the gains from rationalizing the existing structure of production relative to those to be derived from rationalizing new industrial production" (p. 14). In this perspective, integration is deemed as a necessary stage for the less developed countries in the process of achieving higher levels of development and establishing more open economies. The second issue relates to the possibility for member countries to increase their bargaining power in external economic and political relations. Gains in terms of trade are more easily realized through collective action by means of CUs than by isolated negotiations on the part of individual countries. Besides, according to this vision, CUs allow less developed countries to achieve more economically the goals that have been traditionally served by pure protectionism.

4.4 Domestic Policies

Coordination of domestic policies among partner countries is frequently cited as a critical issue in economic integration. In the classical CU theory the topic is indirectly outlined by Viner (1950) when referring to the difference between revenue duties and protective duties. Revenue duties are mainly intended to raise revenues and therefore do not operate as incentives to the domestic production of products that are similar to those paying the duties. While revenue duties are not expected to be trade distortive, in the context of CUs their elimination poses the problem either of guaranteeing other sources of revenue or of adjusting domestic policies to the new budget situation. On the other hand, Meade (1955) refers explicitly to the problem of policy coordination in the framework of CU analysis. Intervention in domestic policies is necessary to assure that full equilibrium is reached by partner countries; the so called tertiary adjustments in CU formation refer to the harmonized application of trade, inflation, and exchange rate controls.

The recognition that domestic policies may influence trade flows as well as the allocation of factors of production has called analysts attention beyond Viner's and Meade's treatment of this issue. In fact, industrial policies, social policies, fiscal policies, monetary policies, and exchange rate policies are considered as relevant to CUs and to economic integration in general (Balassa, 1987). Industrial policies, for instance, may imply the adoption of credit preferences and/or tax benefits that can be applied either "horizontally" (across the board) or "vertically" (to particular activities). While the former do not create distortions as long as they are granted on a neutral basis, that is without favoring a specific activity, the latter generate distortions that may offset the effects of the intra-CU tariff elimination. Additionally, if social policies are based upon general tax revenues, labor costs may be subsidized in practice and hence factor movements responding to differences in this type of costs generate misallocation of resources; as a general rule, resource allocation is sensitive to the way social security is financed among member countries of a CU.

Exchange rate flexibility allows countries to offset differences in the conditions of competition arising from indirect taxes - given that they may be applied on imports but rebated on exports (under the destination principle) - as well as the effects of having the origin principle of taxation applied in one country - indirect taxation on production irrespective of the country of sale - and the destination principle applied in another. However, other trade distortions arising from fiscal policy can not be corrected without changes in this area. If one country applies cascade-type taxation (in which the tax burden is raised with the stage of processing of the products) and another applies value-added taxation, the resulting distortions in trade can only be eliminated by unifying the taxation principle across countries - to the value-added principle (Balassa, 1987). Where coordination or unification of monetary and fiscal policies is aimed within economic integration processes, it has been proposed that fixed exchange rates be established among member countries; according to Balassa (1987), exchange rate fixity should be regarded as the final outcome of policy coordination.

From the developmental perspective, Robson (1983) argues that the unwillingness of member countries to harmonize their non-tariff policies has had negative repercussions on attracting foreign investment flows. Lack of

domestic policies harmonization tends to block the possibility of sharing markets within economic integration arrangements and therefore foreign capital does not find incentives in the establishment or enlargement of industries to serve extended markets.

5. Critical Issues

5.1 Non-Tariff Barriers (NTBs)

The reduction in tariffs that has been achieved through several rounds of multilateral negotiations and numerous bilateral and regional trade arrangements is paralleled by the increase in non-tariff barriers during the last four decades (Mussa, 1993). Although most of Viner's (1950) list of devices that may render CUs inoperative in freeing trade among partner countries have been removed or partially removed through trade negotiations, a new set of protective measures has emerged as a powerful obstacle to effective economic integration.

Bureaucratic procedures and "administrative protectionism" in the form of antidumping laws, countervailing measures, and standards and regulations provide the basis for precluding free market access for partner countries and third countries as well. Bureaucratic procedures required by governments, such as obtaining permits, paying administrative fees, and certifying goods, have been used as disguised forms of protectionism in different countries; this practice is based on the principle that information costs and transaction costs may be artificially increased in order to become effective barriers to trade. Antidumping and countervailing measures are the most widely used GATT-consistent instruments of "administered or contingent protection" among developed countries and have been gaining increased importance in the context of less developed countries' trade policies in recent years (Leidy, 1994).

There are three factors that have contributed to the spread of this type of protective measures to non-traditional users (less developed countries); first, the effectiveness of antidumping measures as a selective protection device; second, interna! political pressure in countries that have been liberalizing trade; and third, the possibility of replacing other protective measures by one that is

internationally sanctioned (Leidy, 1994). In spirit, antidumping and countervailing measures are intended to offset the effect of "unfair" trading practices as opposed to safeguard policies that are targeted at economic disruption arising from "fairly" traded goods. Unfair trading relates to practices such as pricing below cost, international price discrimination, and predatory pricing. While justifiable in its goals, antidumping measures seem to be frequently used for protectionist purposes and create incentives for economic agents and therefore affect resource allocation. One of the most pervasive effects of the use of antidumping policies is its impact on the structure of competition; antidumping regimes can create conditions that are favorable to collusion and provide greater market shares for domestic firms (Leidy, 1994). These mechanisms may be collectively used by member countries against third countries' industries but are also suitable for intra-CU use. As Low and Nash (1994) point out, one of the current challenges for trade policy is to limit the use of such mechanisms, or to minimize their potentially damaging effects on the gains from trade.

The use of standards and regulations as protectionist measures has been frequently mentioned in the economic integration literature. Norms specifying required characteristics of imported goods may be used as disguised forms of protectionism. Strict and sometimes artificially high standards may act as effective barriers to trade; sanitary and phytosanitary regulations applied to agricultural products, for instance, are able to block market access for products from specific countries or regions of origin. The trend towards the establishment of life-cycle management measures in the context of environmental regulations, which encompasses norms related to production, distribution, consumption, and disposal processes of traded goods, is generating an increasing concern about its potential role as a non-tariff barrier. Life-cycle management measures addressing production externalities may constitute the basis for trade discrimination, particularly in referring to trade relations between developed and developing countries. Since these measures must be established on a non-discriminatory basis, they do not represent, in principle, a more important obstacle to intra-CUS trade than to trade with third countries; however, they may be relevant in determining the outcome of CUs inasmuch as they affect trade flows between member countries and third parties.

5.2 Rules of Origin

A particular feature of PTAs and FTAs is the possibility of trade deflection. In fact, as each member country has its own tariff levéis before third countries, imports may enter the agreement's area through the country that applies the lowest tariff; similarly, when trade in intermediate goods is allowed production and investment deflection may also occur (Balassa, 1987). If it is assumed that terms of trade remain unchanged, trade deflection should increase member countries' economic welfare because it diminishes the extent of trade diversion effects; however, the intended level of protection would be violated. On the other hand, if terms of trade are allowed to change, trade deflection will negatively affect economic welfare in member countries and will do the opposite in non-member countries (Balassa, 1987). Production deflection may happen if differences in tariffs outweigh differences in production costs, therefore firms have incentives to relocate according to tariff levéis instead of comparative advantages; patterns of investment may also be influenced by the reallocation of industries.

Since trade, production, and investment deflection may affect the net outcome of economic integration, the imposition of rules of origin for traded goods has become an essential component in PTAs and FTAs. Basically, rules of origin limit the intra-area freedom of mobility to those commodities that contain a minimum amount or proportion of domestically produced goods or that have been substantially transformed in any of the member countries. Even though necessary "... to preserve the value of preferences granted in a trade agreement . . ." (Schott, 1989; p. 25), rules of origin are subject to pressures to serve as protectionist devices. Tough rules of origin may act as deterrents to trade in cases in which imported inputs are intensively used in the production of commodities for export in member countries. The intent to manage rules of origin to protect domestic industries may be considered a non-tariff barrier.

Another aspect of rules of origin is that they increase transaction costs. Customs inspection is necessary to determine the domestic content of traded commodities and its complexity varies according to the methodology that has been agreed. Although the costs of customs inspection are rarely prohibitive,

they offset part of the benefits that accrue from trade; besides, the administrative requirements of the procedure itself may generate uncertainty among traders discouraging trade flows.

5.3 Environmental and Labor Standards

Even though pertaining to the category of non-tariff barriers (as standards and regulations), environmental and labor standards deserve specific mention inasmuch as they have gained increased importance in the context of economic integration. Both are currently perceived as the most relevant non-tariff barriers to trade, either in bilateral and regional or multilateral trade negotiations.

There are two major sources of interaction between environmental and labor standards and trade (Charnovitz, 1992). First, the effects of the former on terms of trade; that is, whether or not disparate standards allow fair competition among countries. Second, the effects of trade on the environment and workers; that is, to what extent trade benefits or degrades the environment and makes workers better off or worse off. Within these lines, a diverse set of issues and controversies characterize the discussion of this topic. There is, for example, increasing concern in developed countries about what has been called "social dumping". The term refers to the possibility that some countries may rely upon low environmental standards to boost their exports; in these circumstances, "clean" domestic production may be displaced by "dirty" imports, unregulated foreign competitors may underprice their products, and investment may be diverted towards polluter havens. Although possible, there is uncertainty about the occurrence of these effects (OECD, 1993) and furthermore there is strong questioning as to why the existence of differing standards should be characterized as unfair. Pollution control subsidies constitute another policy that may be regarded as the source of unfair trade. Similarly, issuing high standards for imports or introducing life-cycle management policies on environmental grounds may constitute forms of trade discrimination.

On the labor front, the possibility that governments may assist national exporters or foreign firms operating in their countries allowing them to operate under substandard conditions within "union-free" enclaves is one of the

permanent worries in the negotiation of trade agreements. Even in the absence of "union-free" zones the presence of differing labor standards among countries (member and non-member countries), such as minimum wages, child labor, and the right to collective bargaining, may be considered either as another form of "social dumping" or as part of a nation's comparative advantage.

Environmental and labor considerations currently play a major role in multilateral trade negotiations and seem to be less important in the context of bilateral or regional integration where it is accomplished among countries with low disparities in their levels of development. However, as the NAFTA shows, they may be of great importance in attempting to integrate developed and developing countries not only because of their likely impact on trade flows, but also because of the attempt to use trade restrictions in order to pursue environmental and labor goals.

5.4 Adjustment Costs

There are two topics that usually lack explicit consideration in discussing economic integration, but in the context of integrating economies with dissimilar levels of development have great relevance. As the discussion on the NAFTA illustrates, adjustment costs and distributive effects of integration may be decisive in determining the outcome of economic integration.

These topics have tended to be overlooked due to the proclivity of theoretical works to measure the gains from integration by means of comparing alternative equilibria, pre and post-integration, without consideration of the costs involved in moving from one situation to the other (McCulloch, 1993). The gains from trade, therefore, are overstated not only because displaced resources may remain idle for a considerably long period, involving opportunity costs and social and political difficulties, but also because unintended distributive effects may result. The usual assumption in the analysis is that undesired distributive effects can be reversed costlessly by means of lump-sum transfers and that government funding can be obtained in the same way through ideal lump-sum taxes. However, in analyzing the impact of economic integration is common to evaluate the distributive effects of the implemented policies instead of considering the

neutralization of policy-induced redistribution of income (McCulloch, 1993); it is worthwhile noting that the latter alternative may affect some of the positive effects accruing from economic integration as it may affect important variables such as the rate of domestic savings.

Another dimension of adjustment costs arises if it is taken into account that acceptance into CUs or other form of economic integration may imply the fulfillment of certain requirements. Adoption of particular economic policies (such as exchange rate or monetary policies) or even social policies may be required and their corresponding costs can be regarded as "entry-fees". Careful consideration of economic, social, and political adjustment costs, although necessary, is difficult and its absence may be a powerful incentive either in favor of the status quo and protectionism or in favor of unrestricted and potentially damaging liberalization.

6. Concluding Comments

This survey's main "conclusion" is that the development of CUs theory has been dominated by the second best nature of CUs themselves. From the vast amount of literature produced from the decade of the 1950s to the beginning of the 1990s, relatively scarce "general principles" have been devised. The preeminence of empirical research over theoretical developments, the latter rather devoted to adding more realistic assumptions to "old" models or to incorporating new issues into the analyses, has largely contributed to this outcome. To some extent, it may be said that empirical results have lacked systematic linkages with theoretical developments.

That is not to say that CUs theory and empirical research lack significance. On the contrary, CUs theory and research have proved an important branch of economics, political economy, and trade policy studies and, no doubt, they will continue to be so. However, it appears that developments in this area will become even more fragmented, following the path traced by the advance of globalization and its emerging issues.

Initially, and for around a decade, CUs theory focused on analyzing its welfare effects. Then, economists' interest shifted towards understanding the rationale

for countries to enter into CUs arrangements, largely an issue of economic rationality versus non-economic motivations. Approximately from the mid-seventies, diverse long-standing issues within CUs theory gained momentum and most of research efforts were devoted to their analysis. Topics such as the terms of trade effects on welfare, the interaction between CUs formation and changes in terms of trade, partner-choosing issues, the effect of economies of scale on welfare outcomes, and the rationale for achieving economic development through participating in CUs, are good examples of research areas.

With the advance of economic integration worldwide and the emergence of the "new trade theory", CUs research deepened its trend towards exploring a vast array of topics making it more difficult to put its findings together into a single theory. Nowadays, it seems, CUs theory is yielding the way to a set of topics that have been brought into economists' attention by the rapid advance of economic integration. The recent fast growth of international trade, enhanced capital mobility (partly owed to the spread of information technologies and the trend towards financial liberalization), the ascent of regionalism and bloc formation, to name a few, are among the issues determining this fragmentation of CUs theory.

In spite of these changes in the direction of research and notwithstanding that what may be considered as a well-developed theory on CUs is lacking, the "old" concepts of trade creation and trade diversion continue to be the basic yardstick to judge the economic outcome of a CU and other forms of economic integration. Likewise, what we know as CUs theory has provided the framework for much of the economic analysis on this topic of undeniable importance.

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