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## Argentina's Industrial Specialization Regime: new-generation industrial policy, or merely a transfer of resources?

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Research Centre on the Economic Structure (CENES), Faculty of Economic Sciences, University of Buenos Aires. The combination of rapidly increasing trade openness with sharp exchange-rate appreciation formed the context in which Argentine industry had to carry out its production restructuring process from 1991 on. The inability of the spontaneous market forces to spark off this process led the Argentine government to adopt a number of measures designed to correct the problem of relative prices and further the restructuring process through fiscal means. In this context, the Industrial Specialization Regime (ISR) was established with the main objective of promoting export specialization by industrial firms. This regime was based on a subsidy for incremental exports which took the form of access at preferential tariff rates to the importation of goods similar to those exported or forming part of a given production chain of complex goods. The aim of the present article is to make a theoretical and empirical analysis of this policy instrument (in its dual dimension of restructuring policy and export subsidy), examining its underlying theoretical bases, questions relating to its design, application and control, and finally, its effects on the industrial sector.

### I Introduction

As from the early 1990s, the Argentine government simultaneously applied a macroeconomic stabilization plan and a broad-ranging structural reform process, including in particular rapid and indiscriminate trade openness. At the same time, the turnaround in international capital flows and the rapid growth of expenditure (especially of consumer goods) fostered by those flows were reflected in strong exchange rate appreciation.

Faithful to the principles of the Washington Consensus, the policy-making authorities trusted implicitly that the spontaneous action of the market forces would bring about the necessary adjustments both at the macroeconomic level (deflation of nominal prices) and in terms of resource allocation (development of sectors with comparative advantages, generalized increases in productivity).

The conversion process did not take place either as completely or as promptly as expected, however. The trade balance quickly became negative, and the deficit began to increase without respite. The tradeables sectors of the economy (especially textiles and clothing, footwear and capital goods) were subjected to strong competition due to the combination of trade openness and a low exchange rate.

Towards the end of 1992 this situation became unsustainable and the Argentine government began to apply a series of measures aimed at correcting the problem of relative prices by fiscal means and furthering the restructuring process. Firstly, the trade openness process was partially reversed by raising the duty on imports from 3% to 10% and applying various para-tariff measures (specific duties, quotas, etc.). Secondly, the real effective export exchange rates were raised by increasing the export drawbacks and reducing some taxes affecting the tradeables sector (including employers' contributions).

Lastly, the government set aside its ultra-orthodox attitude and launched a number of trade and industrial policy programmes designed to facilitate the production restructuring process. The main pillars of this new industrial policy were measures to make the incorporation of capital goods less expensive and promote production specialization. For the first of these objectives, a new capital goods policy was introduced which combined the elimination of tariffs with drawbacks for local producers of capital goods,<sup>1</sup> together with interest rate subsidy arrangements to help finance the acquisition of capital goods by small and medium-sized enterprises.

In pursuit of the second of these objectives, the Industrial Specialization Regime (ISR) was established, with provisions that were similar (although they offered fewer benefits) to those of the Argentine Automotive Regime. Until it was suspended in August 1996, this programme became one of the mainstays of the industrial policy applied under Minister of the Economy Domingo Cavallo.

The general aim of the ISR may be defined as the promotion of a sequence of economic processes: specialization in the production of a more limited number of goods by each enterprise (reduction of the variety of products entering into their manufacture)  $\rightarrow$  exploitation of economies of scale and organization of work  $\rightarrow$  reduction of costs  $\rightarrow$  increased competitiveness on domestic and international markets  $\rightarrow$  greater linkages in international trade  $\rightarrow$  access to new technologies.<sup>2</sup>

In contrast with its multiplicity of objectives and aims, the ISR provided for only one incentive: a subsidy for additional exports operating in the form of access with preferential tariffs to the importation of goods similar to those exported or forming part of the same chain of production of complex goods.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> For a critical analysis of this capital goods policy, see Sirlin, 1997a.

<sup>&</sup>lt;sup>2</sup> In the preambular paragraphs of the measure setting up the ISR these objectives were set out in a disordered and disjointed manner.

<sup>&</sup>lt;sup>3</sup> This form of incentive is similar to that provided under the Argentine Automotive Regime (the only instrument of a sectoral nature kept in being by the new economic authorities), and in its propaganda for the new regime the government asserted that it represented the generalization of the special treatment already being given to the motor industry. There are substantial differences between the two regimes, however. Although the motor industry also enjoys heavy protection through import quotas, it is required to enter into specific commitments in terms of investment and organization of production which are not demanded in the ISR.

The purpose of this article is to make a theoretical and empirical examination of this policy instrument (in its dual dimension of restructuring policy and export subsidy) and analyse its theoretical bases, issues connected with its design, application and control, and its effects on the industrial sector. Even though the ISR is no longer in effect, we consider its critical analysis essential in order to help to improve the capacity for the design, execution and control of industrial policy in general.

In section II below we will study the theoretical bases for production specialization incentives

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and export subsidies in general, demonstrating also how the design and form of implementation of such policies vary considerably depending on the general conception of industrial policy held by the authorities. Section III describes the features of the Argentine Industrial Specialization Regime and analyses the extent to which it is in line with the theoretical grounds set forth in the preceding section. Section IV makes an appraisal of the impact that the ISR had on industry in its first three years of existence, and section V presents the main conclusions.

### Export subsidies and incentives for industrial conversion and production specialization: grounds, benefits and costs

### 1. Production specialization

The aim of the ISR was to bring about the restructuring of industrial enterprises through their specialization in more specific aspects of production. The first question that arises is why, if production specialization is considered to be so efficient, it is not induced spontaneously by the market forces. In other words, what are the flaws in the market or the regulations that lead to vertical integration and lack of production specialization?

In order to answer these questions we must draw a distinction between what we might call "efficient" and "non-efficient" determinants of company decisions on the structure of production, that is to say, distinguish between those cases where non-specialization is due to a desire for the microeconomic optimization of production processes and those where it is the result of distortions that affect the efficiency of production and call for the application of corrective policies.

Among the efficient determinants are those production processes in which the production functions determine the existence of economies of non-differentiation. As well as those deriving from the production function in the strict sense, this kind of economies may also be seen as coming from the indivisibilities and economies of scale existing in other activities of the enterprise in question, such as the design, transport and marketing of goods and the exploitation of trade marks. In all these cases, production specialization does not improve microeconomic efficiency.

The non-efficient determinants of company decisions on production structure, for their part, may be due to inappropriate price signals or microeconomic adaptation to highly unstable macroeconomic contexts or inefficient legal systems.

Macroeconomic instability encourages excessive vertical integration because the agents try to minimize the transaction costs implicit in a more specialized production system supplemented with outside subcontracting.<sup>4</sup> Furthermore, it is noted in the abundant literature on institutions that when property rights are not clearly specified and protected, agents tend to refrain from carrying out all the contracts and specific investments required by a more specialized production structure (North, 1993; Williamson, 1994).

<sup>&</sup>lt;sup>4</sup> With regard to the interaction between macroeconomic imbalances and patterns of microeconomic behaviour, see Fanelli and Frenkel, 1994.

Inappropriate price signals may also be due to distortions induced by the public sector or to market flaws. The main (although not the only) source of erroneous price signals is the existence of an antiexport bias.

When domestic demand for a good is saturated, this gives rise to the option between extending the company's field of operations to the external market or embarking on horizontal expansion by broadening the structure of production and occupying new domestic market niches (Katz, 1993). The existence of an anti-export bias creates an environment in which it is more attractive to sell products on the domestic market and encourages horizontal expansion strategies which lead to excessive diversification of the product structure.

Such a bias is due to:

i) Trade policy instruments (tariff and para-tariff measures) which raise the effective import exchange rate above the effective export exchange rate.

ii) Tariff dispersion, when this tends to protect sectors with comparative disadvantages. Even if it tries to offset the tariffs for each good with export subsidies, a tariff structure of this type gives rise to an anti-export bias, because by discouraging the importation of goods in which the country has comparative disadvantages it tends to depress the real equilibrium exchange rate.<sup>5</sup>

iii) Regulatory and tax measures which involve the export of taxes and extra costs and which operate, in practice, as export taxes.

iv) The differential impact of market shortcomings. Thus, the shortcomings in terms of information and the credit market encountered in export operations are usually much greater than those faced by companies in their sales on the domestic market (Bekerman and Sirlin, 1995).

It may also be wondered how far export subsidies represent the most suitable way of correcting or eliminating the non-efficient factors that adversely affect company decisions on production specialization.

The classical response of second-best theory is that the optimal approach to these problems involves attacking them at their source (Corden, 1978): i.e., stabilizing the economy at the macro level, expediting the functioning of the legal system, eliminating distortive policies (such as trade protection), and developing optimal industrial policies (assistance in the areas of finance and information) which correct market flaws that affect export activities. When this is not possible in the short term, or when the distortive policies nevertheless act as second-best instruments for solving other market flaws, export subsidies may be used to reduce the implicit social costs.<sup>6</sup>

In turn, these subsidies should have some degree of sectoral selectivity, for when the anti-export bias in question is generated by extra costs due to taxes or tariffs the rates of subsidy should reflect the sectorally differentiated impact of those costs.

An export subsidy which seeks to offset an anti-export bias generated by market flaws should also have some degree of selectivity, determined in this case by the nature of the flaws in question. It can thus be asserted that export subsidies should be concentrated in the sectors producing the most differentiated goods (which are those facing most shortcomings in terms of information) and in small and medium-sized enterprises (because the economies of scale inherent in the collection of information and the commercial and financial management of export operations make the export efforts of these firms even more complicated). Furthermore, some of these extra costs act as (individual and sectoral) barriers to entry into export activities rather than as permanent extra costs. This means that the incentives should give priority attention to sectors with the least export tradition and should also go down with time.

<sup>&</sup>lt;sup>5</sup> This is none other than an example of the application of Lerner's well-known symmetry theory, whereby - in a general equilibrium context - import duties operate in a manner equivalent to export taxes. Several heterodox studies on the Southeast Asian experience (such as those by Wade, 1990, or Amsden, 1989) fail to take account of this question when they claim, without further clarifications, that the governments in that region simultaneously promoted exports and import substitution in different industries (Rodrick, 1995).

<sup>&</sup>lt;sup>6</sup> The difference between trade protection which is not offset by export subsidies and trade protection which is offset in this way has been described by Little, Scitovsky and Scott (1970) as the difference between mere protection and true industrial promotion. This conceptual distinction is of fundamental importance for understanding the very different results obtained by the outward-looking industrialization policies of the Southeast Asian countries and the inward-looking industrialization policies adopted by many Latin American countries.

It would also be desirable to investigate the possible effects of the particular form assumed by export subsidies in the ISR, that is to say, the tariff reductions for the imports of the firms involved.<sup>7</sup>

A typical export subsidy has a neutral effect as regards promoting production complementarity (through specialization by the firm) with other local or foreign firms. The export subsidy through tariff reductions, in contrast, gives rise to an artificial bias in favour of complementation with foreign firms. In other words, firms have more incentives to specialize and complement their production with imported inputs than with local inputs. This bias can be a source of serious inefficiencies, not only because it constitutes yet another distortion in resource allocation but also because it runs counter to one of the most important factors of systemic competitiveness: strengthening local production chains and local subcontracting networks.

On the other hand, subsidies through special tariff reductions give rise to further anarchy in the effective sectoral protection structure.<sup>8</sup>

#### 2. Export subsidies

Although the ISR was presented as an industrial policy instrument designed to promote the restructuring of production, its main raison d'être was really to correct the distortion in relative prices which existed in the economy as a result of the increase in the effective export exchange rate. For this reason, it is desirable when analysing this policy to make a global study of the different theoretical grounds for the use of export subsidies.

The arguments in favour of the use of export subsidies are along two main lines, one microeconomic and the other macroeconomic. The microeconomic line is based on general equilibrium models in which it is assumed, at least implicitly, that adjustment mechanisms through prices (in this case, the real exchange rate) make it possible to exclude the coordination failures of an aggregate nature which are reflected in unwanted global trade balances. Attention is thus concentrated exclusively on questions of allocation.

The first and most important case is that of the use of export subsidies as a way of offsetting an anti-export bias. A second justification of a microeconomic nature for export subsidies may be drawn from the arguments highlighting the advantages of a bias in favour of trade. The reasons for such an extension of subsidy policy to exports lie in the externalities generated by greater integration of world trade. Prominent among them is the possibility of securing a greater inflow of technology, and especially of "soft" technologies, since export activities implicitly involve learning processes in terms of quality control, design capability and packaging, which subsequently spread to the domestic market through the influence of improvements in locally sold products, and the dissemination of these new technologies to the rest of the production apparatus through relations with suppliers. As these externalities are very important in the initial stages of an export model -which is when enterprises must embark on the process of productive and organizational restructuring- export subsidies justified on these grounds must also be of a transitory nature.

A third microeconomic argument may be found in new international trade theory. In the models based on this theory,<sup>9</sup> export subsidies are supposed to allow local enterprises to make greater gains than would normally be possible in international markets with high degrees of concentration and serious entry barriers. Although this argument would hardly be applicable to underdeveloped countries (which do not have big enough enterprises to enter into strategic competition for markets with foreign firms), competition within a regional market may be very impor-

<sup>&</sup>lt;sup>7</sup> The main advantage of a system like this is really its lower visibility as a subsidy, in view of possible complaints from outside (e.g., from the WTO or the United States Government). There is also another advantage from the government's point of view: the ISR did not involve actual outlays of public money but only the sacrifice of some tariff revenue (Magariños, Díaz Pérez and Sierra, 1995). Although of dubious conceptual validity, this advantage must be understood in the context of the pressures to reduce public expenditure exerted by the international agencies and incorporated in the so-called Washington Consensus.

<sup>&</sup>lt;sup>8</sup> While at the same time liquidating the tariff preferences granted under MERCOSUR and thereby allowing Brazil to strengthen its bargaining position in other problem areas (such as the automotive regime, para-tariff restrictions, etc.).

<sup>&</sup>lt;sup>9</sup> A good summary of these arguments may be found in Brander, 1987.

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tant (Bekerman and Sirlin, 1994). In these cases the subsidies must be highly selective and suitably measured in the light of the particular characteristics of each market.<sup>10</sup>

All these arguments are posited within a theoretical framework based on general equilibrium principles in which the real exchange rate adjusts spontaneously to its equilibrium level, the trade balance is determined exclusively by macroeconomic variables, and a reduction in imports due to trade protection or an increase in exports brought about by subsidies cause an appreciation in the real exchange rate which leaves the trade balance unchanged.<sup>11</sup>

We believe, however, that imbalances of a global nature (and their interaction with microeconomic policy instruments) are too important in theory and practice to be left out of the analysis. Here there are two major arguments that justify the use of export subsidies as a complement to macroeconomic policies.

Firstly, there may be rigidities which prevent relative prices (such as the real exchange rate) from adjusting to their equilibrium values. In an extreme case of rigidity, adjustment to negative external shocks is reflected in changes in the level of domestic activity (or compensatory capital movements). In this context, the discussion goes beyond the sphere of the allocation effects of trade policy to include the more general problem of the degree of utilization of production resources. Expenditure reform policies (such as import tariffs and export subsidies) recover their macroeconomic effectiveness in this case, for these instruments make it possible either to raise the local level of activity in view of the level of external imbalance or to correct that imbalance while leaving the level of domestic activity unchanged. They thus become second-best instruments for correcting macroeconomic relative price problems (Bekerman and Sirlin, 1995).

Secondly, specific interactions can be established between real flows and financial flows which also make trade policies effective on the macroeconomic level. The clearest examples of this are trade credits tied to the purchase of goods. For example, if the importation of capital goods is reduced (by an increase in tariffs) this will at the same time reduce the inflow of foreign capital to finance such transactions (thus deactivating the currency appreciation pressures that would arise in the case of the neoclassical models analysed earlier). Likewise, an export subsidy accompanied by the export of capital (incorporated in trade credits or foreign direct investments, for example) will also have an effective impact on the trade balance.

It could be argued that in this latter case the result would be to alter the trade balance but not the balance of payments as a whole (since the real and financial movements would cancel each other out), so that the macroeconomic effects would be insignificant.

However, this compensation between the trade account and the capital account becomes particularly significant when the international financial agents view exports and the trade balance as decisive factors in their expectations regarding the ability of highly indebted economies to meet their external commitments. In other words, these variables become influential indicators used by the agents when analysing the external sustainability of economic stabilization and structural reform programmes. In this sense, it can be maintained that the shadow price of each dollar entering through the trade account is higher than that of a dollar entering through the capital account.

Export subsidies may be justified on different grounds in the microeconomic and the macroeconomic spheres.<sup>12</sup> In the second case, trade policy acts as a second-best instrument for correcting general problems of relative prices, so that any kind of sectoral selectivity should be avoided. In the first case, in contrast, trade policy acts as a first- or second-order instrument for correcting micro-economic distortions. The resource allocation effects of the policy are therefore important, and it should have a degree of selectivity determined by the particular objectives of each measure.

<sup>&</sup>lt;sup>10</sup> The activist derivations of the new theory have been the subject of heavy criticism. Grossman (1987) sums up the main shortcomings in the argument, including its lack of robustness (in the event of marginal changes in the assumptions), its failure to include the possibility of trade reprisals, the information problems implicit in policy implementation, and the serious problems of political economy raised by such discretional forms of intervention.

<sup>&</sup>lt;sup>11</sup> See Krueger (1990) and, for a local version, Rodríguez (1994).

<sup>&</sup>lt;sup>12</sup> A second area of interaction between the microeconomic and macroeconomic aspects implicit in the use of export subsidies is connected with their fiscal effects in contexts of fiscal constraint. This issue has been analysed in Sirlin (1997a).

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### 3. Supply-side or integral industrial policy approaches

In the previous two sections we set forth the theoretical arguments justifying the use of export subsidies as industrial policy instruments or as a complement to macroeconomic policy.

But what is the right level for the incentives? Should they be accompanied by some specific commitment on the part of the private agents, to be supervised by the government? Should the incentives provided be supplemented with other types of policies? The answers to these questions will be very different, depending on the theoretical conception the authorities have of the functioning of the economy and, hence, of the role to be played by industrial policy. In this respect, we consider it necessary to distinguish between two main concepts of industrial policy, which we may call the supply-side and integral approaches (table 1). In the first approach, which is well represented by the second-best theory and the new international trade theory, the private agents are assumed to be perfectly rational and the problem stems from the erroneous price signals they receive. If these are corrected, the agents will spontaneously adjust their decisions in such a way as to achieve socially optimal results.

If the system of incentives is well designed, the question of the measures needed to ensure compliance with them is no longer important: there is no point in demanding a programme to increase exports or demanding and supervising the production restructuring processes of the beneficiary firms, because these results will be ensured by the maximizing response of the private agents themselves.

Under the other approach, which we have called the integral approach, the answers to the questions asked at the beginning of this section are significantly different. This approach is based on different

TABLE 1

	Alternative industrial policy approaches		
	Supply-side	Integral	
Critical assumptions	Neoclassical micro-bases: entrepreneurs respond spontaneously to changes in price signals. Transaction costs do not exist.	Evolutionist micro-bases: entrepreneurs ma be incapable of perceiving, processing and re sponding to changes in price signals. Transaction costs do exist. Importance of the institutional framework.	
Problems observed which justify intervention	Price signals distorted by market flaws and policy-derived distortions.	Distorted price signals, plus: Failures of coordination due to transaction costs. Limited entrepreneurial capacity. Need to modify socially inefficient patterns of microeconomic behaviour.	
Types of policies applied	Modification of price signals.	Modification of price signals, plus: Binding commitments required in return for the incentives provided. Industrial extension activities designed to strengthen entrepreneurs' decision-making capacity and to promote coordinated solu- tions within the framework of collective conversion processes.	
Institutional requirements	Low institutional requirements (design, application and auditing of supply-side policies).	High institutional requirements: Greater importance attached to controls in order to reduce transaction costs. Public and mixed institutions linked up with production networks.	

Alternative industrial policy approaches

micro-bases according to which entrepreneurs have only limited rationality and may therefore have difficulty in perceiving, assimilating and responding to changes in price signals. There is no longer a situation of global and absolute maximization, but rather one of local maximization in which the agents tend to take decisions that improve their situation but do not necessarily take the fullest advantage of all the possible alternatives.

Among the consequences of this change of assumptions are the following:

i) It may prove to be necessary to exaggerate the incentives in order to indicate more clearly the types of responses it is desired to induce.<sup>13</sup> In the case under discussion this would mean, for example, generating a positive bias in favour of exports and not merely eliminating the anti-export bias.

ii) The local maximization measures taken by entrepreneurs may not coincide with the socially optimal reactions which it was desired to induce through the policy. An incentive like that provided by the ISR, for example, may be used to obtain windfall rents in the export market rather than to finance a production restructuring process that would structurally strengthen firms' export capacity. Requirements for export and investment commitments and suitable supervision of their fulfilment may prove to be essential in order to achieve the policy objectives.<sup>14</sup>

iii) Entrepreneurs may have difficulty in carrying out the changes promoted by the public sector incentives. This difficulty may stem either from the existence of other price distortions (capital market flaws, for example) or from shortcomings in terms of the capabilities and knowledge needed in order to carry out the restructuring process. Supplementing changes in the price signals with other policies that strengthen entrepreneurs' response capacity may be the key to the success of the incentive systems applied.

In an integral approach, the institutional requirements increase considerably, especially with regard to the need to supervise fulfilment of the conditions imposed.

## III

## The Argentine Industrial Specialization Regime (ISR)

#### 1. Description of the Regime

Enterprises conclude agreements with the Ministry of Industry on (annual or multi-year) schedules for increasing their exports of specific industrial products. Each enterprise may submit more than one programme and include various products in each of them.

In all cases the base year is 1992. The value of the exports is net of imported components.

The enterprises become eligible for tariff rebate certificates, in an amount equivalent to the increase in their exports, which allow them to import goods at a differential tariff of 2% and a "statistical rate" of 3%.<sup>15</sup> As from 1997, a gradual process of reduction of incentives was begun, designed to bring them in line with the prevailing tariffs by the year 2000.

The commitments entered into are not binding, and the enterprises receive incentives for the total amount of their increase in exports, regardless of whether this is lower, equal to, or higher than the amount promised. Moreover, enterprises can refrain from applying for incentive payments in years when they do not make more exports than in the base year, but can apply for them again in subsequent years when they do comply with this condition.

Enterprises can import at differential tariffs products which correspond to the same production sector as the goods they export and are in the same

The ISR operates as follows:

<sup>&</sup>lt;sup>13</sup> Such clearer indications take on greater importance in contexts of great uncertainty, since they provide information on the course the authorities want the transformation process to take.

<sup>&</sup>lt;sup>14</sup> This is so if industrial policy is seen as a mechanism for inducing entrepreneurs to take social efficient decisions rather than merely as a means of providing them with extra benefits. <sup>15</sup> At the time when the ISR was established the "statistical rate" had been raised from 3% to 10% for most products.

chapter of the foreign trade nomenclature. Likewise, in programmes involving complex goods that can be broken down into various components, they can include imports of the same type of goods or of their component parts or assemblies. When programmes involve the export of parts and components, the imports can include complex goods incorporating such components.

When complex goods are exported it is necessary to comply with an additional requirement: the product exported must contain a minimum of 25% of inputs or parts obtained from an independent supplier (the original decree laid down that these suppliers must be local firms, but this requirement disappeared as a result of a later amendment).

In all cases firms must seek the approval of the relevant chambers of industry for the goods to be imported. The key criterion for granting such approval is the possibility of damage to local producers of such goods, if they exist. In some cases, through the mediation of the Ministry of Industry, compromise agreements were reached on the amounts, prices and destinations of the imported goods.<sup>16</sup>

The benefits provided by the ISR are in addition to those available under the systems of drawbacks and exemption and repayment of the value added tax on exports. Adding together the average levels of drawbacks and tariff reductions under the ISR programmes, the total incentive per unit of additional exports came to over 30% (i.e., 13% for the average drawback on exports plus 18% for the average tariff reductions). This total indicates the existence of a bias in favour of exports, since the taxes and extra costs borne by export activities hardly came to such a large amount.

### 2. The ISR as an incentive for production restructuring and an export incentive

Towards the beginning of the 1990s there was generalized agreement on the microeconomic shortcomings of Argentine industry: technological backwardness, small scales of production, excessive diversification of production, and insufficient development of inter-firm networks (especially for subcontracting).<sup>17</sup>

The Cavallo administration tried to address these problems from the start by reducing what it saw as one of their main causes: the anti-export bias. Tariff reductions, the elimination of distortive taxes, economic deregulation, making export drawbacks equal to import tariffs, and the reintroduction of temporary duty-free admission were the main measures adopted in this respect.

The Industrial Specialization Regime (ISR) was presented as a natural extension of this strategy and an effective instrument for promoting restructuring through production specialization. It was acknowledged that the ISR could not of itself transform the Argentine production structure, but it was considered that it could "give rise to valid models of business conduct that should be followed by the rest of the industrial community" (Magariños, Díaz Pérez and Sierra, 1995).

But how was it intended to set this process in motion?

On the one hand, the authorities had eliminated –and even reversed– the anti-export bias which was seen as one of the structural factors responsible for the excessive diversification of production. On the other hand, it was believed that the ISR would enable entrepreneurs to capture trading rents (by extracting them from distributors of imported products) which would be used to finance the necessary investment and restructuring processes.

The design of the ISR reflected some aspects of the "integral" industrial policy approach mentioned earlier: the desire to "signpost" the transformation process, and the provision of somewhat exaggerated incentives (which, as noted in the previous section, were bigger than any possible anti-export bias).

As an incentive for restructuring, however, the ISR was basically a biased, supply-side instrument.

i) No commitment to make investments or modify the product structure was demanded (this represented a crucial difference from the Automotive

<sup>&</sup>lt;sup>16</sup> The consultations with the Chambers of Industry were not binding, however, since they did not include the previous stages (because of the problem of substitution of inputs). Private sources claim that the results depended on the relative strengths of the negotiating parties and that there have been cases of programmes that have been approved despite their rejection by the Chambers (Interview with F. Martínez, representative of the Textile Industries Association).

<sup>&</sup>lt;sup>17</sup> Significant contributions to the establishment of this general consensus were made by the studies carried out in the ECLAC Buenos Aires Office by J. Katz and B. Kosacoff. A summary of these studies is given in Katz, 1993.

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Regime). On the contrary, it was simply assumed that firms would "maximize" their activities, using the rents generated by the ISR to optimize their production.

ii) There was no requirement that the items to be imported by firms should have effectively formed part of their product structure before, so that production specialization could be carried out at the expense of local subcontractors. Furthermore, firms could obtain benefits by exporting all the goods they produced earlier or, still worse, by exporting one set of goods in one year and a different set of products in another (provided they were registered in different programmes of the same firm). In neither case was production specialization a necessary requirement for fulfilling the conditions for the receipt of incentives.

iii) The ISR was not accompanied by other instruments, specially aimed at small and medium-sized firms, which would help to facilitate and materialize the restructuring processes that it was desired to induce. Thus, the main beneficiaries of the ISR were big companies whose process of production restructuring and insertion in the international market was already consolidated and did not need this kind of incentives. This shortcoming was detected by an early appraisal study by the Ministry of Industry itself which noted the need to establish a programme of ongoing attention to the needs of small and medium-sized firms in order to promote their inclusion in the ISR, linked up with the promotional activities of the Fundación ExportAr and the Banco de Inversión y Comercio Exterior (Argentina, Dirección de Estudios Industriales, 1994). These recommendations did not result in any solution for the problem, however.

iv) Scant attention was paid to the institutional facilities needed for spreading (especially among small and medium-sized firms), managing and supervising the ISR. For example, some of its requirements (such as obtaining at least 25% of the parts and components from independent suppliers) were simply not supervised at all.<sup>18</sup>

The ISR was applied as a fiscal incentive for exports rather than as a conversion policy. Towards the end of 1992 the simultaneous processes of exchange rate appreciation and the boom in consumption gave rise to a rapidly growing trade deficit. For this reason, the government embarked on a strategy to correct relative prices by fiscal means, one of the main instruments of which was an increase in export drawbacks. The ISR was just one of the mechanisms in this strategy.

In its role as an export incentive, however, the ISR also displays a supply-side approach, with severe design flaws:

i) The export commitments were not binding. In reality, they served no real purpose at all.<sup>19</sup>

ii) For firms with more than one approved programme it was perfectly possible to receive benefits even without increasing their total exports.<sup>20</sup>

iii) Firms could apply for incentive payments in the years when they exceeded the exports of the base year but were not subject to any penalty in respect of the years when they did not meet their commitments. Thus, the Regime rewarded not only genuine export efforts but also good results of a purely conjunctural nature.<sup>21</sup>

iv) The fixed base year 1992 gave rise to some undesirable biases. It penalized firms which had already made a substantial export effort (even at a loss) in that year. Furthermore, it gave bigger rewards to firms which registered a spectacular but once-only increase (since they received the same incentive for all the years of the programme) than firms which made a sustained export effort and increased their exports year by year. This problem could have been solved by using a movable base year.

<sup>21</sup> Moreover, firms can inflate their export results for one year at the expense of another by altering the billing dates.

<sup>&</sup>lt;sup>18</sup> The shortage of institutional resources for implementing the policy was also reflected in the lack of updated and accurate information on the functioning of the ISR. Furthermore, the weakness of the supervisory arrangements may have permitted fraudulent misuse of the Regime, such as the re-importation into national territory of exports which had received benefits under it.

<sup>&</sup>lt;sup>19</sup> In reality, except for their publicity value, the commitments only served for the proportional payment of benefits during the first year of each programme. As from the second year, the incentives were only granted on the basis of the exports in the base year, in respect of the amount of additional exports (regardless of whether these were less, equal to, or greater than the figures stated in the commitments.

 $<sup>20^{\</sup>circ}$  Take, for example, a firm that submits two programmes for products A and B, of which it exported \$ 50 in each case in the base year (i.e., a total of \$ 100). If in the following year this firm exports \$ 60 of product A and \$ 0 of product B, it can nevertheless claim benefits of \$ 10 (in respect of the programme for product A), even though its total exports have gone down by \$ 40.

v) Firms could submit their programmes after having begun or increased their exports.

vi) Tariffs were not reduced in proportion to the existing import duties but were all reduced to the same amount of 2%. Thus, the higher the original tariff on the goods to be imported, the greater the incentive, and in the Argentine tariff system the highest tariffs tend to correspond to goods with the highest degree of processing.

The foregoing means that in many cases the ISR operated as a superfluous reward for those who had made a sporadic increase in their exports rather than as an incentive to make greater export efforts. In view of its various design flaws, there are grounds for presuming that many of the increases in exports under the ISR programmes would have been made in any case, even without the incentives of the Regime in question.

## IV

## The impact of the Industrial Specialization Regime (ISR)

When it was suspended, in August 1996, the ISR had over 300 approved programmes, of which some 190 had already resulted in the issue of tariff rebate certificates. The increase in exports in the period from 1993 to 1995 came to US\$ 440 million, so that with an average tariff preference of 18%<sup>22</sup> the presumed fiscal cost came to some US\$ 80 million.

As already noted, the ISR only acts as a very indirect incentive for industrial conversion and production specialization. The absence of binding commitments by the beneficiary firms makes it more difficult to verify possible microeconomic changes due to the ISR.

In a survey made by the Ministry of Industry in the first half of 1996, three years after the initiation of the ISR, it was found that 87% of firms had made investments after their inclusion in the ISR, and that most of those investments were for re-equipment. A large proportion of the firms (61%) made changes in their process and organizational engineering, while 48% increased their scale of production. A similar percentage of the firms intensified their quality control activities in view of the new demands posed by external markets, while 35% said that they had carried out processes implying a tendency towards greater specialization and 39% reported specialization towards more complex products or goods with greater added value (Argentina, Secretaría de Industria y Comercio Exterior, 1996).

These results do not allow us to come to any important conclusion, however. In the period from 1992 to 1996 there was a generalized process of investment and re-equipment in Argentine industry, together with changes in process and organizational engineering and increases in scale of production (as witness the increase in the global levels of industrial activity). Furthermore, the 35% of firms which tended to specialize is only a modest figure for a Regime which was explicitly designed to promote production specialization. In no case was it possible to determine the type of causality between the microeconomic behaviour of firms and their inclusion in the ISR.

Independently of the various criticisms levelled at the ISR as an industrial policy instrument, a consensus has tended to grow up on its effectiveness as a means of promoting exports of manufactures, thanks partly to the massive publicity that the Ministry of Industry has made of its results. It has also been claimed that the increases in exports have been greater than those promised in the commitments (table 2).

The information proffered by the Ministry of Industry highlights the fact that, since the initiation of the ISR, US\$ 430 million of exports were generated between 1993 and 1995. However, this information is hardly a reflection of the relative results of the firms registered under the ISR. It would therefore be desirable to compare the growth rates of exports under the ISR with those for the rest of manufactures.

<sup>&</sup>lt;sup>22</sup> This average margin of preference included the reduction of seven points in the "statistical rate". As from 1995, when the "statistical rate" went back to its original level of 3%, the margin of preference under the ISR went down proportionately.

TABLE 2 Argentina: Exports of the programmes which obtained tariff rebate certificates each year under the Industrial Specialization Regime (ISR) (*Millions of dollars*)

Exports 1993 1994 1995 In base year 1992 389.8 163.2 337.5 Annual total 492.0 344.7 508.5 Annual increase 92.3 172.0 175.9 Exports under ISR/ All exports of manufac-7.8% tures of industrial origin 13.4% 7.4%

*Source:* Argentina, Secretaría de Industria y Comercio Exterior (1996).

Table 3 shows that the growth rate of exports under the ISR programmes was almost equal to that of industrial manufactures as a whole in 1993, much higher in 1994 and much lower in 1995.<sup>23</sup> If we deduct from exports of manufactures of industrial origin those corresponding to the motor industry (which has a special Regime of its own) and gold and manufactures thereof (which were inflated by a multi-million dollar fraud against the State), the picture changes and the growth of exports under the ISR in 1993 and 1994 becomes rather more marked. Even so, however, if we take the average for the period from 1993 to 1995 the results for those exports are below those of industrial manufactures as a whole (excluding the motor industry and gold).<sup>24</sup>

The appraisal of the ISR's results is much more unfavourable if one bears in mind that the official figures on export increases under that Regime only take account of the external sales of the firms which applied for tariff rebate certificates in each year. In other words, they only take account of the firms which had exports greater than those of the base year 1992 and were therefore able to apply for benefits under the Regime. In contrast, they fail to include the firms that did not receive benefits in each year, presumably because they did not reach the goal of exceeding the level of exports of the base year.<sup>25</sup> Unfortunately no information is available on the export performance of firms which are registered in the ISR but did not submit applications for benefits in each year.

An indirect idea of the proportion of programmes which did not become eligible for benefits in each year is given by the ratio between the initial level of exports of the programmes which received benefits and the initial level of exports of all the programmes presenting commitments for each year. This ratio was 72% for 1993, only 24% for 1994, and 48% for 1995.

This information indicates that a large proportion of the programmes (estimated on the basis of their share of initial exports) were not able to receive benefits. The proportion is very high for 1994, which was precisely the year when the ISR was supposed to be at its most dynamic. The erratic levels of submission of applications for benefits tend to confirm the hypothesis that the ISR has rewarded sporadic export results rather than systematic export efforts.

Some special comments are called for on the distribution of ISR programmes by sector, geographical area and company size. From the sectoral point of view, the most prominent sectors are iron and steel, with 27% of the increase in exports; tyres, 15%; chemicals and auto parts, 9% each; and footwear, 7% (Bermúdez, 1996). Still greater concentration is to be seen in the geographical origin of these exports: Buenos Aires accounts for 64%, Santa Fe for 12%, and the Federal Capital for 7%.

With regard to the breakdown by company size, 57% of the firms which received tariff rebate certificates were small or medium-sized enterprises, many of which embarked on export activities for the first time under the ISR. They have displayed greater dynamism than the big companies registered under the Regime, though this is partly explained by the low level of their initial exports. Their share of total additional exports only came to 15%, however, which indicates that the ISR was mainly an industrial policy instrument for large firms.

<sup>&</sup>lt;sup>23</sup> The valid point of reference would be manufactures of industrial origin rather than total manufactures, since the sectoral profile of the ISR programmes shows a relatively low proportion of manufactures of agricultural origin.

<sup>&</sup>lt;sup>24</sup> Because of the inadequacy and tardiness of the official data on exports under the ISR, an influential study by Cepeda (1995) overestimates the contribution of the ISR to the growth of industrial exports in 1994. The indirect estimates made by that author suggested that the ISR was responsible for 20% of the growth of exports of manufactures of industrial origin between 1993 and 1994, but the definitive information available indicates that the share attributable to the ISR was only around 10%, both between 1992 and 1993 and between 1992 and 1994.

<sup>&</sup>lt;sup>25</sup> This takes away the validity of the assertion that the export commitments were surpassed, since it only refers to this limited and biased set of programmes.

Argentina: Growth of total exports of manufactures

TABLE 3

and of those which have received tariff rebate certificates under the Industrial Specialization Regime (ISR) (Percentages)						
Exports of manufactures	1993-1992	1994-1992	1995-1992	Average 1993-1995/1992		
With tariff rebate certificates under ISR	26	110	51	49		
Of industrial origin Of industrial origin, with exception of	29	61	126	72		
motor industry and gold <sup>a</sup>	17	34	105	56		

Source: For data on the ISR: Argentina, Secretaría de Industria y Comercio Exterior (1996); for exports of manufactures: prepared by the author on the basis of data from the Institute of Statistics and Censuses.

<sup>a</sup> The categories excluded were SITC, Rev. 2 groups 781, 782 and 784 (motor vehicles and parts) and groups 772 and 897 (electrical apparatus for making and breaking electrical circuits, etc., and jewellery and goldsmiths' wares).

# Conclusions

The Industrial Specialization Regime formed part of a small group of active policies implemented from 1993 on in order to cope with the strong pressures being exerted by the growing trade deficit and the difficulties firms were facing in their efforts to carry out production and technological restructuring processes.

The inadequacy of the incentives offered, their lack of linkages with the other industrial policy instruments, and the failure to demand binding production conversion commitments militated against the efficacy of the ISR as an instrument for promoting restructuring.

Nor does the Regime seem to have functioned properly as an export incentive, since the dynamism of exports under the ISR programmes was less than that of the rest of exports of manufactures of industrial origin. Furthermore, because of various features of the design of the ISR, a substantial part of the benefits provided under it went to sporadically good export results rather than sustained export efforts.

It may be concluded that, in general, the benefits granted have been redundant in the sense that they have rewarded exports that would have been made in any case and have not stimulated a significant additional export flow. The main beneficiaries have been big companies with a long export tradition (notably iron and steel companies).

Finally, the Argentine experience with the Industrial Specialization Regime shows the limitations of the supply-side approach to industrial policy. This case shows how the theoretical biases of orthodox thinking have not only helped to determine the course taken by structural reforms but have also had a negative influence on the ways in which industrial policy instruments have been designed and applied. In particular, nothing was done to ensure the necessary strengthening of the public bodies responsible for policy design, implementation, supervision and evaluation, which appears to be one of the main reasons why the new industrial policies continue to display the same defects as those of the import substitution period.

(Original: Spanish)

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