CEPAL

REVIEW

NUMBER 51
DECEMBER 1993
SANTIAGO, CHILE

ANIBAL PINTO
Director of the Review

EUGENIO LAHERA
Technical Secretary

UNITED NATIONS

CONTENTS

Industrial policy:
where do we stand?

Wilson Peres Núñez

Chief Technical Adviser to the ECLAC/UNDP Regional Project on Policies to Strengthen Innovation and Competitiveness in the Latin American Business Sector.

It is paradoxical that during the 1980s, when industrial policy tended to fade as a subject for academic scrutiny and was relegated to the sidelines by decision-makers in most of the Latin American countries, it continued to form the basis for the implementation of important measures and instruments in developed and newly industrializing countries and regions. However, as a consequence of various shortcomings and distortions characterizing industrial growth during this period, the prospects for paying serious attention to this area of economic policy began to brighten as the region moved into the 1990s. The industrial policy of the present decade will probably be a good deal different from what it was during periods marked by largely closed economies, non-globalized industries and government policies based mainly on subsidies, direct investment in State enterprises and protective trade mechanisms. Section I of this article focuses on a number of events and facts which illustrate the main features of traditional industrial policy and the limitations that it proved to have. Section II analyses various initiatives that have been mounted since the mid-1980s and underscores the fact that the emergence of new approaches in Latin America, in combination with a variety of factors at work outside the region, means that industrial policy cannot be bypassed as the countries of the region strive to resume their growth and integrate themselves into the world economy. The third and final section presents conclusions which highlight a number of ongoing industrial policy issues and outline various proposals for approaches to these issues conducive to the formulation of a more effective and, above all, more efficient policy than in the past.

I

Traditional industrial policy

Any attempt to systematize the wide-ranging experiences of the Latin American countries in the area of industrial policy would require an exhaustive case-by-case analysis of policy-making and policy implementation that would go beyond the scope of this article. These experiences can, however, be outlined –albeit at the risk of losing some of their richness– with the help of a number of examples that bring out the fundamental components of the praxis in this field. These examples will be presented below.

Industrial policy in the region and the corresponding selection of strategies have tended to reflect the theoretical (or, at the least, analytical) preferences of the region's chief policy-making circles rather than more pragmatic considerations.

Although the early stages of the industrialization process in the larger countries of the region were sometimes marked by policy approaches that were not placed on a systematic basis (or even thought of in terms of systematic policies) until later on, dissatisfaction with the type of industrial development seen in the late 1960s and early 1970s led policy-makers to undertake formal planning efforts. Crucial elements behind this trend included the declining effectiveness of basic policy instruments and the fact that numerous decision-making levels had been co-opted by interest groups.

The large number of different agencies and interest groups and the diminishing returns of the policy then in force generated a glut of instruments which, in many instances, conflicted with one another. Against this backdrop, the formalization of policy tools and strategies within the framework of plans and programmes was the result of the policy-makers' will to change existing industrial structures, behavioural patterns and performance, and it took the form of initiatives founded upon broad-ranging analytical considerations. In some cases, the basic approach was the outgrowth of particular views as to how we should think about the process of economic growth as such; in others, it mainly arose out of the generalization of proposals aimed at the achievement of partial equilibrium in specific markets based on industrial organization analyses.

The theoretical framework for industrial policy tended to follow along the general lines of the Kaldor-Verdoorn tradition, which highlighted the role of market expansion as the driving force behind rising employment and labour productivity, expected to take place primarily in the manufacturing sector (Kaldor, 1966). The gains in competitiveness that would be made under conditions characterized by economies of scale, it was believed, would permit not only expansion of the domestic market but the conquest of external markets as well. Within this framework, trade protection to support import substitution was seen as the chief mechanism for internalizing the effects of the virtuous circle of growth-productivity-growth, especially since there were widespread doubts as to the major international markets' ability to absorb Latin American exports of manufactures. When it became necessary to relieve the negative impacts of overprotection (such as anti-export bias, insufficient pressure for the absorption of technical progress, etc.), the tendency was to establish across-the-board production subsidies by, for example, cutting the tariffs on imports of capital goods to little or nothing, offering preferential interest rates, and charging below-production-cost prices for inputs produced by State enterprises.

Sectoral policy approaches were primarily based, either explicitly or implicitly, on the structure-behaviour-performance model developed in the tradition of Mason, Scherer and Bain (Scherer and Ross, 1990). This model permitted analyses to be undertaken upon a solid empirical foundation and made it possible to identify policies for modifying industrial performance by making changes in the production structure or in corporate behaviour. Generally speaking, it was felt that structural changes should be accomplished through direct State regulation or intervention, whereas changes in entrepreneurial or corporate behaviour should be induced through

□ The author is grateful to Antonio Barros de Castro, Fábio Erber, Ricardo Ffrench-Davis, Jorge Katz, Carla Macario, Yoshiaki Nakano and Joseph Ramos for their comments and suggestions.

modifications in relative profit rates. The structure-behaviour-performance model appeared to be particularly useful in closed economies in which a direct correlation existed between industrial concentration and market power.

Industrial policies in the region showed a quite remarkable degree of continuity, especially given that plans and programmes were changed every few years, often for the sole purpose of demonstrating that the administration currently in office was pursuing a different policy from that of its predecessor. In the early 1980s, for the most part industrial planners sought to combine import substitution with export promotion (especially exports of manufactures) as a means of reducing unemployment and boosting the production of essential consumer goods. In general, they were attempting to carry forward the integration of production chains to promote the production of widely-used inputs and, in some countries, of capital goods. The policy tools they used were also quite similar (promotion, protection and regulation), although there were differences of emphasis from one case to the next.

Although the manufacturing sector grew considerably in many countries of the region during the 1970s,[1] in the early 1980s industrial planning began to appear increasingly ineffective. This ineffectiveness was attributed chiefly to: (i) a persistent lack of consistency between the sectoral and macroeconomic levels of planning; (ii) strategies which failed to win the support of important administrative levels or which were combatted or ignored by major public agencies or groups that should be taking part in their implementation; (iii) the faulty implementation of programmes, for which no budget allocations were ultimately made because of their lack of goals for each policy instrument; and (iv) insufficient links with private agents, which consequently did not have confidence in such planning or support it.

The acceptance of this diagnosis by many decision-making circles generated a crisis in industrial planning which later spread to industrial policy as a whole. This crisis was not confined to Latin America. Indeed, the OECD (1987) has stated that, following a sharp increase in State intervention in its member countries during the 1970s and early 1980s, the interventionist wave then began to ebb and eventually receded to the lowest points it had reached during the period before the crisis of the 1970s. At the same time, questions were raised regarding the validity of some of the principles underlying governments' industrial policy. This questioning, which began in the industrialized countries, quickly spread to the Latin American region owing to the influence exerted by the ideas developed in those countries, as well as factors arising out of the industrial policy experiences of many countries in the region.

The industrial policy's validity was called into question mainly because of errors that had led policy-makers to overestimate the costs of market failures and underestimate the costs of government failures. Specifically, the industrial policies of the time ran up against limitations imposed by the following events. First, the range of options open to governments was narrowed by the growing internationalization of trade and production and by a progressive blurring of the borders between production sectors, while moreover the rapid changes in technology and markets made it increasingly difficult and risky for governments to try to control contextual variables affecting the planning process. Second, the policies being applied were hard to evaluate and control, and as a result their duration extended well beyond their validity horizon, owing primarily to the efforts of interest groups. The absence of clear-cut guidelines for determining when their implementation should begin and end made it difficult to achieve the often stated objective of using policy tools within a strictly-defined time frame, while the interest groups' success in co-opting decision-making bodies further added to the difficulty of eliminating policy instruments that had outlived their usefulness. Third, some policies were of intrinsically limited effectiveness, mainly because their complexity increased the probability that they would conflict with other policy objectives. What is more, the task of policy coordination posed often insurmountable problems, especially because of the lack of a clear compatibility between industrial policy and macroeconomic policy.

The consensus that arose in the mid-1980s regarding the reforms needed in Latin America tended to deny the validity or even the possibility of using certain instruments that had traditionally played a role in industrial policy in the region (Balassa, Bueno, Kuczynski and Simonsen, 1986). For example, the generally accepted policies on trade

[1] Different economic schools do not agree, of course, as to whether this growth occurred *thanks to* or *in spite of* the existing industrial policy, especially in situations marked by an abundance of external financing. See, for example, Chami Batista (1992) and Dias Carneiro (1990) for the case of Brazil and Peres (1989) for the situation in Mexico.

liberalization, interest rates, the channeling of public expenditure, privatization, deregulation and intellectual property rights came into direct conflict with the instruments on which industrial policies had been based and crowded them out. The idea that policies as such were no longer valid spread, and this, in conjunction with the impossibility or undesirability of using the instruments traditionally associated with them, caused such policies to disappear altogether or to be relegated to an exclusively symbolic role whereby they stood for a generic interest in "industry" which must be weighed against the attention merited by other economic sectors. This effort to balance sectors or to refrain from discriminating among them caused sectoral industrial policies, which were based on the intensive use of precisely those instruments described above, to be pushed away from the decision- makers' interest.

II

Changes in the late 1980s and early 1990s

In the 1980s, many Latin American countries apparently arrived at conclusions similar to those set out in the preceding section regarding industrial policy, which consequently tended to disappear from the ranks of major policies or, in the best of cases, to be identified with the elimination of structures and behaviour patterns associated with traditional industrial policies.[2]

Nevertheless, industrial policy practices continued to play an important role in most of the developed countries of Europe (OECD, 1987),[3] while the widely-studied features of the developmental State in Japan and the newly industrializing economies of East Asia remained basically unchanged.[4] With the benefit of hindsight, today we can see that the policies formulated or proposed during that period broke new ground and may prove to have determined the possible scope of industrial policy in the 1990s. Some of these experiences and proposals will be discussed below.

1. Possible policies in developed areas: Ontario, 1988

Based on work begun a few years earlier, the Ontario Premier's Council issued a report in 1988 in which it set out a wide array of policy objectives and instruments for restructuring the province's economy within a framework of globalization, technological dynamism and mounting external competition (Ontario, Premier's Council, 1988).

The problems faced by the Canadian province of Ontario had some elements in common with the types of difficulties encountered by developed countries and by countries at an intermediate, natural-resource-based stage of industrialization. On the one hand, the province had a modern industrial structure and patterns of innovation comparable with those of other highly developed areas (e.g., Baden-Württemberg, Lombardy or Catalonia), with internationally competitive firms such as Northern Telecom. On the other hand, however, its production base suffered from serious problems stemming from the heavy weight within the provincial economy of natural-resource processing activities (such as paper and pulp, processed food, iron and steel, and chemicals) and industries subject to fierce competition (such as automobile parts).

The industrial policy proposal put forward by the Premier's Council was based on analytical propositions which the Council itself saw as departing

[2] The virtual disappearance of industrial policy as such did not, of course, prevent the adoption of important measures in the fields of privatization and the refinancing of external debt (e.g., the authorization of debt-equity swaps) which had a strong impact on certain industrial sectors and enterprises.

[3] Ultimately, the consensus regarding viable policy packages tended to focus on three basic objectives: (i) compensating competitive asymmetries among firms of different sizes or located in regions having differing levels of development; (ii) promoting innovation and the diffusion of technology, because of these activities' important externalities; and (iii) at least partly offsetting the investment disincentives generated by macroeconomic policies (such as those giving rise to higher interest rates).

[4] For an interesting analysis of the persistence of the style of industrial policy typical of the newly industrializing countries of East Asia even at their present fairly high levels of development, see Lim (1993) regarding the case of Singapore and Choi (1993) on the Republic of Korea.

appreciably from the traditional types of industrial policies. Specifically, they entailed three basic conceptual elements which involved making the following distinctions:

(i) Between firms producing "traded" goods or services and those producing goods or services that were not "traded" on the international market. The former compete in world markets and are therefore the engine of the Canadian economy's growth; as a rule, they are large manufacturing companies which export to other nations and upon which almost all other activities depend for their own prosperity.

(ii) Between "wealth creation" and "job creation", the latter being a product of the former. The Council expressed the view that industrial policy-makers have habitually focused on firms that produce non-tradeables, in an effort to boost job creation, thus failing to take into account the fact that the tradeables-producing industries and the wealth which they create are what ultimately determine how many jobs will be created in a given economy and how well- or poorly-paid those jobs will be.

(iii) Between "indigenous" firms and nationally-owned firms. What matters for the prosperity of an economic region is not who owns the stock in a company but rather whether or not that company conducts its high value-added activities (product design, research and development, business strategy decision-making, etc.) in that region. The focus of industrial policies should therefore be on "indigenous" firms, regardless of who owns them.[5]

Based on these highly debatable principles, the Council stated objectives and proposed instruments for revitalizing the province's economy. These objectives include:

(i) Restructuring industry in such a way as to expand manufacturing activities producing a high level of added value; this is considered to be particularly important for an economy that is heavily dependent upon activities involving intensive use of largely unprocessed natural resources.

(ii) Developing or creating world-class manufacturing enterprises capable of operating on a transnational scale, especially in high valued-added industries.

(iii) Redirecting industrial policy so as to eliminate its bias in favour of the production of non-tradeables by small firms located in slow-growth areas and its failure to accord due consideration to the distinction between wealth-creating and job-creating activities.

(iv) Investing in fast-growing infant industries, most of which are technology-intensive.

(v) Backstopping "threshold" companies (i.e., firms capable of becoming world leaders in the medium term)[6] producing internationally tradeable goods and services. Policies aimed at promoting the creation of wealth should concentrate on this necessarily small group of business enterprises; in order for this to happen, the role of services in the province's development must be redefined and those services that could be converted into internationally tradeable activities should be encouraged.

(vi) Promoting the development of a risk-taking entrepreneurial culture which will foster the creation of new firms that produce internationally tradeable goods and services.

(vii) Investing in the development of technology and human resources.

(viii) Forming a national consensus that will diminish entrepreneurs' and civil servants' reluctance to act in concert in the area of policy-making and implementation.

On the basis of this set of objectives and strategy lines, the Council proposed a series of tools for their achievement, particularly:

(i) Tax incentives for investment in export firms having the potential to become world leaders in their respective sectors, for investment by workers in efficient, profitable business enterprises, for additional investment in research and development to bring the level of such investment above past corporate averages, and for investment in the stock of companies producing internationally tradeable goods and services which are making their initial public offering of stock.

[5] A similar argument has been presented by Robert Reich, the Secretary of Labour of the Clinton administration. See Reich (1991).

[6] The Ontario programme defines "threshold" companies as firms that are potentially capable of making the necessary effort to become world leaders. This province was felt to have firms of this type in what are regarded as strategic sectors, such as motor vehicle parts, aerospace components, integrated circuits and electronic data communication systems. See Ontario, Premier's Council (1988).

(ii) Establishment of a State procurement system guided by a strategic view of the province's development.

(iii) Promotion of the creation and expansion of financial funds for the development of export products or markets and for encouraging the formation of venture capital funds to backstop the initial stages of investment.

(iv) Subsidies for the hiring of technicians, scientists and engineers by mid-sized firms.

(v) Promotion of training programmes.

The policy lines and tools proposed in the Council's report are quite traditional –at least from the standpoint of the Latin American countries with more experience in the field of industrial policy– but they have a number of important implications. First, the fact that a highly developed area then looking forward to the conclusion of a free trade agreement with the United States nevertheless regarded active industrial policy approaches as both possible and valid suggests that Latin America may well have been too hasty in ruling out the need for industrial policies.

Second, on a more substantive level, some of the basic ideas set forth in the Council's report call for further thought about the types of firm that should be the focus of industrial policy in a context of globalization and intensification of international competition. In particular, they raise some questions regarding the traditional practice in the region of supporting small-scale industry in word while backstopping large companies producing non-tradeables in deed. Focusing on companies with the potential to globalize their trade and foreign direct investments could be a efficient course of action that would be more likely to create wealth in the sense referred to by the Ontario Premier's Council.

2. Emphasis on horizontal policies: ECLAC, 1990

In mid-1990, ECLAC proposed a development strategy for Latin America and the Caribbean in which it outlined a new approach to the relationship that ought to exist between economic growth and social equity and suggested policy lines and tools that could facilitate changes in the region's production structure (ECLAC, 1990). Some of the factors that made it both necessary and feasible to propose a new approach to the issue of development and social equity in the region were the following:

(i) The Latin American countries' resounding failure to combine economic growth with social equity stood out in sharp contrast to the situation in various countries outside the region which have undergone a very rapid development process in recent decades in which they have been able to combine a high growth rate with a much more equitable distribution of income than that prevailing in the region. This appears to have been so in economies such as those of China, Hong Kong, Israel, Portugal, the Republic of Korea, Spain and the former Yugoslavia (Fajnzylber, 1990), although in some cases tendencies towards a deterioration in income distribution appeared during this process.

(ii) An ongoing comparison between the experiences of the newly industrializing economies of East Asia and those of the Latin American countries has shown that the former have achieved much more in terms of higher savings rates, consumption patterns that are less oriented towards luxury goods, efficient integration into the international economy and dynamic, innovative absorption of technical progress at the company level. The spectacular performance of the Asian economies has been an undeniably important factor in fostering the view (which has been the predominant one in Latin America ever since the early 1980s) that the post-war development pattern has definitely outlived its usefulness.

(iii) The new analytical approaches taken to the relationship between economic growth and social equity demonstrate the possibility of a positive relationship between the two; according to these approaches, rather than being a result of economic growth, equity is a *requisite* for the achievement of such growth, especially within the context of a technological revolution that emphasizes the role of human resources in achieving and maintaining competitiveness. Social equity thus becomes a true "factor of production" by facilitating the consolidation of national systems of innovation: an element of the utmost importance in a world market where competitiveness is strongly influenced by the location of firms in different national systems of innovation.

(iv) The increasingly widely accepted view that there is a broad range of economic policies in which social equity and economic growth are complementary rather than antagonistic; this is the case, for example, of policies that promote the efficient creation of jobs, the dissemination of technologies and the training of human resources (ECLAC, 1992).

The ECLAC proposal sets forth both a fundamental objective and a strategy for its achievement, as well as guidelines for selecting the proper policies. The objective is efficient integration of the region's economies into the world economy on the basis of genuine competitiveness (i.e., competitiveness based on improvements in productivity made possible by the absorption of technical progress) rather than a spurious form thereof. ECLAC considers that the latter type of competitiveness was to be observed in many countries of the region during the 1980s, when improvements in those countries' competitive gains were chiefly attributable to wage cuts and the plundering of their natural resources.

In order to attain genuine competitiveness, ECLAC proposes a strategy for resolving three issues that dominated the debate on the subject within the region during the 1980s: (i) surmounting the dichotomy between the domestic and external markets through a strategy for a competitive integration in the world market; (ii) promoting the development of production linkages as a means of avoiding inefficient options that would involve supporting some production sectors to the detriment of others; and (iii) progressing beyond the stage of merely identifying conflicting interests of the private and public sectors and instead advocating options based on negotiation and consensus-building between them.

Based on these strategic guidelines, the proposal specifies a series of policies and policy instruments that would help attain a genuine form of competitiveness involving competitive integration in the world market, internal economic linkages and consensus-building. With specific regard to industrial policy, the proposal offers three guidelines for determining the priority status of different types of policies: (i) as a first step, it is suggested that the countries should use policies to stimulate market mechanisms by increasing their transparency or reducing the costs associated with the acquisition of information by economic agents; (ii) in cases where such stimuli prove to be ineffective, the proposal advocates the use of neutral or horizontal policies that will not discriminate among production sectors or subsectors, such as policies to help strengthen the entrepreneurial base, linkages between the universities and industry, the development and dissemination of technology, and the training of human resources; (iii) in specific cases where horizontal policies prove to be socially suboptimal, the proposal recommends the adoption of policies involving direct intervention at the sectoral level within an expressly limited time frame fixed on the basis of pre-established operational criteria for determining when such intervention should end.

This proposed package of market-stimulus, horizontal and selective-intervention policy measures appears to be broad enough to deal with widely differing situations while at the same time furthering the long-term agenda of ECLAC, which continues to call for active State policies, although now these policies are to be oriented towards efficient integration of the Latin American countries into the international economy rather than towards an essentially inward-looking development, as in the past.

Horizontal policies have a central role in the policy package proposed by ECLAC. Many of the policy tools suggested in its publications since 1990 clearly fall into this category, especially those relating to the creation of jobs, technological development and the training of human resources, which are pivotal elements in the positions espoused by the Commission (ECLAC, 1992). Although during the second half of the 1980s it appeared that policies calling for direct intervention at the sectoral level were to be regarded as beyond the pale, the events of the 1990s that will be discussed later on in this article have shown that there is indeed a place for sectoral policies in the region, although their features will be somewhat different from those of traditional sectoral policies.

3. A more limited scope for industrial policy: Brazil, 1990

Brazil's experience with industrial policy is one of the longest and most intensive in the whole region. In this section, however, we will discuss only those aspects of that experience which refer to changes in the scope of such policy.

In the past, the national authorities have often sought to solve problems arising in the implementation of industrial policy by expanding the scope of the corresponding plans, programmes and instruments. Thus, for example, Brazil moved from policy measures having a basically sectoral impact in the 1950s and 1960s to more comprehensive programmes in the 1970s, and in the mid-1980s it adopted policies covering whole complexes of industries. The basic idea was that it was inefficient to set goals and establish policy mechanisms for isolated branches of industry, because there were important linkages among many of those branches when they shared a production chain or had a common technological base. These linkages had arisen as a consequence of the complexity of the industrial structure in Brazil in such fields as electronics, whose component industries included microelectronics, informatics, telecommunications and consumer electronics.

Thus, the chief mechanism of the industrial policy instituted by Brazil in 1988 consisted of integrated sectoral programmes covering complete production chains, even including the sectors supplying the necessary technology (Marcovitch, 1990). Within this framework, the policy tools must act not only on the main activities in a given industrial sector, but also on its suppliers of raw materials, components, capital goods and production services, so that ultimately these integrated sectoral programmes were intended to influence all the activities determining a given sector's competitiveness.

Of course, a policy with such a broad scope was extremely difficult to implement, particularly under conditions of extreme macroeconomic instability and a changeover of government. Thus, in June 1990 a major change was made with the issuance of the General Guidelines for Industrial and Foreign Trade Policy (Brazil, Ministry of Economic Affairs, Finance and Planning, 1990), which outlined a new type of relationship among economic agents and among markets and reduced the emphasis which Brazilian industrial policy had traditionally placed on State action and the domestic market.

With a view to boosting the efficiency of production and marketing activities, the General Guidelines also provided for programmes aimed at reducing protective trade barriers; increasing the supply of financing for foreign trade, training in the use of technologies and investment in fixed capital; promoting company modernization; strengthening modern sectors; and restructuring potentially competitive but currently troubled sectors. As a complementary measure, the use of new legal instruments to strengthen competition and consumer protection was also planned.

Promoting the modernization of business firms was to be the task of the Brazilian Quality and Productivity Programme (PBQP), which was to foster the introduction of modern management methods, human resources training, the development of technological infrastructure, the improvement of institutional links and the use of efficient methods for monitoring and promoting improvements in quality in production and trade (UNIDO, 1992). Activities concerning industrial restructuring proper would be backstopped by industrial competitiveness programmes that would gradually be designed on the basis of a consensus-building process with the private sector conducted within the framework of sectoral policy implementation groups.

The General Guidelines did away with the integrated sectoral programmes created under the 1988 policy (because they were considered to be excessively complex) and narrowed the scope of industrial policy by focusing it primarily on certain segments of the value chain (Porter, 1990). This segment-by-segment approach constituted a major change in that it reversed a long-standing tendency to increase the scope of policies and, hence, the difficulties associated with their implementation. Although the segment-by-segment approach is not necessarily the most efficient one in all cases, it does enable decision-makers to concentrate their efforts and to establish operational guidelines for deciding whether a policy measure should be continued or terminated.

4. A critique of the mainstream view: Japan, 1991

In the course of the 1980s, a view of the economic process and of development strategies gradually took shape which tended to disregard the role of industrial policy because it was felt that market mechanisms alone could ensure adoption of the most efficient production structure. This idea, which ultimately became the predominant view in the region's decision-making circles, was expressed in the "Washington Consensus" arrived at by the chief international financial institutions, the Republican administration then in office in the United States, and important opinion-makers and research centres (Williamson, 1990).

Within this context, late in 1991 a document prepared by Japan's Overseas Economic Cooperation Fund (OECF, 1991) began to be circulated which criticized some of the most important components of the above position. Although the document does not present any industrial policy proposals in the strict sense of the term, its conclusions concerning growth and growth policies are of the utmost importance in terms of the present article's objectives. In essence, the Japanese argument revolves around four main points:

(i) With regard to policies for achieving sustained growth, it considers that improving the climate for investment by deregulating economic activities may not be enough to boost investment, and it may therefore become necessary to apply fiscal and monetary instruments designed specifically for this purpose.

(ii) A balance must be struck between trade liberalization and industrial development. This balance, whose importance is not recognized in the conventional approach, will not come about automatically since, even though liberalization does reinforce static comparative advantages, it would be overly optimistic to suppose that new industries (based on dynamic comparative advantages) will emerge solely as a result of private-sector action.

(iii) The efficiency of the operating mechanisms of financial markets has very definite limits. This makes it necessary to reconsider the possible application of below-market interest rates to investments that involve a high risk, generate externalities, produce social benefits, are located in markets working on the basis of imperfect information or are made in infant industries.

(iv) Privatization is not always the answer to problems of inefficiency in the public sector.

This set of propositions, many of which run counter to the mainstream view, can, in the final analysis, be seen as a synthesis of certain aspects of the development experiences of Japan and the newly industrializing economies of East Asia, whose growth has been based on cooperation between the private sector and a highly interventionist State in a strong leadership position. Although most of the Latin American States are not in this position and cooperation over the long term has not been a conspicuous attribute in the region, the OECF criticism of the mainstream interpretation does point to the need to reconsider options that may have been ruled out too hastily in the region.

5. The reappearance of sectoral policy: Mexico, 1992

The industrial and foreign trade policy applied in Mexico as from 1989 was not based on distinctions between sectors or branches of industry. On the contrary, it emphasized industry-wide –and, indeed, economy-wide– horizontal policy measures. [7] During Mexico's negotiation of the free trade agreement with the United States and Canada, some of the limitations of an approach based entirely on horizontal policies became evident, since the negotiations had a very marked sectoral focus and the resulting agreement set up different conditions for certain types or branches of industry, such as motor vehicles and computers.

In May 1992, against this backdrop of the re-emergence of sectoral considerations, the Government announced its Programme to Promote the Competitiveness and Internationalization of the Textile and Garment Industry. [8] In view of this industry's importance to the national economy (it provides 10% of the manufacturing GDP and 850 000 jobs) and its potential for growth under the terms of the North American Free Trade Agreement, the programme aims to help create a more appropriate environment for firms in this industry and to lay the administrative and financial groundwork for improving their competitiveness.

The programme for the textile and garment industry covers four main areas: foreign trade, technology, industrial organization and finance. In the area of foreign trade, it lays down policies concerning labeling regulations, adjustment of tariffs on imports of machinery and equipment to ensure that the prices paid by Mexican producers for such items do not exceed those paid by their international competitors, mechanisms for preventing unfair trading practices, [9] and export promotion. In the area of technology, it identifies a number of problems affecting the sector and provides for the establishment of a working group formed by representatives of both the public and the private sectors to devise possible solutions.

In the area of industrial organization, the programme proposes measures for improving the structure and corporate behaviour of the sector. In particular, it notes that very little coordination exists among the sector's three main components (processing of natural and synthetic fibres, manufacture of

[7] See, for example, the chapter of the National Programme for the Modernization of Industry and Foreign Trade in the Period 1990-1994 on the lines of action to be pursued (Mexico, Ministry of Trade and Industrial Promotion, 1989).

[8] The Programme to Promote the Competitiveness and Internationalization of the Leather and Footwear Industries was announced on the same occasion; for the purposes of this article, its content may be considered as very similar to that of the programme for the textile and garment industry. See Mexico, Ministry of Trade and Industrial Promotion, 1992a and 1992b.

[9] In this respect, it sets up customs and inspection mechanisms to prevent the illegal importation of used clothing, stamp out under-invoicing, reduce the cost of customs formalities and facilitate access to foreign trade information.

yarns and cloth, and ready-made clothing). This lack of strong coordination and the overly fragmented nature of the garment industry prevent producers from making use of economies of scale and make it difficult for supply to be flexible enough to react to changes in demand. Better communication and coordination among the producers would make it possible to set up quick-response systems that would help attain the highest possible quality at each stage in the process, eliminate wasted time and optimize technology use.

The programme also places importance on the promotion of joint investments and strategic alliances with international producers and marketing concerns in order to improve the sector's ability to meet the challenges of globalization. It also aims to help firms in the sector to gain access to credit by, *inter alia*, offering preferential terms to micro-enterprises and to small and medium-sized firms and encouraging commercial banks operating at the national or regional levels to specialize in this sector.

The importance of this programme, which is to be monitored by a committee composed of representatives from the private and public sectors, lies less in any innovative aspects it may have than in the fact that its very existence points up the limitations of horizontal policies. Apart from certain extremely broad-scope policies (e.g., policies in support of elementary education), the scope of most of the policy tools varies widely depending on the sector in which those tools are to be used. Since human resources and financial constraints make it impossible to design policies for each and every industry, priorities must be established in order to channel efforts towards selected sectors, taking into account the usual sorts of variables (e.g., number of jobs provided, export potential, or the existence of a serious threat to the sector's survival). Above all, this programme shows that a radical change has been made in the set of basic policy tools used, as reflected in the elimination of tax incentives and outright trade protection barriers.

III

Conclusions: ongoing issues

This review of experiences and proposals in the field of industrial policy indicates that there are certain permanent issues in the debate on this subject. This section will present some of those issues, which are of great significance in terms of policy-making and implementation, and will suggest ways of dealing with them in the 1990s, some of which have already been mentioned in earlier sections.

The disappearance of sectoral industrial policies in the region appears to be due more to the influence of theoretical positions and bad experiences on the countries than to the solution of the problems which those policies were intended to address. Thus, some countries have taken steps that entail the adoption of horizontal policies, but the implementation of such policies necessarily has sectoral implications. Thus, for example, Brazil's "competitive integration in the world economy", Chile's "advance to a second export stage" or Mexico's bid to make the most of the potential offered by the North American free trade area have all led to the adoption of measures or the design of programmes whose scope is of a strictly sectoral nature. This stands out all the more clearly when an attempt is made to defend sectors experiencing problems of (often unfair) competition, such as the Chilean textile industry [10] or the Mexican garment industry.

Just how broad a scope an industrial policy should have is a question that remains open to discussion and to policy experimentation, and it is good that this is so. Although the trend towards all-embracing programmes or programmes aimed at extremely broad-ranging industrial complexes appears to have been reversed, no factors of analysis are at hand that would make it possible to determine *a priori* what scope would be most efficient. In the preceding paragraph mention was made of a number of conditions that have led to the persistence of sectoral approaches, but measures at the segment level

[10] In December 1992 the Chilean Ministry of Economic Affairs unveiled a restructuring plan for the textile industry that seeks to overcome that industry's "growing lag in terms of competitiveness". See *Estrategia*, 1992.

are also important, especially when the aim is to influence existing entrepreneurial dynamics.

Policy implementation capacity continues to be of great importance in determining optimum policy scope. In the region, although it could argued that some of the initiatives outlined above suffered from design flaws, their impact has invariably been different from what was expected because the State's implementation capacity has been insufficient. This shortcoming has frequently prompted assertions that it is impossible to forecast which sectors are going to be winners or losers. The truth of the matter, however, is that rather than making mistakes in selecting the sectors or subsectors to be promoted, the problem has been a lack of capacity to implement measures even in sectors that were clearly "winners", both in the region and elsewhere. Certainly, the exclusive use of horizontal or neutral policies will not solve the problem of inadequate implementation capacity, and in fact will often exacerbate it in cases where it is necessary to pursue policy actions in highly dissimilar sectors. Despite their undeniable advantages in terms of simplicity, strictly horizontal policies soon tend to reach limits imposed by the sectoral specificity of technology, markets, corporate organizational structures and even international economic negotiations.

Regarding policy instruments, no new policy tools have been developed; however, those instruments that are incompatible with trade liberalization and fiscal restraint have been discarded. Thus, the countries are turning away from widespread use of fiscal subsidies, import quotas and preferential interest rates, although almost all of them continue to utilize these instruments to promote activities that generate significant externalities or for what they consider to be key branches of industry, such as the automobile industry. At the same time, the move to privatize State companies has diminished the role of State procurement as a policy tool.

Although progress has been made in reducing information and transaction costs, in many Latin American countries there is still a good deal of room for the application of these types of market stimulation policies. There is also a need to undertake a more thorough-going effort to reduce coordination costs. This is the foundation for the success of industrial areas that have become local systems of innovation, as shown by general regional development experiences in, for example, Italy (Bianchi and Bellini, 1991).

Above and beyond the practical aspects of the failure of many industrial policies, there is also a theoretical factor that has to do with the current status of industrial organization analyses. [11] The theoretical problems attendant upon any essentially casuistic methodology have been compounded by two other elements which have heightened critics' dissatisfaction with these forms of analysis. One of these elements is that the critiques made by the neo-Schumpeterian school and by analysts of contestable markets have shown that industrial structure is endogenous to the structure-behaviour-performance model and therefore cannot be regarded simply as a policy tool, as has implicitly been the case in many sectoral programmes.

The other element is that the increasing openness of the region's economies tends to reduce the importance of a methodology of analysis that was developed primarily with reference to a closed economy (as was that of the United States in the 1940s and 1950s). In open economies undergoing a process of globalization, we must critically review many of the traditional arguments concerning the relations between entry barriers, product differentiation, diversification and concentration, on the one hand, and the power of the market, on the other. Moreover, the positive reassessment of the role played by transnational corporations and the negative reappraisal of the role of State enterprises has made many of the traditional assertions regarding the relations between the above variables and equity ownership less relevant from a policy-making standpoint, although it is debatable whether they have become completely invalid as a result. This crisis of industrial organization analyses is in sharp contrast with the prospects opened up by the "new growth theory" thanks to the incorporation into its models of crucial factors for the analysis of industry

[11] As noted in section II of this article, many of the sectoral policies formulated in the region have been based on traditional ways of analysing industrial organization. The main body of relatively recent theory on industrial organization –i.e., game theory– has supplied some interesting, but inconclusive, analytical results which are still a long way from the point where they could be forged into new policy tools and approaches (Norman and La Manna (eds.), 1992). Nevertheless, game theory, information theory, hierarchy analyses and approaches based on the correction of market failures constitute the analytical core, which may be expected to give results having a fairly similar impact to that generated by the structure-behaviour-performance model (see, for example, Katz, 1993).

and its technological determinants, such as learning -by-doing, economies of scale, and the widespread presence of externalities. The inclusion of variables of this sort within a framework of general equilibrium offers promising opportunities for linking traditional elements of industrial analysis and economic growth theories with sound microeconomic foundations (Grossman and Helpman, 1991).

In closing, it should be noted that the question of which industrial policy options may be considered viable in the region will be influenced by two processes that are taking place mainly in developed countries and particularly –insofar as Latin America is concerned– in the United States. First, the future course of policy-makers' thinking on the most efficient scope for State action will in large part determine whether or not the Washington Consensus will remain in effect as it has up through 1992 and this, of course, will have an influence on what sorts of policies are regarded as efficient and viable by the governments of the region. Second, the type of scenario towards which the international trading system evolves (open multilateral trade, relatively open blocs or closed trading blocs) will have a considerable influence on what type of industrial policy will be acceptable. While it is always possible that trade-based solutions will be found for trade problems, it would not be surprising if the real answers to these problems have to be sought in the underlying economic structures, as illustrated by the negotiation of the Strategic Impediments Initiative between the United States and Japan. In such a scenario, negotiations and trade retaliation may also incorporate considerations of industrial structure and policy. After all, first-best solutions are better than second-best solutions only when all the relevant actors behave as if they lived in a first-best world.

(Original: Spanish)

Bibliography

Balassa, B., G. Bueno, P. P. Kuczynski and M. H. Simonsen (1986): *Toward Renewed Economic Growth in Latin America*, Washington, D.C., Institute for International Economics (IIE).

Bianchi, P. and N. Bellini (1991): Public policies for local networks of innovators, *Research Policy*, vol. 20, No. 5, Amsterdam, Elsevier Science Publishers B.V. (North-Holland), October.

Brailovsky, V. (1980): Industrial growth and international trade in Mexico, Mexico City, Secretaría de Patrimonio y Fomento Industrial, *mimeo.*

Brazil, Ministry of Economic Affairs, Finance and Planning (1990): *Diretrizes gerais para a política industrial e de comércio exterior*, Brasilia, 26 June.

Chami Batista, J. (1992): *Debt and Adjustment Policies in Brazil*, Boulder, Colorado, Westview Press.

Choi, D. W. (1993): *From Export-Led to Technology-Oriented Growth: the New Korean Industrial Policy*, La Jolla, California, IR/PS, University of California, San Diego.

Dias Carneiro, D. (1990): Crise e esperança: 1974-1980, in M. de Paiva Abreu (ed.), *A ordem do progresso. Cem años de política econômica republicana, 1889-1989*, Rio de Janeiro, Editora Campus.

ECLAC (Economic Commission for Latin America and the Caribbean) (1990): *Changing Production Patterns with Social Equity*, Santiago, Chile, March. United Nations publication, Sales No. E.90.II.G.6.

——(1992): *Social Equity and Changing Production Patterns: an Integrated Approach* (LC/G. 1701), Santiago, Chile.

Estrategia, Santiago, Chile, 1 December 1992.

Fajnzylber, F. (1990): *Industrialization in Latin America: from the "Black Box" to the "Empty Box"*, "Cuadernos de la CEPAL" series, No. 60, Santiago, Chile, ECLAC, August. United Nations publication, Sales No. E.89.II.G.5.

Grossman, G. and E. Helpman (1991): *Innovation and Growth in the Global Economy*, Cambridge, MA, The MIT Press.

Kaldor, N. (1966): *Causes of the Slow Rate of Economic Growth of the United Kingdom: an Inaugural Lecture*, London, Cambridge University Press.

Katz, J. (1993): Market failure and technological policy, *CEPAL Review*, No. 50 (LC/G. 1767-P), Santiago, Chile, ECLAC, August.

Lim, L. Y. C. (1993): *Technology Policy and Export Development: the Case of the Electronics Industry in Singapore and Malaysia,* Maastricht, Netherlands, United Nations University, Institute for New Technologies.

Marcovitch, J. (1990): Política industrial e tecnológica no Brasil: uma avaliação preliminar, *Pensamiento Iberoamericano*, No. 17, Madrid, Ibero-American Cooperation Institute (ICI)/Sociedad Estatal Quinto Centenario, January-June.

Mexico, Ministry of Trade and Industrial Promotion (1989): *Programa nacional de modernización industrial y del comercio exterior, 1990-1994,* Mexico City.

——(1992a): *Programa para promover la competitividad e internacionalización de la industria textil y de la confección*, Mexico City.

——(1992b): *Programa para promover la competitividad e internacionalización de las industrias de la curtiduría y del calzado*, Mexico City.

Norman, G. and M. La Manna (eds.) (1992): *The New Industrial Economics. Recent Developments in Industrial Organization, Oligopoly and Game Theory*, Aldershot, Hants., United Kingdom, Edward Elgar Publishing Limited.

OECD (Organization for Economic Cooperation and Development) (1987): *Structural Adjustment and Economic Performance*, Paris.

OECF (Overseas Economic Cooperation Fund) (1991): *Issues Related to the World Bank's Approach to Structural Change. Proposal from a Major Partner*, OECF Occasional Paper, No. 1, October.

Ontario, Premier's Council (1988): *Competing in the Global Economy, Report of the Premier's Council*, Toronto, The Queen's Printer for Ontario.

Peres, W. (1989): *Un decenio de planeación industrial en México, 1979-1988*, La Jolla, California, Center for U.S.-Mexican Studies, University of California, San Diego.

Porter, M. (1990): *The Competitive Advantage of Nations*, New York, The Free Press.

Reich, R. B. (1991): *The Work of Nations. Preparing Ourselves for the 21st-Century Capitalism*, New York, Vintage Books.

Scherer, F. M. and D. Ross (1990): *Industrial Market Structure and Economic Performance*, Boston, Houghton Mifflin.

UNIDO (United Nations Industrial Development Organization) (1992): *Brazil's Industrial Policy: an Assessment in the Light of the International Experience*, PPD. 26, Vienna, Regional and Country Studies Branch, Industrial Policy and Perspectives Division.

Williamson, J. (1990): What Washington means by policy reform, in J. Williamson (ed.), *Latin American Adjustment: How Much Has Happened?*, Washington, D.C., Institute for International Economics (IIE).