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**Trade Liberalization and Preferential
Trade Agreements:
Some Unexplored or Unresolved Issue**

by

Michael Michaely*

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Stanford University
John A. and Cynthia Fry Gunn Building
366 Galvez Street | Stanford, CA | 94305-6015

* Visiting Researcher, Center for Research on Economic Development and Policy Reform, Stanford University, and
Professor of Economics, Hebrew University of Jerusalem

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Abstract

The merits and de-merits of preferential trade agreements (PTA's), and the issue of trade liberalization in general, have been analyzed extensively. However, the existing literature have left many issues concerning PTA's and trade liberalization, particularly in their relation to each other, unexplored. This paper raises and discusses four of such issues: the conclusion of of a PTA with the introduction of an overall free trade system; proximity as part of the criteria for selecting members into a PTA; the impact of past geographical trade patterns; and possible responses of trade with neighbors to a non-discriminating trade liberalization (or the imposition of restrictions).

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The merits and de-merits of preferential trade agreements (PTA's) have been analyzed extensively over the last two generations. So, obviously, has been the subject of trade liberalization. Yet, missing links still exist in the analytical chain. A variety of issues concerning these topics has either not been resolved or, on occasion, not even been raised. In this paper, four such issues concerning PTA's and trade liberalization, particularly in their relation to each other, will be discussed. These are:

- (i) The desirability of a PTA has always been analyzed in a second-best context; that is, a comparison is made between the introduction of a PTA and the continued existence of a non-discriminating system of trade restriction. Little has been said about the comparison of the conclusion of a PTA with the introduction of an overall liberalization (that is, of a free-trade system). The first alternative must, given a set of assumptions which are usually made, be inferior to the second; but what are the circumstances, or attributes, which would make the distortion through a PTA more or less important? These will be suggested in the present analysis.
- (ii) When a country contemplates introduction of trade liberalization in a discriminating fashion—that is, the conclusion of a PTA—should proximity be a criterion for selection of partners to the agreement? This question is far from being novel: in recent years, it has often (sometimes hotly) been debated, mostly under the rubric of the existence and attributes of “natural trade partners.” But the issue has not been resolved. Here, the state of the art will be briefly assessed; and under-emphasized aspects will be brought to focus.
- (iii) The possibility that past geographical trade patterns matter for the determination of future patterns would be relevant for trade policies. Two discussions are carried out here in this connection. One is an analysis of the proposition that a PTA concluded with a partner whose importance to the home country originates from “historical” roots should be viewed differently (specifically, less favorably) than other PTA's. The other analyzes the implication – positive and normative – of the order in which a PTA vs. a policy of universal trade liberalization are implemented.
- (iv) Finally, when a non-discriminating trade liberalization is introduced (or, to the contrary, trade restrictions are imposed), should the country's trade with its neighbors

be expected to fare differently than its trade with other, distant partners? This question has apparently not been raised so far; and it is of some significance.

1. Preferential Trade Agreements vs. Free Trade

a. Context of the Analysis.

The second-best, Vinerian analysis of the impact of a PTA—comparing it with no liberalization at all—has provided the fundamental analytical context for the last two generations. Surprisingly, almost no attention has been paid to the parallel context of contrasting a PTA with a general, non-discriminatory liberalization—in the extreme case, with a complete free-trade policy¹. This tilt of the analysis may perhaps be explained by the particular attraction of sign, rather than size. In the comparison of a PTA with general restrictions, the sign of the welfare change is ambiguous. In the comparison of a PTA with a general liberalization, the sign is in no doubt (given, of course, the fulfillment of some well-known conditions): a PTA is inferior to general liberalization. What is not known—and has been neglected in the main body of the theory—is how important is this inferiority. This will be the topic of the present section.

For analytical purposes, it may be simplest to consider the conclusion of a PTA (starting from general, non-discriminatory import restriction) as consisting notionally of two steps. First, a general, overall liberalization is introduced, leading to the establishment of free trade. Next, a tariff (at the pre-liberalization level) is imposed only on the non-partner countries (the “rest of the world”), leaving free trade to be conducted only in trade with the partner. A comparison of a PTA with general liberalization would thus consist of the analysis of the impact of this second step.

b. Sources of Loss

To start with, we may define—in similarity with the Vinerian analysis—the components

1 The question whether the conclusion of a PTA would tend to come at the expense of, or to exclude, a general liberalization has indeed been a central issue of analysis—particularly in recent years. But this has not included a contrasting of the impacts of these two policy regimes.

of welfare change; in this case, unlike the Vinerian, they are all elements of loss. First comes the impact of contracting the home production of exportable, shifting resources to the production of importables. This may be termed “trade destruction” (in similarity with the Vinerian “trade creation” —but, of course, with a welfare effect of the opposite sign). Next comes “trade dislocation”—the loss from shifting the source of imports from the cheaper non-partners to the more expensive partner (this is entirely equivalent, in nature and in sign, to the Vinerian “trade diversion”).² Finally comes the “consumption diversion”—similar in nature to the second-best analysis “consumption gain,” but consisting here of a definite loss rather than a definite gain.

These three elements of loss are given quantitative representation in Figure 1. PQ is home country’s transformation curve between X, the exportable good, and M, the importable good. All quantities will be measured by X, the exportable good (nothing would have changed were they to be measured by M, the importable good). The slope of aa represents the relative price between X and M in the non-partner country (the “rest of the world”—ROW); whereas the slope of bb represents, similarly, the price in trade with the partner (indicating a higher price of M than in ROW). The home country is “small,” facing a fixed price in trade with either the partner or ROW. With free trade, the production locus will be at F; whereas consumption, given some (not shown) demand conditions, will be at G, with FG representing the trade vector. The value of the country’s national product, in terms of X, will be OA.

When the tariff on imports from ROW is imposed, two alternative changes are possible. One is that imports will continue to originate (exclusively, under the specified circumstances) from ROW, but production and consumption loci, and trade, will change.³ This will be the outcome as long as the imposed tariff is lower than the price differential of imports originating in the partner country and in ROW. This outcome is not shown in the diagram, but will be discussed later. The alternative outcome will occur when the tariff is equal to (or, rather, higher than, by an infinitesimally small amount) this price differential (further tariff increases would be immaterial). In this instance, all trade will be shifted towards the partner, which will become the

2 In fact, this component might be designated “trade diversion” here as well, except that this term is so strongly identified with the Vinerian element in the second-best comparison that confusion would be almost inevitable.

3 With this outcome, there would be no loss from “trade dislocation”.

sole source of imports.⁴ This alternative is shown in Figure 1. The production locus will now become K, and consumption will shift to L, KL being the vector of trade (this time, with the partner).

The value, in terms of X, of the basket of goods represented by K, were trade still to be conducted with ROW, is the amount OB. This is evidently smaller than OA, the value of the country's production basket prior to the tariff. The difference, AB, thus represents the loss from trade destruction. Next, we observe the loss from buying the imports, as they are at their new level, from the more expensive source. The trade vector KL indicates the purchase of the size LN of imports, paying for it NK of exports. But had these imports been bought from ROW, only NH of exports would have to be paid. KH is thus the loss from trade dislocation, and it is represented on the X axis by BC. The aggregate of these two components of loss—trade destruction and trade dislocation—is thus AC: the value, at free-trade prices, of consumption basket L is smaller by this size from the value of the free-trade consumption basket (G).

But, had the economy been provided with the amount of resources OC, and free trade would still prevail, the economy's budget constraint would have been the line a'a', originating in C with the same slope as aa; and, this slope representing also the price faced by consumers, not L but a point like S would be selected as the consumption basket. To reach that level, the economy would have to possess an amount of goods equal to OT of the import goods, rather than OR. The difference, TR, is the loss from consumption diversion. In terms of the export good—the numeraire we are using here—this is equal, at free-market prices, to the size DE. This element should be added to AC to reach the aggregate loss to the economy from all three sources—trade destruction, trade dislocation, and consumption diversion.

c. Impact of Attributes

We now pose the basic question: Given that a PTA leads to a loss, under what circumstance is this loss likely to be larger or smaller? We shall discuss attributes which are the main concern of the Vinerian, second-best analysis.⁵ To a large extent we shall be assisted by

⁴ With variable, rather than constant, foreign prices, trade either with or without the tariff (within a certain range of prices) would be conducted with both foreign sources, rather than be directed exclusively to one or the other. The essence of the analysis, though, would be the same

⁵ These have been introduced, beyond the analysis in Viner's (1950) foundation of the theory, primarily in the contributions of J. Meade (1955) and R. Lipsey (1960).

the analysis just presented; but inferences will not be confined to it, primarily when a multi-commodity world is addressed.

(i) The level of initial restrictions. When the general tariff level of the home country is high, prior to the PTA—which in our analysis translates into an imposition of a high tariff on ROW—the loss from a PTA (in comparison with free trade) is likely to be high. In terms of the analysis just sketched out, this would be easy to realize in the following way. First, take the range in which the discriminatory tariff is not sufficiently high to shift the source of supply of imports from ROW to the partner. The higher the tariff imposed, the higher would be the loss from it. (This could be easily shown by means of Figure 1, but should be quite obvious without it). Second, take the range (or point) at which the source of imports does shift. The higher the tariff level which leads to this shift, the larger is the price discrepancy of imports between the partner and ROW, and the bigger the loss from the shift. Beyond this level, further increases of the tariff are irrelevant—a “tariff redundancy” of a sort exists. At this range, thus, higher tariffs do not indicate bigger welfare losses—nor, however, do they indicate the opposite. More important, in a world of many goods, the higher the tariff level imposed, the more goods will shift from the column of trade with ROW to that of trade with the partner. Altogether, a higher tariff indicates a likelihood of a bigger welfare loss. This is probably the most important instance in which the present comparison yields a contrasting indication to that found in the second-best analysis. There, it would be recalled, a cardinal inference of the analysis states that the higher the initial tariff, the higher is the likelihood of a gain, rather than a loss, from the conclusion of a PTA (in comparison, of course, with the continued maintenance of the overall restrictions). This contrast may, perhaps, help to explain some apparent contradictions between analytical inference and beliefs of policymakers. Over the last decade, since the introduction of radical trade liberalizations in many countries (particularly in Latin America), it is often stated that the lower level of trade restrictions makes the conclusion of PTA’s (the so-called “second-generation” PTA’s) a better proposition. While such statement runs patently contrary to the teaching of the second-best analysis, it may be potentially explained by a frame of mind in which the comparison made is not of a PTA with the maintenance of general restrictions, but of a PTA with a (further) general liberalization.

(ii) The share of trade in income. When this share is large, the welfare loss from a PTA is likely to be high. This seems rather evident intuitively; and may be demonstrated in a variety of

ways. Suppose that, in two alternative situations, production possibilities are the same, but differences in demand patterns lead to different trade shares. In terms of Figure 1, the transformation curve is given; hence also production locus F, under free trade. But a larger preference for M, the importable good, leads the consumption locus to be above (and to the left of) G along line aa. The trade vector will be larger, constituting a larger share of the home-country's income (which remains the value OA). With the imposition of tariffs on ROW, and the shift of production locus to K, the new consumption locus—given the stronger preference for M—would likewise be to the left of L on bb: the vector of trade—now with the partner rather than with ROW—would be larger than in the alternative situation. The loss from trade destruction would remain the same (AB) as in the previous alternative, but the loss from trade dislocation (not shown in Figure 1, but easy to realize) would now be higher. Alternatively, take different production circumstances to be the source of different shares of trade in income. In Figure 1, suppose the value of income stays at the size OA. But a transformation curve more tilted towards X makes its tangency with AG—the new production locus—a point below (and to the right of) F. With given demand conditions, the consumption locus will stay at G, with a larger trade vector—hence, trade's share in income—than before. Again, it should be easy to see (but not shown) that the new production locus (on another transformation curve) would be to the left of line BK. Hence, the loss from the imposition of tariff would be higher; this time originating in a larger loss from trade destruction.⁶

As before, this inference stands in contrast with that of the second-best analysis: the proposition drawn there is that a high share of trade in income is likely to increase the likelihood of a gain, rather than a loss, from the conclusion of a PTA (since the distortion removed, originating in the gap between foreign and home prices, is then more important).

Share of trade with the partner. The higher the share of the partner in the home country's aggregate trade (imports), the smaller the expected loss from a PTA. This cannot be demonstrated by means of an analysis represented by Figure 1: with a single good, and fixed

⁶ Still another possibility is to assume a given set of production possibilities, i.e., a given transformation curve, and given demand patterns, but a lower price of M (a higher price of X) overall (that is, both in ROW and in the partner, maintaining the same price differential between the two). The initial share of trade in income, as well as the one established with the shift of trade to the partner, would be higher, and so would be the aggregate loss from the PTA—due again, in this instance, to a larger loss from trade destruction.

foreign prices, the share of the partner in home-country's imports would be zero or one. But in a multi-good world, this proposition should be intuitively obvious. A larger share of the partner means that more goods, or goods of larger values (or, with variable foreign prices, larger fractions of trade in individual goods) are initially imported from the partner rather than from ROW. Hence, trade dislocation following the imposition of a tariff on imports from ROW would be less important. This time, the inference is similar to the one found in the second-best analysis: there, too, a high initial (relative) level of trade with the partner (an element we shall discuss soon at some length) would increase the likelihood of a gain from a PTA.

(iv) Structural attributes of the partner. When the partner is a large country (or a large bloc of countries), and when its production and trade are highly diversified, the expected loss from the PTA is likely to be small. With a partner of these attributes, it is likely, first, that the imposition of a tariff on ROW would often not be relevant, since the goods involved are imported from the partner even without the tariff (this falls back to the point just discussed earlier). Second, when the tariff does shift the source of imports from ROW to the partner, price differentials between the two sources are likely to be small in many goods—in contrast with a small partner, particularly one which specializes in a small range of goods. Thus, losses from both trade destruction and trade dislocation (as well as from consumption diversion) are likely to be small, and a PTA with such partner is likely to be less harmful. In this instance, too, the inference of this first-best comparison runs along the same lines as the second-best proposition, which states that a PTA is more likely to lead to a gain than to a loss—in comparison with the continuation of non-discriminatory restrictions—the larger and more diversified is the contemplated trade partner.

(v) Cost changes in home-country's production. The more marginal costs (at home) tend to rise with an increase in the size of a good's production, the larger is the expected loss from a PTA. In terms of Figure 1, suppose the starting locus to be as shown. A more rapidly rising schedule of marginal costs would be represented by a more convex (from the origin) transformation curve (which would still, by construction, be tangent to line aa at point F). An imposition of the specified tariff would now move the production locus to a point to the left of the line BK (this, as well as the new transformation curve itself, is not shown, but could be easily demonstrated). The loss from trade destruction, hence the aggregate loss from imposition of the tariff, would now be higher. Intuitively, this should be easy to realize. The loss from trade

destruction is, in substance, the loss involved in shifting the source of production from a more efficient economy, ROW, (in production of the specific good) to a less efficient one (home); and this loss would be larger as the shift to the (relatively) inefficient source tends to increase its inefficiency. Once more, this inference is in full agreement with the one drawn in the second-best analysis: there, the analytical proposition states that the more rapid is the increase of marginal costs when production (at home) expands, the more likely is a PTA to lead to a loss rather than a gain.

(vi) The level of the partner's tariff. The higher, finally, is this level, the smaller is the loss from the PTA. In fact, the introduction of the element of a PTA which refers to the partner's removal of its restriction on imports from the home country may even mean that the PTA would be, from the home-country's point of view, a first-best solution; that is, the selection of a PTA instead of a general liberalization may involve a gain rather than a loss. Intuitively, this is easy to comprehend: the higher is the tariff level which the partner removes, in exchange for the home-country's removal of its tariffs (or, in our analytical construct, in exchange for the home-country's imposition of a tariff on imports from ROW), the more would the home country gain from improvement of its terms of trade. In terms of Figure 1, the removal of the partner's tariff on its imports of X from the home country would be represented by a steeper bb line (a higher relative price of X); and the steeper this line, the more will production locus K tend to be to the right, and the lower would be the losses from both trade destruction and trade dislocation. In the extreme case, line bb would become steeper than aa; and the home country would gain from its imposition of tariff on ROW (reciprocated by the partner's removal of its tariffs on home-country's goods). Here, too, no contrast exists between the substance of the first-best and the second-best analyses: in the latter, too, a PTA with a partner whose trade regime is highly protective is more likely to lead to a gain (to the home country), rather than a loss, than a PTA with a partner whose regime is highly liberalized.

To sum up, we have addressed two elements in which the analytical inferences in the present, first-best comparison stand in contrast with the second-best analytical propositions. We have found that the loss from a PTA, in comparison with a non-discriminating, free-trade policy, would be larger:

- (i) The higher is the level of trade restrictions imposed by the home country prior to a PTA; and

(ii) The higher is the share of trade in the home-country's income.

We have also addressed four other elements, in which the inferences from the present analysis agree in substance with those of the second-best comparison. Namely, the loss from a PTA would tend to be larger:

(iii) The lower is the share of the contemplated partner in the home-country's aggregate trade.

(iv) The smaller is the partner, and the less diversified its production and trade.

(v) The more costs tend to rise, in the home economy, with the expansion of production of a good. And, finally,

(vi) The lower is the level of trade restrictions of the partner, which are designed to be removed upon conclusion of the PTA.

2. Proximity and the Choice of Partners for Preferential Agreements

Is a neighboring country a more promising candidate than a distant one for a preferential trade agreement (PTA)? Hence, does a "regional" PTA stand a better chance of success than an agreement among non-contiguous countries? This is certainly not a novel topic. In recent years, it has been widely discussed, most often under the rubric of "natural trade partners." Among the supporters of such a presumption in recent controversies, P. Krugman and L. Summers⁷ may be most prominent; whereas J. Bhagwati and A. Panagaryia best represent the nay sayers.⁸

Some confusion exists as to the nature and definition of the issue, and it may be best to start by clarifying these. The question posed may be decomposed into three separate elements, namely:

(i) What is the impact of the size of trade with a partner on the promise of a PTA within it?

(ii) What, in turn, is the significance of geographic proximity, and low transportation costs, for the size of trade with a (potential) partner?

And, finally,

⁷ P. Krugman (1991); L. Summers (1991).

(iii) Given the size of trade, is there a separate, additional impact, which may be assigned to geographic proximity per se?

We shall review now in turn each of these elements. But we should note, beforehand, that this part of the presentation—surveying, in fact, on-going analyses—will follow the latter in focusing on trade diversion; that is, trade creation and trade expansion are taken for granted, whereas the implications of proximity for trade diversion only are explored. We shall return to this point later in this section.

a. The Impact of Size of Trade with the Partner

First, to minimize confusion, it should be clear that “size” of trade refers to relative size. This is understood as relative to the home-country’s aggregate trade (more specifically, the ratio of the country’s imports from the partner to its aggregate imports) and not as relative to the home-country’s aggregate economic activity. So far as the latter ratio is concerned, it has long been established in Meade’s analysis, and even more so, in Lipsey’s⁹ and not disputed since—that the higher this ratio, the smaller is the capacity of replacing the home country’s own production by imports from the partner; that is, the smaller is trade creation, the welfare-enhancing element of a PTA.

The Meade-Lipsey analysis, repeated recently under the “natural trade partners” mantle, asserts a positive relationship between the ratio on hand and the welfare- enhancement potential of a PTA: a large size of trade in this sense (meaning, by the same token, a small size of trade with the rest of the world) leaves lesser room for trade diversion, hence a weaker potential for welfare contraction.¹⁰ In the extreme case, in which all the home-country’s imports originate in the partner, no trade diversion at all would be possible. In a limited sense, a PTA with such a partner (with a complete elimination of tariffs) would be equivalent to a move of the home country to a complete free-trade regime.¹¹

⁸ Several papers, but primarily J. Bhagwati and A. Panagaryia (1996)

⁹ J. Meade, R. Lipsey, *op. cit.*

¹⁰ Needless to say, a large size of exports to the partner would be beneficial, in having a substantial impact on the home-country’s gain from a rise of its export price. Note, though, an a-symmetry: unlike the case of imports, the gain on the export side is related positively to the ratio

¹¹ “In a limited sense” —because a difference does exist. While a PTA would not result in any displacement of present (pre PTA) imports from the rest of the world—there are none—it might still lead to the displacement of

This tenet of the conventional wisdom has recently been disputed by Bhagwati and Panagaria. They conclude that “the volume of trade criterion is conceptually inappropriate and must be summarily rejected.”¹² This conclusion, however, is not warranted: the analysis of Bhagwati and Panagaria raises valid points, but these do not address the specific issue on hand.¹³ The conventional-wisdom proposition that *ceteris paribus* (including, under this proviso, a given ratio of the home-country’s aggregate imports to its domestic activity), the higher the share of imports from the potential partner in the home-country’s aggregate imports, the more promising is a PTA, must still stand.

b. Proximity and the Size of Trade

Having dealt with the significance of the size-of-trade criterion, we shall now address the issue of whether, or to what extent, geographic proximity of countries tends to increase their mutual trade; and, in this way, make them more “natural” partners and a PTA between them more promising. It should be noted that this is not an ingredient in the assessment of a specific, concrete PTA. For the latter task, it is enough to know the size of trade, disregarding the factors that might have contributed to it (but see a proviso, of a different sort, in the next section). Even as a proxy, distance could not, in pragmatic terms, represent shares of trade: trade data are much more readily available, and subject to clearer interpretation, than data on (economic) “distance”

potential imports that would have been forthcoming had tariffs on imports from the rest of the world also been removed.

¹² J. Bhagwati and A. Panagaria, *op. cit.*, p. 40.

¹³ Bhagwati and Panagaria offer three grounds for rejection of the conventional proposition. First, they contend, the expected impact of a PTA is not the “actual” but “potential” trade diversion which counts; and the latter is a function not just of the size of imports (from the partner), but also of the “cross elasticity of (the home country’s) demand for the partner’s goods with respect to the price of its own goods, relative to that with respect to the price of the outside country’s goods”. (p. 35). The second argument suggest that a large initial size of trade from the partner may itself not reflect free-market forces but be the product of existing preferences (i.e., those in place prior to the contemplated PTA). The third argument asserts that the loss from trade diversion is more than meets the eye: what we (notionally) observe is the distortion of present trade system; but potential future changes in patterns of comparative advantage (whatever their direction) would raise the loss from trade diversion.

The second of these three arguments is misplaced. It does seem likely that a future PTA is contemplated more often with a partner to which some privileged treatment has already been accorded. But if this preference has indeed led to welfare loss, this would be a sunk cost, immaterial to the issue of whether further preferences are likely to lead to a gain or to a loss. The first and the third arguments, on the other hand, do seem valid, but their relevance in the present contest is not indicated. These two arguments propose additional considerations why a PTA is more likely to lead through trade diversion to a loss rather than to a gain. But unless a bias is demonstrated, tying these additional sources of loss to the size of trade--- and no such bias is suggested in the Bhagwati-Panagaria analysis—these arguments do not address the issue of size, which is the present subject matter.

(a concept which is obviously more intricate than a number of miles measured on the map—and even then, between what points?). The issue of proximity is thus relevant only for generalizations—primarily for the question whether in general (not in a concrete case!) regional PTA's stand a better chance of success than agreements among distant partners.

There could be no doubt about the principle. Geographic proximity, in its economic sense, involves (actually means, by definition) low transportation costs; it should thus contribute, *ceteris paribus*, to a larger size (and share) of trade between countries. As a general proposition, this should not require any empirical verification. As an issue worth of investigation, the question should be decomposed into two: a. is the impact of transportation costs of much quantitative significance? And b. is the ceteris paribus framework of analysis legitimate—that is, are there no other attributes (beside transportation costs) which are related to distance and which should be expected to affect the size (and structure!) of trade among countries, one way or another?

The first question is obviously a matter of empirical investigation. We shall not attempt here any survey of such inquiries, but only note that, in all probability, the importance of transportation costs must have declined materially as a trend. This is due both to a relative decline of the size of various components of transportation costs (for any specific good); and, probably of more importance to the change in the structure of goods (and services!) traded internationally—a shift from goods with high content of natural resources to those with low content.

The other component of the question deserves, in the present context, more attention. Geographic proximity is, indeed, often related to attributes (beyond transportation costs), which may either facilitate or hamper trade among nations. These are mostly quite well known. The foremost attribute leading to closer commercial ties must be ethnic, cultural and linguistic affinity, which is often found among neighbors. Notable examples today would be Chinese ethnic origin and culture in Southeast Asia; Spanish in most countries in South and Central America; English—and, again, Spanish—in North America; or Arabic in the Middle East and North Africa. Due to recent changes in the definition of political entities, another important segment of the world should now be added, namely, Russian (and legacies of the Soviet regime) and the countries of the former Soviet Union. Although studies of the significance of this factor are not easy to come by—or to conduct—a guess may be ventured that it is much greater than the differentials of “transportation costs” in the narrow sense.

Against this tends to work a negative element, very important where it is found although limited to narrower segments of the world. One should recall that wars, hostilities, and historic fears of the other are much more common among neighbors than among distant nations. The Indian subcontinent, the Caucasian region, or, again, the Middle East, are a few obvious examples in the present-day world. That this tends to hinder trade is only too obvious.

Of greater universal significance must be another factor, of a purely economic nature, which tends to diminish trade among neighbors: this is the structure of economic activity. This element would be of only limited importance when the economies of the neighboring countries are highly developed, largely industrialized and highly diversified. But among less-developed economies, specialized in a narrow range of goods which are based on the availability of natural resources, the pattern of specialization would often tend to be similar among neighboring countries. This is due to similarity, within regions, of climatic conditions, properties of soil, availability of minerals, and the like. Thus, a whole region, rather than a single country, would specialize in oil, bananas, or coffee. Needless to say, trade among such similar economies would tend to be small, even had transportation costs been completely absent.

At the end, thus, a priori considerations are ambiguous. The question whether countries close to each other tend to trade more heavily amongst them than any pair of countries selected at random is a matter for empirical observations; and different regions would probably reveal radically different patterns.

c. Significance of Distance *Per Se*

We now reach the third element mentioned in our decomposition of the issue of proximity and the share of trade, namely: beyond the potential impact of distance on the size of trade—i.e., at any given trade size—should the distance between economies be of any concern for assessing the promise of a PTA? Put slightly differently: given the size of trade with a partner, is it of any interest, for the purpose on hand, to know whether this size is due to some (high or low) level of transportation costs rather than to a variety of other factors?

To answer these questions in the affirmative, a reason must exist to presume that if trade with a specific country is due to low (or high) transportation costs, that country could potentially displace trade of the home country with others more or less easily than otherwise; or that any displacement would tend to have a smaller or a higher welfare loss. We do have one

demonstration— valid, I believe— that proximity per se should be a consideration against a preferential treatment. This is provided by Bhagwati and Panagaryia in their formerly discussed contribution (1996, p. 40-43). They take two trade partners whose “inherent” supply conditions of a given good are similar, but one is closer to the home country than the other. At any given import price, the marginal cost (to the home country) would be higher in trade with the nearby country: its sale of the import good would be larger than that of the distant country, implying a lower elasticity of supply. The home country would thus be better off if some of its imports could be diverted towards the distant country. Thus, a policy which discriminates against the nearby country, and in favor of the distant one, taking advantage of the differential effects of the home-country’s tariffs on its terms of trade, would be welfare enhancing.

It should be noted, though, that the meaning of *ceteris paribus* is somewhat different here from the one used in the context in which the issue has been discussed thus far: to abstract from the criterion of size of trade, and separate out the impact of proximity per se, we have prescribed equal sizes of imports (from alternative potential partners) rather than equal “inherent” production costs. With equal import sizes, the marginal costs of imports from the two alternative sources would have been also equal. But this observation does not negate the Bhagwati-Panagaryia conclusion that, whatever other criteria (including that of size of trade) tell us, a low level of transportation costs per se would be a consideration against a PTA with the contemplated partner. Whether this element of assessment is of much quantitative significance may be doubted—and it is difficult to conceive a way of actually calibrating it. Two points, however, should be observed. First, this analysis would be applicable to any case in which one trading partner is lower-cost than another, whether the excess cost is due to transportation costs or any other “inherent” reasons. This would hold as long as the cost differential is constant per unit; otherwise, the conclusion would either be re-inforced or would tend to be offset. Second—probably of much significance—the analysis is applicable to a large home country, which faces rising supply curves of its partners’ exports. For a small, price-taking home country, this analysis would be of no consequence. In an instance like this, it seems obvious that a lower-cost country (whether due to low transportation or other costs) is likely to become a better potential partner to a PTA; the loss per unit of trade diversion (the terms-of-trade loss) towards such partner is likely to be smaller than otherwise. It is also more likely, the lower the partner’s cost, that this partner would have been the cheapest source of imports to start with, so that no trade

diversion would be involved.

Expanding somewhat the scope of discussion of the transport-cost issue, a question may be raised concerning the relationship of proximity to the structure of trade with a partner (rather than to its size). In the most obvious way, trade with a distant partner would tend to have a heavier representation of goods whose transportation cost is low (relative to value). This by itself, though, would have little bearing on the issue of a promise of a PTA. Of more interest is another structural feature related to transportation costs—that of its commodity concentration. The higher the transportation costs in trade with a given partner—just as the higher is the level of man-made barriers to trade—the smaller would be the range of goods imported from the partner (or exported to it): the higher the barrier, the more will goods in which the partner (where imports are concerned) has a relatively low “inherent” comparative advantage drop out of the actual import list. This shortening of the list, making (actual and potential) imports from the partner be more concentrated among few goods, is relevant to the assessment of a PTA; but the information indicated by it is fully revealed by observing the trade structure. Whether goods are not imported due to high “inherent” production costs to the partner or to high transportation costs is immaterial for the assessment of the promise of any concrete PTA. Proximity, or transportation cost per se should thus not form a separate element in such assessment.

d. Proximity and Trade Creation

As noted earlier, the discussion of the “natural trade-partners,” which we have followed thus far, has been focused solely on the trade diversion element of a PTA: in essence, the question addressed has been whether an agreement with a proximate country tends to minimize the loss from trade diversion. The trade creation and trade expansion elements (for brevity, we shall refer to both as “trade creation”) have remained in the background. Without their existence, an agreement would certainly not be worth undertaking, and the discussion would be a futile exercise; but the relationship of proximity to trade creation, which might conceivably be of greater significance than its impact on trade diversion, has been ignored.

To start with, we should note that the analyses of trade creation and trade diversion, in this context, are not symmetrical. For trade diversion, the (relative) size of trade with the partner seemed to be the crucial element, and proximity seemed to be of significance primarily due to its expected relationship with this size. For trade creation, on the other hand, the size of trade with

the partner is not at all a relevant factor: it is, instead, prices in the partner country, in relation to prices in other countries, which should matter. We have seen, though, that at least in one form, through the expected impact on the extent of worsening of the home-country's terms of trade, this is an element also in the analysis of trade diversion.¹⁴

Here, the reasoning is straightforward and the outcome unambiguous. The lower the price charged by the partner, the larger should be the scope for trade creation; and the larger, hence, the benefit from it.¹⁵ Transportation costs are lower—by definition—in trade with a proximate country. Hence, ceteris paribus (understanding by this proviso not given sizes of trade, but equal “inherent” costs, or FOB prices), the foreign price facing the home country, would be lower when the foreign source is a proximate rather than a distant country.¹⁶ The benefit from trade creation should definitely be expected to be positively related to proximity of the contemplated partner to a PTA.¹⁷

3. Preferential Agreements and Past Trade Patterns

It is commonly accepted that a phenomenon of hysteresis is manifest in determining geographic trade patterns: the existence of past trade between two partners leads to a larger flow of trade between the two at present than this trade would have been had all other current trade-determining variables been the same, but past trade would be absent. This role of “history” may be large or small, and its origins would differ. It may be, in the simplest case, due to the “fundamental” variables being more conducive to the relevant trade flow in the past than at present; to past political circumstances, such as the existence of colonial relationships, and the like.¹⁸ Whatever the source, the possibility that present trade is partly determined by “history” is

¹⁴ L. Summers (1991, p.298) notes that PTA's among countries which already maintain “disproportionately strong trading relationships... are likely to be trade creating rather than trade diverting”. This may reflect a proposition about the strength of trade creation, not just the weakness of trade diversion. But, if so, it would assign the impact on trade creation to the (relative) size of trade flows—a relationship, we note, for which no a priori justification could be pointed out.

¹⁵ This could easily be demonstrated rigorously, through either a general equilibrium or a partial-equilibrium analysis; but such demonstration would seem to be redundant.

¹⁶ As noted earlier, the lower the partner's price, the higher also is the probability that even prior to a PTA this partner was the source of supply of the home-country's imports, so that this price was the “world” price.

¹⁷ As would be recalled from our earlier discussion, this does not necessarily translate into a similar proposition concerning neighboring countries.

¹⁸ A recent empirical analysis of the role of “history” in determining trade patterns is conducted in B. Eichengreen and D.A. Irwin (1998) — where references to earlier contributions may also be found. The specific role of a history of colonial relationships is analyzed extensively in E. Kleiman (1976).

relevant to the issue of the desirability of concluding a PTA, in at least two ways. One, partly related to the just-concluded analysis of “natural trade partners”, is whether trade determination through “history” should play a role in identifying more promising partners for a PTA. The other is whether this phenomenon is relevant to the order of policies; that is, to the stage at which a PTA is introduced. The present section will analyze, in turn, these two issues.

a. “Historical” Trade and Partnership to a PTA

It may be convenient to start this analysis in reference to an interesting and, to my knowledge, novel proposition made recently by P. Wonnacott.¹⁹ He submitted that:

(i) “If, prior to the establishment of a free trade association, countries are close trading partners because of fundamental economic forces—those of classical comparative advantage and geographic proximity - [the] countries are natural trading partners, and discrimination against outsiders that any such agreement entails is likely to have relatively weak trade-diverting effects. In contrast, if the high level of trade is explained on the basis of historical accident, then discrimination against outsiders is more questionable....” And

(ii) “Fortifying traditional ties by discriminating against new outside competitors [is] less desirable than fortifying the natural advantages that come from geographical proximity or from comparative advantage in the traditional sense.”²⁰

This proposition may certainly be of concrete significance, and it merits some analysis.

Past events, or “history,” may best be considered an investment, or fixed costs. Whether these were indeed “costs” in the traditional sense, such as the establishment of a distributional organization, or advertisement, or whether they were events like the imposition of trade channels by a monopolist-monopsonist or a colonial power, is immaterial in the present context. Either way, a potential new entrant would have to make an investment (presumably, a substantial one) to overcome the advantage of the incumbent trader, and to gain equal (or more equal) footing—an element of costs absent in imports from the incumbent. We shall assume, for simplicity, that without making such investment, the potentially new provider cannot enter the home market at all; that is, that no imports from this (“third”) country (or “the rest of the world”) take place; and

¹⁹ P. Wonnacott (1998). This was a comment on the contribution of Eichengreen and Irwin, *ibid.*

²⁰ Separation of the proposition into two parts, and indication by small roman numerals, are added by the present author.

this is indeed the starting position, prior to the introduction of a PTA.²¹

Within this context, it is immediately evident that the first component of the proposition suggested by Wonnacott must be rejected. This should be clear even without recourse to a formal, rigorous analysis. In the circumstances of the “pure” case just laid out, no trade diversion whatsoever would be possible, since there is no trade at all with countries other than the contemplated partner to the PTA. Even if some trade is admitted, it must be small—or else, the situation under consideration is of no particular interest. Thus, with no scope (or almost none) for trade diversion, the contemplated PTA—expected to lead to some trade creation and trade expansion—must be beneficial. This should be true in this case just as it is in any other in which the partner to the PTA is the major source of the home-country’s imports.

But the second component of the proposition on hand would look quite differently, particularly if interpreted—as perhaps it was meant to—not as a statement within the second-best frame of analysis, but in the context of our analysis in the first section of this paper; that is, in a comparison of a PTA with a first-best situation, which is a multilateral, uniform liberalization or, at the extreme, with free trade. In this context, this element of the proposition does seem to be warranted.

We shall address the issue on hand through a partial equilibrium analysis, represented diagrammatically in Figures 2 and 3. In both, subscripts P, R, and W designate, respectively, the partner, the rest of the world (ROW), and the world as a whole (i.e., the combination of these two components); and S, S', and S'' designate, respectively, supply curves prior to the PTA (with a tariff t imposed on imports from both sources); with a PTA (the tariff is removed just on imports from the partner); and with free trade (the tariff is removed also on imports from ROW). DH stands for the home-country’s demand for imports.

Figure 2 presents the “normal” case, where the partner is a major source (prior to the PTA)—we show it here as the exclusive source—of the home-country’s imports due to some “natural” advantage, rather than to “history.” This is indicated by S_P lying to the right, to a sufficient extent, of S_R , with S_W representing the (horizontal) aggregation of the two. Prior to the PTA, the equilibrium price is P_0 , and the size of imports M^0_W —all of it being provided by the

²¹ This is not a crucial assumption: the analysis, and its inferences, would be basically similar when some imports from the “third” country exist even without the required investment. But the “pure” case makes the analysis better focused.

(future) PTA partner. With the PTA, the tariff is removed on imports from the partner, and its supply curve (with the price axis standing for the home-country's price²²) becomes S'_P , lying below the original supply curve S_P by the vertical distance of the tariff t . S'_W is the new aggregate, world supply of imports to the home country. The new equilibrium price becomes P^1 , and the size of imports increases to M^1_W (this is the source of the obvious benefit) —all of it originating, as before, from the partner country.

Now, moving to a universal free trade regime for the home country, the tariff is eliminated also on imports from ROW. Supply from this source increases from S_R to S'_R , and the world supply from S'_W to S''_W . The equilibrium price falls to P^2 . Imports increase from M^1 to M^2_W , and they are now provided by both sources: M^2_W , by the partner, and M^2_R by ROW.

The comparison of a PTA with free-trade thus shows the following: with a PTA (notionally, the imposition of a tariff on ROW), the aggregate size of imports falls by $M^2_W - M^1_W$; this is a net change of a fall of imports from ROW (by the size M^2_R) and the increase of imports from the partner ($M^2_P - M^1_W$). The welfare losses will not be shown in this diagram, but it would be clear that both trade contraction and trade dislocation are present.

Figure 3, to which we now move, represents the circumstances of a trade pattern determined by “history,” rather than by inherent differences in (variable) costs of production. To make the distinction clear, we assume that in this case, variable costs are identical in the two potential sources of supply, so that marginal-cost schedules too are identical. The two supply curves, in turn, are the same—represented (with the existence of tariff t) by S_P, S_R . The ROW, however, has to make an investment to enter the home-country's market and overcome the “historical” advantage of the partner. Hence, its level of minimum average costs, \bar{C}^0_R , is higher than that of the partner's (for convenience, we assume no fixed costs at all in production of the latter). Thus, the supply curve of ROW will start only at B, and go upwards from there. The aggregation of the two separate supply curves—the “world” supply curve to the home country—will thus be the broken line $ABCS_W$. The equilibrium price will be P^0 —chosen to be below \bar{C}^0_R ; and the size of imports will be M^0_W , all of which is provided by the (future) partner. This is a clear case where the exclusivity, (or just, in less extreme circumstances, the dominance) of a

²² Most often, the analysis would become technically less cumbersome by representing the supplier's price on this axis, and showing tariff changes through movements of the demand curve. This is, however, not feasible when a discriminatory policy is practiced—different tariffs apply to different source of supply.

partner in providing the home-country's imports owes none to "inherent" differences in costs, and everything to "history."

Introduce now a PTA, by which the tariff t is removed on imports from the partner. The latter's supply curve moves from S^0_P to S^1_P ; and the world supply curve—the (horizontal) aggregation of S^1_P with S^0_R —becomes S^1_W . But this aggregation is still not relevant, since all imports would still come from the partner country—and even more of it now. The equilibrium price will be lowered to P^1 , and the size of imports will increase from M^0_W to M^1_W —all of it coming from the partner. No trade diversion is involved—only trade expansion; and the PTA must hence be welfare improving. So far, this is not different from the previous analysis of a "normal," comparative-advantage origin of trade patterns.

We move now to the situation of overall, non-discriminating liberalization; i.e. (again, for simplicity), of free trade. The tariff t is removed also on imports originating in ROW; and the latter's supply curve changes from S^0_R to S^2_R . Its starting position, where the price equals the level of minimum average costs, also falls by the size of t - from \bar{C}^0_R to \bar{C}^2_R . The new world, aggregated supply curve becomes $EKLS^2_W$. The sizes of movements have been selected so that imports from ROW now do become relevant; that is, so that the new equilibrium price exceeds the (new) level of minimum average costs in imports from ROW. With less than that, the outcome would be the same as with the PTA, and the overall liberalization would be irrelevant; that is, this would be the case in which with free trade, imports would still be coming only from the (potential) PTA partner country. The new equilibrium price will be P^2 ; and the new aggregate size of imports, M^2_W , now being provided from both the partner and ROW (by construction of the present case, the two sources will share equally in the aggregate, each exporting $M^2_P = M^2_R$).

In comparing this outcome with that of a PTA, the difference is now substantial—due to the "step jumping" involved in moving between the two situations. The shift from free trade to a PTA would result in a large trade destruction (imports fall from M^2_W to M^1_W); and, in particular, in a large size of trade dislocation—imports from ROW would fall from M^2_R to nil. In comparing this outcome with that of Figure 3—the case of "comparative-advantage" origin of imports—we see that the impact of movement from free trade to a PTA are similar in sign: in both instances the changes involved would lower welfare. But the outcome is more pronounced—that is, the welfare reduction likely to be bigger—in the case in which the import

pattern has been determined by “history.” The proposition thus established is that, in comparison with a complete liberalization (a free- trade situation), a PTA is more harmful, *ceteris paribus*, when concluded with a partner trade with which is due to “history”.

Finally, let us go back to the second-best framework; and compare the outcomes of two alternative PTA tracks. One, which we have discussed thus far, is with the “partner;” the other is with the “other” country—the ROW.²³ This analysis might be performed within the framework of Figure 3; but to avoid cluttering, we do it separately in Figure 4, reproducing there the relevant components of Figure 3.

A PTA with the “partner” would result, we recall, in the “world” supply curve moving (in Figure 3) from $ABCS^0_W$ to $EFGS^1_W$, with equilibrium price P^1 and size of imports M^1_W — all of it provided (as with no PTA) by the “partner.” Consider now, instead of a PTA with this country, a PTA (again, a complete removal of the import tariff) with the other—the ROW. Designate this track, in Figure 4, by superscript 3. It is now ROW’s supply curve, rather than the partner’s, which moves rightward, to S^3_R —with the “partner’s” supply curve remaining at S^0_P ; and the minimum average cost level in ROW’s supply gets down (as under free trade) from the level \bar{C}^0_R to \bar{C}^3_R (the latter being represented in Figure 3 by \bar{C}^2_R). The new “world” supply curve now becomes $AHVS^3_W$. The new equilibrium position becomes Q, with price P^3 . The size of imports increases from M^0_W to M^3_W , with M^3_P being provided by the partner and M^3_R by ROW.

This outcome is clearly superior to that of a PTA with the “partner.” The volume of imports is larger—hence, a larger size of trade creation. Trade diversion does take place now: imports from the “partner” fall from M^0_W (with no PTA) to M^3_P . But in this instance, trade diversion is beneficial: it diverts trade towards a cheaper source of imports.

This unconventional outcome is due to the fact that the preferential treatment accorded to ROW serves to enable that country to break the barrier “history” has created, and join the market as supplier of imports to the home country.

This is an interesting inference—and one which is probably not entirely obvious

²³ To avoid confusion—may be, at the expense of creating confusion in a different way—we shall refer in this comparison too to the country with “historic” trade relations with the home country as the “partner”, though the contemplated PTA in one of the alternatives is with the other country, to which we refer as the ROW.

²⁴ To avoid confusion—may be, at the expense of creating confusion in a different way—we shall refer in this comparison too to the country with “historic” trade relations with the home country as the “partner”, though the contemplated PTA in one of the alternatives is with the other country, to which we refer as the ROW.

intuitively. The analysis carried out here demonstrates that a PTA with a “non-traditional” trade partner, although inferior to universal free trade, is superior to both the continued existence of overall, non-discriminatory restrictions and to the conclusion of a PTA with a “traditional” trade partner. *Ceteris paribus*—on these grounds alone—if a PTA is contemplated by the home country, a “non-traditional” trade partner should be a better candidate for it.²⁵

b. General Liberalization and a PTA: Order of Introduction

Once the possibility that past trade patterns affect present (and future) geographic composition of trade is admitted, the order of introduction of policies becomes relevant. Specifically, assuming that a general, non-discriminatory trade liberalization is eventually achieved, an interim introduction of a PTA – a “two-step” implementation of a general liberalization – may have a long-term consequence.

This is analyzed with the aid of Figure 5, which is similar in nature to those used in the previous section. In this Figure, S^0_P and S^0_R represent the tariff-ridden supply curves of M to the home country of, respectively, the “partner” to the (future) PTA and the Rest of the World (ROW); the two are taken as equal—dissimilarity between the two, as will be indicated later, would either re-inforce or weaken the probability of the outcome addressed here. The “world” supply, S^0_W , is the (horizontal) aggregation of the two separate supply curves. At this initial position, the equilibrium price is P_0 ; and the equilibrium size of imports is M_0 , shared equally by the two exporting countries.

Introduce now a PTA with the “partner”, by which the tariff (at the level AF) is eliminated—with the tariff on imports from ROW remaining intact. The partner’s supply curve (with the price axis representing the home price) moves to the right, becoming S^1_P . At any price below OA, this is also the “world” supply curve, since nothing would be offered then by ROW. As drawn here, the new equilibrium price, P_1 , is indeed within this range. Imports will increase to OM_1 , all of it being now supplied by the “partner”, with imports of ROW disappearing completely. Now, a crucial (in the present context) assumption is made, namely: this disappearance creates some (fixed) costs to any future re-appearance of such exports from ROW to the home country, requiring some investment (of the nature discussed earlier) for such re-

²⁵ This is a somewhat different proposition from the one suggested by P. Wonnacott, with which we have opened

introduction. This element of fixed costs raises (as in our earlier analysis) the level of minimum average costs by the size $A \bar{C}_1^R$. Price OC_1^R thus becomes the lowest at which any exports from ROW would be forthcoming: ROW's supply curve becomes $\bar{C}_1^R TS_R^0$, and the "world" supply— $FGKS_W^1$.

At this moment (after the disappearance of ROW's exports and liquidation of the past investment in it), introduce a full liberalization, eliminating the geographic discrimination: the tariff is fully removed also on imports from ROW. The latter's supply curve shifts to the right to the same extent as the earlier shift of the "partner's" supply; but it is still bound from below by the level $O \bar{C}_1^R$. That is, ROW's supply now becomes $\bar{C}_1^R GS_P^1$. The "world" supply (not shown) also moves to the right, at the range above \bar{C}_1^R . But this – as drawn here – is immaterial: the equilibrium price and quantity of imports remain unchanged ($P_2=P_1$, $M_2=M_1$) since nothing has changed in the relevant range. We thus get a result by which the general liberalization becomes irrelevant: the ROW stays excluded from the home-country's market, even though it is no longer discriminated against.

The outcome would be quite different had the general liberalization not been preceded by a PTA; that is, where the process does not incorporate a stage in which geographic discrimination is involved. In Figure 5, starting from general restriction and moving straight to general liberalization, the world supply curve would become the straight line $FENS_W^3$. P_3 would be the equilibrium price; and OM_3 would be the equilibrium size of imports – shared equally, as under a universal restriction, between the "partner" and ROW. This is evidently a superior outcome, for the home country, in comparison with the two-step liberalization. A larger amount of imports materializes, at a lower price.

Thus, admitting the possibility of the long-term impact of a PTA through the elimination of some trade flows and the cost involved in re-starting them, we get an inference indicating that the introduction of a stage of geographic discrimination into the process of liberalization leads to an inferior outcome even beyond the transition – beyond, that is, the completion of a universal liberalization. This is, evidently, a possible outcome, not an inevitable one. Its likelihood – as may be gathered by looking at Figure 5 – would be higher the lower the home-country's elasticity of demand for imports: the lower this elasticity, the larger would be the price fall

following the PTA, and thus the likelihood of imports from ROW being driven out. Also, recalling that we have assumed so far two equal trading partners, it should be easy to see how changing this assumption would affect the outcome. Thus, for instance, if the “partner” were a cheaper producer of imports, or if it were a larger economy, so that its supply curve without discrimination would lie further to the right of that of ROW, the outcome addressed here would become more probable (although of lesser consequence); and vice versa.

4. Proximity and Trade Expansion Following Liberalization

This section will address again an issue concerned with the relationship of proximity of countries to commercial policies. But this time we assume that a policy of universal, non-discriminatory (among trade partners) trade liberalization (complete or partial) is implemented by the home country. We pose the question: should this policy measure be expected to have a different quantitative impact—in the sense of proportional changes--on proximate countries versus those that are far away?

This issue has not, apparently, been raised before; and it is of some importance. Take, for instance, the liberalization policies introduced in Latin America in the late 1980’s and early 1990’s. The majority of the countries involved have followed two parallel tracks, almost simultaneously: a radical universal, non-discriminating trade liberalization; and the conclusion of trade-preferential agreements (or the actual implementation of an arrangement that had existed in name only). These were MERCOSUR – for Argentina, Brazil, Paraguay, and Uruguay; and the Andean Pact—involving Bolivia, Colombia, Ecuador, Peru, and Venezuela. Quantitative analyses of trade within each of these groups show a dramatic increase (proportionately, of course) of intra-bloc trade flows. In interpreting these changes, would it be legitimate to assign such increases, as a working hypothesis, to the impact of trade preferences? Or may such outcome be, instead, predicted from the expectation that trade flows among neighboring countries should expand more than others following the general trade-liberalization policies? These two alternative interpretations would indicate quite different inferences for the expected outcome of the conclusion of a trade-preferential agreement.

The issue on hand will be addressed here in a very rudimentary fashion; specifically, by using a partial-equilibrium analysis and by an intuitive extension of its inferences.

Start with Figure 6. We assume two potential providers (to the home country) of a given import good. The two partners are inherently equal; that is, their FOB supply curves are identical.²⁶ But one of the partners, N, is nearby, with low transportation costs in trade with the home country; whereas trade with the other partner, F, is subject to higher transportation costs. For simplicity (this is irrelevant to the outcome) assume that transportation costs with N, the nearby partner, are zero; and that they are constant per unit of the imported good in trade with F, the far-away partner. S_N is thus the supply curve (to the home country) of both N and F without transportation costs,²⁷ and it is indeed the supply curve of N to the home country. S_F , on the other hand, is partner F's supply curve: it lies at a given distance, equal to the level of transportation costs (in trade with F), above S_N .

The home country's demand curve is not shown. Suffice it to know that prior to liberalization, given some (geographically uniform) tariff imposed by the home country on imports of the good in question, the equilibrium price (net of duty) received by the exporter (whether N or F) is P_0 . At this price, the amount imported from N is OB; whereas imports from F—smaller, of course—are OA (OB and OA together being the equilibrium quantity). Suppose, now, that the duty is removed (or just lowered—this is immaterial), and the new exporter's price becomes P^1 .²⁸ At this new price, imports from N would expand from OB to OD, and imports from F—from OA to OC. The absolute expansions (BD or AC) are equal in both trade flows. But, given the difference in initial flows, the proportional expansion is higher for the imports from F than it is for imports from N. That is, import expansion would be proportionately higher in trade with the distant partner.²⁹

Figure 7 describes a different initial position and a different outcome—with the same basic assumptions. Here, at the initial price P_0 (under the existence of a tariff), the good in question is imported solely from the nearby partner N. With the removal of the tariff, the

²⁶ Without such assumption, any differential impacts would be assigned (at least partly) to factors other than distance.

²⁷ S_N represents an assumption of a rising supply curve. This is necessary in the present context: with infinitely elastic supply curves, all imports would come from a single source—the cheapest—so that an analysis of proportional trade expansion could not be undertaken. But see the analysis further down for a different meaning of “proportional expansion”.

²⁸ The distance between P^1 and P^0 would normally be lower than t —the rate of tariff duty (or the part of it which is removed).

exporter's price becomes P^1 . At this higher price, imports are still bought only from N, with the size of these imports increasing by AC. In this case, all import expansion occurs in trade with N. The comparison of proportional expansion of imports of a given good from the two partners becomes meaningless in this case. It obtains meaning only when imports of this specific good are contemplated in the context of overall imports: these do expand in trade with nearby partner N, whereas no expansion takes place in trade with far-away partner F. In this instance, thus, a bias towards expansion of trade with the nearby partner is evident—in contrast with the case analyzed earlier.

Still another possibility—not shown in the diagram explicitly—is where the initial position is as shown in Figure 7 (at price P^0); but at the post-liberalization price P^1 , some imports appear also in trade with partner F (that is, P^1 would be somewhere above P^*). In this case, the proportional expansion of imports from F must be infinite; but this is almost meaningless. The real consideration here, too, involves the impact on overall imports. In absolute amounts, the expansion of imports from F, of the specific good on hand, is smaller than the expansion of imports from N. We also know that if in each market the same assumptions are made as they were in this analysis, initial overall imports from F are smaller than imports from N. Hence, with no further information, we would not know what the differential impacts on the expansion of this specific good would imply for the proportional changes of overall imports from the two alternative partners.

The outcome of this analysis is that “anything could happen;” that is, we are not able, on the basis of a priori analysis, to provide a definite proposition on the likelihood of a uniform, non-discriminatory liberalization provoking an expansion of imports which would be (in proportional terms, of course) biased either towards or away from nearby partners. What may be stated by way of generalization is that: (i) the absolute expansion of trade will always be larger (equal to, in the limiting case) in trade with the neighboring country than with the distant country. (ii) the proportional trade expansion—the size which is relevant in the present context—would tend to be biased in favor of the neighboring country the more the tariff reduction (elimination) introduces new goods into the trade flow; whereas the distant country would be

²⁹ Another way of inferring the same outcome would originate in the realization that at any given home price, the elasticity of supply of exports should be higher in the distant country: any change in this price would imply a larger proportional change in that country of the net (of transportation costs) exporter's price.

avored the more the price change induces the expansion of trade flows of goods that are already traded prior to the policy change.

It should be noted that the analysis here is symmetrical for the two directions of price changes—that is, it may be applied equally to the case in which the tariff is increased (or newly imposed). There is no general answer to the question of whether increased restrictiveness of the home-country's trade—imposition or intensification of its barriers on trade—would constrain more (in proportional terms) the country's trade with its neighbors or with distant trade partners.

References

Bhagwati, Jagdish and Arvind Panagariya, (1996), "Preferential Trading Areas and Multilateralism – Strangers, Friends, or Foes?", in J. Bhagwati and A. Panagariya (eds.), *The Economies of Preferential Trade Agreements*. Washington, D.C.: American Enterprise Institute, 1-78.

Eichengreen, Barry and Douglas A. Irwin (1998), "The Role of History in Bilateral Trade Flows," in Jeffrey A. Frankel (ed.), *The Regionalization of the World Economy*. Chicago: The University of Chicago Press, 33-57.

Kleiman, Ephraim (1976), "Trade and the Decline of Colonialism", *Economic Journal*, 86, 450-480.

Krugman, Paul (1991), "The Move Towards Free Trade Zones," in *Policy Implications of Trade and Currency Zones (A Symposium Sponsored by the Federal Reserve Bank of Kansas City)*, 7-41.

Lipsey, Richard G. (1960), "The Theory of Customs Unions: A General Survey," *Economic Journal*, 70, 496-513.

Meade, James E. (1955), *The Theory of Customs Unions*. Amsterdam: North-Holland Publishing Company.

Summers, Lawrence H. (1991), "Regionalism and the World Trade System," in *Policy Implications of Trade and Currency Zones*, op. cit, 295-301.

Viner, Jacob (1950), *The Customs Union Issue*. New York: Carnegie Endowment for International Peace.

Wonnacott, Paul (1998), "The Role of History in Bilateral Trade Flows: Comment", in *The Regionalization of the World Economy*, op. cit., 59-62.

Figure 1

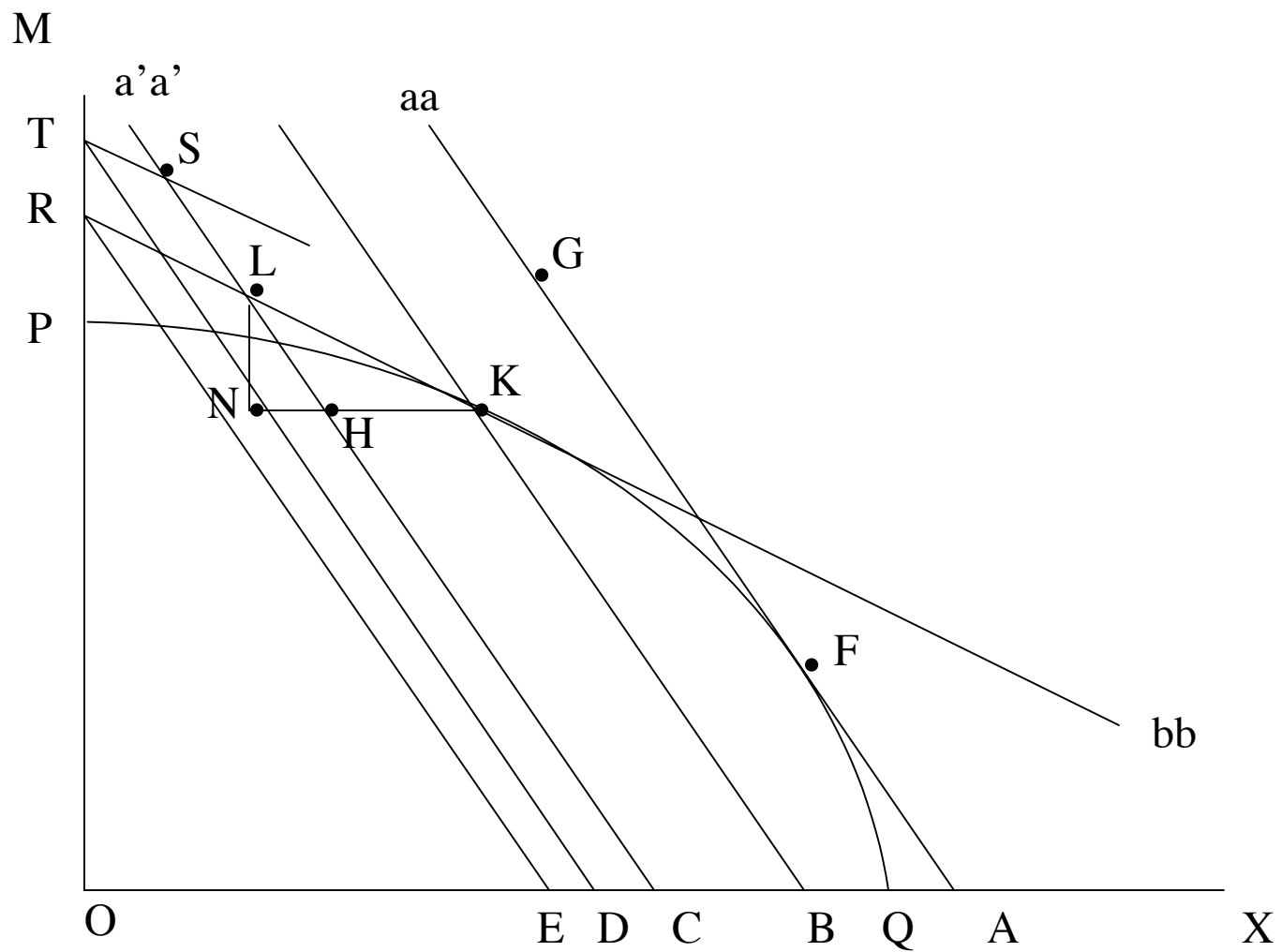


Figure 2

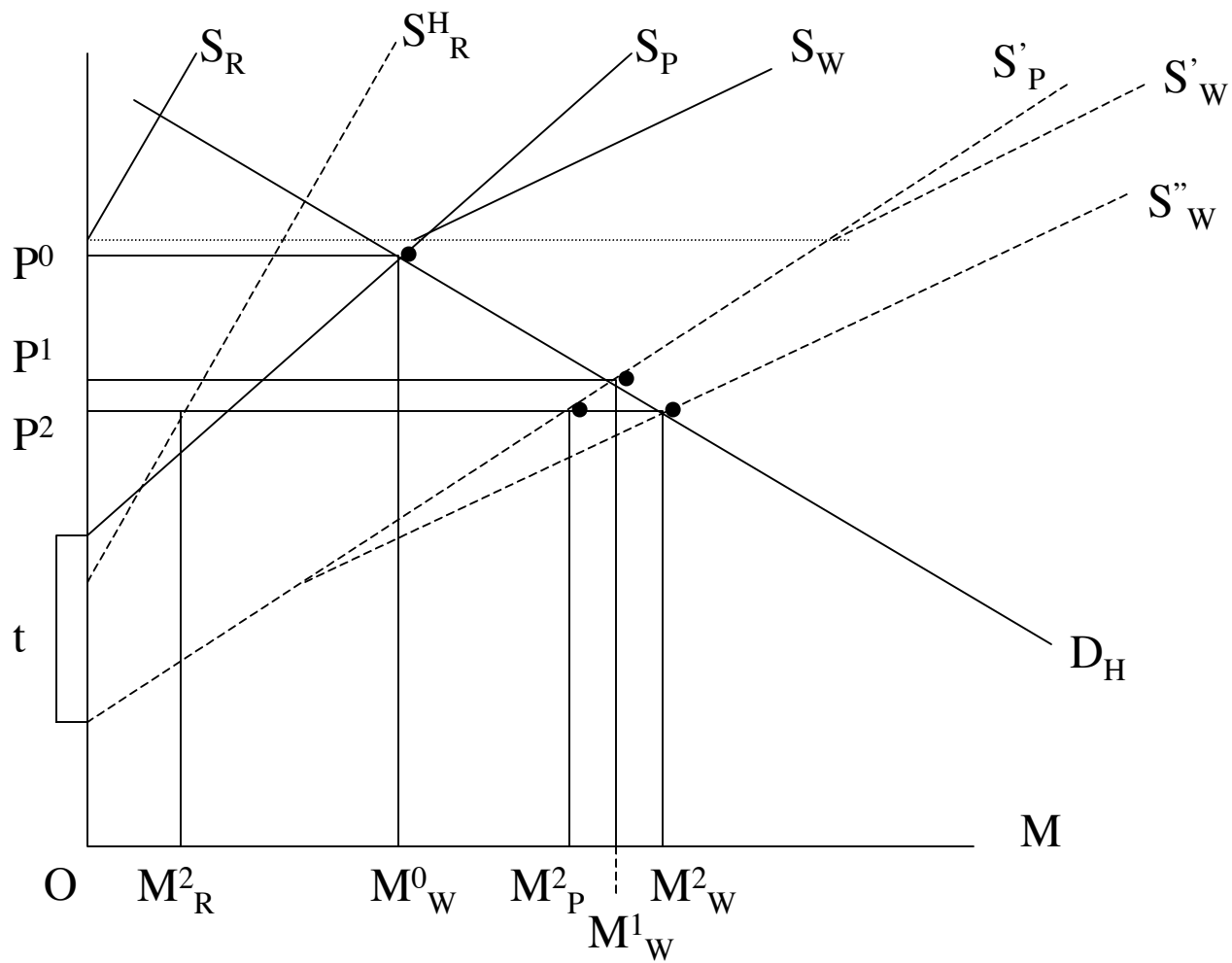


Figure 3

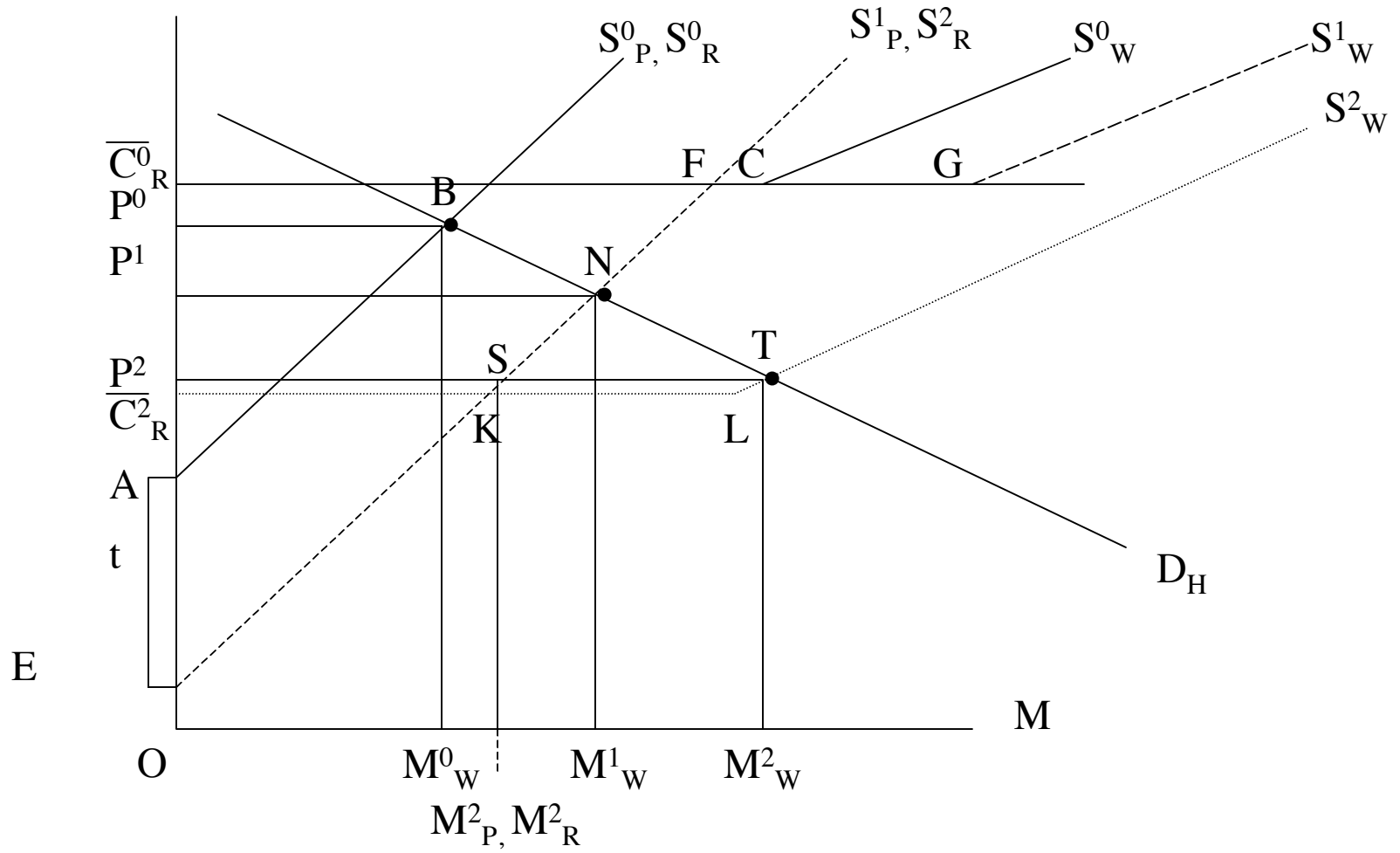


Figure 4

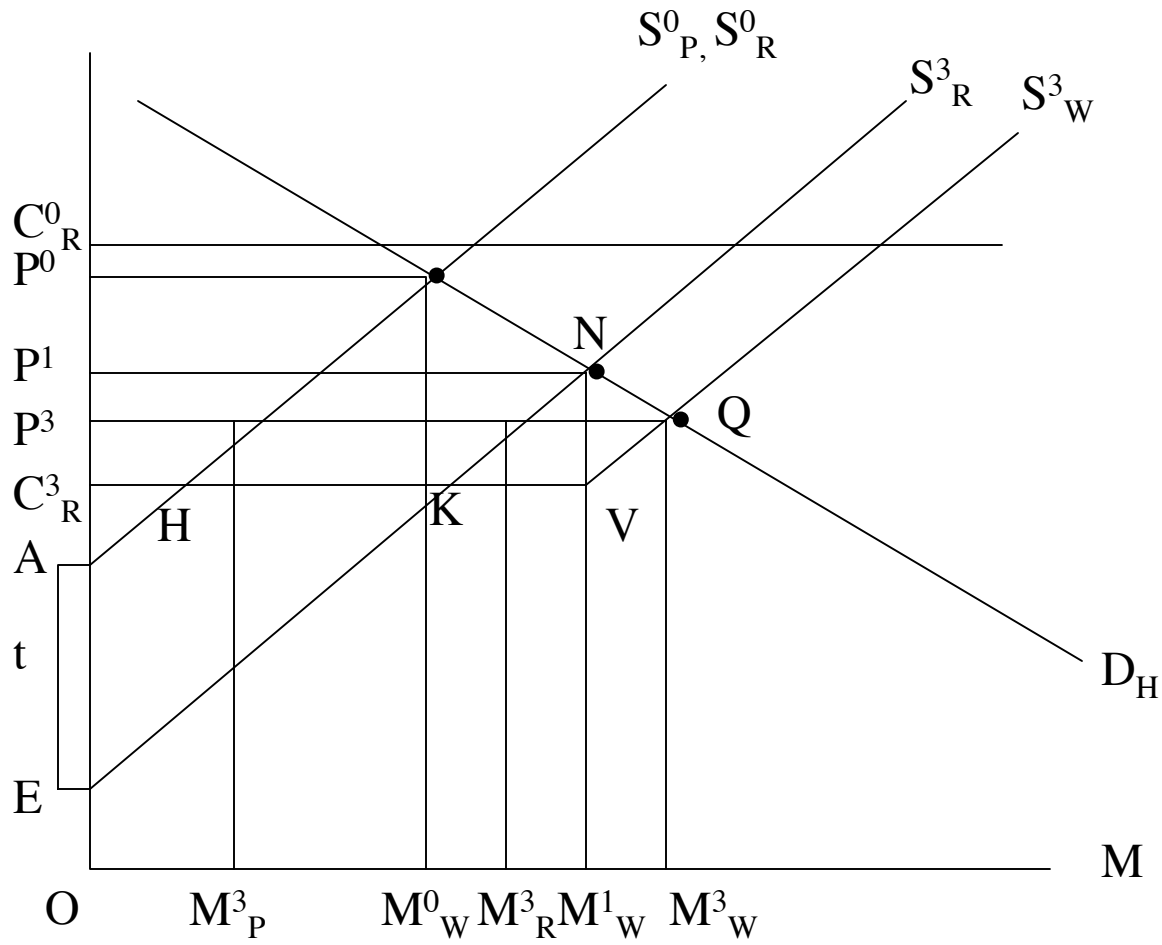


Figure 5

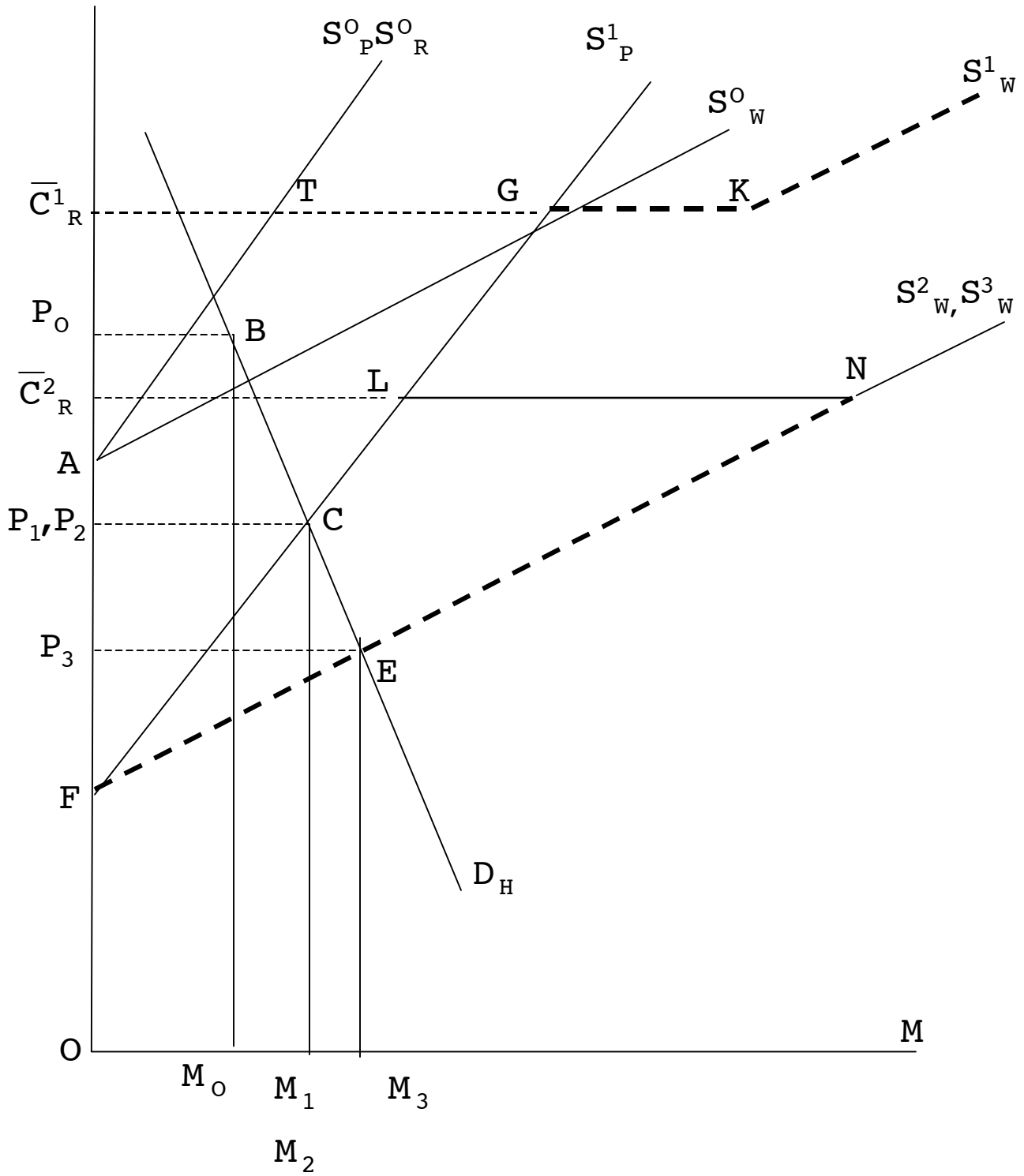


Figure 6

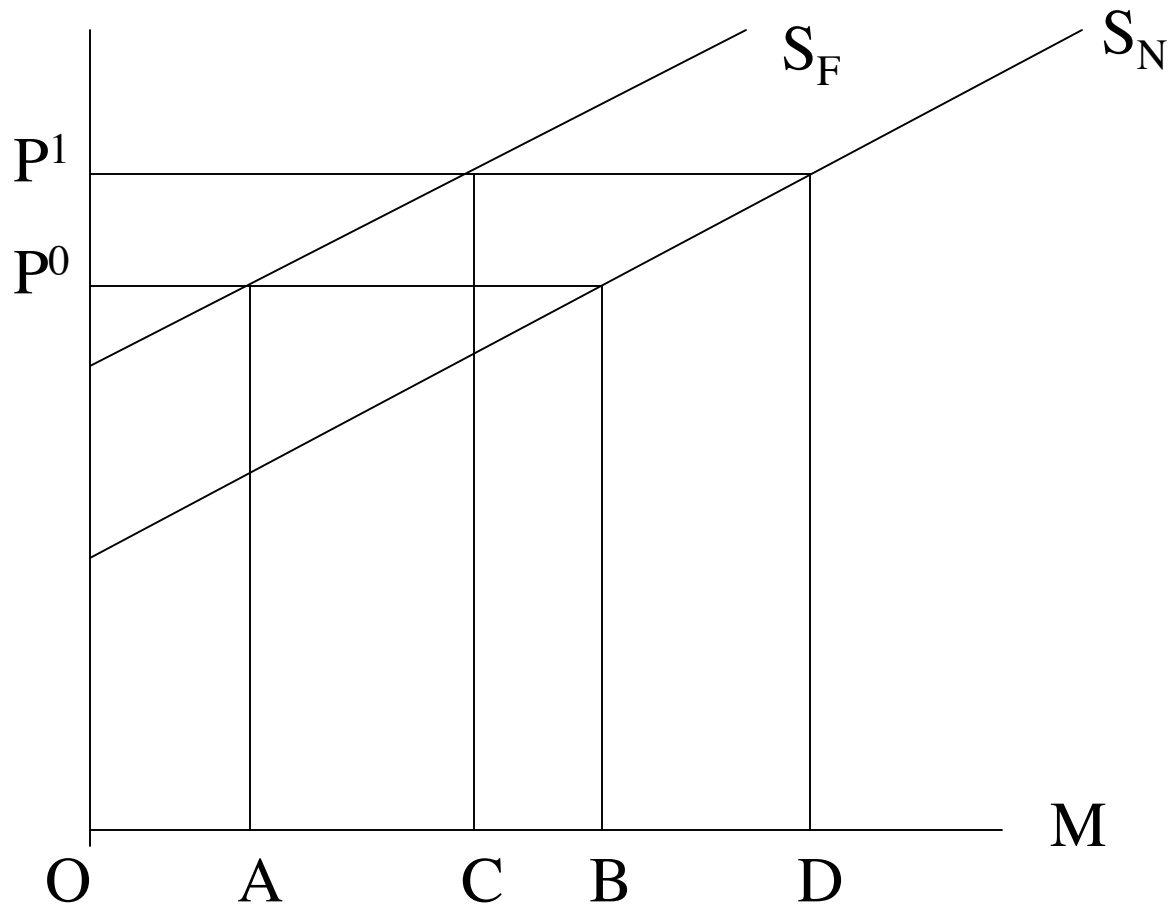


Figure 7

