



**Università degli Studi di Ferrara**

**DIPARTIMENTO DI ECONOMIA, ISTITUZIONI, TERRITORIO**

**Corso Ercole I D'Este n.44, 44100 Ferrara**

**Quaderni del Dipartimento**

**n.20/2002**

**June 2002**

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The Chilean Challenge for the Twentyfirst Century**

**Patrizio Bianchi – Mario Davide Parrilli**

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*Abstract*

This paper analyses the policy-making approach taken in the last three decades in Chile as a move away from the former unsatisfactory ISI regime and as an affirmative response to the rule of free trade and globalisation. After many years of successful economic growth, the country seems to arrive at a turning point. Indeed, the position of Chile -as other small countries- in such a new globalised appears too weak to be able to compete with stronger country competitors. A different kind of answer is needed, that builds upon the voluntary and collective strategic approach to policy-making and that tries to reconnect an industrial system that tends to atomise as a result of the growing competition in the global market. The paper goes through the economic structure of the country to analyse in detail the policy framework and the basic decisions taken by the national decision makers. The paper starts identifying the present difficulties of the neoliberal approach, which are seen through the lenses of the practical operations of the national support agencies. In contrast and as a conclusion, a different type of approach is outlined, that melts together the importance of market responsiveness with strategic policy-making, in order to integrate the modern with the traditional sector and insert the country's productive system competitively within this challenging international scenario.

## *Introduction*

Chile has been the country that before everyone else condemned the import substitution policies. It was in the early 1970s that the Chilean military government changed direction in economic policy and opened the way to market liberalisation as the best way to allocate efficiently the national resources and produce the highest growth process (Dornbusch, 1996: 4).

Nowadays, after thirty years of this policy all over the planet the political context has changed and the economic environment seems to require new policy approaches. In the last decade, many countries have been falling into deep crises. The East-Asian economies plunged into financial crises from which are hardly coming out; the main Latin American countries, such as Brazil, Mexico and Argentina, have followed the same route, as the last crisis of Argentina proves (Bianchi, 2002). Most of developing countries have not been able to start yet a process of growth and development. This evidence questions the consistency of the economic policy paradigm used from the debt crisis onwards by the main development organisations and governments.

At present, Chile remains one of the best performing countries, capable to maintain a growth pattern, even though reduced in respect of the previous period. In this context, the country arrives at a turning point. The previous stage of resource-based export and growth seems to exhaust its energies and leaves Chile in the necessity to modify its strategic policy orientation, even leaving the former approach blessed by the IMF, the World Bank and the World Trade Organisation. Once again, Chile can be the leading Latin American country in search for a new policy paradigm of economic development.

This paper studies the Chilean economy, with special reference to the different kinds of existing enterprises. Most of them, usually small and medium enterprises (SMEs), hardly adapt to the new conditions of market liberalisation and, therefore, question the neoliberal policy approach. Their number is large even in Chile and their requirement for policy support is evident. The analysis highlights the policies and activities set up by State

organisations to respond to the demands of the private sector and stresses the limitations of this approach and the changes that are due to happen in order to lead the national production system to a more competitive orientation.

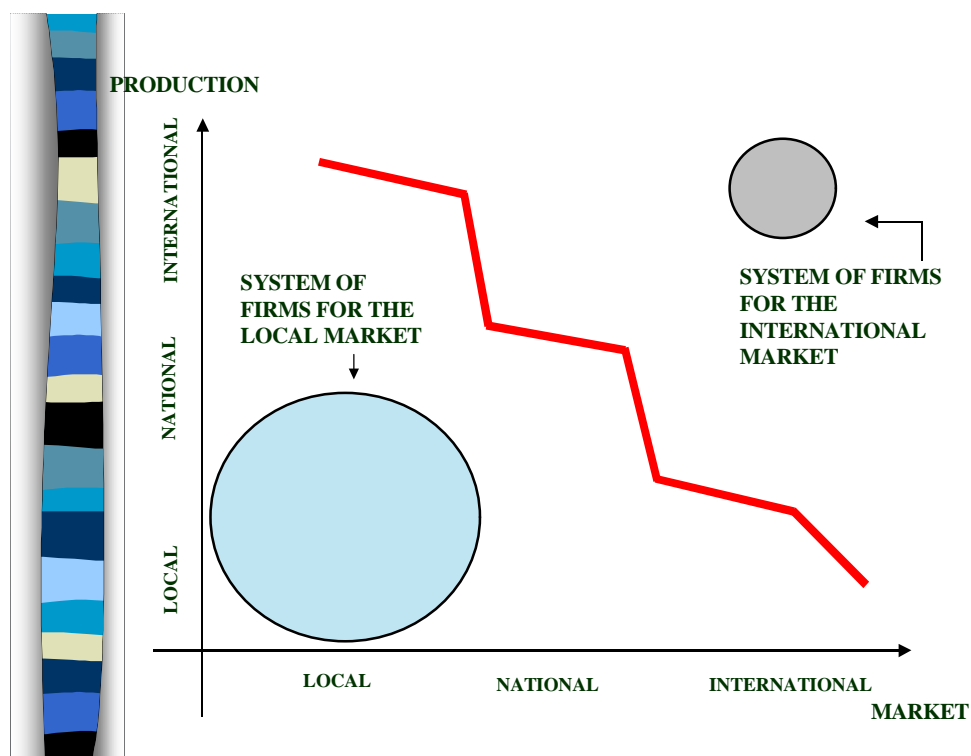
### *Conceptual Framework*

All over the world, small and medium firms are a very heterogeneous sector. Among them, there are the rural family enterprises oriented to subsistence, the urban artisanal workshops, the subcontracting firms, the specialised firms typical of the industrial districts, the medium firms that offer niche products, the firms of research and development. These firms are localised within a local, national and international context of relations of production and market. For instance, the industrial districts are systems of firms that produce at the local level and sell at the international level, while the small rural firms are firms that produce and sell both at the local level. The firms of research and development are firms capable to keep relations of production and market both at the international level (Bianchi and Di Tommaso, 1998).

This evident heterogeneity in the enterprise universe tends to neglect the kinds of relations that exist among the different types of national firms. If these work in the market as separated atoms, they remain weaker than other larger firms, and the system as a whole loses competitiveness. The lack of linkages among the national firms (and also the foreign transnationals based in the country), which is often a collateral effect of market liberalisation, increases the risk of splitting the national economic system. On the one hand, isolating a few large national and foreign firms, which produce with advanced technologies standardised goods in large series for the national and international market. On the other, leaving the plenty of small and microfirms, that work as craftshops, with second-hand machinery and low-skilled workers, producing general-purpose goods for the local market. The first group of firms constitutes the modern sector, while the second represents the traditional sector.

The overall effect is to generate a double-speed economy, in which plenty of people remain outside of the development circle without any opportunity for personal and collective growth. In this way, the country is not going to benefit from all the national resources and plunges in an even worse economic condition. The following diagram represents synthetically this situation:

**FIGURE 1**



In this figure, it is evident how a bigger group of (micro, small and medium) traditional firms remains isolated from the smaller group of usually large (but also micro, small and medium) modern firms. The first group remains confined to local-to-local productive and market dynamics. At the same time, the smallest group maintains a different approach, opening its relations of production and market to the international collaboration and competition. This situation can lead to a stiff dualism that protects the interests of regressive coalitions and transnational powers (Cowling & Sugden, 1997; Bianchi, 1998).

In this sense, this paper hypothesises the need to set up a specific industrial strategy that, blending wisely different kinds of policies and instruments, helps the system to close the gap among these two groups of firms and shape a stronger industrial system. These aspects are analysed in detail in the final section of the paper.

### *The System of Enterprises in Chile*

Wherever in the world, micro, small and medium firms are the most numerous enterprises, and represent a very important part of the economy also in terms of employment and gross domestic product (Bianchi and Di Tommaso, 1998). In the case of Chile the situation is the same as the following table shows:

**The Enterprises in Chile in 1997 and 2000**

	Number		Employment (%)		Sales		Sales / Enterprise	
	1997	2000	1997	gr.2000/01	(million UF) 1997	2000	(thousands UF) 1997	2000
Micro Firms	432,400	521,820	40	-5.8	201	135	465	386
SMEs	89,700	61,337	50	-1.2	1,085	786	12,095	12,822
Large Firms	4,800	4,200	10	n.d.	3,287	3,599	684,700	857,000

Legend: 1 UF is about US\$ 25.

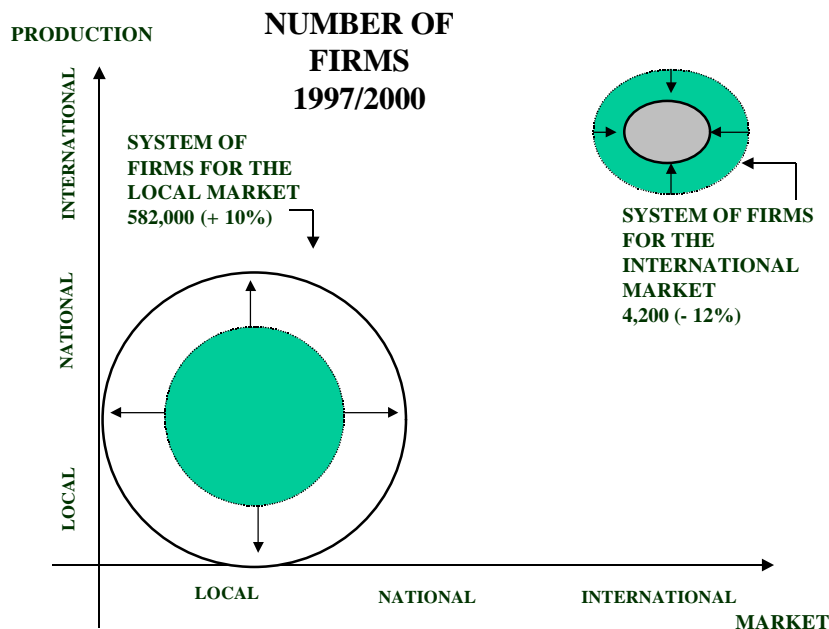
Source : for 1997 CORFO, in Comité Público-Privado Pymes, December 1999. For 2000, INE-BancoEstado and CORFO, First half-yearly Survey of the microenterprises and third Survey of the SMEs, 2001.

These data indicate quite clearly the importance of these kinds of firms within the national production system. The microenterprises are the most numerous, but as everywhere they produce a very tiny proportion of the national sales, even though they participate very importantly in the generation of employment at the national level. These statistics indicate an interesting data, that refer to the effects of the crisis that has been affecting the whole of the continent recently. On the one hand, the numbers of large firms and SMEs have been shrinking, due to the crisis of competitiveness of the Chilean system and the growing imports of Asian products, that throw out of the market several formal

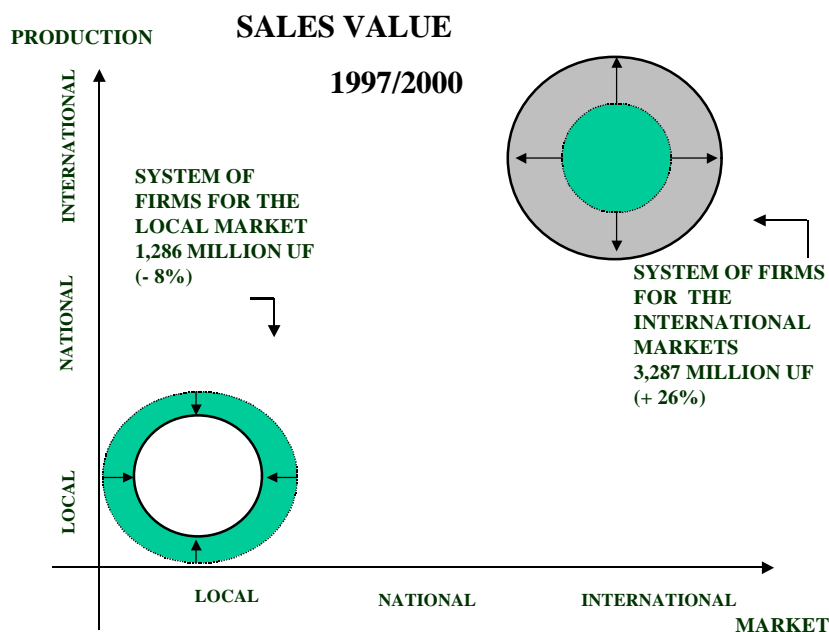
firms. At the same time, the large remaining firms have increased their volume of operations. On the other hand, the number of microenterprises has been increasing, for the need of the population to create some niche solution, often survival, solution, to raise their income and employment. But at the same time, their volume of operations has been shrinking.

In terms of the previous theoretical framework, the number of firms and their sales value can be represented as follows in diagrams 2 and 3. In these figures, we make an arbitrary assumption, which refers to considering the large firms as the modern sector (working for the international market) and the micro, small and medium firms as the traditional sector (working for the local market). In conceptual terms this assumption is obviously too strong; but, in terms of numbers it is quite likely to respond to the real proportions that exist among the two sphere/systems of firms:

**FIGURE 2**



**FIGURE 3**



In terms of the number of firms, the figure 2 shows that in the last few years the traditional sector grows more and more (especially in terms of microenterprises), while the number of large firms decrease. In terms of sales, the situation is opposite: the value produced by the modern sector is increasing on the whole, while the value produced by the traditional sector is lower and shrinking sharply (figure 3). A consequent reading of these data highlights the different trends of these two sectors and the growing risks of splitting the social and economic structure of the Chilean productive system.

*Declared, Undeclared and Expected Industrial Policies in the Democratic Era*

The article now turns to what kinds of policies have been implemented in Chile over the last 10 years and what assessment can be made of those. There are two extreme views



about it: on the one hand, the view of the international financial organisations (i.e. IMF and World Bank); on the other, the ECLAC and other views on industrial strategy.

The first stance indicates that the competitiveness of the national productive system depends mainly on the good management of the macroeconomy, which is defined by the rather strict control of inflation, public expenditure, currency appreciation and balance of payments, and the reduction in the state-owned enterprises and other kind of involvement of the state with the working of the market. For this approach, the economic and competitive problems of the Chilean system are not linked to the lack of industrial policies. It is rather rooted in the improper management of the macroeconomic variables, which led for example to the real appreciation of the *peso* in the 1991-1998 period. This hypothesis is proved by the export growth of 19% that took place between 1999 and 2000, which is said to be due to the real *peso* depreciation (Fischer, 2001: 17; Dornbusch, 1996: 4-6).

This policy approach highlights an “undeclared” shift in the national trade policy that has taken place during the last ten years. In their view, the country’s authorities started to leave the tariff barriers to imports and move to the use of non-tariff barriers, such as safeguards, phytosanitary restrictions, price bands, anti-dumping regulations. At the same time, Chile started a parallel entry in numerous free trade agreements (FTAs) with neighbouring Latin American countries, but also with North-America and the European Union. These policy options were caused by a sort of fear of being left outside of the international geopolitical areas, especially after the dictatorship parenthesis, and the need not to be left out from the most important trade exchanges (Hachette in Fischer, 2001: 6). These considerations led the country toward a new proactive kind of trade policy, far away from the former neoliberal regime. For this approach, this policy shift can also be at the basis of the slowdown of the Chilean economy in recent years.

This new perspective of development, insofar as the previous more orthodox development model, have been part of what is called the export-led model (or export-oriented industrialisation), which has been successfully implemented in Chile for

decades, even though often in an “undeclared” way. The observation of the several measures (i.e. subsidies and other powerful instruments) applied by the different governments to boost the national exports helps verifying that a proactive policy approach was in action even in the 1980s (French Davis, 2002; Agosin, 1999, Saez and Valdez, 1999). And the continuous macroeconomic growth of the country proves the good performance of such a development policy approach.

In general, the hypothesis brought ahead by the big international organisations stresses the relevance of the comparative advantage theory, which values the capacity of a resource-based economy to generate exports and growth. In their view, if this does not occur in the case of Chile, it depends mostly on the mentioned undeclared protectionist policy that Chile has recently chosen (i.e. non-tariff barriers). A different outcome would come if they base their growth on natural resources effectively, in a way that permits “the successful exports in one of these sectors building up new knowledge that can be used to develop other export lines, such as occurred with the fishery and mollusk industries (e.g. turbot and abalone), on the basis of the outstanding outcomes of the salmon industry (Fischer, 2001: 22-24; 29-30). This option is strengthened by another consideration, that points that “the technology required in these industries is quite sophisticated and in terms of value added, sending fresh fish from Chile to the US adds perhaps more value than a traditional industrial export” (Fischer, 2001: 22; Perez-Aleman, 2000: 44; Falabella, 2001: 261).

The second theoretical stance contrasts quite evidently with the previous analysis. In fact, it indicates that the past democratic governments made their clear pronouncements about the need to consolidate the productive structure of the country and increase the high value added productions. None the less, there are several examples that policy-making has substantially maintained the neoliberal approach implemented over the former two decades (1970s and 1980s). Its trajectory led Chile to a significant de-industrialisation process (Stumpo, 1999).

Indeed, there is an interesting evidence about the reduction of the industrial participation in the GDP over the period 1972-1997 from 24.9% to 17.2%. This trend has not been subverted in the 1990s, since it passed from 19.2% to 17.2% from 1989 to 1997 (Stumpo, 1999: 10). At the same time, it is also important to observe the kind of transformation that is taking place within the industrial sector. The industrial composition of production passed from 17.7% in science-based industries, 45.5% in natural resource-based industries and 36.8% of labour-intensive-based industries to different proportions: 5.1% in science-based, 66.5% in natural resources and 28.5% in labour-intensive industries (Stumpo, 1999: 17). In this sense, this evidence contrasts with the former idea of a general shift in Chile from low-value added resource-based production to more sophisticated types of productions (i.e. science-based).

In terms of kinds of industries, some specific industrial chains have been neglected and dismembered over this long period of time, while others have increased their share in the national economy. For example, the quota of industrial production of durable goods and capital goods production has been shrinking. At the same time, the quota of less value-added productions, such as forestry products and cellulose, agriculture, fish flours, vegetable oils, canned fish, tomatoes and fruits, wine, cattle, milk and dairy products has been increasing substantially. At the firm level, there is a reduction in the number of SMEs and a parallel increase in the number of micro and large firms (Stumpo, 1999: 21).

The conclusion of such an approach to policy is that “In the last twenty years, it has not been possible to find out in Chile a clear tendency toward the creation of productive chains that start from the transformation of natural resources and that indicate the birth of a more complex and diversified productive structure...At the same time, do not seem to increase sensibly the presence of Chilean products in more sophisticated markets and sectors. In this sense, the growing trade deficit indicates a clear loss of competitiveness” (Stumpo, 1999: 31-35; Sachs and Warner, 1995; Meller et al., 1996).

Which of the two mentioned approaches is the most qualified is an open question. Possibly, they are not too distant from one another, since the same first stance recognises

the need to increase the value added of production and emphasises the relevance of working closer to the technological frontier even in newer (agroindustrial) productions. But this potential concordance among the two stances should not lead to neglect the complaints manifested by entrepreneurs, business associations and government officials, especially those coming from the SMEs sector, in the last few years (FUNDES, 2002). These indicate that the problems of industrial competitiveness have not yet been overcome. In particular, there is a significant number of microfirms and SMEs that are suffering the negative effects of liberalisation and that are not able to join the market in a competitive position. In contrast, they fear the new entrants in the national market, with whom they are impelled to struggle on a “low-road” type of competition (Pyke and Sengenberger, 1990).

The existence of a Public-Private Committee for SMEs indicates the need of this sector to receive support policies that help them cope with other major policies protecting the interest of different lobbies (usually large modern firms). This situation seems to represent well the collocation of two different groups of firms in the bottom-left (i.e. traditional sector) and top-right (i.e. modern sector) sides of Figure 1, 2 and 3. Avoiding the risk of falling into a dualistic socio-economy is a priority for Chile and other Latin American economies.

### *Industrial Development Practices*

In this sense, it becomes a key-node the discussion of the operative part of development, which refers to the work of public (and private) support organisations and their ability to avoid falling into such a dualistic economic system. This analysis focuses eminently on the work of the biggest public organisation (the Development Corporation, CORFO) of the Ministry of Economy, because it seems to clarify quite well the type of development logic applied in Chile over the last decade.

CORFO is quite an independent institution, financially stronger than the same Ministry of Economy and Energy, as the following table shows. This situation is justified by the main international organisations and governments that want the policy-making sphere of Chile (and other developing countries) weaker than its operative areas. In fact, this condition is more likely to reduce the risk of incurring in any attempt of state planning.

**Table 1: Budget Expenditure in Chile for 2002**

	Thousands of Million Pesos	Participation in the total (%)
Presidency of the Republic	6,7	0,06
National Congress	44,1	0,42
Justice	104,4	0,99
Auditing Power	18,8	0,18
Ministry of Internal Affairs	328,0	3,10
Ministry of External Affairs	109,7	1,04
<b>Ministry of Economy &amp; Energy</b>	<b>44,3</b>	<b>0,42</b>
<b>CORFO</b>	<b>726,8</b>	<b>6,87</b>
Ministry of Treasury	137,8	1,30
Ministry of Education	1.863,4	17,61
Ministry of Justice	236,0	2,23
Ministry of Defense	1.120,8	10,60
Ministry of Labour	3.031,5	28,66
Ministry of Health	1.039,0	12,37
Ministry of Public Works	660,0	6,24
Other Ministries	792,0	8,00

Source: Ministry of Treasury, Directorate of Budgets, Budget 2002, October 2001.

These statistics seem to indicate a feature of the Chilean policy-making, which represents a case of what is labelled as the “capture theory”. For the theory, the “capture” occurs because bureaucrats do not have a profit goal to guide their behavior, but an institutional mission or an individual goal (e.g. career). However, they depend on the Parliament for their budgets.

At the same time, the people who benefit from their mission can influence the Parliament to provide more funds. These interest groups - who may be either lobbyists of regulated industries or other kinds of interest groups - become important to them. Such

relationships can lead interest groups to capture bureaucrats, leading the latter to work in the interests of the former (Stigler, 1971; Grossman and Helpman, 1994).

In our case, the situation is of the following type. A (state) agency – CORFO - becomes too strong for its “principal” institution, which is the policy-making group within the Ministry of Economy. Therefore, the first becomes independent and, in contrast, creates dependency in the second, directly or indirectly, by pushing the entrepreneurs to demand specific kinds of policies. This situation is highlighted by the gap in the budgetary resources devoted from the state to CORFO and those devoted to the Ministry of Economy and Energy and other Ministries.

In spite of this situation, several studies highlight the proficiency of the development activity of CORFO, that has been able to spur a learning process within the productive system and the related business associations. Advancing on the line of increasing exports in more sophisticated agroindustrial productions (i.e. salmon, abalone, wine) is the product of a learning process that led the firms to higher quality standards, higher efficiency and scales of production, etc. All these activities have been part of the promotion activity of CORFO and other public agencies (e.g. PROCHILE in exporting, FOGAPE in credit) for several years (Perez-Aleman, 2000; Fischer, 2001, Stumpo and Dini, 2002).

Following the development programs of CORFO, a few characteristics can be observed. The first refers to its market orientation. CORFO is a large development institution, born in 1939, that assumed a new development profile in the last decades. As a development agency, it has been able to modify its approach and incorporate the free market scheme among its key features. In other words, CORFO has become extremely reactive to market demand, leaving the formerly recognised style of supply-driven policies. It has recently developed several support activities in order to respond to the variety of demands coming from different economic groups. The Annual Report and the web page of CORFO permit realising how many development programs and instruments are in place for all types of firms.

**Table 2: Development Programs of CORFO in 2002**

NAME OF THE PROGRAM	TYPE OF PROGRAM	MODALITIES	DIRECT MANAGEMENT
PDP	Subcontracting development	Subsidies for up to UF 9,000 per group of firms in 3 years	Private Agencies
PROFO	Association and Cooperation	Subsidies for up to UF 8,100 per group of firms in 4 years	Private Agencies
FAT	Technical Assistance	Subsidies for up to 50% of the cost and UF 150 per firm	Private Agencies
FAT clean production	Technical assistance for clean production	S. up to 70% of the cost and UF 125 per firm	Private Agencies
PAG	Enterprise management and relative Actions	Subsidies for up to 50% of the cost up to UF 1,500/firm	Private Agencies
Program for Commerce	Commercialisation		Sercotec
Program pre-investment	Subsidies for Pre-investment studies	Up to 60% of the factibility study and US\$ 12,000/ firm	CORFO
Program of Credit Insurance	Subsidies for credit insurance	Subsidise the eventual bankruptcy up to US\$ 30,000	CORFO
FDI	Funds for innovation development	Concursos y licitaciones públicas	CORFO
FONTEC I	Funds product and service innovation	Subsidise up to 50% of the cost	CORFO
FONTEC II	Funds for investing in infrastructures	Subsidise up to 30% of the cost	CORFO
FONTEC III	Funds for associativ. Techn. Transference	Subsidise up to 50% of the cost and up to US\$ 100,000	CORFO
FONTEC IV	Funds for centres of technology transfer	Subsidise up to 50% of the cost up to US\$ 400,000	CORFO
FONTEC V	Funds for innovation pre-investment study	Subsidise up to 50% of the cost up to US\$ 15,000	CORFO
Program for Supporting credit	Subsidies for credit support	Subsidise up to 80% of the first payment and the commission for the guarantee	CORFO
Program of training for new hired workforce	Subsidies for hiring workforce	Subsidise up to UF 140 per worker	CORFO
Program for industrial urbanisation	Subsidies for urban- isation of regional lands	Subsidy up to UF 0,5 for square meter, 6,000 per firm	CORFO
Program for Industrial Regional localisation	Subsidies for indust. regional localisation	Subsidise up to US\$ 10 million for project generating more than 200 jobs	CORFO
Program for buying industrial estates	Incentives for buying ind. Estates	Subsidise up to 50% of the cost of land and UF 2,000	CORFO
COBEX	Borrowing guarantee for exporters	Guarantee that cover up to 40% of the total guarantee	CORFO (guarantee), Private Banks (credit)
Reprogramming SMEs debt and Credit Line B.13	Reprogramming debt with CORFO guarantee	Up to US\$ 150,000 to be paid in up to 6 years	Banks for credit and CORFO for guarantee
Credit Line A.3	Financing leasing operations for SMEs	Up to UF 15,000 with repayment terms of 3-5 years	Leasing Companies and Banks
Credit Line B.14	Credit for environmental Protection operations	Up to US\$ 1 millon and repayment terms up to 12 yrs	Private Banks
Credit Line B.22	Credit for input purch. and selling abroad	Up to US\$ 3 million and repayment up to 8 years	Private Banks
Credit Line B.21	Credit to foreign buyers of goods and services	No financial restrictions and up to 10 yrs. repayment term	Private Banks abroad
Credit Line B.11 and B.12	Financing SMEs investments	Up to US\$ 5 millon with repayment term up to 10 yrs.	Private Banks
Credit Line B.41 and B.42	Financing under- and post-graduate studies	Credit up to UF 3,000 to study abroad	Private Banks

Source: Author's elaboration on the basis of the internet page: [www.corfo.cl/instrumentos](http://www.corfo.cl/instrumentos), 2002.

This table indicates the several interventions, often in the form of subsidies, that the main governmental development institution implements in Chile. As a matter of fact, this table indicates that the Chilean government has acted in a way that is somehow distant from the pure neoliberal prescriptions. It has implemented industrial interventions in a disguised way, through a very punctual approach, which resembles to a market approach. In this way, the government has promoted the productive system in various relevant aspects, such as export, technological innovation, technical education and training, subcontracting, association, and so on.

During the 1990s, the policy behaviour of Chile, also through CORFO, succeeded quite clearly to maintain the level of growth that the country enjoyed in the last twenty years. Nowadays, Chile remains one of the few countries that suffers the less from the effects of the general world slowdown, that affects much more strongly larger countries such as Argentina and Brazil. Chilean economic stability and its steady growth along the 1970s, 1980s and 1990s are features of outstanding success in the international arena. The role of CORFO in this success is quite evident, being the main promoter of development in production and export.

A second important characteristic of CORFO is its management of a variety of development programs. It is a significant symbol of “economic democracy”, since it represents the capacity of the state to respond to the specific demands of different socioeconomic groups. Theoretically, this option is fully in line with the worldwide importance recognised to the “free market” rule and the sensitivity to the new pattern of demand.

In this context of a substantially positive evaluation of the work of CORFO, this article attempts to analyse a critical point and propose an industrial strategy shift to the Chilean government and CORFO. In the present world of fierce global competition (e.g. the increasing role of China in the international market), the “democratic”, “punctual” approach to development and industrial policies can lead to a problem of operational



efficiency. This occurs when too many programs and tools hinder the creation of scale and scope economies, that are unescapable competitive keys in the globalised market. If the country is not able to pull together a critical mass of producers on the types of production in which it competes internationally, the productive system is hardly going to succeed (Bianchi and Parrilli, 2002).

The data presented by the Annual Report of CORFO seem to confirm these considerations. In fact, these programs altogether involve no more than 15,000 firms and only two or three programmes involve about 2-3,000 firms individually (CORFO, 1999). Being 500,000 the firms existing in the country, the service of only a few thousand firms is not a sufficient result to produce systemic changes. This hypothesis has been tested with the several interviews realised to entrepreneurs and managers in our recent fieldwork in Chile. Very often, they confirmed not to know about the existence of important governmental development programs (e.g. CORFO, BancoEstado-FOGAPE, INN).

In contrast, the history of the European Union process proves that systemic development is not based on interventions oriented to the individual firm, but rather on interventions directed to a critical mass of firms (Bianchi, 1998; Capaldo et al., 1998). The most successful example of this kind of approach is the Sabatini law created in Italy in 1965 for the technological upgrading of small and medium firms. It delivered more than 200,000 credit operations for more than 100,000 million dollars of subsidies over a thirty years period (Bertini, 1998: 317-318). And also the history of the credit and export consortia and their thousands of associate is a very clear example of a program (with the relative law) oriented to spur systemic changes through systemic facilities available to the whole set of enterprises (Bianchi and Parrilli, 2002).

The same refers to the logic of each program. Being a support to the individual enterprise is not producing the same positive results than being a support to groups of firms, as it occurs with all the European Union development programs. All programs and development activities oriented to credit, export, subcontracting, training and other

aspects of competitiveness are structured in a way that promotes the advantages of participating as an association or a group of enterprises. The same approach is taken at the level of the territories. In fact, in the new kind of industrial policy promoted by the European Union, even the development activities at the local level are to be seen as a part of the bigger and more integrated development of the Union (Miller and Bianchi, 1998: 151; 155-156).

In conclusion, the punctual approach of the Chilean government has been very useful in the past to buffer the severe microeconomic impact of the macroeconomic monetary policy. It also supported the modern sector, simply because these firms, large and small, are in better position to collect information and to satisfy CORFO's requirements.

At this stage, given by the new globalisation linked to the entry of China in the World Trade Organisation context, this approach seems not enough to link together the two sectors of the economy, with a risk of creating a modern area more and more compacted and linked to the international market and production systems, and an increasingly wider part of the economy with decreasing capacity to create value.

The serious risk is that the more and more compacted modern sector does not find a sufficient internal dynamic or a more reliable context to sustain the entire national development. In fact, the traditional sector reacts to the international pressure by destructuring its activity and therefore producing an unstable and uneven quality level and a scarce capacity to generate technology diffusion through the whole system.

#### *A Few Remarks for a Strategic Approach to Industrial Development*

In this sense, it is evident that a particular effort needs to be achieved in order to connect the modern sector with the traditional sector. A country strategy for development is needed as a way to voluntarily and rationally address the problem and pull together all national forces and actors around it. This approach is certainly emerging in several

programs implemented up to now by the national development organisations, with the support of the international institutions. Nevertheless, most of these programmes supported by international institutions are “punctual” and not affecting the capacity to strengthen the weakened structure of the economic fabric of the society.

For instance, the lines of action that can avoid a widening of the internal division of the productive system are of three types. First of all, there are actions that can spur the consolidation and competitive strengthening of the traditional sector. One of the most interesting examples of this type of actions is the program of *Mise-a-Niveau* realised with a lot of success in Tunisia and that spurs all companies and institutions that interact in a local system to work with the same quality standards (Ministere de Economie de Tunisie, 2000; Di Tommaso et al., 2001).

Secondly, an effort is required to widen the small number of firms inserted in the international networks of high technology. This is the case of the academic spin-offs of high-technological content, that permit the firms and the society to go toward the knowledge economy. In this way, the national and local productive systems can re-centre their objectives of growth and competition in the medium and long term, and leave the productive sectors of strong price competition (UE, 2001).

Finally, the two mentioned actions need a third type of strategy, oriented to link the traditional sector with the modern firms, in order to create a unique integrated system of national firms. It is the case, for example, of the subcontracting chain relations among large and small firms (e.g. very successful in Japan) or among small firms only (e.g. very successful in Italy). These allow the economic actors to work together in a single project of competitive development, and favour the search of a better specialisation and complementarity among firms, which is essential to integrate them in competitive networks that produce for the open market (Lazerson, 1990; Caddy, 1998; Innocenti and Labory, 2001; Bianchi and Parrilli, 2002).

These three actions correspond also to three basic criteria, that represent the keys for the development of the national and local production systems: quality, knowledge and networking.

**FIGURE 4**

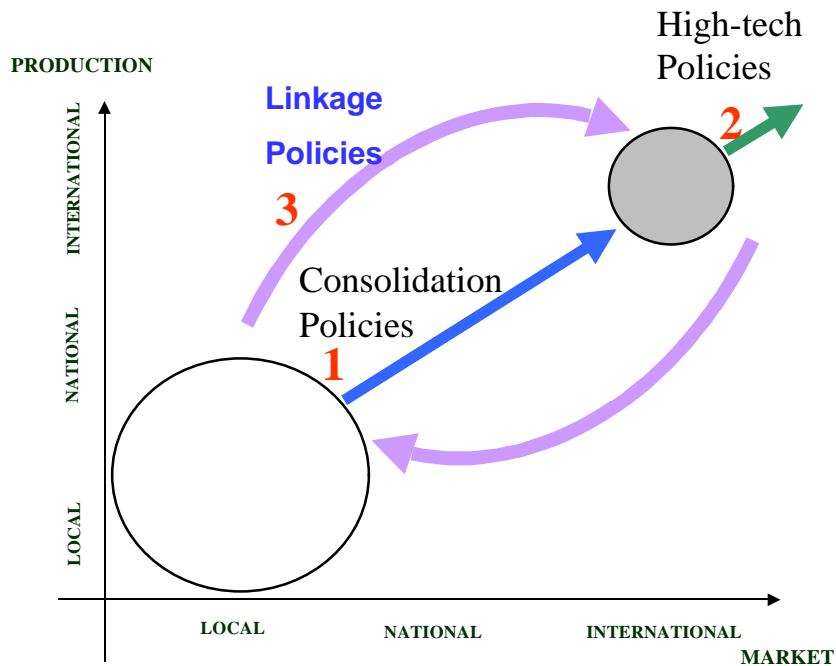


Figure 4 shows clearly that policies and mechanisms are needed to help to link up better the two ambits of traditional and modern firms. In this manner, it becomes easier to avoid a country development at two different speeds and that income, wealth and welfare gaps increase among the population.

The mentioned strategic approach is more likely to promote the realisation of the potentials of growth of the small firms, that usually constitute the traditional sector of the productive system. These potentials lie in greater efficiency and agglomeration economies, the first of which results from the individual specialisation of the enterprise joint to the collective complementarity of the group of firms. The advantages of agglomeration come from the territorial and sectoral chains in the form of networking.

This latter aspect has been able to produce the needed advantages of dimension without reference to the individual size, but through the consolidation of chains and complementarity among firms (Brusco, 1982; Piore and Sabel, 1984; Becattini, 1990; Pyke and Sengenberger, 1990; Best, 1990; Schmitz, 1992; Nadvi and Schmitz, 1999). All these experiences, corroborated by strong theoretical frameworks, have directly influenced the industrial policy of the European Union in the last two decades.

Nowadays, a productive system that wants to be competitive requires a series of new components that lead it toward the new technological frontier and the new consumers' demands. Among these components, there are the strategic relations among basic research (e.g. chemistry, physics, biology) and production, the new demand for a better quality of life and the key-role associated with the welfare sectors (e.g. health, environment, education), the competitive pressure of the new countries in low-quality and standardised productions. All these aspects have to be taken into account in order to build up a more competitive country-system.

These considerations push Chile, just as any other more or less small country, to outline a strategy of industrial development that can work in an open economy. A series of basic principles are involved in order to achieve it, the first being the determination of a "country identity"<sup>1</sup> in the context of the global market. This aspect determines why the global consumers are willing to buy the national product instead of others'. The formation of a productive and commercial country identity is very likely to help all economic actors to focus their actions toward a strategic profile of benchmarking practices and a process of socioeconomic convergence. Once again the experience of the European Union explains very well the important effects this process had on systemic competitiveness.

Still, all this process is hardly going to materialise, unless a second basic principle is agreed among the members of the project (i.e. the Chilean economic actors). It is the

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<sup>1</sup> The concept of "identity" used here refers to the economic sphere and does not make reference to political considerations and nationalistic tendencies.

principle of the common game, that refers to the collective complementarity and the creation of an efficient dimension for productive and commercial networks and chains. In fact, the generation of competitive economic systems and the consequent country development is more likely to take place when all firms directly involved in production, services and public support institutions avoid working in an atomised way and shift to a coordinated and cooperative production formula.

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