Documento de Trabajo 9627

IMPORT PROTECTION IN NEWLY INDUSTRIALIZING ECONOMIES. COMPARING BRAZIL AND MEXICO WITH SOUTH KOREA AND TAIWAN

PABLO BUSTELO

Diciembre, 1.996

FACULTAD DE CIENCIAS ECONOMICAS Y EMPRESARIALES
UNIVERSIDAD COMPLUTENSE DE MADRID
VICEDECANATO
Campus de Somosaguas. 28223 MADRID. ESPAÑA.

La protección del mercado interior en las nuevas economías industriales: una comparación de Brasil y México con Corea del Sur y Taiwán

Resumen

Frente a las afirmaciones de muchos economistas neoclásicos, Corea del Sur y Taiwán recurrieron extensamente a la protección del mercado interior durante la mayor parte de su industrialización desde los años 60. Al igual que Brasil o México, esas nuevas economías industriales (NEI) asiáticas usaron la protección en los años 50 para sustentar el crecimiento inicial de las *industrias nacientes*. Pero también otorgaron protección a las industrias locales de varias maneras novedosas que se apartaron notablemente de la estrategia adoptada en América Latina.

En Corea del Sur y Taiwan, la protección sirvió para *incubar* sectores exportadores, para fortalecer la competitividad internacional de la producción y para diversificar el tejido industrial. Tal pauta proteccionista ha demostrado arrojar excelentes resultados.

Por el contrario, Brasil y México no concedieron la misma importancia a los beneficios potenciales del establecimiento de sistemas de vinculación entre exportaciones e importaciones (en virtud de los cuales sólo las empresas que cumplían ciertos objetivos de exportación podían obtener licencias de importación), del subsidio de las exportaciones mediante la alta rentabilidad de las ventas en el mercado interior y del fortalecimiento de los efectos internos de arrastre hacia atrás de los sectores exportadores de bienes duraderos de consumo.

Este trabajo sugiere que la divergencia entre las pautas de industrialización en las NEI asiáticas y latinoamericanas no se debe a que las segundas recurrieran a la protección y a que las primeras no lo hicieran, sino a que ambas zonas aplicaron sistemas de protección sustancialmente diferentes. La conclusión principal es que el proteccionismo puede estar justificado en los países del Tercer Mundo, pero siempre que las barreras a la importación se erijan con miras a cumplir objetivos predeterminados en una estrategia integrada de desarrollo.

Palabras clave: industrialización, sustitución de importaciones, orientación a la exportación, régimen comercial, América Latina, Asia oriental.

Import Protection in Newly Industrializing Economies: Comparing Brazil and Mexico with South Korea and Taiwan

Pablo BUSTELO

Associate Professor of Applied Economics
Departamento de Economía Aplicada I
Facultad de Ciencias Económicas y Empresariales
Universidad Complutense de Madrid
Campus de Somosaguas
28223 Madrid (Spain)
Tel.: 1.394.24.72
Fax: 1.394.24.99

Director of Economic Studies
Instituto Complutense de Asia
Edificio Más Ferré
Campus de Somosaguas
28223 Madrid (Spain)
Tel.: 1.394.24.91
Fax: 1.394.24.88

Final draft

November 1996

Paper delivered at the 92nd Annual Meeting of the Association of American Geographers, Special Session on "Compartive International Development: Trade Strategies and Foreign Direct Investment", Charlotte, NC, 12 April 1996.

Abstract: Contrary to the claims of many neo-classical economists, South Korea and Taiwan relied heavily on import protection throughout their industrialization since the 1960s. Like Brazil and Mexico, the Newly Industrializing Economies (NIEs) of East Asia used protection on *infant industry* grounds. But they also provided extensive protection to domestic industries in several novel ways that substantially departed from the types of strategy implemented in Latin America.

In South Korea and Taiwan, protection was used to *incubate* export sectors, to enhance the competitiveness of production in world markets and to diversify the industrial structure. This protectionist path has proved to be very successful.

By contrast, Brazil and Mexico failed to give due consideration to the benefits of establishing *export-import link systems* (under which only firms achieving export targets could obtain import licenses), of subsidizing exports through the high profitability on sales on the domestic front and of fostering the internal backward linkages of the export sectors of consumer durables.

In this paper, it is argued that the paths of industrialization in the East Asian and Latin American NIEs were divergent not because the latter used protection and the former did not, buth rather because both areas relied on substantially different types of protection. The main conclusion is that protectionism may be justified in developing countries, but only if import barriers are erected to fulfill predetermined objectives in an integrated developmental strategy.

Keywords: economic geography, industrialization, developing countries, import protection, East Asia, Latin America.

1. Introduction

The neo-classical explanation of the divergent paths of industrialization in East Asia and Latin America has been subjected to a considerable challenge (see Gereffi and Wyman, eds., 1990; Haggard, 1990).

Neo-classical economists, such as B. Balassa, A. C. Harberger, C.-Y. Lin, G. Ranis and others, and even the World Bank new "market-friendly" orthodoxy, have suggested that the divergence can be accounted for by three main factors:

(a) the import-substituting industrialization (ISI) phase has been shorter and milder in East Asia than in Latin America;

(b) the Asian Newly Industrializing Economies (ANIEs), such as South Korea and Taiwan, undertook in the 1960s a significant import liberalization program, which enabled them to create a *neutral* trade regime and to promote *export-led growth*;

(c) adjustment policies to the external shocks of the 1970s and early 1980s were orthodox (demand contraction, import liberalization, currency devaluation, ...) in East Asia, while Latin America pursued policies of debt-driven demand expansion and maintained import controls and overvalued currencies.

There is certainly scope for extensive argument about these three tenets, which may not have an adecuate empirical foundation (see, for instance, Bustelo, 1994b).

One of the main points of the neo-classical explanation is that the ANIEs prospered because they did not rely extensively on import protection. On the contrary, Latin America, the explanation goes on, was unable to undertake import liberalization programs and therefore to be competitive in world markets and thus to launch an export-led developmental strategy.

In this paper, it is argued that both East Asia and Latin America did rely extensively on import protection and that the divergence in their industrialization experiences has to be accounted for by the different type or nature of their import protection regimes.

2. Import Protection in South Korea and Taiwan: Against the Mainstream

Before dealing with the dynamic contribution of import protection to the industrialization drive in South Korea and Taiwan, several preliminary aspects should be kept in mind.

Firstly, the magnitude of the import liberalization process undertook in South Korea and Taiwan in the 1960s has been largely exaggerated by neo-classical economists. Extensive research has clearly shown that the tariff system remained virtually intact and that non-tariff barriers were only partially reformed (Luedde-Neurath, 1986; Wade, 1990). What is more, this limited import liberalization did occur only in those categories of goods required by the exporters (see Haggard and Pang, 1994: 76, for Taiwan; and Kim, 1994: 323-4, for Korea).

Secondly, although the resulting average effective protection rate was certainly lower than in Latin America, it was not low by the standards of the bulk of developing countries. What is more, import protection in the ANIEs during the 1960s and 1970s featured a high sectoral dispersion, with very high rates of protection for competitive imports in certain consumer durables, intermediate goods, machinery and transport equipment (Jenkins, 1991).

Thirdly, protection continued beyond the ISI phase (1949-58 in Taiwan and 1953-64 in Korea) and was pervasive during most of the export-oriented industrialization (EOI) period. In the latter, the negative impact of the remaining protection was offset (or even more than balanced out) by massive export incentives to manufacturing industry. All this amounted to what Gold (1986) has called an *export-oriented import substitution strategy*. A gradual import liberalization was embarked upon in the 1980s, mainly as a consequence of external pressure and in order to keep open the markets of developed countries for their exports (Gwynne, 1990: 186). Obviously, pressure from the U.S., whose combined trade deficit with the four ANIEs (South Korea, Taiwan, Hong Kong and Singapore) amounted to as much as a quarter of its global deficit in 1987, obliged currency appreciation and trade liberalization. But the latter was not carried out in an indiscriminate fashion. It involved mainly the easing of the discretionary import licensing scheme. In general, tariffs remained relatively high and other protectionist safeguards were retained. Allowance was even made for firms in adjustment difficulties. In stark contrast with the Latin American experience in the 1980s and the transitional economies of Eastern Europe in the 1990s (Bustelo, 1994c), trade liberalization was gradual and smooth in South Korea and Taiwan.

Import Protection during ISI

During the 1950s. South Korea and Taiwan used import barriers not only to protect *infant industries*, as did many other developing countries, but also to *incubate* export sectors.

Even neo-classical economists, such as Corden or Krueger, acknowledge that the existence of significant *market failures* during the learning process of *infant industries* offers a strong case for temporary import protection (Kirkpatrick, 1987: 67). In South Korea and Taiwan, *infant industries*' protection was the main incentive to render manufacturing resilient and even internationally competitive.

Moreover, both the South Korean and Taiwanese governments created an *export-import link system*, under which only firms able to achieve export targets could obtain import licenses. In South Korea, several currency devaluations (in 1954, 1955 and 1960) preceded the large depreciations undertaken in 1961 and 1964 at the outset of the EOI strategy. Furthermore, exporters in both economies were granted incentives, such as favourable exchange rates, rebates on tariffs, preferential access to long- and short-term credit, and reductions on almost all direct and indirect taxes (Alam, 1989: 55-6; Westphal, 1990: 47). By these means, the governments urged *infant industries* to pursue an early outward orientation. This use of protection as a kind of *incubator* for export sectors contrasts sharply with the experience of Latin America, where protection acted as a powerful *greenhouse*, under which inefficient and internationally non-competitive industries prospered.

Import Protection during EOI

The economic policies adopted during the EOI phase in the ANIEs were in fact a combination of import-substituting and export-oriented strategies, which demonstrated to be complementary rather than mutually exclusive approaches, contrary to the claims of much mainstream literature. As Gereffi has pointed out:

> "import-substituting governments were forced to promote exports, and export-promoting governments generally controlled imports, in order to earn or conserve scarce foreign exchange" (Gereffi, 1990: 233).

South Korea and Taiwan continued to protect *infant industries* and to promote their outward orientation, but they began to consider two additional important objectives of their protectionist path.

Firstly, protection during the EOI phase was used to enhance the competitiveness of production in world markets, through a strategy that Paul Krugman has termed "import protection as export promotion" (Krugman, 1984). Import controls (often in the form of quotas that set quantitative ceilings on imports, a form of protection much disdained by orthodox economists) allowed firms to impose high prices on domestic sales, so as to obtain high rates of return for goods with a low price-elasticity of demand. This high profitability on the domestic front made possible to reduce export prices. As Alice Amsden has stressed for the case of South Korea:

> "if overseas sales were not always profitable... then the government compensated the losers by inflating the returns on domestic sales. It did so by imposing trade barriers on imports" (Amsden, 1989: 69-70).

This kind of protection could be considered as an additional and *hidden* subsidy to exports (Smith, 1991: 11).

A good but not unique example has been the Korean automobile industry which has simultaneously received protection and export incentives. In 1995 South Korea's car industry exported more than one million units, while import penetration (imports respective to domestic demand) was less than 1 percent.

Secondly, protection during the EOI phase also acted as a dynamic tool to diversify the industrial sector. Import controls were imposed through a de facto "law of similars", under which an import license was only granted if the firm wishing to import could demonstrate that the input was not domestically available on reasonable terms. Beginning in the mid 1950s, export incentives were extended to *indirect exporters*, that is, manufacturers of capital and intermediate goods used in the production of consumer durables for export. In the 1970s, South Korea even introduced additional import restrictions in order to deepen the substitution process towards the heavy and chemical industries (HCI), a drive that has been criticized by the World Bank but which seems rather to have been somewhat of a success, as Korea has become one of the leading world producers in steel and shipbuilding (Auty, 1992).

Therefore, South Korea and Taiwan used protection during their EOI phases as an effective and subtle mechanism to foster the internal backward linkages of the rapidly growing export sectors in consumer durables (textiles, garments, electronic equipment,...). As a result, they also achieved success in more capital- and technology-intensive industries, such as shipbuilding, steel, petrochemicals, vehicle manufacturing and computers. By contrast, many other developing countries (Latin America, India, ...) failed then to give due consideration to the dynamic domestic potential of export industries, and often regarded them only as a source of foreign exchange in order to finance the imports required by the prolongation and deepening of ISI and also to service the growing foreign debt requirements.

3. Inefficient Protection in Brazil and Mexico

By contrast to the ANIEs, Brazil and Mexico did not encourage an early outward orientation of *infant industries.* Their trade strategy during the ISI phase did not link import capacities to the achievement of export targets. Moreover, their currencies were overvalued, in contrast to those of East Asia, and acted as a powerful deterrent to exports. Furthermore, their schemes of export incentives were created later and were less comprehensive than in East Asia.

During the 1950s and almost all of the 1960s, both Brazil and Mexico relied on quantitative restrictions and other import controls. However, the protective impact of those measures on *infant industries* and even on the potential exports from those sectors was more than offset by an overvalued exchange rate. The first attempt to promote exports in import-substituting activities through industrial policy was probably the computer sector in Brazil in the late 1970s. It has been argued that this case also suggests that *infant industry* promotion through tariff protection, quantitative import restriction and administrative measures renders net benefits, as medium- and long-term advantages more than counterbalanced its short-term costs (Schmitz and Hewitt, 1991).

Due to the pressure of foreign exchange earnings, the requirements of the deepening of ISI and the use of the exchange rate as an anchor to fight inflation, currencies in Brazil and Mexico were overvalued. Brazil initiated a crawling-peg policy in 1968 but its currency appreciated in real terms during most of the 1970s. Mexico adhered during more than 20 years (1954-76) to a fixed nominal exchange rate (there was a slight currency appreciation in real terms) and did not devaluate until 1976.

Finally, Latin America did not begin to promote extensively exports of manufactures until the late 1970s and early 1980s, when import necessities and debt service urged them to earn foreign exchange.

In Brazil, tax exemptions and financial credits were granted to export firms in the mid-1960s but their impact was rather limited. Some relaxation of quantitative restrictions and several tariff cuts were also accompanied by an exchange-rate unification and the adoption of a crawling peg. In the 1970s, Brazil introduced a more comprehensive export promotion scheme (BEFIES), under which export firms were granted tax exemptions, but the external shocks (in the energy, trade and capital international markets) prompted new import restrictions (Fritsch and Franco, 1994)

In Mexico, the Certificate of Tax Refund (CEDIS), created in 1971, was linked to stringent domestic-content requirements and was phased out in 1982. The drawback regime, under which import duties on intermediate inputs were refunded to export firms, was created in the early 1970s, along with tariff rebates on imported inputs for exporting firms, and also short-term export credits (FOMEX) and preferential credits for export-oriented investments

(FONEI) (Ros, 1994). Moreover, export incentives were not extended to *indirect exporters,* as was the case in East Asia. The *maquiladora* program, initiated in the mid-1960s, attracted substantial investment from the U.S., but was not adequately linked to the rest of the domestic economy, in contrast to, for instance, the export-processing zones in South Korea (CEPII, 1981).

There was not in Latin America a wastage-allowance system similar to the one created in South Korea and Taiwan, where firms could import more inputs than necessary and sell the surplus in the profitable domestic market. For a comparison of export incentives in East Asia and Latin America, see Rhee (1985) and Lejavitzer (1985), respectively.

Several structural factors in the 1950s and 1960s may explain the Latin American path: larger domestic markets (which in 1950 were 11 times larger in Brazil and 8 times larger in Mexico than in Taiwan), both for demographic and per capita income reasons; more foreign exchange earnings, due to much larger primary exports and foreign direct investment; less manufacturing competitiveness in world markets, due to high labor costs and timid export incentives (Bustelo, 1992 and 1994a: 79-87; Mahon, 1992).

Land reform in East Asia resulted in a relatively equitable distribution of income and promoted an abundant supply for the manufacturing sector of surplus worforce, linked to agriculture, through rural-urban migration (Korea) or rural manufacturing (Taiwan), containing wage levels and increases. The very wide dissemination of basic education also contributed in the ANIEs to rising productivity levels. It has been convincingly suggested that

"comparing Brazil with Taiwan (...), what Brazil lacked was not low wages *per se*, but the pattern of agricultural landholding, rural industrialization, and mass education which alone could make low wages compatible with high and fast-rising productivity" (Galvao and Tylecote, 1990: 97).

Nevertheless, Brazil and Mexico were not willing (or able) to institute a policy directed to promote an early ouward orientation of the infant industries, a real depreciation of the currency and a comprehensive scheme of export incentives in manufacturing.

4. Conclusions

In contrast to neo-classical claims, both Latin America and East Asia relied heavily on import protection during most of their industrialization efforts since the 1950s.

What counts for the bulk of the divergence in their trade regimes is that the nature of import protection was substantially different in both areas. While South Korea and Taiwan created in the 1950s an *export-import link system*, allowed price discrimination between domestic sales and exports, introduced an early scheme of export incentives and depreciated their currencies in real terms, Brazil and Mexico used what may be called *conventional import protection*. They did not promote exports from *infant industries* nor, mainly because of their appreciated currency, used protection to enhance the competitiveness of manufacturing in world markets. Moreover, they did not contemplate the dynamic export sector of consumer durables as a tool to diversify industry towards more capital- and technology-intensive activities. Instead of using selective import protection to foster the domestic backward linkages of the outward-oriented consumer goods' industry, they merely conceived these exports as a mean to obtain foreign exchange in order to finance imports and to service the foreign debt requirements.

Orthodox economic theory has dismissed import protection in developing countries, mainly because of its generalized anti-export bias and its wide and uneven dispersion across sectors. Using both import protection and export subsidies (the latter to offset the bias of the former) is a *double distorsion* in neo-classical terms. In fact, conventional theory argues for import liberalization and easing of export incentives. Nevertheless, some neo-classical economists have accepted, as a *second best*, that export promotion may strictly conterbalance the negative impact of protection on competitiveness, thus creating a *neutral* trade regime. The experience of South Korea and Taiwan tends to suggest that there was not neutrality in the trade regime, but instead a *pro-export bias*, as the effective exchange rate for exports has been consistently greater than the rate for imports (Bradford, 1991). So, export subsidies may indeed not merely offset the anti-export bias of import protection but be used also to create a trade or export-push economy, rather than simply a *neutral* regime.

The main conclusion arising from the preceding pages may be laid out as follows: import protection may be justified in developing countries, but only if import controls are erected in a fully integrated developmental strategy. Using insights gained from the experience of South Korea and Taiwan, protection may be useful not only to promote *infant industries*, but also to incubate export sectors, to enhance international competitiveness and to diversify the industrial sector.

REFERENCES

ALAM, M. S. (1989), *Governments and Markets in Economic Development Strategies. Lessons from Korea, Taiwan and Japan*, Praeger, New York.

AMSDEN, A. H. (1989), *Asia's Next Giant. South Korea and Late Industrialization*, Oxford University Press, New York.

AUTY, R. M. (1992), "The Macro Impacts of Korea's Heavy Industry Drive Re-evaluated", *The Journal of Development Studies*, Vol. 29, No. 1, October, pp. 24-48.

BRADFORD, C. I. Jr. (1991), *Escenarios alternativos de desarrollo: los países de reciente industrialización y las perspectivas de América Latina* (Alternative Paths of Development: the Newly Industrializing Countries and Latin America's Perspectives), CEMLA, Mexico DF.

BUSTELO, P. (1992), "La industrialización en América Latina y Asia oriental: un análisis comparado" (Industrialization in Latin America and East Asia: A Comparative Analysis) , *Comercio Exterior* (Mexico DF), Vol. 42, No. 12, December, pp. 1,111-9.

BUSTELO, P. (1994a), *La industrialización en América Latina y Asia oriental. Un estudio comparado de Brasil y Taiwán* (Industrialization in Latin America and East Asia. A Comparative Study of Brazil and Taiwan), Editorial Complutense, Madrid.

BUSTELO, P. (1994b), "Neoliberalismo y nuevos países industriales" (Neo-liberalism and Newly Industrializing Countries), *Información Comercial Española. Revista de Economía* (Madrid), No. 727, March, pp. 77-93.

BUSTELO, P. (1994c), "Industrial Policy in Post-socialist Transitions: Some Lessons from the East Asian NICs", *The European Journal of Development Research*, Vol. 6, No. 1, June, pp. 108-23.

CEPII (1981), "Mexique et Corée: deux stratégies d'industrialisation", *La Lettre du CEPII* (Paris), No. 17, September, 4 pages.

FRITSCH, W. and G. H. B. FRANCO (1994), "Import Compression, Productivity Slowdown and Manufactured Export Dynamism. Brazil, 1975-90", in Helleiner (ed.), *infra*, pp. 63-95.

GALVAO, C. and A. TYLECOTE (1990), "The Choice of Technology in Brazilian Industrialization", in M. P. Van Dijk and H. S. Marcussen (eds.), *Industrialization in the Third World. The Need for Alternative Strategies*, Frank Cass, London, pp. 84-104.

GEREFFI, G. (1990), "International Economics and Domestic Policies", in A. Martinelli and N. J. Smelser (eds.), *Economy and Society. Overviews in Economic Sociology*, Sage, Newbury Park, CA, pp. 231-58.

GEREFFI, G. and D. L. WYMAN (eds.) (1990), *Manufacturing Miracles. Paths of Industrialization in Latin America and East Asia*, Princeton University Press, Princeton, NJ.

GOLD, T. B. (1986), *State and Society in the Taiwan Miracle*, M. E.

Sharpe, Armonk, NY.

GWYNNE, R. N. (1990), *New Horizons? Third World Industrialization in an International Framework*, Longman, London.

HAGGARD, S. (1990), *Pathways from the Periphery. The Politics of Growth in the Newly Industrializing Countries*, Cornell University Press, Ithaca, NY.

HAGGARD, S. and C.-K. PANG (1994), "The Transition to Export-led Growth in Taiwan", in J. D. Aberbach, D. Dollar and K. L. Sokoloff (eds.), *The Role of the State in Taiwan's Development*, M. E. Sharpe, Armonk, NY, pp. 47-89.

HELLEINER, G. K. (ed.) (1994), *Trade Policy and Industrialization in Turbulent Times*, Routledge, London.

JENKINS, R. (1991), "The Political Economy of Industrialization: A Comparison of Latin American and East Asian Newly Industrializing Countries", *Development and Change*, Vol. 22, No. 2, pp. 197-231.

KIM, K. S. (1994), "Trade and Industrialization Policies in Korea. An Overview", in Helleiner (ed.), *supra*, pp. 317-63.

KIRKPATRICK, C. (1987), "Trade Policy and Industrialization in LDCs", in N. Gemmel (ed.), *Surveys in Development Economics*, Basil Blackwell, Oxford, pp. 56-89.

KRUGMAN, P. R. (1984), "Import Protection as Export Promotion: International Competition in the Presence of Oligopoly and Economies of Scale", in H. Kierskowski (ed.), *Monopolistic*

Competition and International Trade, Clarendon Press, Oxford, pp. 180-93.

LEJAVITZER, M. (1985), *Políticas de incentivos a la exportación de manufacturas en América Latina. Estudio comparativo de los esquemas de Argentina, Brasil, Colombia y México* (Manufacturing Export Incentives Policies in Latin America. Comparative Study of the Schemes of Argentina, Brazil, Mexico and Colombia), CEMLA, Mexico DF.

LUEDDE-NEURATH, R. (1986), *Import Controls and Export-oriented Development. A Reassessment of the South Korean Case*, Westview Press, Boulder, CO.

MAHON, J. E. (1992), "Was Latin America Too Rich to Prosper? Structural and Political Obstacles to Export-led Industrial Growth", *The Journal of Development Studies*, Vol. 28, No. 2, January, pp. 241-63.

RHEE, Y. W. (1985), "Instruments for Export Policy and Administration: Lessons from the East Asian Experience", *World Bank Staff Working Papers*, No. 725, Washington DC.

ROS, J. (1994), "Mexico's Trade and Industrialization Experience since 1960. A Reconsideration of Past Policies and Current Reforms", en Helleiner (ed.), *supra*, pp. 170-216.

SCHMITZ, H. y T. HEWITT (1991), "Learning to Raise Infants: A Case-study in Industrial Policy", in C. Colclough and J. Manor (eds.), *States or Markets? Neoliberalism and the Development Policy Debate*, Oxford University Press, Oxford, pp. 173-96.

SMITH, S. C. (1991), *Industrial Policy in Developing Countries. Reconsidering the Sources of Export-led Growth*, Economic Policy Institute, Washington DC.

WADE, R. (1990), *Governing the Market. Economic Theory and the Role of Government in East Asian Industrialization*, Princeton University Press, Princeton, NJ.

WESTPHAL, L. E. (1990), "Industrial Policy in an Export-propelled Economy: Lessons from South Korea's Experience", *The Journal of Economic Perspectives*, Vol. 4, No. 3, Summer, pp. 41-59.
