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RAUL PREBISCH AT ECLA

Years of Creative Intellectual Effort

Leopoldo Solís

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Raúl Prebisch at ECLA

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PREFACE

We are pleased to publish this paper by Leopoldo Solís as Number 10 in the Center's series of Occasional Papers. The series presents broad reflections by senior scholars and policymakers on major "lessons" produced by recent advances of knowledge.

Mr. Solís is an eminent Mexican economist who has had a distinguished career of public service and research in his country. He has taught at the top graduate institutions in Mexico and has written widely on economic policy and development issues for international, regional, and Mexican audiences. Currently Economic Advisor to the President of Mexico, he has served in the past as Deputy Director of the Bank of Mexico, Deputy Minister of Commerce and Industry, and Deputy Minister of Programming and Budget. He has added to the understanding of Mexican development and economic policy performance, especially in monetary and financial matters, public finance, growth and technology issues, and balance of payments.

In this essay Solís thoughtfully reviews the influence of the theories of Raúl Prebisch on economic policymaking in Latin America over the last four decades. He clarifies the originality and force of Prebisch's thinking, which was aimed at finding more effective avenues of development for Latin American economies in the environment of the Great Depression and the aftermath of World War II. With great objectivity he analyzes the pros and cons of several key aspects of Prebisch's thesis and concludes by showing how developments in economic theory and policy performance in the last twenty years have gone beyond the original Prebischian assumptions with respect to the inward/outward orientation of economic growth.

This essay should be valuable in Latin America and other developing countries, as well as for professionals interested in the influence of ideas on human endeavors.

Nicolás Ardito-Barletta
General Director
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Panama City
September 1988

ABOUT THE AUTHOR

Leopoldo Solís has had a varied and distinguished career in both economic policymaking and research. Currently he serves as Economic Advisor to the President of Mexico. Solís has taught economics at several graduate institutions in Mexico and was a deputy director of the Banco de Mexico from 1976 to 1984. His many publications include several books on the Mexican economy—including *Mexican Financial Development*, *La Realidad Económica Mexicana (Mexico's Economic Reality)*, and *La Economía Mexicana (The Mexican Economy)*—and articles in numerous journals on economic development.

LEOPOLDO SOLIS

Raúl Prebisch at ECLA

Years of Creative Intellectual Effort

For most of the postwar period, one seminal thinker almost single-handedly influenced the history of economic development policy in Latin America. Raúl Prebisch, as head of the United Nations Economic Commission for Latin America (ECLA)* and afterwards of the Latin American Institute of Economic and Social Planning, had the opportunity to build a team that had significant influence in Latin American policymaking circles. Later, as first secretary of UNCTAD (the U.N. Commission for Trade and Development), he was also instrumental in achieving the worldwide agreement on nonreciprocal trade concessions in favor of the developing countries. Building on earlier writings, Raúl Prebisch published his first major book in 1949—*The Economic Development of Latin America and Its Major Problems*—which presented his theory about the deteriorating terms and conditions of trade in developing countries (or "periphery," to use his term). This work provided the theoretical foundation for the import substitution policies that dominated the economic policies of most Latin American countries until only recently.

The early industrialization of Latin America through effective protection policies in the 1940–70 period was at first glance successful, but while imports of machinery and raw materials for such

* In Spanish, La Comisión para América Latina (CEPAL).

industries increased very rapidly, there was no parallel increase in exports of industrial products. When this lack became evident in the 1960s, there was a movement to increase exports and to create trade integration schemes for the Latin American region. It was not until the 1970s that wider Latin American policymaking circles began to appreciate that the terms of trade argument espoused so strongly by Prebisch, even in the cases where it was true, could best be neutralized by diversifying exports beyond raw materials to include industrial goods and by applying economic policies that would not bias investment and allocation of resources against tradable goods and in favor of nontradables. Recently, a number of Latin American countries have successfully begun to implement more balanced policies in the external sector, making them more competitive internationally and stimulating exports more effectively.

Background

In 1943, Raúl Prebisch "was forced" to relinquish his position as head of the Central Bank of Argentina because of differences of opinion with the Peronist government. His departure signaled the beginning of what Prebisch termed the first of "five stages of my theory of development."[1] He returned to teaching and devoted himself to extensive reading of recently published economic texts and publications. His study of John Maynard Keynes and Joseph Schumpeter, among other writers, would decisively influence Prebisch's later thoughts on and attitudes toward economics.[2]

It was during this period, in a speech given in 1944, that he alluded for the first time to the concepts of "center" and "periphery," concepts that, in time, became synonymous with Prebischian thought. Prebisch also visited Mexico twice during this time—first in 1944 to speak and lecture at the Banco de México and El Colegio de México, and later in 1946 to take part in an inter-American meeting of the directors of central banks.[3] In one of his lectures at El Colegio de México, Prebisch warned of the vulnerability of Latin American countries in the international economic arena, citing as evidence Argentina's need to substitute imports during the Great Depression when it saw it had no way of getting the foreign currency it needed to pay for products purchased abroad. As Joseph L. Love recently pointed out, the Prebischian analysis of this process of constrained industrialization in

Argentina would be taken up later by different writers—including Albert Hirschman, André Gunder-Frank, and Carlos Díaz Alejandro—to develop the concept of a "very positive negative jolt."[3]

In 1944, in an article published in *El Trimestre Económico (The Economic Quarterly)*, Prebisch called attention to the fact that the United States, which had replaced Great Britain as Latin America's principal industrial partner, was not committed to an open trading system and was disinclined to import. For Prebisch, this factor constituted an ominous sign of permanent imbalance in the balances of payments for these countries.[4] And in 1946, for the first time in writing, he referred to the United States as the "cyclical center" and to Latin America as the "periphery of the economic system."[5]

> Having returned to university teaching in Buenos Aires in 1948, Prebisch pointedly attacked the theory of comparative advantage and observed that its teachings and principles had been repeatedly violated by the industrialized nations, whose economists, nevertheless, utilized the classic theory of trade as an ideological weapon. He also concluded that the industrialized countries acted as monopolizers against agricultural countries in the trading process. He declared at the time that, from the historical point of view, technological progress, both in Great Britain and the United States, did not result in a decrease in prices but, rather, in an increase in wages.[6]

All these ideas would take shape in contributions that Prebisch would later make as Director of the Economic Commission for Latin America.

Prebischian Thought at ECLA

Birth of the Economic Commission for Latin America. The idea behind ECLA grew out of a Chilean initiative advanced before the United Nations in Lake Success, New York, in 1947. The creation of this body was approved by the Social and Economic Council of the United Nations in February of the following year, and its first meeting took place shortly thereafter in Santiago, Chile. Even then, Prebischian ideas had already begun to exert decisive influence on the ideas and philosophy of Latin American economists. Thus, it came as no surprise that the primary result of that meeting was a resolution demanding a study of Latin American trading terms and conditions.

Nor was it surprising that Prebisch was called on to direct the newly created body. Because of his exclusion from the Peronist government and his influence in the region, which had increased with the publication of his *Introducción a Keynes (Introduction to Keynes)* in 1947, Prebisch turned out to be the perfect candidate to guide ECLA.[7]

Prebisch's first reaction was to decline the offer. As he said in a later interview, he was afraid that an organization like the United Nations would not allow underdeveloped countries to analyze their economic problems from their own perspectives.[8] Nevertheless, a few months later he was again invited to go to Santiago to work on special assignment as editor and author of the foreword of an economic report on Latin America that had been approved at ECLA's first meeting. His acceptance of this invitation in 1949 marked the beginning of the second stage in the development of his thought. At the time of his entry into ECLA, he wrote, "my ideas were reaching their maturity, and I was able to give them definite shape in several studies published in the early 1950s in which I attempted to provide a diagnosis of the problems and propose policies that would serve as options to the proposals of the orthodox school."[9]

His most important work of this period was almost certainly *El Desarrollo Económico de América Latina y Sus Principales Problemas (The Economic Development of Latin America and Its Major Problems)*, published in Spanish in 1949. In this work, which Hirschman has called the "ECLA Manifesto,"[10] Prebisch elaborated his theory about the deterioration in the terms and conditions of trade. He also published *El Estudio Económico de América Latina, 1949 y Problemas Teóricos y Prácticos del Crecimiento Económico (The Economic Study of Latin America, 1949 and Theoretical and Practical Problems of Economic Growth)*.

Hirschman's turn of phrase could hardly be more accurate. Indeed, *The Economic Development of Latin America* influenced not only Latin American academic circles, but also the decision-making echelons of Latin American countries and the academic community worldwide. It is no exaggeration to say that this work altered the course of Latin American economic history. The economic policies underlying the Prebischian essay continue to be the focus of heated debate even today, and they have left their mark on the economic foundations of these countries.

Principal ideas. Prebisch's contributions to ECLA summarize the ideas he had been developing over a long period. For purposes of analysis, Prebisch begins by dividing the world into two camps: the center and the periphery. The former consists of the industrial centers; the latter comprises what we today know as the developing world, which specializes in producing agricultural products and other primary commodities. According to the classic outline, this international division of labor will translate into gains for both regions, maximizing production, income, and consumer value. The thrust of Prebisch's attack is to call this dictum into question.

The axis around which his thesis revolves is the long-term deterioration in the terms and conditions of trade. In Prebisch's own words:

> In general, it appears that technological progress has been more pronounced in industry than in the production of primary commodities of the countries of the Periphery, as is pointed out in a recent report on price relationships. As a result, if prices had declined commensurately with increased productivity, the drop would have to have been less for primary commodities than for industrial products, such that the price relationship between both of them would have progressively improved in favor of the countries of the Periphery, depending on how the disparity in productive capacities developed.
>
> If it had come about, this phenomenon would have had far-reaching impact. Peripheral countries would have benefited to the same degree as the central countries from the drop in prices for the finished industrial product. Consequently, the fruits of technological progress would have been equally distributed throughout the world, in conformance with the implicit premise underlying the outline of the international division of labor; and Latin America would perceive no economic advantage in becoming industrialized. On the contrary, there would be definite loss as long as productive efficiency equal to that of the industrialized countries was not achieved.
>
> The facts do not support that premise. As we see . . . beginning in the 1870s, right up to the Second World War, the price relationship has continued to evolve to the detriment of the production of primary commodities. It is regrettable that price indexes do not

> reflect the permutations in quality which have occurred in the finished products. Owing thereto, we have been unable to take them into consideration in our discussion. In the 1930s, only 63 percent of the finished products purchased in the 1870s could be purchased for the same amount of primary commodities; that is to say, on the average, 58.6 percent more primary commodities were required to buy the same amount of finished manufactures.
>
> The price relationship has developed, therefore, in a manner inimical to the interests of the Periphery, contrary to what would have happened if prices had declined commensurately with the drop in costs occasioned by increased productivity.[4]

Baer has summed up Prebisch's analysis as follows: the deterioration in the terms and conditions of trade occurs within the context of a growing world economy. The root of the problem is to be found in the difference between the income elasticities in center and periphery imports. While center import elasticity is very low—less than one unit—that of the periphery is generally greater than one. At the same time, demand curves exhibit lower price elasticities.

Prebisch takes recourse to Engel's Laws to explain the low income elasticity for center imports. That is, as available income increases, the amount spent on food (the periphery's export product) constitutes a decreasing percentage of expenditures made by developed countries. Linked to this fact, Prebisch pointed out, trade barriers raised by the center function to protect its own primary commodities industry from periphery competition. Greater efficiency in the use of primary commodities, a result of improved technology, and the advent of synthetic materials are also factors responsible for the slower growth in the demand for periphery products.

Under these circumstances, imports coming from the periphery will grow, all other things being equal, at a rate less than the product growth rate for the center, while at the same time the greater economic growth of the periphery, caused by technological progress, will depress export prices of primary commodities and produce. On the other hand, the greater income elasticity in periphery import demand tends either to stabilize prices for the latter, if increases in center productivity grow at the same rate, or to raise the price of imported products, if productivity does not grow sufficiently quickly or if

monopolizing practices by the center make it possible to cut back supply. The net result of these effects is a deterioration in the periphery's terms and conditions of trade, with the resulting decrease in its importing ability.[12]

The role of technological progress. In explaining the causes of the deteriorating terms and conditions of trade, Prebisch placed special emphasis on the role played by technological change and market structures in the capitalist world.

According to his interpretation, while technological progress in the countries of the center manifests itself in a generalized way in all economic sectors, in the countries of the periphery it manifests itself preferentially in export-related activities.

With perfect competition, improvements in productivity generally translate to decreases in price, with production-related compensations remaining constant or, if at all, increasing less than gains derived from improved productivity. If the market for finished products is competitive, but imperfections exist in the markets' factors, increases in productivity will translate to increased compensation of these factors, without a change in the prices of those finished products, as long as the increase in compensations does not exceed productivity gains.

Prebisch argues that, in the center, productivity gains almost always are accompanied by wage increases; there are no reductions in the prices of finished goods. The opposition to decreasing salaries derives, in Prebisch's opinion, from the monopolistic power of unions. In fact, if there were any room for price reductions, they do not occur because of the market control exercised by center manufacturers. The result is that, even amid technological improvements made in the center, prices do not drop.

In the periphery, meanwhile, productivity also increases, although at a slower rate than that of the center. However, if the prices of goods produced in both regions decrease proportionately to the corresponding increases in productivity, the terms and conditions of trade practiced in the periphery should improve. This, however, has not happened. The center's export prices have remained at their old levels or have even increased, while export prices for the periphery have decreased.[13]

To understand Prebisch's reasoning, Baer adds, it is useful to divide the periphery's economy into two sectors: the export economy

and the domestic economy. In the former, productivity increases more rapidly. Moreover, it is implicitly assumed that the periphery's labor market is competitive, and that the labor supply is elastic, in the Lewis-ian sense.

For Prebisch, productivity gains in exports translate to higher unemployment levels, because unless product increases are equal to gains in productivity, decreased labor demand per finished product will lead to decreases in the employment level. This factor combines with the low income elasticity in the center's import demand, such that employment in the periphery does not grow at a rate necessary to absorb the growing supply of labor.[13]

The implications of his analysis were clear to Prebisch: the disparity in technological development between the periphery sectors, the abundance of labor and the low income elasticity in the demand for its exports, together with a very elastic demand for imports, translates to the fact that the fruits of technological advances are transferred abroad.

Equally clear were the economic policy recommendations to be drawn therefrom. If the world was as Prebisch described it, it therefore behooved governments of the periphery countries to adopt policies designed to prevent increases in real income from being transferred to the center. Specifically, trade policy should erect barriers to protect domestic industries and to enable aggressive implementation of a process designed to replace imports with domestic goods. This recommendation would become the recipe for an economic policy most closely identified with Prebisch and the ECLA.

The Orthodox Response

Challenging the empirical evidence. The publication of Prebisch's works elicited an immediate response. Initial criticism challenged the empirical validity of the secular deterioration in the terms and conditions of trade. An entire spectrum of distinguished economists turned their attention to the data used in *The Economic Development of Latin America*. Gerald Baldwin, Charles Kindleberger, Gerald Meier, Gottfried Haberler, P. T. Ellsworth, and John Powelson, inter alia, assailed Prebisch from different vantage points. John Spraos has condensed the major criticisms into four points:

(a) The terms and conditions of trade used by Prebisch for Great Britain are not representative of the industrialized world as a whole, and consequently the inverse sequence is invalid for approximating the terms and conditions of trade for primary commodities.

(b) Imports of primary commodities made by the center come *predominantly* from center countries themselves.

(c) The export valuations used by Prebisch are FOB (free on board), while those for imports are CIF (cost, insurance, and freight); consequently, an improvement in the terms and conditions of trade for Great Britain may be partially or wholly attributed to a reduction in shipping costs and not to a drop in prices for primary commodities.

(d) New manufactured products are continuously entering the market and the quality of existing products is improving. These factors are not reflected in price indices. Therefore, an apparent deterioration in the terms and conditions of trade for the periphery may indeed not exist, once adjustments for quality differences have been made.[15]

It should be recalled that Prebisch himself acknowledged the phenomenon identified in the preceding paragraph, although he did not concern himself with it further.

Spraos has undertaken to perform an exhaustive study in an attempt to determine the extent to which these objections are valid. With respect to the use of Great Britain's statistical data to represent the terms and conditions of trade of the center, Spraos points out: "In retrospect, it seems peculiar that Prebisch would have decided to base his argument on data exclusively relating to Great Britain, when the very United Nations' sources he used also contained a statistical listing of the terms and conditions of trade for the primary commodities and manufactures in world commerce."[16]

Comparing this statistical listing with that used by Prebisch, Spraos concludes that even though both listings pointed in the same direction, drawing from the United Kingdom exclusively caused Prebisch to overestimate the deterioration in the terms and conditions

of trade vis-à-vis the periphery: according to Prebisch's figures, the relative price of primary commodities declined at a yearly rate of 0.9 percent, while according to data of the League of Nations, the yearly decline is only 0.6 percent.[17]

Spraos approaches the second criticism indirectly. One would hope that the percentage of subtropical agricultural products imported by the United States is greater than that exported by it, such that, if the price of the former has declined with respect to the latter, Prebisch's assertion will not be compromised for his failure to adjust his findings to include the exchange of agricultural products in Great Britain and other countries of the center. Spraos's findings point precisely in this direction. His analysis of the price listings for United States' agricultural export and import prices denotes a positive (though insignificant) trend for the former, and a negative trend for the latter.[18]

The problem of inconsistency in the valuation of imports and exports is a little more complicated. The criticisms leveled by Ellsworth, Jacob Viner, Baldwin, Meier, and Haberler emphasized that reductions in shipping costs may have caused the deterioration in the periphery's terms and conditions of trade, because Prebisch used FOB export and CIF import figures in his analysis. Nevertheless, Spraos compares the behavior of the index of the terms and conditions of trade with the development in ocean freight costs (measured by the index established by Leon Isserlis in 1938) and concludes that available evidence does not justify repudiation of Prebisch's theory.[19]

As concerns Prebisch's failure to take into account improvements in the quality of manufactured goods, Spraos is equally cautious. He rightly argues that both the center and the periphery have improved the quality of their products. This applies, for example, to coffee from Kenya, cotton from Greece, and steel exported by developing countries. Given the obvious inherent difficulty, owing to changes in quality, durability, and construction, in adjusting the terms and conditions of trade utilized by Prebisch, there is no clear-cut evidence to support rejection of his thesis on the grounds of this argument.[20]

Spraos's conclusion, after carefully reviewing the criticisms leveled at Prebisch, is that

> . . . during the 70-year period in question up to approximately the Second World War . . . the evidence points to a trend in the erosion

> of the relative price of primary commodities. Taking into account the reservations concerning the quality of the evidence, no definitive conclusion can be reached. Nevertheless, in examining point-by-point the key criticisms raised in objection to the inferred deterioration, we find nothing to warrant rejection of Prebisch's theory. The statistical data selected by Prebisch nevertheless exaggerate the rate of such deterioration.[21]

However, a second question remains. Prebisch's analysis not only addressed the past behavior of the terms and conditions of trade; it also stated that the deterioration would persist in the future.

Spraos also analyzes the development of the terms and conditions of trade during the post–World War II years to determine to what extent Prebisch's prophesies have fulfilled themselves. He concludes that "despite the fact that during the post-War years the relative price of primary commodities of developing countries has had its ups and downs, on an average it has fared rather well, if one compares them with the preceding period, and even if oil is treated sui generis and excepted from calculations beginning in 1973. Thus, despite the fact that the theory of secular deterioration cannot be rejected out of hand, the theory can be impugned if data available up to the end of the 1970s is taken into consideration."[22]

Theoretical criticism. The neoclassical theoreticians launched more fundamental criticisms of Prebisch's models. Among them June Flanders has probably mounted the most complete and conclusive case against Prebisch. In two articles published in the early 1960s,[23] she challenged Prebisch's theoretical consistency, the plethora of models—not necessarily in agreement with each other—implicit in ECLA publications, and the implications of the policies recommended.

Flanders is right when she argues that "despite the great deal of discussion given Prebisch's works, a good part of this discussion has revolved around one aspect only of Prebisch's multifaceted arguments and, what is more, part of the controversy is due to the false interpretations of that aspect . . . there is not a single Prebischian theory or a single model but, rather, many of them . . . which are not necessarily in agreement with each other."[24]

This author has issued numerous calls to scrutinize Prebisch's work. In the first place, she accurately points out, "a careful reading

of his work reveals to us a Prebisch who is far less autarkic than so many of his detractors as well as followers would have us believe."[25]

Still, two questions concerning Prebisch's theories command Flanders's interest. The first is an attempt to explain what determines the secular deterioration in the terms and conditions of trade in Prebischian models. The second is to link this deterioration to the protectionist policies proposed by ECLA. In this regard, her uneasiness stems from inquiring just what benefits the periphery expects to achieve in erecting barriers to trade. According to Flanders, various kinds of benefits exist for Prebisch.

The first of these, which is understandable, consists in the economizing of foreign currency reserves. When *The Economic Development of Latin America* was written, the world was experiencing a "dearth of dollars" and

> Prebisch was, of course, not the only economist who made the mistake of thinking that this would be a permanent phenomenon or that it would last a long time. In later works, the scarcity of dollars would be dropped from discussion, but Prebisch would continue to be concerned about the United States' low import rate and Latin America's diminished importing ability caused by the inadequate inflow of foreign currency."

"The pessimistic nature of the elasticities" poses the following dilemma for the periphery: either it achieves a balance of payments through a lower rate of growth, or else it cuts back its import demand by raising trade barriers. Of these alternatives, the latter is clearly preferable. However,

> a duties and tariffs system designed to ration scant foreign currency reserves and not to decrease total demand for imports, cannot be expected to improve the terms and conditions of trade. In the best of cases, it may put a stop to future deterioration if the protectionist policy arrests the growth of exports by the periphery. This, nevertheless, assumes that the latter has a monopoly on its exports market, a fact which implies that at least this aspect of the Prebischian analysis applies to the periphery as a whole and not to any individual country in particular."

The second kind of benefit Prebisch anticipated from this trade policy has to do with ensuring that the terms and conditions of trade

do not continue to deteriorate. Flanders notes that this not only "presents many problems with respect to the structure of market, distribution of income and determination of salaries in the center and the periphery but that, on the contrary, other 'macro' economic problems are also involved."[28]

The traditional "monopolist" argument advanced in favor of imposing tariffs is generally based on a two-country model. However, if we assume, along with Prebisch, that there is only one country in the center and another in the periphery that is similar in size, we must accept that the center's principal customer is itself and not the periphery. That is, domestic demand in the center will exert greater influence on the prices of its export products than will the external demand on the part of the periphery. Thus, it should be expected that the impact of the protectionist policies mounted by the periphery against the price of its imports will be rather limited.[29]

Another inconsistency pointed out by Flanders is that Prebisch, to a great extent, explains past deterioration in the terms and conditions of trade as the result of inflexibilities underlying center prices and salaries. If this is the case, any reduction in the import demand of the periphery will result in a worsening of the center's position, as unemployment would increase without any change occurring in the terms and conditions of trade. Yet the theoretical possibility exists that, as center income declines, the periphery would also find itself affected by the reduced demand for its exports (the reason is that although its income elasticity is low, it is not negative).[30]

One of Prebisch's most frequently quoted assertions is that, given the prevailing division of international labor, the fruits of technological progress are unevenly distributed between the center and the periphery.[31] According to Flanders, the argument presumes to contradict the conclusions concerning the equalization of international pricing factors formalized by Paul Samuelson at the same time Prebisch was making his theory known.

> Leaving aside the known limitations attendant on any practical application of this theorem to the real world, the hypothetical counterexample Prebisch uses implies an erroneous application of Samuelson's findings. As happens in other parts of Prebisch's work, everything seems to indicate that he equates salaries with personal income, that is, he assumes there is but one single produc-

> tion factor in the world: work. If that is the case, however, the theorem of the international equalization of the compensation of factors is irrelevant and equalization of incomes, consequently, is . . . a premise implicit in the outline of the international division of labor.[32]

Let us see why. If there is only one production factor, one of the following statements should be true: (a) There exists something called "atmosphere," "production conditions," "climate," or "state of technology," which is not a productive factor, because it is a given, but which differs from one country to another. If this is the case, there is no reason whatsoever for salaries or per capita income in this model to be equal. The only factor—work—will be more productive in the country blessed with a better atmosphere. (b) There are no international differences in atmospheres. In this situation, there can be no discrepancies in the compensation of these factors, even if there is no commercial trade.[33]

Alternatively, if there are two production factors, the theorem is valid only when both countries produce both goods. This assumption is difficult to accept when one of the regions is the center and the other is the periphery. Moreover, Prebisch, in his example, explicitly assumes that there is complete specialization.[34]

For Flanders, the core of Prebisch's theory is the difference in the income elasticities in center imports and those of the periphery.[35] She sums up Prebisch's case in a succinct model: There are two countries (P and C), similar to each other in regard to demographic growth, rate of per capita income growth, and technological density. At the prevailing foreign exchange rate, and given the real salaries in both regions, all of P's exports are primary commodities and all of C's exports are manufactured goods. The only difference is that, as income grows, world demand for C's products increases more rapidly than world demand for P's products. The result of this is that an increasing proportion of P's increased labor supply must be absorbed by industrial activities, while the same thing happens in country C. Nevertheless, P's industrial production can only compete with imports coming from country C if P's terms and conditions of trade deteriorate.

In this way, part of the increase in P's productivity will benefit C. From the analytical point of view, the only question is whether there

exists any tendency at all to halt the deterioration in the terms and conditions of trade. For Prebisch, the answer is no. Nevertheless, Flanders points out two forces that can check this deterioration. In the first place, as P's working population engaged in industrial activities grows, demand for imports coming from C will increase at a diminishing rate. That is to say, there will be a *natural* process of import substitution. In the second place, it is a conspicuous fact that if a deterioration in P's terms and conditions of trade actually exists, the real per capita growth in this region will be less than that in country C—for which reason, even with high import income elasticity, the absolute increase in the value of said imports may possibly be equal to the growth in the demand for its exports.[36]

The formal presentation of Prebisch's arguments, undertaken by Edmar Bacha[37] toward the end of the 1970s, makes it possible to clearly identify the assumptions and implications underlying his analysis. Bacha develops a straightforward Ricardian model of general equilibrium, with class conflicts extant both in the center and in the periphery; this model allows him to analyze the terms of trade in the presence of a surplus labor pool in the periphery. According to this model, the level of periphery employment deteriorates amid conditions of technological progress if the "condition of immiserizating growth," formulated by Harry Johnson, is satisfied. This condition, let us recall, consists in the fact that the value of income elasticity in periphery import demand exceeds the Marshall-Lerner condition (that is, the sum of the absolute values of the price elasticities of import demand minus the unit). The economic import of this is easily understood: an increase in productivity in the periphery raises income in this region, consequently increasing its demand for imports. At the same time, it reduces the price of exports but increases their value (assuming a price elasticity of their demand greater than one). If the effect on incomes is greater than the effect on prices, employment levels will have to decline in order to maintain an equilibrium in the balance of payments. Prebisch's assumption (and Singer's, too) is that periphery income elasticity of import demand will be sufficiently high while price elasticity will be sufficiently low to satisfy Johnson's condition.

Nevertheless, from the empirical point of view, the question of the extent to which high imports income elasticity in developing countries is an exogenous variable or the result of policies adopted

still remains unanswered.[18] The importance of this critical line of thought should not be dismissed. The "intensity of imports in the process of substituting imports," to use Díaz Alejandro's expression, is, today, an abundantly acknowledged fact. We need only recall how the economic growth model adopted by Mexico during the period of stabilizing development translated into a growing dependency on imported products.

Flanders poses a second empirical question relating to the operation of Engel's Laws. Clearly, these laws do not apply to all periphery exports but rather only to the export of foodstuffs. Empirical evidence suggests that Engel's Laws are indeed satisfied and that the income elasticity in the demand for foodstuffs is less than one. But a corollary thereto, also empirically verified, is that this income elasticity is greater the lower the income level of the group.

Flanders takes issue with other aspects of Prebisch's argument. Concerning the tendency toward contraction in the rate of products imported by the United States, she points out the following:

(a) The relevant concept is the marginal, not the average rate.

(b) The relevant marginal tendency is the marginal tendency to import raw materials, not the tendency corresponding to total imports.

(c) The period selected by Prebisch (1919–48) could be skewed. Because almost two thirds of this period encompasses the Great Depression, the Second World War, and the initial post-War years, one might expect to find more years with percentages of declining, rather than increasing, imports.[19]

Finally, one of the reasons frequently cited for the low income elasticity in the center's demand for raw materials is the advent of synthetic substitutes. This seems logical. However, one implication deriving from the foregoing is that the price elasticity for periphery exports will similarly tend to increase.

Final Evaluation of Prebisch's Impact on ECLA

There can be no doubt about Prebisch's influence on ECLA. Only with difficulty can we imagine the Commission having the impact it did without Prebisch at its head. His perceptions concerning the deterioration in the terms and conditions of trade opened up a mother lode for economic prospectors of all persuasions. He was, moreover,

an original thinker. Five years before Arthur Lewis published his famous article "Economic Development with Unlimited Supply of Labor," Prebisch had worked up a similar concept in his *Economic Development of Latin America*, published in 1949.

Prebisch not only authored many theories, which would later be considered specifically ECLA theories; he also inspired several generations of economists who would continue his efforts and who created a school of Latin American economics. In the broadest sense of the expression, he was more than a brilliant economist: he was a singular intellectual visionary.

Paradoxically, however, his looming presence brought important, deleterious repercussions to the development of Latin American economies and to economic thought in prestigious academic centers of Latin America which I cannot fail to point out.

In his writings, Prebisch insisted on the inability of the neoclassical theory to understand the developing economic world. This suspicion had its effect on budding economists of the periphery countries who —unlike Prebisch — ceased being concerned with keeping tabs on what was going on at universities in the center countries. The fallout from this neglect was significant. Felipe Pazos acknowledged recently:

> The attack mounted by neoliberalism would have been inevitable in any event, but it was hastened by the excessive protectionism characterizing the model of Latin American development, which implemented that policy to a much greater degree than would have been necessary. This excess protectionism was due, basically, to our underestimation, as Latin American economists, of the ability of our countries to increase their foreign sales, moving from producers of primary commodities to exporters of all kinds of products, including manufactures. Protectionism was pushed far beyond any levels necessary to make it plausible that exports could increase at a rate of only 2 percent per year, a rate much less than that we hoped the economy would grow. This figure was based on calculations made in industrialized countries concerning their imports of primary commodities in the three of four subsequent decades and assumed that our countries would not be able to export manufactures on a competitive basis with industrialized countries. We figured that our industries would not be able to compete in the world marketplace with those of developed nations because they

> couldn't even compete in the domestic market, as evidenced by the fact that they needed protection. This line of reasoning did not take into account that exports would have enabled us to build larger and more efficient factories which, given our lower wage costs, could have competed advantageously in the world market, as did the burgeoning industries of Taiwan, South Korea, Malaysia and Hong Kong. However, since we did not appreciate that opportunity, we chose the route of domestically oriented development.[40]

That Latin American economists "failed to understand" the advantages of export-oriented growth and the inherent dangers of protectionism was due, in good part, to their disdain for neoclassical theory. In one of the very same articles she wrote criticizing Prebisch, Flanders was in 1964 already warning of the dangers associated with policies geared toward substituting imports with domestic products:

> We aren't denying that it is better for a country to derive greater benefits from international trade rather than fewer. But to earn less than your business partners doesn't imply that it's better to earn nothing. Nor do we mean to reject the advantages (from the standpoint of the stability of export derived income) to be achieved from diversifying exports. However, it is not obvious, and is, indeed, far from being so, that protectionism or even subsidies to encourage industrialization are going to result in an increase in the number of products exported. Unless the industries themselves protected implement commensurate cost cutting policies, tariff and customs protection will not likely translate to greater opportunities to compete successfully abroad, although the flow of imported goods will very probably contract.[41]

A quarter of a century later, Flanders's pessimistic predictions concerning the outlook of replacing imports have been fulfilled. Today, it is apparent that nations that decided to adopt export-oriented policies of economic growth not only have witnessed higher growth rates, they have also weathered external shocks far more successfully than nations which opted for the inward, domestic course of development. As Rolf Luders has pointed out, even accepting the fact that the elasticities in the value of exported raw materials are quite low, it is not evident that they couldn't expand their nontraditional exports in order to improve their balance of payments.[42]

The experiences of Hong Kong, Singapore, Taiwan, and South Korea are a clear lesson in the results of export-oriented policies. The economic indicators presented in Table 1 are the best evidence for the different policies implemented by these countries in comparison with Argentina, Brazil, and Mexico, countries that—to a greater or lesser degree—opted for models of economic development pegged to their internal, domestic markets. During the period elapsing between 1963 and 1985, the rate of real growth for these four Asian nations averaged 9 percent per year versus 5.3 percent for the three Latin American countries. Because the latter evidenced, on the average, a higher rate of population growth, the results in terms of per capita growth are even more dramatic: 6.9 percent per year, for the Asian countries, more than double the rate (2.9 percent) for Argentina, Brazil, and Mexico (Table 1).

Table 1 Economic Growth and Incremental Capital-Product Rates

	1963–85		
	GNP Growth Rate (percentage)	GNP Growth Rate Per Capita (percentage)	Incremental Capital-Product Rate
Hong Kong	8.5	6.2	4.1
South Korea	8.7	6.8	3.6
Singapore	9.5	7.8	4.3
Taiwan	9.2	6.8	3.3
Average for East Asian Countries	9.0	6.9	3.8
Argentina	2.4	0.8	9.8
Brazil	7.1	4.6	4.5
Mexico	6.3	3.2	4.6
Average for Latin American Countries	5.3	2.9	6.3

Source: Bela Balassa and John Williamson, *Adjusting to Success: Balance of Payments in the East Asian NICs*, Policy Analysis in International Economics, no. 17 (Washington, D.C.: Institute for International Economics, June 1987), pp. 2–3.

The behavior of the incremental capital-product rate in these two regions is also an indicator of the relative efficiency of both development models. While Argentina, Brazil, and Mexico registered rates of 9.8, 4.5, and 4.6, respectively, the corresponding rates for Hong

Kong, South Korea, Singapore, and Taiwan were 4.1, 3.6, 4.3, and 3.3.

We need not look far to find the explanation for this phenomenon. Today we know that policies oriented toward substitution of imports mean significant distortions in the factors market, which translate to relatively intensive industrialization in the use of capital. In the Asian countries, on the other hand, industrialization was predicated on exploiting the comparative advantages available, specifically, in the promotion of labor-intensive activities that could successfully compete in international markets.

Though it is true that there were important differences in the role played by the governments of these four countries in the promotion of development, and in the extent and speed of the processes of internal liberalization,[43] there is no denying that the promotion of foreign trade and an export-oriented process of economic growth were the underlying common denominators and priorities of economic policy in all of these experiences.

The four Asian nations adopted, to couch it in the terms recently used by Bhagwati,[44] an effective exchange rate (one that includes subsidies, taxes, and other factors affecting the structure of relative incentives between activities), which did not discriminate between exports and imports and which, when the anti-export bias inherent in the import-substitution policies was eliminated, favored reallocation of resources in the direction of foreign markets.

The results of these policies are today well known. The promotion of exports translated into strengthened foreign sales of traditional products; in addition, foreign currency was increasingly obtained through the export of manufactures. ECLA pessimism with regard to achieving industrialization through international trade finds its most severe repudiation in the performance of these countries. Table 2 shows how, between 1963 and 1984, the export of manufactures from these Asian countries rose from $1.762 billion to more than $55 billion. In 1963, they accounted for only 23.8 percent of total foreign sales, and this share rose to more than half (53.5 percent) of total foreign sales twenty years later. Although Latin American countries also greatly increased their exports of manufactures—from $575 million to $12.638 billion—during this same twenty-year period their dependence on sales of primary commodities as a fraction of total foreign sales grew from 17.8 to 24.8 percent.

Table 2 Exports from Various Countries

(1975 prices)

	Primary Commodities Non-oil Related		Manufactures		Total Products Non-oil Related	
	$ millions	per-centage	$ millions	per-centage	$ millions	per-centage
1963						
Hong Kong	115	0.3	1333	18.0	1448	3.1
Korea	97	0.2	84	1.1	181	0.4
Singapore	78	0.2	73	1.0	151	0.3
Taiwan	584	1.5	272	3.7	856	1.8
East Asian NICs	874	2.2	1762	23.8	2636	5.6
Argentina	2641	6.7	169	2.3	2810	6.0
Brazil	2941	7.4	90	1.2	3031	6.4
Mexico	1461	3.7	316	4.3	1777	3.8
Latin American NICs	7043	17.8	575	7.8	7618	16.2
1984						
Hong Kong	397	0.5	1193	11.5	12335	7.0
Korea	1206	1.6	18883	18.1	20039	11.3
Singapore	482	0.7	5205	5.0	5687	3.2
Taiwan	1625	2.2	19551	18.8	21176	11.9
East Asian NICs	3710	5.0	55527	53.5	59237	33.4
Argentina	5023	6.8	1002	1.0	6025	3.4
Brazil	10408	14.2	8157	7.9	18564	10.5
Mexico	2795	3.8	3479	3.4	6274	3.5
Latin American NICs	18226	24.8	12638	12.2	30863	17.4

Source: Bela Balassa and John Williamson, *Adjusting to Success: Balance of Payments in the East Asian NICs*, Policy Analysis in International Economics, no. 17 (Washington, D.C., Institute for International Economics, June 1987), pp. 8–9.

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