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# Protectionism and industrialization: A critical assessment of the Latin American industrialization period

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Protectionist policies were considered one of the pivotal features of the import industrialization process in Latin America. In this paper the effects of protectionist policies are assessed in terms of the principal macroeconomic variables, productive structure and external trade composition; also, ECLAC's perspective on the import substitution process is discussed. The main conclusions are that regional protectionist policies were spontaneous, and their effects were limited due to the generalized protection that took place and the government's commitment to price stability.

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## INTRODUCTION

Latin America underwent an import substitution industrialization that induced profound structural change in production and external sectors. An important policy objective of the Import Substitution Industrialization (ISI, hereafter) model was to protect domestic production sectors from external competition. Consequently, economic policy instruments such as quotas, tariffs, subsidies and special licenses were applied to imports and exports. Also, policies for financing specific economic and social sectors were imposed, along with various forms of government inter-

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vention (public investment and public enterprises) that identified the strategic economic sectors that were to lead the industrialization process.

Although the Latin American industrialization process brought positive results, they were insufficient for overcoming the region's basic underdevelopment. In fact some authors argue that while the Latin American (LA, hereafter) ISI model initiated the industrialization process long ahead of some South-East Asian (SEA, hereafter) countries, it was less successful (Stallings & Studart, 2006). LA countries ended up as *integrationist* economies, while SEA countries have been classified as more independent economies (Amsden, 2001, p. 14).

The reasons for the relative weakness of the ISI model in LA are multifaceted, especially in the region's three largest countries (Argentina, Brazil and Mexico). In this paper we shall concentrate on the study of protectionist policies adopted during the ISI period, emphasizing the structural composition changes in productive and external trade sectors that were unable to achieve the last step of independence, which is external technological independence.

Our hypotheses are, first, that protectionist policies in new industrial activities are essential to developing an industrial sector which, in turn, is crucial to attaining economic development (Edwards, 1993); second, that during the LA industrialization process, protectionism was homogenous in all manufacturing sectors and equally benefited domestic producers and multinationals; and finally, that technological innovation did not induce internal market deepness and more importantly, dynamic sectors did not internalize their technological innovations. The latter generated a process of technological imitation without asset knowledge acquisition.

This paper is divided into four sections. After this introduction, the following section focuses on assessing the behavior of the region's principal macroeconomic indicators and productive structural changes as well as external trade composition. The next section will discuss the main ECLAC ideas regarding industrialization, followed by a critical analysis of protectionist policies, and, finally, the main conclusions of this paper.

## MACROECONOMIC VARIABLES, PRODUCTIVE STRUCTURE AND EXTERNAL TRADE COMPOSITION

The region's principal economies have passed through three production modes. The Primary Export Model (PEM, hereafter) was characterized by producing low-income subsistence goods, via pre-capitalist production modes, along with primary export goods through capitalist production modes, which formed enclaves. This led to high levels of income concentration, along with distorted consumption demand structures, with high contents of luxurious goods, above the country's development capacity, met by imports ~~in~~ducing low levels of labor demand and reduced wages.

After the Second World War, the ISI process extended throughout LA. Unlike in England and other Western European economies, the industrialization process

was initiated in LA countries through import substitution of existing demand, characterized by high components of luxurious goods.

The demise of the Bretton Woods system and the LA external debt crisis (1982) modified the production mode which, as in the PEM, switched to the external sector, with a range of different exports again becoming the engine of economic growth. In this period manufacturing (especially high-tech) exports grew and became the leading group. This process is known as the Secondary Export Model (SEM, hereafter) or the neoliberal period, in which it is supposed that economic growth depends on market forces, and differences between developed and developing economies become meaningless (see Kregel, 2005, and Edwards, 1993, for a critical discussion of the concept of development).

**Economic growth in LA and the region's largest countries**

A fundamental characteristic of the LA import substitution industrialization period corresponds to the accelerated economic growth rates that in 1970-1974 attained their highest levels, then declined, and did not return to the previous high levels. Therefore, two periods can be identified in the postwar era, one of high economic growth rates, when ISI policies dominated; and, another of lower growth rates, ruled by market mechanisms, and deregulated and liberalized economies (see Table 1).

The highest economic growth rates during the ISI period were induced by increased gross fixed capital spending that in the 1960s and first half of the 1970s achieved a record, even above that of OECD countries (see Table 1), but it was not sufficient for overcoming underdevelopment. In the neoliberal period, investment spending was drastically affected, diminishing investment coefficient levels, which in some countries were below export participation in the GDP. This was the case in Mexico and the LA region during the 2000-2005 period. In Argentina and especially in Brazil, although the investment coefficient diminished in relation to previous periods, it was still above the export coefficient (see Table 1).

The LA export performance was quite unique. From the late 1960s and through the 1970s, LA exports increased at accelerated levels, reaching values above OECD levels. However, in the following (neoliberal) period, despite the promotion of exports (or export-driven growth), LA export participation was below OECD levels, with the exception of Mexico (see Table 1).

Finally, despite export growth rates and higher export coefficient rates, the external trade deficit remained, and was especially large in Mexico (see Table 1). This meant higher multiplier income leakages and insufficient vertical integration.

On the basis of the performance of macroeconomic variables, two phenomena can be stressed. First, in the ISI period, the investment coefficient was higher in relation to the SEM, giving way to the export coefficient in the following period. Second, the trade deficit is a structural characteristic of Latin America, reflecting the *truncate* (incomplete) LA industrialization process (Fajnzylber, [1990] 1998).

**Productive structure of LA and the region's three largest countries**

Between 1960 and 2005, industrial value-added participation in the GDP in LA was one third, on average (see Table 2), and from that time on, two different periods can be detected. The first had higher industrial growth rates, reaching participation levels near 40% of the GDP, while during the second period (from the 1990s on) there were lower industrial participation levels, near 30% of the total GDP (see Table 2). Hence, the ISI model definitively transformed the production structure in favor of industrialization without drastic reversals in the neoliberal period.

The valued-added participation of the services sector in the GDP was quite relevant with high growth rates beginning in the 1990s (see Table 2). However, the agriculture sector showed an inverse trend. It was high during the first years of the ISI period, but after the intense stage of the import substitution industrialization process began, together with export promotion policy, the agriculture share in the total GDP dropped dramatically, by half of its total value during the 1965-69 and 2000-2005 periods (see Table 2).

Taking a look at the three largest LA countries, we find that Argentina showed the higher industrial value participation in GDP during the 1960s and 1970s, followed by a decrease in the 1980s, and reaching its lowest levels in the 1990s and 2000s, below levels in Mexico and Brazil. These latter two countries have similar industrialization patterns. An important observation is that beginning in the second half of the 1990s, an industrial gap evolved between Mexico and Brazil (to the detriment of Mexico, see Table 2), despite the enormous Mexican export manufacture growth rate, which will be discussed in the next section.

In Mexico and Argentina the value-added participation of the services sector increased notoriously from the 1990s on, due to the presence of external financial services. The impact on Brazil was minimal, and it retained its public banks, which are one of the most important finance institutions constructed during the ISI period for the purpose of backing economic growth. Therefore, globalization in Argentina and Mexico drastically modified the financial sector, which once again had weak connections with the rest of the economy (in Mexico the credit coefficient has not surpassed 13% of the GDP since 1995). The reduced importance of the agriculture sector is more evident in Mexico, where it shrank to just over a third of what it was, while in Brazil it was reduced by half. Argentina experienced ups and downs, recovering its initial levels after the 2001 crisis (see Table 2).

Summing up, during the ISI period the region became industrialized, with investment spending as the main driving force of economic growth. In the SEM, although industrialization decreased, its trend was not reversed, and the main driving force shifted to manufactured exports.

Therefore, while the LA industrialization process triggered a virtuous circle that increased economic growth, it was unable to overcome underdevelopment. Unemployment and low wages continued to be the unresolved issues, which drastically deteriorated in the *neoliberal* years (see Levy, 2007, and Ross, 1994, on Mexico).

**External sector composition**

The composition of the external sector reflects the structural changes that took place during the ISI and neoliberal periods. Up until 1965, the bulk of exports came from non-fuel primary products (food and live animals, beverages and tobacco, raw materials,[1] vegetables and animal oil). However, export promotion policies modified the external trade composition. Manufactured exports increased drastically, up 10 points in Argentina and Brazil during the 1975-1980 period, while in Mexico, this change took place earlier (1970-1974) (see Table 3). The more striking feature is that high-tech manufacturing branches (chemical, machinery and transport equipment) took the leading role, dominating manufacturing exports and even total exports (see Table 3).

The opposite occurred with primary goods. By 1990, primary goods exports reached 22% of total exports in Mexico, with 10% corresponding to mineral fuels. There was a similar trend in Brazil, although not as extreme, with export participation by primary products cut in half in relation to total exports. In Argentina, on the other hand, although export participation by primary products diminished, it remained relatively high (see Table 3).

Therefore, export promotion policies concentrated in high-tech manufactures, distorting the industrialization process, since the investment coefficient dropped. Consequently, the external dependence of these final goods increased even more due to their higher import content (intermediate and capital goods), since backward linkages were not accomplished. This trend was more evident in Mexico.

LA countries went through a different process than SEA countries, since the export composition of the latter began in sectors with low technology contents (see Levy & Fujii, 1993), and upscaled to higher technological commodities, as soon as backward linkages of lower-tech productive processes had been dominated. With these conditions it is argued that the SEA region went through a process of acquiring asset based knowledge, rather than only imitating technical innovations, as was the case in LA.

From the analysis of the external trade deficit of the three largest countries (see Table 3, part B) can be highlighted, first, that manufacturing goods (especially of high sectors) became the main source of that deficit, since final consumption goods dominate, while intermediate inputs and means of production are imported. The reason is that the LA industrialization process satisfied the existing internal demand, generated by middle and upper income classes, with high contents of luxurious goods that were above the development level of these countries. It can be argued that this industrialization route biased the production structure against the enlargement of internal markets and against backward linkages.

The second outstanding feature of the external trade deficit is that during the ISI period, the primary product surplus could finance the manufacturing deficit,

[1] Subsector 68 (non-ferrous materials) was added to the raw material sector and removed from basic manufactures.

however this situation did not continue, since primary product exports became weaker and there was no leading manufacturing industry that could accomplish this task. In other words, although manufacturing exports increased in the neoliberal period, none of them developed backward linkages, which would have reduced imports and financed the rest of the economic trade deficit.

Finally, it is important to highlight the persistence of import-export price demand inelasticity and income-demand elasticity. Economic crises (income reduction) lower manufacturing import demand, which can reduce the current account deficit or even turn a current account deficit into a surplus (the case of Mexico in 1995). This means that a lower current account deficit (surplus) is not due to price changes (devaluations), but rather is caused by import income-demand elasticity, and import price-demand elasticity is not so significant. It is also important to highlight that trade agreements that include industrial countries are short lived; for example, NAFTA's positive effects only lasted five years in the Mexican economy.

From the above discussion we can argue that LA did not attain technological independence or achieve homogenous productive sectors since the region's dynamic sectors did not develop close links with indigenous sectors, which remain highly underdeveloped. Nor did domestic capital production evolve. Consequently, the external trade deficit remained as a structural characteristic of LA.

Summing up, we can say that in the three largest LA countries, there was a significant process of industrialization and it modified their production structures as well as the composition of their external sectors. However, dependence continued to be a structural characteristic of the region, and this limited taking ownership of asset based knowledge.

In none of the countries was a sector (subsector or industry) constructed that could trigger economic growth and modify the unequal terms of trade. This situation worsened during the neoliberal period, since high-tech manufacturing exports increased and consequently, so did imports with high technological contents.

## LIMITATIONS OF PROTECTIONIST POLICIES DURING THE ISI PERIOD

To understand the main strengths and weaknesses of the ISI process, we will first discuss the concept of underdevelopment, as expressed by ECLAC, to identify the initial conditions of the *peripheral* (term coined by ECLAC) countries or "the *rest*" (term coined by Amsden, 2001). Then, we will discuss Prebisch's propositions of industrialization, and finally, we will analyze protectionist policies to determine whether they were part of ECLAC proposals or a result of the economic and political situation in the region.

### The concept of underdevelopment

Most theoreticians that analyze the conditions of *peripheral* countries (Fajnzylber, Furtado, Prebisch, Sunkel, Amsden) emphasize that the third *industrial wave* was different from the previous two (in Great Britain and Western

Hemisphere countries), since there were no "technical innovations" or "conditions of empty countries with vast productive resources". To the contrary, pre-capitalist structures coexisted alongside export *enclaves*.

The main hindrances of heterogeneous production structures are that internal markets remain shallow and small, as do wages and the labor force demand, since the non-capitalist sector determines the working conditions (labor demand and wages) of the entire economy (Fajnzylber, 1983). Hybrid production structures (Furtado, [1971] 1998) neutralize the *dragging* effects of capitalist enterprises due to their weak backward linkages and limited connections with the *indigenous* sectors.

Development and underdevelopment are partial and interdependent structures making up the economy as a *whole*, with one (dynamic) structure dominating by virtue of its endogenous capacity of development; and the other (underdeveloped) is dependent due to its induced character (Sunkel, [1970] 1998, p. 509). This unequal production structure causes the developed (dynamic) sector, usually under foreign domination, to maintain weak relations with the local economy (internal sectors) and strong links with matrix houses (i.e., external markets). Because of these conditions, developed sectors (enclaves) are unable to take advantage of potential growth opportunities, and peripheral export prices reflect higher productivity through price reductions (in booms and recessions). At the same time, the prices of imports (from *central* countries) are not modified, despite their increased productivity (see Bielschowsky, pp. 21, 22).

Technological innovations are the heart of industrialization processes and the only way to overcome economic and social backwardness. In order to move on to more sophisticated industrial structures, government intervention is essential.

**Latin American industrialization routes**

In the late 1930s, a "spontaneous" ISI process was initiated in LA and continued throughout the Second World War, and this encouraged ECLAC views of industrialization that built up the notion of underdevelopment. This special condition, argued Prebisch, was ignored by dominant (mainstream or heterodox) economic theories.[2]

Prebisch ([1941] 1998) claims that the industrialization process should rely on the triad of higher investment spending along with vertical productive integration (i.e., domestic technology development); higher exports based on primary products that need to undergo a process of technological advances and mechanization; and higher external demand to guarantee enough international reserves for *peripheral* countries to finance economic growth. Prebisch did not support the so-called au-

[2] Dominant economic theories do not consider the characteristics of peripheral countries, and impose a false sense of universality (quoted in Bielschowsky, 1998, p. 16). Kregel (2005) adds the autarky conditions of mainstream economic theories that fail to recognize the reality of open economies and government intervention, which have been a part of post-conquest Latin America. Under these conditions, price mechanisms are unable to function as key instruments of economic development.

tarkic *peripheral* industrialization process, and therefore there are no grounds for discussion on *inward* and *outward* growth strategies, at least not in relation to ECLAC views.

The industrialization process requires higher industrial shares in the GDP, backed by dynamic export sectors, which should initially come from primary sectors already in existence. Prebisch advocates international trade, placing great importance on agricultural goods that should undergo a process of technical innovation and mechanization in order to raise productivity (ibid, p. 67). This will, consequently, satisfy the internal market with low prices, and more importantly, will constitute an export base that will convert agriculture into the main financial source for development. The agricultural sector's modernization is of utmost importance since it guarantees food autonomy.

Prebisch was highly skeptical of the benefits from foreign capital participation (foreign direct investment, FDI, or foreign financial capital – even in the form of external government credits), since multinationals do not transfer the more dynamic technological innovations to host-*peripheral* countries; and "financial services may not be fulfilled" as in the great depression (ibid, p. 69). He argues that financial services should be paid with new foreign investment or with exports sold in the indebtedness currency (for example, matching currency techniques).

Technological promotion is highly important in any industrialization process, and more importantly, countries need to specialize in sectors different from those dominating industrial or western hemisphere economies, to avoid market fractioning. Amsden (2004) takes up this argument, demonstrating that technological specialization in specific sectors was highly successful in SEA countries (using the example of Taiwan), backed by government technological finance and government support in the insertion of domestic industries (or specific goods) into international productive linkages. Amsden emphasized that this support is even compatible within globalization.

Prebisch was, however, extremely cautious about public financing through liquidity expansion (forced inflation). He was aware that internal savings were insufficient to finance economic growth but he was doubtful as to whether higher money circulation would be channeled to investment spending, due to excessive luxurious consumption (at least above domestic productive development levels). It should be stressed that Prebisch did not favor protectionist policies, and this will be discussed later.

The nodal issue proposed by Prebisch and ECLAC is that economic development requires an industrialization process in order to overcome unequal terms of trade, and it must be supported by asset based knowledge rather than simple technical imitation. Summing up, the industrialization process as proposed by ECLAC was far from what many proclaimed it was. Agriculture was extremely important in the process of industrialization since it was to provide cheap food and constitute the engine of export growth ~~-sin~~ce LA agriculture was supposed to have comparative advantages. Second, industrial activity should be expanded in sectors that compete with industrial economies (new activities should play a complementary instead of

substitution role in relation to *central* economies) and should go from low to high technological contents. In addition, pre-capitalist underdeveloped sectors must evolve to increase labor demand and wages in order to unleash technical innovations along with backward integration (see Kalecki 1954, for further explanation). Third, governments should be at the center of the industrialization process, supporting scientific and technical advances for productive innovations and inventions, and becoming export promoters. Finally, the import substitution industrialization process should not be limited to fulfilling the existing (luxurious) consumption demand. Prebisch argues that luxurious goods should be curtailed to create new non-competing industries in relation to western countries.

**Protectionist policies in the ISI model**

The Latin American industrialization process developed on the basis of the historical peculiarities of the period. In terms of external factors, the features of the US economy defined economic relations in the region. Particularly notorious was the low US import coefficient level, which signified low external demand for LA economies. Second, the broad US production structure limited the specialization of LA productive structures, and restrained export growth drive. Amsden (2001, pp. 179-180) highlights that the US economy lacked a leading sector, and it pioneered exploitation of the same non-reproducible raw materials as LA countries (petroleum, for example). Also, it had too many export sectors that could not be easily "targeted" for promotion. Consequently, LA was unable to replicate the product composition, and had to improvise its own export basket. Finally, US resource-intensive manufacturing exports were driven by advanced technology that was not shared with foreign competitors. Hence, in comparison to SEA countries under Japanese leadership, LA faced more difficulties in becoming the US supplier, and thus, in increasing exports on an ongoing basis.

In terms of internal factors, the commitment of LA governments to price stability made inflation control a major policy objective, even at the cost of lowering wages (see Noyola, [1957] 1998). Furthermore, in contrast to Korea, there was no national social-political agreement to construct an industrialization process or an endogenous domestic core of enterprises that would lead the industrialization process. Archaic production sectors were not destroyed, and foreign producers were not expelled – not even in Mexico, where Mexican Revolution took place during the early decades of the 20th century. Although the war paralyzed the economy, it did not modify the country as much as the Korean War did in the 1950s.

In relation to protectionist policies, the first observation is that they were imposed in LA much before the industrialization process took place. In part, this was due to the scarcity of international reserves during the early decades of the 20th century, and this left countries with insufficient liquidity to finance their external trade. Second, this was a result of policy imitation (Amsden, 2001, Table 7.5, p. 175). Import duties, tariffs and non-tariff barriers were imposed in the United States in the late 19th century and early 20th century. Therefore, protectionism was not a

planned policy for protecting infant industry as in the US industrialization process. To the contrary, it was a spontaneous response to US dominance in LA.

Furthermore, Prebisch (p. 84) argued that protectionist policies are better suited to industrial (*central*) countries, because after these economies reach maturity, advanced technological sectors subsidize less advanced sectors, increasing their wages, and this reduces their ability to compete with advanced industries that pay lower wages. Protectionism is seen as a means to distribute income, rather than to fortify productivity and industrial robustness. In this context, Prebisch stressed the importance of technical innovation and the acquisition of domestic asset based knowledge rather than the use of protectionist policies.

Protectionism was seen in a different way in SEA countries. It protected specific (new) activities from external competition and limited luxurious imports. The main objective was to construct an endogenous industrial core, under domestic enterprises, and allied with the state. Imports were complementary, since industrial activity was highly specialized, and in a later stage would undergo substitution processes, generating strong backward linkages. Protectionist policies were also dynamic.

In contrast, LA protectionist policies were applied to the entire manufacturing sector, (i.e., a general scheme for finished manufactured goods). Multinationals and domestic enterprises were equally eligible under protectionist policies, and imports were supposed to be composed of intermediate and capital goods, mainly demanded by multinationals and public enterprises. Therefore, technology transference was limited to an adaptation process and its objective was to reduce production costs of final manufactured private goods through import subsidies and lower prices of public goods, usually used as inputs for private manufacturing industries (electricity, for example).

The instruments for protectionist policies during the industrialization process were tariffs, fiscal exemptions and non-tariff instruments such as quotas (in terms of volume and commodities listing) and discretionary direct controls, affecting both imports and exports. Their main objective was to increase the prices of imports in the internal market that were under substitution processes, and to raise the internal supply of domestically produced goods subjected to exports. Protectionist policies can be measured through prices (domestic and external) and value-added differentials (with and without protectionist policies)[3] (see Edwards, 1993 for a broad

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[3] Two protectionist rates were determined. The *w* rate calculates protectionism in terms of price differentials and the *z* rate considers the value-added differential.

$$w = \frac{p^d - p^*}{\mathrm{p}^*} \;;\; p^* = Rp^{\mathrm{US\$}} \;\Rightarrow\; w = \frac{p^d - R^{\mathrm{US\$}}}{\mathrm{Rp}^{\mathrm{US\$}}}$$

$$z = \frac{y^d - y^*}{y^*} = \frac{y^d - y^{\mathrm{US\$}}}{\mathrm{y}^{\mathrm{US\$}}}$$

w: nominal protection rate of the good considered; $p^d$: domestic price; $p^*$: the hypothetic price that would dominate in the absence of protectionist policies; R: exchange rate between pesos and dollars; $p^{US\$}$: the dollar price of the good in the external market.

z: effective protectionist rate; $y^d$; value added per unit at domestic prices; $y^*$: value added in the absence of protectionist policies; $y^{US\$}$: value added in international prices.

criticism of protectionist measurements). After the Second World War, Argentina practically ceased its use of tariffs and relied on agricultural primary products to finance its rapid industrialization process during the 1960s. Brazil relied on tariff instruments and continued to be among the more protected economies, while Mexico relied on non-tariff instruments, such as special import permits (quotas) and fiscal exemptions, without the use of exchange rate controls or multiple exchange rates.

There are many studies on protectionism in Mexico's ISI period (see Wallace & Ten-Kate, 1979) that, using different methods, found negative agriculture protectionist rates (lower prices than the rest of the world) for 1970, if minimum guaranteed agricultural prices were not considered. The mining sector (metallic and non-metallic commodities) also had negative rates, reflecting the price controls on basic commodities and taxes designed to limit their exporting, since they were channeled to the manufacturing sector. Consequently, the traditional sectors (includes divisions from 1 to 6 and 7 to 19) that dominated the pre-ISI model were not subject to subsidies or to efforts to increase their productivity. In these sectors profits showed a downward trend.

Non-durable and durable consumption goods were mainly produced in modern sectors (sectors 20 to 35) and enjoyed high protection rates (see Wallace & Ten Kate, 1979, Chapter 2 Appendix, pp. 139-154). More astonishing is that almost any enterprise could apply for protective policy treatment without being asked for anything in return,[4] making it extremely easy to become a protected industry. Wallace (1979) relates that after the mid-1960s, import permits and tariffs (under Treasury Ministry control) could be requested by almost anyone (individuals or businesses, public offices and decentralized public institutions) and were reviewed by consultant committees organized around the SIC (Standard Industrial Classification). The decision to grant protection was made on the basis of whether the goods to be protected were produced in the country, and on other information such as delivery dates and quality conditions. The price differentials between domestic and international markets were not essential, and could be above 100%, justified on industrialization needs per se (ibid, p. 51). Only an imbalance in the Balance of Payment would consider the argument of price differentials and would reduce import permits, reflecting the import income-demand elasticity and price–demand inelasticity. Therefore, a major issue was exchange rate stability, plus the overvalued exchange rate that would reduce import costs and a higher investment coefficient.

An interesting point raised by many LA observers is that despite the relation between high shares of the metal-mechanic sector in total production and high protectionist rates, industrial integration was weak. Fajnzylber (1983, p. 184) ar-

[4] Before 1966, price differentials could not be above 15%-25%, and there was also a scheme of compensated exchange, which was needed to export another good whose total ought to equal the value of the imported good.

gued that the metal-mechanic sector (characterized by its high technology content) had experienced heterogeneous development. Compared with industrial countries, the electric and non-electric machinery sectors in LA had lower shares in total production; while metallic products (less complex in technological terms) had higher ratios in relation to industrial countries. Consequently, the more technologically complex production was not transferred to LA and remained in the *industrial* countries. In other words LA specialized in the production of final consumption goods in the metal-mechanic sector that require high import levels with high technology. Additionally, domestic capital goods production in LA is less technically complex than the capital goods imported.

Furthermore, the limited technological transference was also due to the fact that domestic capital goods were produced by multinational branches that produced machinery and equipment, hence foreign enterprises were simultaneously producers and importers. Their decisions in terms of what to produce domestically and what to import, were made considering the multinational as a whole, rather than focusing on attaining technological independence in the host countries.

Another important argument that explains the relative low technical complexity of capital goods produced in LA countries was that industrialization policies stressed the importance of increasing the volume of investment in relation to production, which required low investment costs. Thus governments preferred to import capital goods that were subsidized by development banks through lower interest rates, direct import subsidies, and special credit lines, instead of using goods produc domestically. The overvalued exchange rate was a key variable.

Fajnzylber ([1990] 1998, p. 837) argues that the implementation of protectionist policies privileged a showcase modernity (*modernidad de escaparate*), since multinationals were encouraged to transfer their know-how regarding final consumption goods to LA in order to remain in the market and to prevent competition from other foreign enterprises. Technological transference was limited to capital goods required to produce final goods, without any commitment on transferring technology for producing these capital goods. Domestic (national) producers were relatively banned from the capital goods sector, since they could not compete with external multinationals to acquire new techniques, and they did not have access to international financing. Meanwhile, domestic finance policies did not make any special concessions for them.

Izquierdo (1995) argues in the case of Mexico that the so-called *Mexicanization* process (the construction of Mexican enterprises) was limited to certain sectors (mining, electricity, financial system, commerce and construction) while multinationals concentrated on the manufacturing sector (in 1959 they represented 42.8%, and in 1970, 73.8%). An alternative strategy followed by Mexican enterprises was to form partnerships with multinationals in order to share the considerable benefits from protectionist policies. Therefore, the way protectionist policies were implemented led to limited competition, and more importantly, higher prices and inefficiencies.

## CONCLUDING REMARKS

There is no doubt that the ISI period brought positive results, including high levels of economic growth attained, fewer episodes of economic crises (stagnation and financial crisis), and perhaps more importantly, transformation of production structure, incorporating higher industrial activity levels. These transformations were absolutely necessary, but not sufficient to trigger economic development. An evaluation of the ISI period in relation to the SEM leaves no doubt as to the better macroeconomic performance in the former period.

However, the ISI period was not a complete success. Its major failure was its incapacity for developing productive sectors that could finance development, overcome technological dependency and guarantee food sovereignty. Despite the industrialization process, underdevelopment structures remained and led to high income economic concentration, and limited internal market development – resulting in lower labor demand and reduced average wages. This was accompanied by income inequality, signifying that large sectors of the population remained beneath the poverty line, constituting a buffer for increasing prices.

Within the scope of this paper, it can be said that the protectionist policies were not part of ECLAC recommendations. To the contrary they resulted from internal and external conditions, especially political in nature that dominated the Latin American region after the Second World War.

The main problems of protectionist policies were: first, their generalization, including all manufactured goods for which there was internal demand, and thus protectionist policies were used to produce high-tech final goods. The most striking example is the development of the auto industry that prioritized public infrastructure investment toward private transport, ignoring other important means of transportation (railway infrastructure almost disappeared) and requiring large amounts of financial resources. In addition, some of the most important ECLAC claims (particularly by Prebisch) were not fulfilled: the demand for luxurious items was not curtailed, the current account deficit remained, and more importantly, government intervention or resource mobilization was not concentrated in sectors that could guarantee economic development.

Second, protectionist policies covered domestic and foreign capital equally. There was no intention to build a national industrial core to develop and fortify backward or forward linkages. In other words, there were no policies directed toward maximizing raw materials absorption and specializing particular manufacture sectors. Even more significantly, there was no attempt to plan the industrialization process. In this context it can be argued that the definition of protectionism was extremely broad, covering the entire manufacturing sector, and there was no intention to acquire and develop asset knowledge in order to construct capital goods. The objective of protectionist policies was to reduce costs with no *quid pro quo* that would oblige multinationals to move their laboratories to host countries or to develop scientific knowledge in host countries (for an interesting discussion, see Ha-Joon Chang & Grabel, 2004, Chapter 9).

A key reason for not following more selective protectionist policies was the commitment to price stability. The main objective was to increase the investment coefficient at lower costs. Therefore, subsidies were preferred since they subsidized investment imports. The commitment to exchange rate stability (and an overvalued exchange rate) can be understood along these lines.

Finally, LA faced more difficulties in comparison to other developing regions because of the characteristics of the US economy, primarily low import capacity and a wide range of manufacturing that made LA industrial specialization more difficult.

Our main conclusion is that the industrialization process through import substitution did not fail. What went wrong is the implementation policy of not guaranteeing enough exports to finance economic growth, and inducing a process biased toward price stability rather than technological independence. The more important shortcoming is that industrialization was biased against technological independence and against the construction of a domestic core that would lead the country's development.

In conclusion, it can be argued that there is still some space for public policies aimed at increasing industrialization activity, even under globalization schemes, by supporting the development of technical advance through public financing of technological research, backed by trade policies that insert domestic production into international production chains. Governments continue to be key institutions in the process of development.

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Table 1: GDP and its principal components

| | High Income OECD* | | | | Latin America | | | | Argentina | | | | Brazil | | | | Mexico | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | □GDP | I/GDP | X/GDP | X-M/GDP | □GDP | I/GDP | X/ GDP | X-M/GDP | □GDP | I/GDP | X/GDP | X-M/GDP | □GDP | I/GDP | X/GDP | X-M/GDP | □GDP | I/GDP | X/GDP | X-M/GDP |
| 1960-1964 | 4 | 17 | 7 | -1 | 4 | 20 | 11 | 1 | 2 | 20 | 4 | -1 | 4 | 19 | 4 | -3 | 6 | 24 | 4 | -7 |
| 1965-1969 | 4 | 20 | 8 | -1 | 4 | 21 | 11 | 1 | 3 | 19 | 4 | 0 | 6 | 20 | 4 | -3 | 5 | 28 | 4 | -6 |
| 1970-1974 | 3 | 22 | 10 | -1 | 5 | 22 | 10 | 0 | 3 | 21 | 4 | 0 | 9 | 23 | 4 | -6 | 5 | 26 | 4 | -7 |
| 1975-1979 | 3 | 20 | 11 | 0 | 4 | 23 | 9 | -2 | 2 | 22 | 5 | 1 | 5 | 24 | 4 | -5 | 5 | 27 | 4 | -6 |
| 1980-1984 | 2 | 19 | 13 | 1 | 0 | 20 | 10 | 0 | -1 | 19 | 5 | 0 | 0 | 20 | 5 | -1 | 1 | 23 | 7 | -3 |
| 1985-1989 | 3 | 21 | 13 | 0 | 2 | 18 | 12 | 2 | 0 | 15 | 6 | 3 | 3 | 22 | 7 | 1 | 1 | 17 | 10 | 1 |
| 1990-1994 | 2 | 21 | 15 | 0 | 3 | 19 | 14 | 0 | 7 | 16 | 7 | 0 | 2 | 21 | 8 | 1 | 3 | 21 | 12 | -5 |
| 1995-1999 | 2 | 22 | 19 | 0 | 2 | 21 | 18 | -1 | 3 | 18 | 10 | -1 | 1 | 22 | 9 | -3 | 4 | 20 | 19 | -5 |
| 2000-2005 | 2 | 21 | 22 | -1 | 2 | 20 | 23 | 0 | 2 | 15 | 13 | 3 | 2 | 20 | 13 | 2 | 2 | 22 | 30 | -4 |
| Average | 3 | 21 | 15 | 0 | 3 | 20 | 15 | 0 | 2 | 18 | 7 | 1 | 4 | 21 | 8 | -1 | 4 | 22 | 17 | -2 |

* High Income countries data covers till 2004.
□ GP: Anual average growth of the period.
Source: Own calculations based on "World Development Indicators", 2007, CD, World Bank.

Table 2: Average Valued added as a porcentage of GDP

| | 1960-1964 | 1965-1969 | 1970-1974 | 1975-1979 | 1980-1984 | 1985-1989 | 1990-1994 | 1995-1999 | 2000-2005 | Mean | SD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **High Y OECD*** | | | | | | | | | | | |
| Agriculture | | | 5,5 | 5,0 | 3,8 | 3,0 | 2,6 | 2,0 | 2,0 | 3 | 2 |
| Industry | | | 38,0 | 37,0 | 35,8 | 33,2 | 30,4 | 28,6 | 26,6 | 33 | 19 |
| Services | | | 56,3 | 58,4 | 60,8 | 63,4 | 66,8 | 69,2 | 71,8 | 64 | 33 |
| **LA&C** | | | | | | | | | | | |
| Agriculture | | 14,1 | 13,0 | 11,8 | 10,1 | 10,2 | 8,4 | 7,6 | 7,6 | 10 | 9 |
| Industry | | 34,4 | 36,8 | 38,2 | 39,1 | 39,2 | 34,4 | 30,6 | 32,9 | 36 | 13 |
| Services | | 51,3 | 50,4 | 50,1 | 50,9 | 50,7 | 57,3 | 61,7 | 59,5 | 54 | 27 |
| **ARGENTINE **** | | | | | | | | | | | |
| Agriculture | | 10,4 | 10,7 | 7,6 | 7,9 | 8,4 | 6,4 | 5,5 | 8,5 | 8 | 3 |
| Industry | | 48,0 | 44,2 | 47,8 | 40,8 | 39,1 | 31,5 | 28,4 | 32,0 | 39 | 58 |
| Services | | 41,6 | 45,1 | 44,6 | 51,3 | 52,5 | 62,2 | 66,1 | 59,4 | 53 | 80 |
| **Brazil** | | | | | | | | | | | |
| Agriculture | 18,3 | 15,4 | 12,9 | 12,5 | 10,6 | 10,3 | 8,2 | 8,2 | 8,8 | 12 | 12 |
| Industry | 37,1 | 35,3 | 38,8 | 39,9 | 44,6 | 44,5 | 39,0 | 30,4 | 36,8 | 38 | 19 |
| Services | 44,6 | 49,4 | 48,3 | 47,7 | 44,8 | 45,2 | 52,8 | 61,4 | 54,4 | 50 | 31 |
| **Mexico*** | | | | | | | | | | | |
| Agriculture | | 12,2 | 12,2 | 11,0 | 8,8 | 9,1 | 6,9 | 5,5 | 4,0 | 9 | 9 |
| Industry | | 28,1 | 31,6 | 32,7 | 34,1 | 33,9 | 27,6 | 28,4 | 26,6 | 30 | 9 |
| Services | | 59,7 | 56,1 | 56,3 | 57,1 | 56,9 | 65,5 | 66,1 | 69,4 | 61 | 28 |

LA&C: Latin America & Caribbean countries.

* No data available between 1960 and 1971 and 2005.

** No data available between 1960 and 1964.

Source: Own calculations based on "World Development Indicators", 2007, CD, Word Bank.

Table 3: Exports and Imports according to division
(%, on the basis of millions of dollars, constant prices, 2000=100)[1, 3]

| A | Exports | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PRIMARY PRODUCTS[2] | | | | | | Manufactures | | | | | |
| | Argentina | | Brazil | | Mexico | | Argentina | | Brazil | | Mexico | |
| | TOTAL | FM | TOTAL | FM | TOTAL | FM | TOTAL | M/HT | TOTAL | M/HT | TOTAL | M/HT |
| 1955 | 94 | 0 | 98 | 0 | 91 | 7 | 6 | 5 | 1 | 1 | 9 | 2 |
| 1960 | 96 | 0 | 97 | 1 | 87 | 3 | 4 | 3 | 2 | 1 | 13 | 4 |
| 1965 | 95 | 1 | 92 | 0 | 85 | 4 | 5 | 4 | 8 | 3 | 15 | 6 |
| 1970 | 86 | 0 | 87 | 1 | 67 | 3 | 14 | 7 | 13 | 5 | 33 | 19 |
| 1975 | 76 | 0 | 74 | 3 | 67 | 16 | 24 | 17 | 26 | 13 | 33 | 18 |
| 1980 | 77 | 3 | 63 | 3 | 88 | 67 | 23 | 11 | 37 | 20 | 12 | 8 |
| 1985 | 79 | 7 | 55 | 6 | 79 | 65 | 21 | 11 | 44 | 22 | 21 | 15 |
| 1990 | 71 | 8 | 47 | 2 | 56 | 37 | 29 | 12 | 52 | 25 | 43 | 32 |
| 1995 | 66 | 10 | 45 | 1 | 22 | 10 | 34 | 17 | 53 | 26 | 77 | 56 |
| 2000 | 66 | 18 | 39 | 2 | 16 | 10 | 32 | 20 | 58 | 34 | 83 | 62 |
| 2005 | 69 | 17 | 47 | 8 | 22 | 15 | 31 | 19 | 53 | 32 | 77 | 56 |
| B | Exports – Imports | | | | | | | | | | | |
| | PRIMARY PRODUCTS [2] | | | | | | Manufactures | | | | | |
| | Argentina | | Brazil | | Mexico | | Argentina | | Brazil | | Mexico | |
| | TOTAL | FM | TOTAL | FM | TOTAL | FM | TOTAL | M/HT | TOTAL | M/HT | TOTAL | M/HT |
| 1955 | 33 | -17 | 42 | -25 | 62 | 0 | -34 | -23 | -42 | -36 | -62 | -57 |
| 1960 | 55 | -12 | 51 | -18 | 71 | 0 | -55 | -41 | -52 | -44 | -71 | -64 |
| 1965 | 57 | -9 | 42 | -21 | 67 | 1 | -57 | -13 | -42 | -35 | -67 | -58 |
| 1970 | 59 | -4 | 54 | -13 | 47 | 0 | -59 | -14 | -54 | -46 | -47 | -43 |
| 1975 | 43 | -13 | 36 | -23 | 42 | 11 | -43 | 20 | -36 | -32 | -42 | -40 |
| 1980 | 54 | -7 | 5 | -39 | 63 | 65 | -54 | -19 | -5 | -14 | -63 | -47 |
| 1985 | 54 | -5 | -7 | -41 | 51 | 59 | -54 | -25 | 7 | -8 | -51 | -42 |
| 1990 | 49 | 0 | 3 | -25 | 31 | 34 | -49 | -19 | -4 | -18 | -29 | -20 |
| 1995 | 52 | 6 | 16 | -11 | 9 | 8 | -52 | -2 | -18 | -28 | -8 | 0 |
| 2000 | 53 | 14 | 12 | -13 | 5 | 7 | -55 | 6 | -15 | -24 | -2 | 3 |
| 2005 | 56 | 11 | 18 | -11 | 7 | 9 | -56 | 14 | -19 | -25 | -6 | -1 |

FM: Fuel mineral participation (petroleum).
M/HT: Considers chemical products, machinery and transport equipment.
(1) The methodology used is based on CICU, REV, 1 from 1965 onwards.
(2) The subsector 68 (non ferrous metals) is moved from the basic manufacture to raw material.
Mexico's information between 1955 and 1965 is presented in Mexican pesos. It was converted to dollars.
(3) The information was converted to constant for which was used the GDP deflector.
Own calculation on the basis of "Yearbook of International Trade Statistics" for 1955, 1960 y 1965.
From 1979 BADECEL, ECLAC, online data.