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Industrial policy *and promotion of* competitiveness

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The debate in the region on industrial policy is currently centered on policies to promote competitiveness in the context of open economies. It gives priority to the use of horizontal policies, is based on the market, and attaches great importance to the maintenance of macroeconomic balance. It continues to suffer from weaknesses in its treatment of sectoral issues, however, continues to be reluctant to assimilate the Asian experience of giving support to pioneering firms and seeking closer coordination between the public and private sectors, and still does not give sufficient importance to measures to strengthen the technological base and human resources. This article reviews the international events which have changed the notion of competitiveness and posits that the idea of production development policies is more appropriate than that of industrial policy as such. It maintains that changing production patterns in the 1990s are indissolubly linked with internationalization and the deepening of the export process, and looks at some possible policy instruments in the areas of export promotion, technology, productivity and training. It concludes with some reflections on the quality requirements in public management that stem from this approach.

I

Introduction

Industrial policy has been associated with the idea of direct public intervention in the structure of production in the light of certain more or less well-defined views of the future. As part of such policy, attempts have been made to identify and promote certain sectors, and sometimes even specific firms, considered to have greater growth potential. The traditional approach emphasized the flaws in the market as a guide for investment, because of the presence of externalities and economies of scale. Public action, it was implicitly assumed, could effectively cope with such imperfections. In practice, investment planning by firms was underestimated, while the microeconomic management capacity of governments was overestimated.

The most radical expressions of industrial policy have involved the practice of "picking winners", with very mixed results. As a reaction, those opposed to any form of industrial policy have seen this practice as an attempt to ignore the functioning of the market and to shape the economic structure on the basis of political considerations (Lambsdorff, 1993).

The most recent approaches, while still stressing the shortcomings of the capital, labour and product markets, nevertheless do not try to take their place in the allocation of investment resources. They seek to correct the flaws observed directly, in order to strengthen the allocative role of the market in production decisions. In addition to the generally known flaws of the capital market (adverse selection, moral risk, segmentation) there are also such flaws as lack of coordination, insufficient provision of public goods such as information, knowledge, dissemination of technology and training, and weakness of the associated learning processes (Stiglitz, 1989).

In open-economy strategies, changing production patterns and growth potential are more associated with exports, with greater emphasis on the development and spread of technology as a means for

improving the position of local firms on the international market.¹

Consequently, current production development policies are aimed:

i) at the development of as yet incomplete markets (for technology, human capital, long-term capital, foreign exchange) by overcoming such shortcomings as underinvestment in export activities (new products, new markets) and insufficient support for pioneer firms;

ii) at the achievement of rising yields and strategic forms of complementarity which foster systemic competitiveness;

iii) at the regulation of markets of crucial importance for competitiveness, such as the financial system, public telecommunications services, energy and other areas of the infrastructure (ECLAC, 1994a).

Nevertheless, the question of policies to promote production and technology in open economies is still a pending item in the regional debate: "For now, the prevailing attitude is to simply abandon such policies, regarding them as being more appropriate to closed economies, without there being any effective substitute for promoting competitiveness. Behind the argument for non-discriminatory policies may lie the naive and unsubstantiated belief that the mere functioning of markets is a sufficient tool for resolving issues related to technology, business, human resources, competitiveness and international standing" (ECLAC, 1994b, pp. 19-20).

¹ The notions of efficiency and international market position are analysed in ECLAC, 1992a, chapter V.

II

Changes in the concept of competitiveness

1. Globalization and technological change

Globalization and technological change are currently reshaping the international economic order through the dynamic growth of the international financial markets, foreign direct investment, and exports of services. As a result, economic dynamism has come to be a predominantly world-level matter, and the distinction between domestic and external economic policy has lost some of its significance, since the economic agents tend to operate in a way that gives the international setting most weight in their decisions. Thus, the main criterion for judging economic policies today is the extent to which they help improve the country's competitiveness.

In a context of marked globalization, the world product and trade grow more slowly than in the past, but greater trade openness and the gradual reduction of tariff barriers to trade increase the elasticity of world exports in terms of the product. Foreign direct investment (FDI), closely linked with the transnational corporations, is seen as one of the most dynamic factors in the promotion of growth and the spread of technology. In recent years, world FDI flows have grown three times as fast as the product, while the growth rate of exports has been double that of world output (CTC, 1991).

Economic and trade power is shifting rapidly towards the Pacific. A new map of world trade flows is being drawn, with the deliberate formation of trade areas, complementation agreements in the fields of production and technology, and processes of converging economic policies (Rosales, 1993).

These tendencies towards the regionalization of trade and the creation of great trade blocs further stimulate the process of concentration of FDI in the main economies, in order to minimize the risk of protectionist measures, concentrate research and development resources in the parent companies of the transnationals, and reduce technology costs by sharing them with partners and even with competitors through joint investments and other ways that place the emphasis on specialization and flexible adaptation to demand.

The rapid increase in flows of FDI has been accompanied by a change in their sectoral composition, with a growing proportion of services.² Within such services, the technological, information and knowledge component is increasingly important, so that the new services represent a crucial aspect of strategies for building competitiveness in the global economy. Both the rapid growth of trade in this field and the growing tendency to channel FDI towards it are indicators of the degree of internationalization of the economies (CTC, 1991).

The processes of financial liberalization and deregulation have accentuated the globalization of markets and are imposing new conditions as regards the determination of exchange rates and interest rates. Non-trade-related capital movements are several tens of times greater than movements connected with trade and FDI. Thus, capital movements have become the main factor of globalization and a major guiding force in the world economy (Drucker, 1993).

The technological transition increases the globalization of markets, the internationalization of production, and international competition. Decisive factors in such competition today are production-related scientific and technological research; the training and systematic updating of human resources; management techniques compatible with the global economy, and public and private forms of organization which stimulate innovation, flexibility and creativity.

Within such processes, the underlying common feature is that knowledge—in the form of education, science and technology—has become the key to economic and social development and the main organizational code of society in these final years of the twentieth century. What counts in the current competition between nations is the quality of the goods and services produced and the calibre of the human resources involved in such production.

² Services absorbed a quarter of world FDI in the early 1970s, but they now account for half of the total FDI and between 55% and 60% of the annual flows of such investment (CTC, 1991).

As the importance of knowledge grows, it is only natural that there should be a decline in competitive advantages based on natural resources, low wages or unskilled labour and that such advantages should be transferred to new manufactures and services in which quality, design and the incorporation of advanced technology are of increasing importance (Lafay, 1989). The competitive advantages demanded by the world market are based on intelligence, technical change, innovation, and intellectual added value.

Consequently, commodity-based economies are tending to be cast adrift from the new global economy. Technological change has stimulated greater economy and efficiency in the use of energy and raw materials, thus reducing the income-elasticity of demand for primary commodities in industry and services, and this has been a hard blow to strategies based on the use of natural resources. Proof of this is that the recent expansionary cycle in the world economy—the longest since the war—has coincided with record low levels of commodity prices (Drucker, 1993). The deterioration of such prices has not led to a recession, as it did in the past. The predictions of shortages and high prices of raw materials have not only not come true, but in the food sector the opposite situation of over-supply is the most likely outlook, in view of the disappearance of great import markets (China, India, the former Soviet Union) and their gradual conversion into exporters of foodstuffs (ECLAC, 1992b).

2. Price-competitiveness and structural competitiveness

The traditional approach associates the promotion of competitiveness with real devaluation and the reduction of unit labour costs, either through increases in labour productivity or reductions in real wages (OECD, 1992).

This kind of approach can offer very convincing explanations in the case of competitive markets with high price-elasticity of world demand for tradeable goods consisting of homogeneous products, and where the qualitative factors influencing the trading capacity of a country remain more or less constant. Its capacity to provide such explanations goes down, however, if a substantial part of international trade takes place under conditions of imperfect

competition³ and intra-industry specialization based on product differentiation. In this case, policies of production specialization and technological development—with their impact on the quality and design of processes and products—are beginning to play a significant role in winning markets, while isolated considerations of relative prices are tending to lose importance as factors serving to explain the evolution of competitiveness.

In the case of standardized products, competition operates through prices and availability. With specialized products, however, the most important aspects are quality and service. They are followed by considerations of availability, and it is only if all the foregoing factors are equal that price is a decisive aspect. This does not mean that price and cost considerations are no longer of interest, but in the new competitiveness conditions prices have lost some of their relative importance (Pérez, 1988).

3. Elements of the new form of competitiveness

In the world of today, the competition is not between firms but between systems. The firm is the hub of competitiveness and innovation, but it is an integral part of a system of linkages which includes its suppliers of goods and services, the financial, educational, technological, energy, transport, telecommunications and other systems, the infrastructure, and the quality of the public sector and of relations within the firm itself.

Shortcomings in these areas all affect the competitiveness of the firm. Building systems of competitiveness therefore demands reasonably simultaneous advances in the network of contacts that defines the firm. This can be stimulated by systematically fostering cooperation between the public and private sectors and within the private sector itself, as well as promoting the capacity to form long-term strategic alliances, with special emphasis on export promotion, technology, education and training, along with flexible complementation agreements and shared internationalization strategies.

³ In this respect, recent trade policy approaches strongly reflect the influence of economies of scale, the advantages of experience, innovation and the technological learning process on patterns of specialization (Krugman, 1991).

This systemic approach to competitiveness goes beyond narrow concepts that limit its analysis to the exchange rate and the trade balance. As the "lost decade" vividly showed, it is all too easy to achieve big trade surpluses through severe real devaluations, with all that they imply in terms of compression of imports, reductions in real wages, and even cuts in social expenditure.

The real test of competitiveness, however, lies in measuring the capacity of nations to meet the challenges of world markets while at the same time increasing the well-being of their inhabitants. The most fully developed proposal in this respect involves consideration of four indicators: i) labour productivity; ii) real wages; iii) the real yield on capital, and iv) international trade position.⁴ Although each of these variables is affected by a whole range of factors, analysing them as a whole gives a reliable idea of the evolution of national competitiveness.

Competitiveness now depends not so much on advantages in terms of wages or natural resources as on the quality of human resources and the capacity for the incorporation of technology. The promotion of competitiveness thus involves the application of policies for training human resources (educational and technical training) and strengthening the technological base. Decisive determinants of competitiveness in the overall context are also macroeconomic stability and smooth functioning of markets.

Maintaining the macroeconomic balances –low and declining inflation, fiscal saving, incentives for saving and investment, promotion of increased productivity and defence of the real exchange rate– is a basic requirement for competitiveness. Exchange rate instability, for example, raises transaction costs, increases uncertainty, and may block investment. From a broader standpoint, it is necessary to seek fuller incorporation in the international economy, while maintaining macroeconomic stability. This means taking further steps in the direction of trade diversification and financial openness, albeit subject to the necessary safeguards in terms of gradualism, portfolio diversification, risk coverage and stabilization funds, in order to obviate the transmission of external disturbances to the domestic economy.

⁴ See *Report of the President's Commission on Industrial Competitiveness*, Washington, D.C., 1985.

In other words, the purview of competitiveness policies should be limited to improvement of the factors of production, and they should be subordinated to proper macroeconomic management and the application of good economic policies. Promotion of competitiveness is thus not a substitute for the latter, but only a necessary complement (Krugman, 1994).

Competitiveness also requires transparent competitive markets readily open to the various economic agents. Maintaining stable incentives and reducing search, transaction and information costs is a further way of supporting competitiveness.

Thus, the real significance of the guidelines presented below with regard to technology, training, infrastructure and internationalization of production must be understood in terms of the need to maintain macroeconomic stability and promote market competition.

4. Stages in competitiveness

No generally applicable suggestions can be made with regard to competitiveness and production development policies, whose relevance will depend to a critical extent on the specific features of each country. Factors of particular weight in this respect are the level and density of the industrial and technological base, the particular features of the country's form of incorporation in the international economy, the relative weight of foreign trade in the product, the degree of export diversification, the management and human resources base, the quality of public management and the progress made in the application of economic reforms. The range of possibilities opened up by the various combinations of such variables is also an indication of the variety of possibilities that exist for tackling the various stages of competitiveness.

Macroeconomic reforms –in such fields as price stability, fiscal discipline, trade reform and its consistency with macroeconomic policy, and the credibility of the reforms themselves– are the minimum basis on which national competitiveness can be built. After such reforms, experience shows the important contribution that can be made to competitiveness by institutional reforms in such areas as ports (ECLAC, 1991), labour legislation, modernization of customs and tax authorities, etc.

In economies which have progressed further with macroeconomic reforms and these institutional

reforms, there is also a need to make reforms at the microeconomic and mesoeconomic levels, covering such matters as bottlenecks in training, productivity

and infrastructure,⁵ as well as the challenges of technology and the internationalization of production (especially investment in production activities abroad).

III

Industrial policy or production development policy?

The current debate on industrial policy is centered on the promotion of competitiveness by increasing total factor productivity, improving the quality of goods and services, and promoting the generation and spread of technology.

The first comment that may be made in this respect is that these are really policies to promote production and technology rather than industrial policies proper. Narrow sectoral approaches have gradually been left behind. The challenge now is to strengthen the country's position in the world economy by guiding its structure of production in the direction of the most dynamic trends in world trade. To this end, it is necessary to increase the content of knowledge and technological value in each product, favouring the promotion of service and production linkages for export activities and stimulating production services, the development of suppliers, and the production of intermediate inputs and associated capital goods.

Modern industrial development, which is centered around chains of production, demands that attention be given not only to the production of material goods but also to the whole range of production-related services, such as those in the fields of repair and maintenance, industrial consultancy, technology, administration and finance, computer programmes, design and process engineering, etc. Modern policies for industry and related services cannot be divorced from other sectoral policies or isolated in sectoral approaches.

With the reorientation of development strategies in the region, a leading place in production development is occupied by support for new emerging industries, i.e., non-traditional exports. Firms able to identify a line of export products and place them on dynamic international markets on competitive terms have to shoulder the heavy initial costs typical of the penetration of difficult markets.

Through their actions, they generate positive externalities – information, prestige, marketing networks, etc. – which are of benefit to other new exporters. This is why it is important to compensate innovative firms that bear the costs and risks of winning new markets (ECLAC, 1994a).

In cases where success has been obtained with exports based mainly on natural resources, it is necessary to consolidate the existing advantages by moving on to the areas of inputs, capital goods, technology and associated services. In this way, the export profile is gradually redirected towards products with greater added value and technological content which enjoy more dynamic markets and steadier prices, with less risk of protectionism, thus reducing the vulnerability of the overall range of exports.

This does not mean polarizing a conflict between primary commodities and industrial goods, since the important thing is the amount of knowledge and technology incorporated in each product, along with the promotion of chains of production and services for exports.⁶

In agriculture, for example, the conventional distinction between fresh (or unprocessed) and processed crops does not necessarily reflect greater or lesser incorporation of added value. In many cases, fresh products require quite complex processes of production, harvesting, selection, classification,

⁵ For suggestions on policies to deal with the road infrastructure, see Schliessler and Bull (1992), and with regard to ports see ECLAC (1991).

⁶ OECD imports grew at an annual rate of 5.7% over the period 1978-1987. Products with a high natural resource content grew more slowly than this, while those that incorporated a higher content of knowledge grew by over 10% or 15%. Imports of timber, for example, grew by less than 1% per year, while wood manufactures grew by 9%. This lends added strength to the argument that it is necessary to strengthen production systems using existing natural resources.

quality control, storage and transport. The final consumer markets for these goods tend to be demanding with regard to quality and presentation, so that various services are required in addition to the production process proper, which increase the added value and the content of technological knowledge (ECLAC, 1993a).

The appearance of faster-growing, less vulnerable lines of products with a higher content of knowledge and technology is not usually an automatic result of market forces. In some cases clear signals of the consolidation of leading national positions are needed, and in other cases public and private sector external promotion alliances to win market positions through the carefully focussed application of production and export development instruments.

There is room here for concerted action aimed at sectoral development. Thus, if emerging sectors whose growth potential has already been shown by their market performance and high export volumes encounter certain shortcomings in the areas of marketing, training, design, technology or infrastructure, public and private efforts could be joined in order to concentrate the existing horizontal instruments on those areas. At the same time, opportunities for lobbying can be minimized if there are non-State public institutions made up of business associations

(including exporters), together with technological and academic centres, which operate in a highly transparent manner in the allocation of funds and the evaluation and follow-up of activities.

The public sector is no better fitted than the private sector to "pick winners", but it does have advantages (or can build them up) in the areas of the coordination of efforts and the encouragement of prospective views of the international economy and the corresponding markets. The public sector could listen to the demands of businessmen and foreign investors when defining its expenditure on infrastructure and human resources and its long-term financing policies, in order to maximize their effect on systemic competitiveness and the spread of technology.

A possible institutional expression of this could be the development of tripartite productivity and competitiveness centres –i.e., with the participation of the public sector (the government, universities and technology centres), business associations, and labour organizations– to follow up the evolution of competitiveness and of sectoral technological and commercial trends, approaching national issues with due consideration of the international aspects involved. Such a practice would strengthen global, outward-looking economic behaviour by stimulating cooperation among the economic agents.

IV

Internationalization and export emphasis

Today, production (and especially export) activity is carried on in line with the concept of networks. Export activities form an integrated network or circuit with various links: suppliers, production, transport, imports, distribution, marketing, financing for importers and clients, legal and financial services, etc. The competitiveness of a product will depend on the efficiency of each of these links.

Two policy considerations arise in this respect: first, it is important to promote the proper articulation of these production and services links by stimulating specialization and externalization of functions through strategic alliances with suppliers, with marketing and transport chains, with consumers, and even with competitors, and second, it is necessary to review the appropriateness of export incentives in

order to take account of the importance of export chains.

From this point of view, the aim is to support all firms that are potentially competitive, whatever their size, by concentrating public support on the elimination of specific hindrances that limit the development of that potential and by strengthening dynamic linkages. Furthermore, support for small and medium-sized firms should not tend to develop them as watertight and sometimes "protected" compartments, but should be designed to create and strengthen their links with successful larger firms and facilitate their incorporation into export chains, where they could operate initially as subcontractors or indirect exporters. The main thing in each case is to follow up the competitive performance of the main export lines

very closely in order to identify hindrances and opportunities and react to them quickly, in keeping with the available resources and through non-discriminatory policies.

The quality of international specialization is not just a commercial concern: it also has a direct impact on the possibilities of generating productive employment at higher wages. Specialization in low-growth products which have marked price cycles and are subject to protectionist practices can eventually affect the macroeconomic balances, while on the other hand, relying too much on natural resources with little processing, on low wages, or on substandard labour conditions makes it difficult to achieve systemic competitiveness.

In order to progress in the internationalization of production it is necessary to ensure closer collaboration between the public and private sectors. This is necessary, for instance, in order to promote greater national influence in global production, marketing and transport chains connected with exportable supply and in order to stimulate the formation of national marketing firms as part of a more active trade policy and closer public-private coordination.

The fundamental contribution of the public sector to improved export performance lies in: i) ensuring a climate of growth and economic stability; ii) giving incentives a global orientation which reduces anti-export biases and guarantees access to inputs on competitive terms; and iii) providing export activities with institutional support, especially as regards information, finance, export insurance and the promotion of exportable supply abroad.⁷

All the above, however, is not of itself enough to ensure progress towards a phase of internationalization of production and fuller and deeper export activities. This contribution must therefore be accompanied by investment abroad, participation in marketing chains, joint operations with local firms in the export markets, and redoubled attention to such aspects as promotion, quality and brand differentiation.

The experience of the Asian economies shows the strategic importance of these areas, especially: i) the establishment of combined marketing and export firms; ii) the installation of firms for importing national products in the main target markets; iii) the signing of export contracts with differential

⁷ ECLAC (1994a, chapter V) reviews fiscal and financial incentives for promoting Latin American exports.

incentives according to commitments regarding the value exported, and iv) the promotion of investment abroad for marketing and participation in wholesale distribution chains. All these aspects are increasingly important for the internationalization of production and increased competitiveness (Rosales, 1994; ECLAC, 1994a).

The public sector could collaborate in these tasks, especially during macroeconomic periods when large inflows of foreign exchange into the economy tend to depress the real exchange rate and discourage exports. In these cases, consideration could be given to the possibility of using small, limited amounts of the international reserves (say 1%) for these external promotion initiatives, subject to the provision of matching sums by export groups. These resources could be used for the establishment of trade offices abroad or promotional expenditure which benefits all exporters. It may be noted that the Asian countries reward expenditure by firms on promotion abroad and technological activities by granting double tax deductions in respect of it (Annex 1).

Some salient aspects of the deepening of export activities are the following:⁸

i) *Stimulating national marketing firms*, as part of an effort to apply more active trade policy, and *improving the organization of exporters themselves* are other tasks belonging to the phase of the deepening of export activities. With regard to some agricultural and marine products, for example, a stage seems to have begun in which there are greater requirements in terms of quality, standardization, trade promotion, alliances with importers and coordination of supply, since the market is now more demanding and there are new competitors. It is therefore necessary to organize in order to export more effectively, by improving private promotion and marketing management and learning from successful experiences.⁹

⁸ In this article, the concept of deepening of export activities comprises: product and market diversification; incorporation of knowledge and technology; establishment of export chains; greater incorporation of small and medium-sized firms; and introduction of incentives for improved product quality.

⁹ Among the most outstanding cases of natural-resource-based non-traditional exports are fresh shellfish and crustaceans (Argentina and Panama), soluble meal and similar animal feed derived from marine species (Chile and Ecuador), frozen shrimps (Ecuador), salmon (Chile), grapes (Chile and Mexico), apples (Chile), pineapples (Costa Rica and the Dominican Republic), concentrated orange juice (Brazil), fresh chicken meat (Mexico), cut flowers (Colombia and Costa Rica), and sawnwood and railroad ties (Chile). See ECLAC, 1993a.

ii) *Competitive finance for non-traditional or pioneering exports* will continue to be an important pillar of export promotion. Expanding export insurance (or creating it when it does not exist), arranging lines of long-term finance for exporters of manufactures and services on internationally competitive terms, and creating the necessary mechanisms and incentives for incorporating the private banking system into this area are essential prerequisites for the deepening of export activities.

iii) With regard to *trade promotion*, it is necessary to get away from atomized, individual and sometimes ingenuous forms of action which are not in keeping with the importance of exports in economies which have opted for greater integration into international markets or with the degree of penetration that some countries have achieved in sophisticated markets. In this respect, it is necessary to increase the public resources assigned to promotion; to establish incentives favouring trade promotion; to persuade the private sector to invest more heavily in this task, and to improve public/private coordination in such areas as promotion of the country's image, for example.

iv) The promotional nature of *foreign investment policy* may also be reflected in a more active policy of strategic alliances with transnational corporations and stimulation of foreign investment in manufactures, services, and human resources training, through clearer signals of sectoral diversification. Facilitating such investment through the reduction of taxes on technology transfer, services and technical assistance and through bilateral agreements to avoid double taxation may be an advantageous line to take, especially in economies which have progressed further with structural reforms.

v) Improving coordination and appropriateness in the *design, application and evaluation of export promotion measures* involving the repayment of taxes and customs duties is generally a task that includes various public bodies (customs, inland revenue, the treasury, and the ministries of the economy, foreign trade or industry), thus sometimes making coordination more difficult and saddling exporters with costs that could be avoided. Such important areas as the import and export of services and the financing of export activities sometimes do not correspond to any clearly defined institution. In order to reduce red tape in respect of external trade formalities, it is necessary to improve information

handling and the registration of exports and imports by using informatics and progressing towards a "single window" for exporters and their relations with the customs service.¹⁰

Here there is an ongoing challenge to reduce anti-export biases by reviewing regulations, making procedures more flexible, reducing formalities and red tape and raising the technical level of the staff.

vi) An area which has not been developed much in the region but which is gaining importance is that of *monitoring unfair competition* in external trade.¹¹ Special attention is being given in trade agreements, for example, to treatment of investments, services, anti-dumping measures, safeguard clauses, and dispute settlement machinery. The management of such a system must: i) be located at such a level as to ensure full knowledge of real sectoral conditions; ii) be in close contact with the private sector; and iii) have a high level of technical expertise and credibility, so as to avoid utilization of the system by vested interests with protectionist aims.

The public institutions responsible for the design and execution of export development policies have not evolved as fast as the growing process of internationalization of the economies of the region. This is why it is important to bring the rates of evolution and performance of the promotional bodies and the respective Foreign Ministries into line with these new challenges. Such adaptation should be carried out in concert with exporters' organizations so as to stimulate a stronger private sector commitment to the trade promotion, technological development and training policies.

vii) *Modernization of the management and institutions responsible for international economic policy* plays a decisive role in internationalization efforts.

¹⁰ The continued progress of export activities is continually raising new challenges. Thus, for example, port management must be adapted to multimodal transport practices, incorporating technological changes such as the use of containers and electronic data interchange (EDI) (ECLAC, 1993b).

¹¹ The new Mexican External Trade Act, published in the *Diario Oficial* on 27 July 1993, contains precise rules on price discrimination, subsidies, damage or potential damage to domestic production, safeguard measures and procedures (Banco Nacional de Comercio Exterior, 1993).

It is a question of unifying economic and political criteria, giving greater weight to the economic component of international relations, and enhancing political and technical support for the tasks arising in international economic relations. To this end, it would be helpful to work out national strategies of a

consensual nature, with clearly defined targets in terms of trade promotion and investments by regions and mega-markets, so as to enable the unified and timely handling of the tasks of trade promotion, penetration and defence of markets, and the quest for new technologies and business opportunities.

V

Dimensions of production development policies

The current debate in the region on industrial policies (or rather on the promotion of competitiveness) is mainly centered on technical and economic policy requisites.

With regard to technical requisites, such policies i) tend to be based on market institutions; ii) place emphasis on the dynamic efficiency of competitiveness; iii) make use of incentives which are limited in time, decreasing, provide for their own eventual elimination, and are linked to precise export goals; iv) have limited objectives and concentrate the critical mass of public sector measures on programmes which will have a decisive impact and are in keeping with that sector's technical and administrative capacity; v) promote decentralization of the administration and follow-up of incentives; and vi) are selectively concentrated on pioneering exports or those with a high content of knowledge.

With regard to economic policy requisites, production development policies must be public (but not State) policies and must be based on consensus rather than a technocratic approach. An orthodox counter-argument maintains that the massive surge of information in its present dimensions rules out any possibility of establishing production priorities, since there is no public authority or body capable of collecting such flows of information and processing them in a prompt and timely manner.

The truth is that this is applicable to any type of body, public or private. The main opportunity for public action here lies in sharing information, arriving at consensual diagnoses, and generating suitable institutions to favour flexible, informed and consensus-based development and reduce uncertainty.¹² The main competitive advantage of the public sector is

the possibility of fostering this public/private process of sharing information and promoting consensus-based diagnoses and a range of instruments for following up, evaluating and correcting the processes of investment, export, training, infrastructural development and spread of technology.

1. Horizontal and market-oriented policies

The current form of production development has a horizontal dimension –i.e., it does not support specific sectors or activities– and also a factorial dimension, providing benefits which are distributed transversally to the various branches in support of the generation of markets and institutional systems that facilitate the development of the factors of production.

Production development may therefore be understood as being based on horizontal instruments which improve coordination within the private sector and between that sector and the public sector and reduce the risk involved in new investments by improving the supply of information and fostering ready access to existing instruments.

Consensus on industrial policies is reflected in policies that do not interfere with the market but seek to improve its operation by strengthening or correcting it, as appropriate. It seeks to secure positive adjustments based on the principles of the market and

¹² Paradoxically, the public sector's inability to effectively process technological, trade and financial information for deciding on production options may actually be turned into an advantage if practices of seeking consensus among the actors and institutionalizing dialogue, negotiation and a prospective view of the international environment are adopted on a regular basis.

competition, and assigns responsibility for structural adjustment to the firms themselves, concentrating public tasks on ensuring a suitable environment for private investment, stable growth, the pre-eminence of competition, and ready access to markets.

In analysing trade specialization strategies, it is no longer sufficient to distinguish between price-takers and price-makers: the real difference now is between passive strategies (which merely accept available factors) and active strategies (which create factors). Here lies the analytical distinction between "comparative advantages" and (nationally generated) "competitive advantages".

Making progress in terms of competitiveness, then, means building factors and competitive advantages. In view of the characteristics of current competitiveness, this means using horizontal-type policies which do not discriminate between activities or firms but are expressly directed towards solving a known shortcoming of the market, promoting a whole industry or a region in general, or promoting the development of inputs vital to systemic competitiveness, such as training and infrastructure (OECD, 1992).

2. Promoting competition

The competitive functioning of markets is one of the pillars of industrial policy. Promoting competition calls for a suitable regulatory framework, however.

In order to take full advantage of the potential of the market, it is necessary that markets should be competitive, transparent and readily accessible. Creating markets where they do not exist, strengthening them when they need improvement, and regulating them when they are of critical importance are natural elements of pro-market industrial policy. Democratizing access to markets, improving their efficiency and transparency, and reducing the tendencies towards economic concentration are also the modern way of raising efficiency, competitiveness and equity.¹³

In order to ensure the effective operation of competitive markets, it is necessary that the public sector should have sufficient regulatory capacity to take action both on the structure of markets, so as to do

away with anti-competitive practices, and on the results of their operation. Generally speaking, promoting competition is the best policy for stimulating efficiency, but when this is not possible, timely regulation is the next best option. In many of the countries of the region there is a need to improve the institutions governing the financial, social insurance, energy, non-renewable natural resources, and public utility service markets, as well as to make suitable institutional arrangements for the monitoring of unfair competition.

The institutional framework for the regulation of competition should include measures to strengthen market discipline, boost the mobility of resources, and improve their availability (Atiyas, Dutz and Frischtak, 1992; Tavares de Araújo Jr., 1993).

Market discipline is strengthened through less protection, anti-monopoly policies, regulation and supervision of financial institutions, privatization operations, use of performance contracts in public enterprises, and safeguards for the interests of consumers and small shareholders.

Resource mobility is stimulated with measures that eliminate entry and exit barriers, make markets more flexible, reduce transaction costs, improve access to information, and do away with regulations that impede transfers of assets (bankruptcy laws, legal reforms). In the case of the labour market, such mobility is facilitated by improving information and favouring flexibility through such means as unemployment insurance, flexible working hours, and profit sharing.¹⁴

Resource availability improves along with increases in the flows of finance and information. Important factors in this regard are programmes of labour and management training, programmes to further the spread of technology, and measures to promote the inflow of technology and foreign investment. Other favourable elements are flexibility of financial restructuring arrangements in the event of business failures, the activities of bodies specializing in asset conversion, and policies to facilitate financial intermediation and deepening of the capital market, especially with a view

¹³ Supplementing technology markets; easing access by workers to the training market; correcting cases of segmentation of the capital market; increasing the access of small and medium-sized firms to credit, and improving contractual relations between contractors and suppliers and between direct and indirect exporters are forms of market promotion which not only favour competitiveness but also have a positive impact on equity.

¹⁴ Profit sharing strengthens the link between wages and productivity because wages depend on output; it discourages dismissals and encourages the hiring of labour, by making labour costs more flexible; and as it identifies wages with the economic results of the firm it usually helps to improve labour relations (ECLAC, 1992a, chapter VI).

to providing better facilities for small and medium-sized firms, new ventures, and investments in technology.

3. Criteria for retooling

The main aim of retooling as it affects both products and labour is to facilitate adjustment through market mechanisms that allow competitiveness to be generated or regained in various activities. This involves promoting the transfer of labour from low-productivity jobs to others which are more productive, with inter- or intra-sectoral reallocations of resources, specific subsidies, training programmes, tax rebates for investments in given regions, etc. What industrial policy must avoid is slowing or hindering the retooling process.

In periods of globalization, retooling forms part of the strategy for improving a country's place in the world economy and developing production, since the promotion of dynamic sectors must be complemented with the retooling of more backward sectors. It will be necessary to take steps in advance to ensure concerted retooling capacity in sectors or regions whose competitiveness is threatened; the measures to be taken must facilitate the reallocation of resources to activities with a more promising future, taking care to minimize the social cost of such reallocation and to preserve, modernize and realign labour and management skills.

Although horizontal policies represent a necessary basic framework, they do not appear to be sufficient for dealing with specific sectoral and regional aspects when these involve regions or sectors with a marked lag in terms of competitiveness or, still worse, with structural failings.

The most advanced examples of structural adjustment display successful cases of improved international economic positions obtained through sectoral policies (the motor vehicle and computer sectors in Mexico), but also cases where sectoral and regional difficulties have made their appearance (the Chilean textile sector and the coal mining sector in the Eighth Region of that country), reflecting a certain degree of exhaustion of horizontal policies as means of tackling such problems.

Retooling as public policy tends to become inevitable when sectors or regions of economic and social importance suffer from serious and persistent lags in terms of competitiveness. If these sectors have the capacity to recover, yet neither the market nor the existing promotion instruments offer sufficient

stimuli to enable them to do so unaided, the public sector can step in to supplement the efforts at competitive adaptation. In cases where those sectors simply do not have the capacity to recover, then what is really needed is simply to minimize the social cost of withdrawal from the sectors.

In cases of retooling, it is necessary to focus the overall range of horizontal policies in order to give coordinated support to sectors or regions which are lagging behind in terms of competitiveness. Such policies aim to improve the factor markets, expand the supply of production externalities, improve access to trade and technological information, finance and technological support, and reduce transaction costs. It is therefore desirable that the financial support, technological development, technical assistance, labour training and retraining and unemployment benefit measures should be integrated with each other and should be closely linked with social policies and their territorial and local effects.

Thus, when retooling is involved, horizontal or factor-oriented policies (with regard to technology, training, export development, infrastructure) may have a sectoral focus. Such cases may be dealt with through special, highly specific and carefully focussed public programmes of limited duration which link together the efforts of the public and private sectors in a flexible and concerted manner.

It may be that more specific diagnoses may point to the need for intrasectoral changes, minor rationalization measures, or modernization, which will require public resources. The first thing to do in every case is to distinguish between lagging competitiveness and structural decline. The second thing is to distinguish between the firm or activity affected and the region involved. In the first case, a distinction is being made between policies for the recovery of competitiveness and policies of total withdrawal from the sector; in the second case, the distinction is between production development policies and regional development policies. In other words, reducing the social cost of the loss of competitiveness of a firm which is important to a region does not necessarily mean rescuing that firm at all costs.

4. Unified treatment

Emerging competitiveness involves above all systemic aspects: it is therefore not efficient if policies for promoting competitiveness are designed and managed as watertight compartments which fail to

take advantage of the clear sectoral, regional and institutional interlinkages present in public action. Consequently, the coordination of policies on public investment, infrastructure, human resources training, export incentives, technological and financial support and technical cooperation is of the highest priority. Such coordination should be expressed in some institutional benchmark that can be evaluated in terms of the unified management of these policies. At the same time, such unified management reduces the demand for extra financial resources, since coherent action in various areas of public activities generates externalities and clear economies of scale which facilitate the focussing of administrative efforts and of resource allocation.

Emphasis on heightening competitiveness demands such greater coordination of production development policies and closer links between them and trade policy, for in open economies the development of production is linked with reduction of anti-export biases, overall promotion of exports in general, and selective special promotion of pioneering exports or those with a high content of knowledge. Moreover, the greater exposure of the domestic economy to imports is forcing the countries of the region to pay more attention to such matters as retooling and the

treatment of unfair competition. Finally, the need to make more progress in the internationalization of the economies is raising challenges in terms of technification and updating in international economic relations. Naturally, production support options cannot be divorced from the question of advances in these fields in general.

Unified treatment of production development policies is also a natural corollary of policies on changing production patterns which seek to give the same treatment to economic and social issues. In so far as the reduction of poverty and progress towards equality of opportunity both depend on economic growth, on the modernization of production and on the generation of more and better productive jobs, it is obvious that in order to boost the advances in income distribution¹⁵ it will be necessary to make complementary improvements in the efficiency of macroeconomic management¹⁶ and in competitiveness. Thus, the gradual change in production patterns should be reflected in an economic policy which assigns growing importance to production development policies. The following section briefly describes four priority areas in this context: productivity (with emphasis on innovation and quality), development and spread of technology, training, and infrastructural policies.

VI

Promotion of competitiveness

1. Productivity: innovation and quality

Increases in productivity are linked to innovation, the promotion of technology, and the improvement of quality. Giving greater flexibility to working hours, contracts and activities, for example, may be a key aspect of productivity, especially as regards the elimination of redundant tasks, processes that are maintained merely through inertia, or laws and regulations that have not been adapted to new condi-

tions.¹⁷ Labour laws, for example, should be reviewed in order to provide more possibilities for innovation and consensus-building in firms. An important suggestion in this respect is that of the introduction of profit-sharing (ECLAC, 1992a).

¹⁵ As far as social policy is concerned, this means expanding its coverage and improving its effectiveness; strengthening the links with production development policies by emphasizing investment in people, so as to improve their capacity to gain access to productive employment; and protecting the most vulnerable groups, all this with amounts of financial resources compatible with maintenance of the macroeconomic balances.

¹⁶ In order to achieve such advances, it is necessary to add to the traditional aspects that of regulation, the main purpose of which is to ensure that markets operate more efficiently and are more transparent, thus reducing the possibility of economic concentration and giving access to them to all.

¹⁷ Although the economies of the region have moved away from models based on a closed economy to strategies involving an open economy and closer involvement in the international economy, there are still substantial numbers of laws and regulations based on a closed economy which hinder the innovative efforts of the public and private sectors. The same is true of the processes of deregulation and privatization of some public services, which have not been accompanied by functional changes in the legislation.

a) *Innovation*

The various different views on technological change and labour relations all agree that the main obstacle to innovation is the existence of non-cooperative relations within a firm. Likewise, they stress the need for a skilled, flexible and motivated labour force, as an essential input for technological innovation. They also point out that most technological change is incremental, that is to say, marginal and workaday, and takes place in the interaction of the production process. This heightens the need for firms that operate in a climate of cooperation and are open to participation and innovation: an increasingly vital feature of competitive performance.

It is now generally considered that relations where there is a low level of cooperation among individuals and organizations act as obstacles to technological innovation and improved industrial performance (Solow, Dertouzos and Lester, 1989). Indeed, cooperation among competitors is part of the new rules and is a vital element in innovative performance (examples of cooperative industries are machine tools in Modena, the Italian textile industry, Danish furniture, and German industry in general, which was once described as "a group of clubs") (Jorde and Teece, 1990).

The traditional technological innovation model was conceived as a linear, predictable process beginning with research, continuing with development, design and production, and ending with marketing, sales and service. This model incorporated the experience of large-scale industries, but not the synergy of cumulative innovations which is the backbone of current technological change (especially in semiconductors, computers and motor vehicles).

Now, however, technological innovation is conceived as a systemic process of discovery, development, improvement, adoption and marketing of new processes, products, procedures and organizational structures (Jorde and Teece, 1990). It is also seen as a process that can be stimulated by strengthening the links and feedback mechanisms within firms, among them, and among technology centres and universities. Thus, innovation ceases to be a serial process, and it no longer begins with research, as the new form of operation of firms in a global context makes it necessary to give priority to the link with consumers and therefore innovate on the basis of after-sales service.

b) *Quality*

The growing demands for quality in international markets are causing the countries of the region to assign increasing importance to this aspect and to incorporate it in their production and export development strategies. Incentives for higher quality can also favour increases in productivity and gradual adaptation to stricter international standards.

The establishment of quality systems in firms makes it possible to modernize management techniques and, especially in small and medium-sized companies, to rationalize costs and take fuller advantage of the available incentives, which are often not used because of ignorance or shortcomings in business management. Stimulating the formation of private firms specializing in quality certification, for its part, favours competition and allows the public sector to concentrate on regulation and supervision; greater competition in this crucial market gives the public sector a wider choice when it is necessary to designate reference laboratories.

The international distribution channels handle goods and services for demanding consumers. The creation of demanding domestic consumers should therefore form part of quality promotion policies, which should seek to do away with the often very marked differences between export quality and the level of quality considered sufficient for the domestic market. Legislation on the quality of goods and services and on consumer protection is therefore an integral part of the promotion of quality and competitiveness.

2. Promotion and spread of technology

The market provides a sub-optimal supply of information and technology (Stiglitz, 1989). In such fields as technology and information, which are essential for the modernization of production, externalities are usually of decisive importance. The private use of technology and information does not terminate its availability for other agents (Romer, 1992), so that the social benefits exceed the private ones, and this justifies public action to generate more technological research and development activity than would result from the action of the market alone.

"Completing" the technology markets is thus a typical public task, in view of the externalities involved. In order to achieve this, it is necessary to strengthen demand, and the link between demand and

supply, by fostering the access of small and medium-sized agents to information and technology.

The supply of technology does not of itself represent a restriction on increased productivity and technological innovation. The real obstacle is the lack of demand by firms in this field, due to imperfect information in the technology markets (Peres, 1993).

Mechanisms aimed at developing the *supply of technology* must cover both the public and the private supply. In promoting the *private supply*, it is desirable to emphasize development at the company level and promote closer links between firms and technology centres. A suitable instrument for this could be the incentivisation of research contracts for innovation and adaptation of technology, thus increasing the private funds available for technological research and development activities, favouring such expenditure with tax-deductible status in the case of private projects or private contributions to technology centres.

In the case of the *public supply of technology*, the aim today is above all to link the resources more closely to results that can be evaluated in line with performance indicators. In order to strengthen this approach it would be desirable to increase private participation in the management and financing of public technology institutes and, as a counterpart to this, take steps to achieve greater flexibility in the budget management of these institutes, in their rules of operation, and in the numbers and types of projects that can be accepted in technological innovation support programmes.

Generally speaking, the resources assigned to public sector technology institutes represent most of the expenditure by the countries of the region on technology. To a large extent, however, this significant amount of resources is not subject to periodic performance evaluations. The move from the current system of more or less guaranteed financing of the public technology supply to a system where there is more competition for funds on the basis of projects that can be objectively evaluated should therefore lead to greater social profitability of these resources, greater dynamism of the production base, and more contact between the institutions and the latter.

In view of the features of greater competitiveness outlined above, such programmes should support, inter alia, the scaling of innovations, production and technological alliances, subcontracting operations, production chains, technology enterprises and the adaptation and dissemination of technology.

On the demand side, measures should be aimed at fostering initial demand by business firms and keeping up with its gradually increasing sophistication. International experience shows that industrial extension work plays a central role in inducing demand. The public sector could take on this task until the technology market matures, by developing networks of contacts among technological agents. When some firms begin to generate their own demand and need support abroad, the public sector should go along with that effort by including technological issues as an important element of economic policy.

As well as giving this greater importance to technology, steps should be taken to focus objectives in a highly selective manner, by way of a demonstration effect. Advancing in the field of technology means concentrating efforts on specific areas by giving express signals, through public policies, in respect of the technological priorities adopted and also linking together efforts and institutions in support of the effective technological mobilization of the economic agents.

The priorities to be adopted can be determined through a joint public-private effort in terms of fostering a dialogue, sharing information, reaching consensus on the diagnosis of problems, and dividing up tasks in a complementary manner in the light of the comparative advantages of each agent. Dissemination and extension should be foremost among technological activities and should be carried out through close cooperation between the public and private sectors and among business firms, universities and technology centres, with encouragement being given to the establishment and development of bodies for the dissemination and demonstration of technology.

In order to highlight the need for the inclusion of measures to disseminate technology among urgent national goals, ECLAC has been promoting the idea of tripartite visits to foreign plants which use the most advanced technological practices. The participants in such visits would be businessmen, technicians, workers and trade union leaders of various firms from different production subsectors. On their return, the participants would prepare detailed reports on the production processes, equipment, quality control systems and industrial relations observed in the plants visited and the possibility of applying them in their own firms. These reports would be circulated to business and labour organizations in order to make productivity and innovation leading concerns among

workers, trade unions and businessmen (ECLAC, 1994a).

Through measures such as those described above, which are of low cost and are designed to link up the efforts of the various actors in the production process, it would be possible to design or consolidate instruments and mechanisms to make private sector spending on technology grow faster than that of the public sector. At all events, in order to maximize the effectiveness of public spending in this area it would be desirable for the resources assigned to public technological institutions—whether direct contributions or funds allotted on the basis of competition—to be made subject to performance indicators, while their administration should be made more flexible and easier to evaluate.

To sum up, then, the following actions could be taken as part of a technological development policy:

- i) Defining public priorities in the field of science and technology with the participation of the scientific and technological community and business organizations;
- ii) Giving suitable institutional status and rank to the transfer, adaptation, copying, dissemination and innovation of technologies;
- iii) Improving the linkages between technology supply and demand, disseminating technological and trade information more widely, and supporting the formation of regional markets for technology and skilled labour;
- iv) Increasing public research and development expenditure, subject to efficiency and performance criteria, and stimulating similar private expenditure through tax incentives;
- v) Stimulating systems of risk capital for investments in technology by promoting greater private bank and multilateral participation in this area;
- vi) Exploring the possibility of setting up guarantee funds for insuring investments involving some technological risk and a system of risk capital for such investments;
- vii) Giving special incentives to exports of engineering services and design-intensive manufactures;
- viii) Giving greater priority to policies for the dissemination of technology and the provision of industrial extension services. Encouraging the organization of visits by businessmen and workers to modern foreign firms and technology centres;
- ix) Developing forms of subsidies for small and medium-sized firms to pay part of the cost of techno-

logical consultancy services to modernize management practices and industrial processes, standardization and quality control systems, preparation of investment projects, presentation of projects to private banks, and business travel;

x) Developing a more active policy with regard to the granting of post-graduate fellowships, as a function of national technological priorities;

xi) Incorporating criteria into public purchasing policy which facilitate the development of domestic suppliers in keeping with conditions of international competitiveness;

xii) Promoting commitments by foreign investors with regard to assimilation of technology and development of domestic suppliers of goods and services with a higher technology content;

xiii) Improving the incentives for the transfer of technology, services and technical assistance and promoting bilateral agreements for avoiding double taxation.

3. Training

“Completing” the training market should be another pillar of production development policy. Here, the main challenge is to put this issue in an important place on the national agenda in terms of both resources and institutional status. Once this has been achieved, it will be necessary to move on to the tasks in the areas of coverage, quality of supply, flexibility of the institutions, linkages with business firms, and adaptation of the duration and contents of the curricula to demand.

It is not a question of the public sector listing the courses and defining their contents, or providing them directly. The public sector does, however, have an irreplaceable linking role to play: it must improve the arrangements for identifying the training needs by sectors, regions and size of enterprises; it must stimulate and subsidize the formation of training firms, and it must establish indicators to permit evaluation of the results and quality of the training supplied. The task of the public sector, then, is to promote the harmonization of supply and demand, regulate the content, quality and relevance of training activities, and improve the incentives for the training of businessmen and workers. This task can be carried out more cheaply and effectively if the public sector acts on a tripartite basis in conjunction with business and workers' organizations and if it makes use of private consultants for specific tasks.

In order to improve the appropriateness of training, business firms must give stronger, clearer signals to the executing bodies. The links between the training system and technical and professional education are still weak, and in some cases there are no mechanisms for the official approval of curricula so that students can transfer from one system to the other. A measure which would help to solve this problem would be the establishment of a system of certification of qualifications, with the direct participation of private and public enterprises, so as to measure the skills acquired in line with standards recognized in the labour market. This would strengthen the links between training and the secondary and post-secondary technical education system through advances as regards the accreditation of skills and the establishment of modules to make possible the official approval of curricula.

In order to gain a full knowledge of business firms' training needs and thus ensure the suitability of the services offered, the design and financing of training courses could be linked to commitments by specific firms as regards on-the-job practice or steady jobs for students completing these courses successfully.

The experience of the National Training and Employment Service (SENCE) in Chile shows the importance of freeing the central structure of such an organization from routine operational and administrative functions (such as purchasing, payments and programme supervision) which can be carried out effectively by private firms. By farming out such functions, the central structure can concentrate on policy and programme formulation; on information systems for users of the labour placement and training services; on the promotion and dissemination of policies and programmes, and on the coordination of programmes and activities with those of other public institutions operating in the same field. This experience also shows the importance of fostering inter-agency coordination, seeking to improve the coherence of the various training policies, programmes and actions, and linking training more closely with policies for the development of production and technology and with unemployment insurance. In all these areas it is essential to promote the participation of businessmen and workers in order to strengthen the certification of skills, the timely identification of needs, and the ongoing evaluation of public training policies.

In short, it is necessary to stimulate spending by business firms on training by providing suitable tax and financial incentives. Public training institutions should also adapt their practices by increasing direct participation by firms and business associations in guiding their activities, encouraging the use of more market-based criteria in their management, and linking training programmes to technological priorities.

4. Infrastructure policy

There is a close link between the quality of the infrastructure and the competitiveness of an economy. Many of the competitive advantages built up by Southeast Asia are due to a crucial combination of quality of human resources and of the infrastructure. The development of new infrastructural systems, and especially their complementarity and integration with the existing international systems, is thus a strategic area of export development.

The sustained increase in export and import activity will put demand pressures on energy services, telecommunications, roads, railways, ports and airports. These pressures could affect competitiveness unless the necessary investments for the replacement, expansion and technological updating of such infrastructure have been programmed in advance.

The infrastructure makes a dual contribution to the promotion of competitiveness. On the one hand, it can reduce the costs and time needed for the transport of goods and services to their destinations. On the other, suitable institutional innovations which expand the field of action of private enterprise in financing and managing the infrastructure can:

- i) increase the flow of resources to the sector by incorporating private resources;
- ii) rationalize decision-making and thus secure efficient resource use;
- iii) favour decentralization, and
- iv) free resources which the public sector can use to give the lower-income sectors adequate access to basic services.

The linking element in all these objectives is the need to make users pay the real cost of the use, maintenance and operation of the public infrastructure, that is to say, to strengthen economic criteria which link use of the infrastructure with the costs involved, providing explicit subsidies when there are social reasons for doing so.

In addition to having healthy repercussions on the efficiency of resource allocation, by putting an end to the widespread belief that the public infrastructure is free, this also has favourable effects on equity, since it establishes a more direct connection between use and payment, thus freeing resources for the public sector which can be used for basic infrastructural works with a higher social content, such as basic sanitation infrastructure, drinking water, sewerage, paving of streets in lower-class areas,

construction of fishing harbours, and minor irrigation works.

Thus, for example, financing the road system from general taxation represents a subsidy in so far as road users are exempted from paying for their effective use of it, so that there will always be an excess of demand. It is also an inequitable subsidy, since the lower-income sectors, and especially those who live in distant areas, contribute proportionally more to the financing of this system than would be justified by their use of it.

VII

Strategic consensus-building and the quality of public management

1. The consensus-building role

The degree of effectiveness of industrial policy is closely linked to its capacity to build basic consensus regarding the development strategy and to the image in terms of production, employment and technology which is promoted as a national project.

Issues which must necessarily be reflected in such policy include the modernization of labour relations, a responsible attitude to the environment, and a global concept of the economy which reconciles competitiveness, flexibility, economic stability and equity. It must also take account of the debates on a new type of enterprise, greater market flexibility and the stimulation of cooperative relations within business firms, among them, and between private enterprise and the public sector.

In open economies, excessive inequality and the weakness of the established institutions in dealing with the resultant conflicts increase the inherent country risk and affect competitiveness. The promotion of competitiveness and advances in the internationalization of the economy must therefore be accompanied by national consensus which give more attention to equity and distributive issues. The treatment given to these issues must also be in line with the conditions of competitiveness and flexibility demanded by open economies.

If approached properly, such concerns are not at variance with the objective of raising competitiveness. Thus, stimulating tripartite cooperation on

training, productivity agreements, labour relations, quality and technological innovation, which are national issues, simultaneously serves the objectives of both competitiveness and equity.

Promoting "associativeness" and collaborative relations between public and private agents may be a decisive instrument for stimulating productivity and technological innovation through, for example, private centres for the creation and transfer of technology, aimed at specific sectors and supported by business associations and unions.

2. Linkages and strategic alliances

In the context of a global economy in which export activity tends to be organized into networks and strategic alliances, public policies should seek to help in the organization of private actors¹⁸ and in improving the coordination of public and private efforts abroad, through clear national efforts of unified design.

¹⁸ For example, it has been suggested that the public sector could grant tax rebates, limited to export firms which devote the amount of the rebate, plus a matching sum, to strengthening the activities of their trade associations. Such resources could be used to finance technical support to exporters' groups to permit them to improve their capacity of analysis in respect of technology, trade and international economic relations in general. This would help to give the public sector a better-documented counterpart with a clearer idea of its goals, thus improving the overall capacity for outlining external trade strategies.

For this purpose, the public sector should promote the preparation by the economic actors of shared long-term views on exports, investment and technology, bearing in mind international data and trends. The main function of the public sector would thus be to promote shared positions and reach agreement on the diagnosis made, the identification of the main national shortcomings, and the main policy lines.

The internationalization strategy must be shared by the various sectors concerned and be based on a consensus regarding the export-oriented nature of the national development project. The more solidly based the private strategies in this field are –adopted at the regional and sectoral levels, for example– the more feasible it will be to make progress with national strategies to enhance the country's place in the international economy, and the strengthening of private-sector organizations at the sectoral level will favour the public sector's relations with exporters. Such consensus, together with stability of the incentives offered, will make it possible to carry out a more active trade policy, with the sectoral ministries committed to the goal of promoting exports.

In order to progress towards an economy with greater capacity for innovation, institutional changes must be made both in business firms and in the public sector. Modernization in the technological field is an essential requirement in the present international setting. There are various ways of going about this, however. The greater the consensus among the various social actors, the greater will be the capacity for mobilizing resources, institutions and attitudes on behalf of production modernization policies. A technocratic-style modernization process may prove not to be viable and, still worse, it may waste good technical options for modernizing production and technology.

Team work, joint exploration of new scenarios, consensus-based diagnoses and the building of strategic consensuses among the actors are now frequent practices in international business, in the recent activities of transnational corporations, in joint ventures and in "virtual" companies. Incorporating these

practices into political institutions and into social behaviour would appear to be the real challenge for attaining forms of changing production patterns with social equity. This is why there is an urgent need for innovation in institutions and in the behaviour of the social actors, in order to adapt to open economies with the aim of establishing social cooperation as a cultural requisite and participation as a requisite for efficiency in change.

3. The quality of public management

The quality of public management will depend on the coherence of the relevant institutions, clear delimitation of a limited number of objectives, the effectiveness of the instruments used, and the capacity of the upper and middle-level staff. This means that it is necessary to be highly selective in formulating objectives, in order not to overestimate the capacity of the government.

It is the quality rather than the quantity of public intervention in the structure of production that is important, and such intervention must be in keeping with the requirements for institutional innovation raised by the internationalization process.

In order to support the tasks of promotion of production, regulation and stimulation of quality and competitiveness, the public sector must be more highly qualified, it must enjoy strong social legitimacy in order to stimulate broad consensus on the new development tasks, and its performance must be transparent, subject to controls, and subject to strict evaluation criteria in terms of its results.

In order to achieve more ambitious objectives in the field of industrial policy, a more sophisticated public sector is needed. When there is no guarantee of this, the burden of proof must fall on those proposing innovations: when it is necessary to make innovations, the first step should be to build the necessary public and private agreements and institutional conditions to make possible the new form of operation of the public sector. In this, as in other fields, it is just as dangerous to underestimate the flaws in the market as it is to overestimate the capacity of the public sector.

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ANNEX I

Instruments for promoting competitiveness: some Asian experiences**1. Hong Kong**

Training. There is a tax of 30 cents on every thousand dollars of clothing and footwear exports. These funds are used for the training of workers in the same sector.

Follow-up of progress in competitiveness. The Industrial Development Council, which is made up of representatives of industry, government, the universities, technology centres and business associations, makes technical and economic studies of important industries, defines the future prospects and identifies obstacles in order to update the contribution of the State.

Productivity. The Productivity Council organizes study missions for local industrialists on foreign technology and techniques, provides training, advisory, technical assistance and laboratory services in various areas of industrial productivity, and also carries out activities in the fields of consultancy, training, industrial exhibitions, industrial information services, and liaison between technology centres and industrial firms.

Trade promotion. The Trade Development Council provides trade research and information services, as well as services in the areas of product and market diversification and improvements in product quality, design, presentation and image. It is financed with regular quotas paid by companies established in the country.

Modern technologies. The Industrial Estates Corporation was set up to support the establishment of technology-intensive industries which need large physical spaces, by providing building land and services.

2. Singapore

Training. The Training Promotion Fund, to which employers must pay 1% of their payroll, is

open to all firms which require training or upgrading of their workers. The Fund also gives financial incentives to employers, through various programmes of training grants.

Internationalization. The Singapore Trade Development Board, which is responsible for export promotion, now encourages and helps firms to establish offices abroad, to improve product and packaging design, to market new products and services, and to participate in bidding for foreign contracts.

Tax support for exports. There is provision for partial exemption from corporation tax. Manufacturing firms which export over 60 000 dollars or more than 20% of their total sales per year are given partial exemption from this tax (in respect of 90% of the additional profits above the export base; the exemption period is usually five years and the export base is the average export profits for the last five years). For tax purposes, expenditure in respect of participation in fairs, exhibitions, trade missions, publicity campaigns, communications and maintenance of trade offices abroad is subject to double deduction from gross income.

Fiscal incentives for participation in the global economy. Incentives are provided in respect of technical assistance in research and development, improvement of product design and processing, improvement of standards and quality, and training of technical and management staff. There are additional benefits for being "pioneers", incentives for expansion, tax rebates on investments, foreign loans for the purchase of production equipment, and deductions for accelerated depreciation.

Aid for research and development. Subsidies to firms cover from 30% to 70% of the direct costs of suitable projects by firms. Tax rebates of up to 50% of fixed investments in this field may be granted.