

# **Disappointment and Challenges**

## **Policies Addressing the Micro, Small and Medium Size Enterprises in Chile**

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### **Introduction**

In recent years, the Chilean economy has been featured by its high growth and manifest macroeconomic stability. Economic reforms carried out during the 1970s and 1980s, have transformed the economy from an inward-oriented development strategy into an open economy based on international trade and financial flows. Likewise, Chile moved from policies which implied a relatively high state intervention across markets to a more deregulated and competitive system in which resources are basically allocated on the basis of free markets.

In spite of the significant progress observed by the Chilean economy in terms of its growth and stability, there are still pending problems regarding the Chilean social dimension. As a result of the application of an ample policy package aimed at tackling the social situation, a dramatic decrease in the percentage of poverty from 40% to about 20% of the population happened in the 1990s. However, the country is still characterized by a deficient income distribution, a situation which displays an important political effect affecting the sustainability of the economic development. In fact, Chile has remained during the 1990s and 2000 among the 12 more unequal countries in the world regarding the distribution of total incomes, dramatically contrasting to its place among the 10 more stable and dynamic economies in the world. This is contradictory with the overall economic progress that has been praised all over the world

A key factor in explaining the poor income distribution of Chile in comparison with its noticeable success in macroeconomic achievements connects with the insufficient development of the Micro, Small and Medium Enterprise (MISME). On the one hand, this is a crucial sector in order to increase the competitiveness of the Chilean economy regarding the need of further diversifying exports, increasing the labor productivity and stimulating innovation and entrepreneurship. Reaching greater economies of scale through a better coordination and association of MISMEs is a potentially important instrument for Chile to continue in its economic strategy of trade openness. On the other hand, the development of the MISME can imply a significant improving in the prevailing income distribution, given that it is more labor intensive and able to better reflect on labor earnings the actual productive results.

The Chilean economy has done much in terms of setting macroeconomic policies which afforded good aggregate results and made the country world famous to their respect. However, the policies addressing the development of MISMEs are still wanting and need to be improved in the continuation to what has been called "the second stage of economic development", which implies a necessary change from exports intensive in natural resources to those more intensive in local value added. In this context, policies addressing the development of the MISME are an indispensable ingredient.

## **The Chilean Economic Results**

Economic results between 1987 and 1995 were brilliant from the view point of GDP growth, exports, investment rates and low inflation. If in the 1950-1971 period the economic growth averaged 4.2% p.a., in the 1987-1995 period growth reached more than 7% p.a. in average; by the same token, yearly inflation decreased from an average of 26% to 7% p.a. whereas investment, expressed as a percentage of the GDP, increased from 17% to 26% in the aforementioned periods. The per capita income grew at 2.0% p.a. in 1950-1971, while in the 1987-1995 period the growth of this variable was 5.3 % p.a. Altogether with these important achievements, the open unemployment rate remained around 6% of the labor force in the two periods which we are

comparing. Hence, the period 1987-1995 is considered a golden period of the Chilean economy, resulting from the productive potential awakened by economic reforms carried during the 1970s and 1980s, which were kept in their essential components by the democratic governments in the 1990s.

The economic reforms of the Chilean economy followed the lines of the structural adjustment programs encouraged by international financial institutions under the so called "Washington Consensus". These programs aimed at reducing the extreme weaknesses of developing economies, trying to open them to international trade and at reducing the economic size of the state. Along those lines, a dramatic reduction in tariffs was carried out in Chile in 1974-1978 to produce an important opening of the economy to foreign trade. This took place along with a significant stabilization program aimed at attaining lower inflation rates, one of which decisive instruments was a tight monetary policy altogether with a notorious drop in fiscal expenditures. A significant reduction in the economic size of the State and the degree of government intervention across the economy were also key companions of the macroeconomic program. After the dramatic financial crisis in the early 1980s, largely due to an overvaluation of the Chilean peso due to a nominally fixed exchange rate, the government continued implementing a deep economic reform program. This included the privatization of most public firms, the continuation of a tight fiscal and monetary policy and the adoption of an export-promoting strategy.

As mentioned above, the notable achievements of the Chilean economy in macroeconomic terms diverge quite remarkably with the observed situation reached in the social dimension. Unemployment rate has remained relatively high in recent years, in spite of a GDP growth above of 4% p.a., this being an important factor underlying the persistence of an unsatisfactory income distribution. In fact, the difference in the average income of the 20% poorer compared to the 20% richer amounts to 17 times, whereas it is only 9 in the USA and 10 in Korea. Although the country has done a lot in terms of reducing the extent of absolute poverty, which currently remains a little below 20% of the population after having reached as much as 40% in the 1980s, the gaps between different income groups are still very significant, and becomes a decisive political factor that may hinder the continuation of the economic strategy. As many see the economic model as the final responsible for these

observed social results, the effect of a deteriorated income distribution may attain a significant detrimental effect on aggregate economic achievements.

This situation of the income distribution in Chile is largely due to the role played by several structural factors connected with the distribution of education and human capital among the population, as well as to the different productive specialization that characterizes different regions inside the country. Nonetheless, a key factor regarding the poor record reached with regard to the income distribution in Chile connects with the labor productivity and the distribution of the human capital across different segments of the labor force. In fact, the discussion about failures in education quality and the absence of an adequate system of public education as well as in connection with the low expenditure in research and development (R&D) have been pointed out in discussing the poor progress of the country regarding its competitiveness (World Development Forum, *World Competitiveness Index*, 2007).

At the same time, another crucial factor in explaining the deteriorated income distribution observed in Chile concerns the structure of the productive activity. In fact, although many policies have allowed large firms an adequate environment for their development and subsequent success in terms of production and exports, these policies do not apply to smaller firms. Although the MISME is the primary labor source in the economy, and it is present in all productive branches and regions of the country, policies addressing its development have been inadequate and insufficient. The high degree of financial exposure, the lack of collaboration to obtain resources for the investment, high cost to initiate and develop business due to red tape, the absence of instruments to provide smaller firms with opportunities for labor training, etc. are all crucial detrimental factors which have been insufficiently tackled by the economic policy. Politicians and government authorities have manifested concerns about the macroeconomic dimension and the need for supporting MISMEs development, but little has been done to attend the necessary microdimension in establishing a more friendly environment regarding the development of the smaller firms.

## **The Concept of MISME**

Traditionally Chile has not adopted a formal, well established definition of the micro, small and medium enterprise. Lately, however, data from the Internal Revenue Service (IRS) has allowed a definition based upon the value of total sales (Table 1). According to these criteria and as a proportion of the total private employment<sup>3</sup>, the occupation provided by the MISME reaches a 81.1%; in comparison, this sector represents only a 21.7% of the total sales in the economy, according to IRS figures in 2003<sup>4</sup>. In other words, if productivity is defined as sales per employee, it is clear that, at a national, aggregate level, large firms are 36 times more productive than MISMEs. If this index is calculated only for the medium size firms, the productivity gap with large firms is equal to 3, whereas it is equal to 6 in the case of small firms.

Given the high proportion of the employment provided by MISMEs, it is clear that the sector must constitute a concern for the public policy. The adequacy of a policy aimed at promoting the MISME can be questioned on the ground that is a low productivity sector, as reflected by the amount of sales per employee. However, the ratio formed by sales and employment cannot be considered as an indicator of labor productivity, given that the efficiency of the sales dimension in any enterprise is associated with general management aspects, such as those related to expenditures in marketing, transportation and installations, rather than to merely production. At the same time, the high labor intensity of the MISME sector implies that policies aimed at achieving its development can introduce a significant equitable impact, particularly in the area of labor force training.

In any case, the MISME has been declining its relative importance in sales between, for instance, 1999 and 2003<sup>5</sup>. Similarly, the importance of exports associated with the MISME in relation to total exports has dropped from 5.3% to 3.9% between 1999 and 2003. Therefore, and as a result of an inadequate policy environment, the participation of MISMEs is quite high in employment but quite low and decreasing in terms of sales and exports<sup>6</sup>. The current political debate in Chile concerns with this significant difference, and the need for different policies aimed at stimulating the MISMEs to reach higher sales and exports, as well as better productivity standards.

## **Problems Regarding the Development of the MISME in the Chilean Economy**

Nine fundamental problems can be identified with regard to the situation of the MISME in Chile. These problems act as a significant impediment for achieving its more prominent productive development.

- (1) The public policy does not recognize MISMEs as a different economic unit as opposed to large enterprises. As a consequence, economic policies do not discriminate by size of the productive unit and are defined only in connection with large private firms. Governments need to give recognition to existing differences and problems for both large and smaller productive firms, thereby introducing different policies in the context of targeting economic results;
- (2) MISMEs are characterized by a rather disadvantaged access to markets, as they face a more difficult situation than larger firms regarding the conditions of financial intermediation and the access to services such as insurance, transport and commercialization services;
- (3) As providers of intermediate production for large enterprises, MISMEs are subject to a discriminatory treatment particularly in terms of payment delays, thereby implying that large firms transfer part of their financial liabilities to smaller firms, which are therefore paying for part of their commercial risks;
- (4) MISMEs constitute an interesting political market which is widely exploited in electoral periods. However, there usually are no further commitments to their problems once a government is elected, thereby creating the sensation of a customary political exploitation. Moreover, leaders of MISMEs are not even considered as valid counterparts when discussing policy decisions at aggregate levels, at least not as compared to the prevailing situation with leaders of larger firms;
- (5) MISMEs are characterized by an ample heterogeneity regarding factors such as economic size, entrepreneurship capabilities, industrial branch to which they pertain, regional adscription, links to relevant output markets,

etc. Therefore, this causes weaknesses as public policies can hardly be targeted to all possible existing situations. In fact, the design of specific policy measures aimed at stimulating smaller firms are defined in such general terms that they cannot attain any significance in terms of potential impact. Another dimension of this heterogeneity problem connects with the enforcement of policies regarding taxation, environmental impact, intellectual property, labor policies and so on, which usually do not differentiate by firm size in terms of its application;

- (6) A serious constraint for the MISME sector is its faulty access to credit and to the financial sector in general. Lack of credit, particularly for working capital, is a serious factor inhibiting the development of the MISME sector due to the lack of enough collateral and absence of credit lines able to properly reflect higher risks with acceptable interest rates and periods of return;
- (7) There is an inadequate statistical definition of the MISME sector (ANNEX A). The use of definitions based on sales implies that there is a significant volatility in the statistics since the number of firms pertaining to alternative groups varies significantly from year to year. In turn, this is an inconvenient factor with regard to policy design and evaluation;
- (8) There are too many definitions of instruments for the promotion of the MISME, which are located at different levels in various public sector institutions. At the same time, the MISME entrepreneur usually does not have the time or the professionalism to complete so many forms and evaluate alternative offers which respond to alternative opportunities. In addition, there is insufficient emphasis in this sector of the economy, as demonstrated by the fact that between 1990 and 2004 public resources for industrial promotion has increased 2.5 times and that only 39.8% of these resources are allocated to MISMEs, thereby demonstrating the bias of the public policy towards larger firms.
- (9) MISMEs are particularly disadvantaged in accessing instruments of human capital formation, such as formal training and specialized education, as well as in counting with applied research that may increase their productive efficiency and capacity of innovation. All the corresponding

policy instruments in place in the country are based in the reality of larger firms, and therefore they openly discriminate against the needs of the MISME.

The problems so described make virtually impossible to attain a significant development of the MISME, particularly in the export industry. Chilean politicians recognize in their public speech that the continuation of the country's development strategy necessarily implies a shift from a natural resource-based industry to an export strategy concentrated in industries that include more value added in the local production. The international experience, particularly the Asian one, indicates that export diversification should be associated with a potent growth of the MISME, with policies that allow their development, their coordination and integration to gain economic efficiency. As said above, this would also allow Chile to obtain better distributive results as an expansion of the MISME may also promote an increase in the labor productivity. To attain a significant development of the MISME in Chile a political decision is essential. In this context, the government must aim at better policies to address the fundamental failures that characterize the situation of the MISME in the financial, training and general policy design.

## **The Public Policy Environment**

The policy design has not been aimed at stimulating the development of the MISME, since in its general inception economic policies have fundamentally targeted the large firms as their basic objective. This is in fact responding to the actual importance of large firms in terms of production and exports, since they concentrate around 90% of the economic activity measured according to these parameters. However, these policies do not account for the importance of the MISME with regard to employment, as well as to the possibilities of increasing the labor productivity in the economy and attaining a development strategy based upon the productive increase of the MISME.

It is not, however, the case that Chilean governments have done nothing in terms of policies and institutions regarding the MISME. The problem is the



dispersion of policies and institutions in charge of the MISME inside the government, at the same time that overall resources have not been enough to deal with the magnitude of observed problems.<sup>7</sup> In the past five years, for example, the government has created more than one hundred programs in support of the MISME which have operated through no less than fifteen distinct government offices in different Ministries. In addition, the amount of resources has not been enough considering the important target constituted by so numerous enterprises characterized by a large diversity from different viewpoints. As mentioned before, the MISME is characterized by substantial heterogeneity regarding the industrial branches to which they pertain, regional adscription and specific situation regarding their financial situation, as well as the particular condition regarding human capital needs and the peculiar impact of regulatory policies. On the contrary, the large enterprise is more homogenous and characterized by a high degree of concentration, making it easy to target alternative policies and evaluate their result.

The general economic policy cannot provide a propitious environment for the MISME, as policies regarding taxation, general business regulations, labor, environment, etc., cannot discriminate according the size of economic units. This has resulted in a quite unequal situation for the existing competition between the MISME and the larger firms, and has not provided adequate protection to the former when there prevails a vertical integration which is prone to abusing smaller firms. Policies that have stimulated the international insertion of the country, for example, have openly favored larger firms, since, differently than the MISME; they accomplish the several financial requirements and have the organizational capabilities to attain an active and permanent participation in foreign trade.

The example of the retail sector can be used to illustrate with regard to some of the issues mentioned above. This sector represents in Chile about 42% of the total entrepreneurial initiatives. However, measured through the Gini coefficient<sup>8</sup> the degree of concentration in large firms, as opposed to MISMEs, is extremely high: going from 0.835 in 1998 to 0.842 in 2004. This degree of concentration of retailing in larger firms is not in principle beneficial to consumers, and it is the result of general economic policies that have either propitiated concentration or disregarded the importance of it. To a large extent this situation is due to the access of large enterprises to lower input prices,

which allow them to drive MISMEs out-of-the-market, and subsequently increase the final price to consumers. This situation has not been prone to promoting a more transparent competition, raising the need for more sophisticated rules on regulatory policies than those actually prevailing.

The economic policy has not been able to successfully introduce a positive discrimination to attain a further development of the MISME sector. The past government administration and the present one have attempted to create alternative policy packages aimed at encouraging the development of this sector, but they have not been successfully implemented. Three examples can be quoted to illustrate the lack of an adequate policy design in the aim of encouraging the MISMEs development.

The first example was the project that in 2006 attempted to solve the existing problem of tax liabilities of the MISME sector, including the negotiation of periods of payment and the reduction in interests and charges against the debt amount. Since there were more than 360.000 tax payers in arrears pertaining to the MISME sector, a situation that exerted negative consequences regarding their prospects to obtain access to the financial sector, it was expected that a large number of them could have used this alternative. However, only 10% of the total numbers of those entrepreneurs in tax arrears were actually able to take the package. The reason was simple: the government proposal implied the immediate payment of 30% of the total debt in arrears, whereas the remaining 70% had to be paid in 11 payments. Given the financial reality of MISMEs the offer was simply unaffordable for this productive sector, making the announcement of the package a failure with regard to its actual achievement<sup>9</sup>.

A second example was the announcement made by the government in August 2006 in order to modify the timing for enterprises to pay their sale taxes. Firms in Chile have to make two tax payments that may significantly affect their cash flow: the 10<sup>th</sup> day of the month they have to pay the payroll tax, and the 12<sup>th</sup> day they have to do the same with the value added tax (19% of their sales) plus a provisional payment of about 1% to 3% of their total sales as a credit on their annual tax payment. The government proposal consisted in postponing those payments to the 20<sup>th</sup> day of the month, in order to alleviate the cash flow situation of the MISME, and granting more time for them to get

enough resources. However, such a good idea did not work out since an eligibility requisite was that all payments should be made using internet, thereby also implying that enterprises had to have a checking account in the banking system and being able to emit electronic documentation on their sales. Given that this is not the reality of the vast majority of micro and small enterprises, from an universe of about 690,000 MISMEs, less than 2,000 were able to access to the proposed benefit. In fact, more than 50% of MISMEs do not have any checking account given their prevailing liabilities with the financial sector, and 99% of them did not yet have any access to electronic technology to process and produce electronic sale receipts<sup>10</sup>.

A third example of inadequate policy design was the proposal made by the government in 2001 in order to have a law for the promotion of the MISME. Six years later it can be said that this has not been at all carried out in spite of the commitment publicly made by the government. However, a new announcement made by the Minister of Finances in April 2007, has once again proposed the idea of developing an ample legal framework for the MISMEs.

The problem with the policy design regarding the importance of the MISME sector in the economy has suffered from two inconveniences. First, the lack of a real political commitment of the authority with the evolution and contribution of the sector to the economic activity and employment. Second, the improvisation of policy measures which are more oriented to gain a superficial support by the public, but not to achieve any effectiveness in terms of the real impact in the economic activity, employment and the income distribution. In general, the idea of firm which largely prevails in the inception of the economic policy corresponds to that of large firms, which is at the same time the sector able to put more economic and political pressures on governments.

## **Public - Private Collaboration and the MISME Development**

Although disadvantaged by the general inception of the economic policy, the MISME in Chile has proved its capacity to compete in an environment of transparency and fair rules. Their open competition with large enterprises,

however, is affected by financial disadvantages, specially because they are exposed to a situation in which the larger firms can delay payments and create cash-flow complications to the smaller ones. This is the case when the MISME is a provider of intermediate products for larger firms. Other times the open competition in product markets is affected by the size of the MISME, because they cannot compete with the marketing expenses of large firms. The bargaining power of the MISME vis-à-vis the large firm is undoubtedly weak, and it is the reason for their visibly lower capacity to compete. However, it is possible to assert that, under more transparent conditions, particularly regarding information, the MISME can compete very much better with its larger counterparts.

The Chilean government has implemented an on-line system where firms are invited to furnish with their offers of goods and services, in the frame of specific demands raised by the public sectors. This *Portal Chile Compra* is a system adopted by the government to facilitate the management of public resources allocated to buying goods and services from private suppliers, at the same time than offering a transparent system for an open competition on the part of private firms. In this system, which is not featured by asymmetric information or other common market distortions, the MISME reaches a 38.8% of the total sales made by the government<sup>11</sup>, a proportion that is strikingly higher than the 21% of participation they reach in "open" markets. This is a clear indication that the higher the transparency of the market, and the lesser the asymmetry of information, the higher the possibilities of success of the MISME.

The situation of the MISME is strongly related to the existence of market mechanisms that negatively discriminate against smaller firms, given their economic size and lack of capital. This is the reason the public policy concern gravitates around the idea of adopting policy measures that may give more opportunities to MISMEs. In this aim, the authority has called upon public-private task forces or committees to address proposals in this context and acquiring a better knowledge of the industrial organization issues surrounding the participation of the MISME in the market. The usual problem in adopting a policy view on regulations that may improve the competitiveness of the MISME in the context of better market rules, is the prevailing view that raises concerns only to the relationship between the state and the firms, this being

conceived in the frame of large-formal firms. This view disregards the existence of the MISME, a disadvantaged sector with regard to general economic policies.

That prevailing view has affected the quality of policy decisions with regard to their potential effect in term of the MISME. Whenever a discussion takes place in decision-making instances, with regard to providing assistance to the productive sector, the issue of declining fiscal revenues or possible harm to the large firms comes about. By the same token, policy measures aimed at helping the MISME with regard to taxation or labor issues are generally rejected with the support of labor unions which also only see the large enterprise as the beneficiary, since they do not use to differentiate firms by sizes.

The crucial issue concerns the need of targeting policy measures to the MISME in order to improve their financial stance and their actual possibilities of competing in the market by means of more transparent rules. However, the targeting of MISMEs is very difficult to achieve given the prevailing view on private firms as one homogeneous situation, in which there would not prevail disadvantages that can be seen as negative economic externalities.

This simplistic view of the relationship between the state and the private firms has dominated the policy scenario relevant to the MISME. If a differentiation is made between the MISME and the large firms, a great benefit can be attained for the former in terms of taxation, financial and other measures aimed at alleviating the disadvantages for them to operate in distorted and not fully transparent markets. As mentioned above, the nine issues that characterize the weaknesses of the MISME shall be tackled though appropriate policy measures that need to clearly identify the sector and its problems<sup>12</sup>.

## **Policies to Achieve MISME's Adequate Development**

A key endogenous variable to consider in the aim of attaining an improvement of the MISME connects with its own management. This in turn connects with

the possibilities of gaining access to adequately trained human capital characterized by both technical competences and due knowledge of relevant markets. In many respects the current situation in Chile reflects a notable deficit in this matter derived from the prevalence of relatively low salaries of the managerial staff in the medium size enterprises, and the inexistence of any professional management in micro and small firms. In general, the low attractiveness of professional jobs in the MISME is entailed to the high volatility that characterizes this sector regarding its development in terms of expansion and survival conditions. Altogether with these structural problems, the MISME has a very low access to formal training systems, particularly those eligible for public subsidies.

Regarding the exogenous factors that affect the development of the MISME in Chile, the lack of adequate access to formal training is of paramount importance. For the MISME the opportunity cost of its employed labor is higher than that corresponding to the case of the large firms, particularly because there is insufficient possibilities of substituting job positions from the inside of the firm. In addition, the prevailing rules to access public subsidies for the formal training<sup>13</sup> establish a clear discrimination against the MISME given that the subsidy is provided through a credit that operates in a year time frame, which is a negative factor affecting the MISME's cash flows.

Another key exogenous factor affecting the development of the MISME connects with the relationship between this sector and that of large firms. As mentioned above, the latter usually employs some unfair practices in competing against smaller firms. In the case when both the MISME and the large firms operate in the same market as suppliers, the large firms carries price policies aimed at installing entry barriers which normally hinder the possibilities of fair competition and usually attain to expel the MISME from the market. In the case when the MISME operates as a suppliers of inputs or parts to the large firms, it is usually the case that payment delays and arbitrary rules regarding delivery conditions may simply drive out the MISME from the market. Undoubtedly, there is large room for improving or creating a more appropriate legal body regulating this unfair competition practices.

The situation of the MISME is raising an active political debate in Chile as it is being more and more clear that the low development opportunities that public policies offer to the MISME seriously threaten the possibilities to sustain aggregate economic growth in a long term context, as well as to achieving an improvement in the income distribution. This is the reason why the current government administration has been raising the need for discussing a new legal framework to assist the MISME, emphasizing the basic conditions to attain its sustainable development. In this context, there is a need for discussing some urgent policy measures which are not necessarily aimed at modifying structural prevailing conditions affecting the MISME, but only aimed at correcting some specific problems. Basically these measures connect with the large financial debt of the MISME, which is virtually obliterating its development potential and drastically restricting available cash flows. New terms regarding financial charges, especially those connected with risk assessment and periods of payments should be included in a legal definition that must also include the eligibility conditions to access government subsidies. This new legal arrangement should also establish similar measures regarding the high indebtedness of the MISME sector with the tax system and the social security.

At the same time, the public policy must deal with some of the structural problems affecting the MISME. To this respect, it is envisaged that the new MISME's legal body (*Estatuto*) should be the key to establishing the difference in economic size as a fundamental variable guiding the public policy. If economic size is recognized in the law as a relevant policy variable, it will provide ground to prepare new regulations to avoid unfair competition based on firm sizes, and it will allow better conditions for the development of the MISME. The new legal framework for the MISME (*Estatuto*) shall be based upon the idea of securing market transparency, a key structural ingredient to achieve the development of smaller firms. Asymmetric information and the practice of unfair competition by large firms are two basic elements that the *Estatuto* should address upfront. A fair-play system should stem from the *Estatuto* to avoid those practices that, by reducing the access of the MISME to markets, are key in deterring its development. The government must use its regulatory capabilities to enact a new legal framework in this regard. Similarly, the government can use its own economic size to install competitive practices by which only the good management and the

competitive advantages of firms should be accounted as the only factor able to explain market success.

There are three aspects in which the Estatuto shall be carefully designed to attain an adequate competitive environment to favor the MISME's development.

- (a) Access to the financial markets in better conditions regarding interest rates and time frame. The high risk normally associated with the MISME and the lack of sufficient collateral are structural weaknesses that can be effectively mitigated through state subsidies and the operation of Chile's State Banks and other government institutions which can be mandated to deal with MISMEs. This subsidy is consistent with the idea of positive externalities that in terms of economic activity, employment and the income distribution, can be entailed to the development of the MISME.
- (b) Access to training through similar instruments than those that allocate resources to large firms, but without affecting the cash flow as it now happens in the case of the MISME.
- (c) Access to technology and innovation by measures to allow engagement of consortiums of MISMEs in different production fields with research centers. This would allow the MISME access to fresh knowledge and technologies, thus also allowing research institutions to tackle problems that specifically affect this sector of the economy. This would also allow research institutions to be better in touch with national priorities in terms of applied research.

## **An appropriate definition of the MISME**

The appropriate definition of the MISME is a key element regarding regulatory aspects as well as in adopting alternative economic policies. The segmentation at the inside of the MISME is also a fundamental aspect to consider given the need of targeting alternative policy instruments to different categories of firms. Until now there has not been any official definition of micro, small and



medium size firms, a subject on which there have prevailed many alternative criteria based upon different grouping of firms. These definitions have originated in academic purposes, as well as on entrepreneurial views, considering either sales, employment or taxation as clear-cut definitions.

The need of an official formal definition is paramount to any policy effort aimed at attending the needs of the sector. An incorrect definition may leave some larger firms classified as small or medium - if only sales is, for instance, the variable used to measure economic size. This would allow some large firms to access benefits designed for the smaller ones. By the same token, by only considering employment as clear-cut definition of size, a significant volatility could be introduced in the statistics, thus causing serious problems to properly target policy measures. The most usual definition of micro, small and medium size firms, as opposed to large firms, is based upon the amount of sales, which is a variable that may introduce significant distortions.

Currently there is not any official definition or policy action that effectively takes into account the needs of the MISME sector, because legally it does not exist. At the same time, policies addressing MISME issues are ineffective in absence of an appropriate statistical definition. The new legal body sought by the government (*Estatuto*) constitutes an effort to carry out policy initiatives to support the development of the MISME, but they would do little in absence of adequate definitions of the sector.

To avoid the volatility and the misleading use of the statistics that segment firms by size we propose a methodology to define an index number. This will allow distinguishing between micro, small, medium and large firms based upon the agreement on specific value brackets. This classification takes into account three variables which are usually available from sources such as tax information:

- (a) Sales ( $S_t$ ): Annual sales (period  $t$ ) of the firm measured in Chilean pesos (\$);
- (b) Employment ( $L_t$ ): employment in different job positions used by the firm in period  $t$ , a variable which should not be included in simple linear terms given its high variability across firms according to efficiency levels and the organization of the firm;

- (c) Assets ( $A_t$ ) corresponding to the declaration of the firm on accumulated investment net of depreciation.

It seems that a proper way to include the employment variable in determining the index number is by considering it relative to the amount of sales. What is important for policy purposes is the labor intensity that characterizes the productive behavior of smaller firms, and this can be adequately proxied by the value of sales by employee. Thus, the polinomy we propose to build up the index number ( $I_t$ ) is the following:

$$I_t = a_1 S_t + a_2 (L_t / S_t) + a_3 A_t$$

$$\text{With } a_1 + a_2 + a_3 = 1$$

Instability can still be a problem with this definition. Think, for instance, in the case of a small firm that has been classified as such for several periods, and that in a particular year, given the selling of a large amount of output, it is classified as "large". This could also happen the other way around, introducing problems which may affect the effectiveness of alternative policies. Therefore, we propose the calculation of the index described above by a moving average over three years.

## Concluding Remarks

Chile has been a very successful in its aggregate economic results. In general, the macroeconomic policy has been quite satisfactory regarding the attainment of higher growth and investment, a fair degree of economic openness and low inflation rates. However, there are still problems regarding the income distribution and a need for microeconomic policies aimed at attending issues arising from the different size of economic units. Only by making this distinction it would be possible to provide better conditions for the MISME development, an objective which is important in attaining higher employment creation and better distributive results. At the same time, the development of the MISME is paramount to attain a higher productive efficiency and to consolidate the progress of the economy towards a diversification of its export

base, including a higher value added.

The economic policy has not been able to introduce a better environment for the development of the smaller firms, although the government has attempted to provide adequate incentives towards that direction. In general, the economic policy has been considered in terms of the large firms and their problems, but not necessarily with the smaller productive units. The Chilean government is attempting to enact a new law to provide the MISME with a more appropriate policy environment, and thereby simulate its development. In this new initiative, which has been waited for a long time in the country, it will be necessary to account for the main disadvantages that the current situation presents to the MISME, and introduce the definitional criteria regarding the size of the firm allowing to improve the targeting of alternative policies.

**Table 1: Classification of Firms by Amount of Sales and Employment**

Size	Annual Sales (US\$ Dollars)	Number firms (According to sales)	Number of Employees	Number firms (According to Employment)
Micro	35 to 83,000	570.544	1 to 9	647.529
Small	83,000 to 865,500	105.524	10 to 49	39,329
Medium	865,000 to 3,462,000	14.577	50 to 199	6,964
Large	3,462,000 and more	6.868	200 and more	3,691
<b>Total</b>		<b>697.513</b>		<b>697.513</b>

**Table 2: Number of Firms, Employment and Sales**

Size	Number of		Employment*	Employment %	Sales	
	Number of Firms (IRS Criterion)	Firms (%)			IRS Criterion (million US\$ Dollars)	Sales %
Micro	570,544	81.8	2,276,032	49.1	8.6	3.4
Small	105,524	15.1	822,745	17.8	24.14	9.5
Medium	14,577	2.1	600,787	13.0	22.2	8.8
Large	6,868	1.0	933,858	20.2	198.72	78.3
<b>Total</b>	<b>697,513</b>	<b>100.0</b>	<b>4,633,422</b>	<b>100.0</b>	<b>253.66</b>	<b>100.0</b>

\* Data obtained from the Socioeconomic Survey (CASEN) 2003.

**Table 3: Expenditure in Productive Promotion<sup>i</sup>**

Year	Total	MISME	%	SM	%
1990	158 <sup>ii</sup>	10	6,3	2	1,3
1991	218	17	7,8	5	2,3
1992	299	30	10,0	7	2,3
1993	426	31	7,3	10	2,3
1994	528	43	8,1	13	2,5
1995	537	18	3,4	13	2,4
1996	598	63	10,5	25	4,2
1997	639	80	12,5	23	3,6
1998	660	84	12,7	32	4,8
1999	673	115	17,1	44	6,5
2000	687	125	18,2	47	6,8
<b>2000/1999</b>	<b>4.3</b>	<b>12.5</b>	<b>21.5</b>		

<sup>i</sup> The data corresponds to the total expenditure in productive promotion by the MISME and the Small and Medium Enterprises (SM). It also reproduces the expenditures in export promotion and training.

<sup>ii</sup> Million of US\$ Dollar 1998.

Source: Ministry of Economic Affairs 2001.

Year	Total	Export	%	Training	%
1990	158	49	31,0	31	19,6
1991	218	89	40,8	44	20,2
1992	299	137	45,8	52	17,4
1993	426	224	52,5	66	15,5
1994	528	269	50,9	76	14,4
1995	537	274	51,0	77	14,3
1996	598	300	50,2	78	13,0
1997	639	297	46,5	74	11,6
1998	660	298	45,1	93	14,1
1999	673	254	37,7	108	16,0
2000	687	282	41,0	101	14,7
<b>2000/1999</b>	<b>4.3</b>	<b>5.7</b>		<b>3.3</b>	

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## Notes

1. Full Professor of Economics, PhD University of California-Berkeley; former President of the University of Chile and Professor (Invited) Autonomous University of Barcelona.
2. Industrial Engineer, Professor of Management, M.A. in Business Accounting; Chairman of the Department of Accounting and Management - School of Economics and Business - University of Chile.
3. The Total Private Employment is equal to the total employment in the economy discounting that provided by public (government) services and the Army Forces.
4. To this respect, see Table 2 in the Appendix.
5. The MISMEs sales relative to the total flow of sales in the economy, according to IRS data, declined from 26.9% to 21.7% between 1999 and 2003.
6. In addition, if 27.5% of the large firms that existed in 1996 had disappeared by 2002, this proportion was 84.8% in the case of micro enterprises, and 58.6% and 41.6% in the cases of small and medium enterprises respectively.
7. After increasing political pressures derived from the rejection in the Parliament of a Project aimed at providing more resource to large firms. The government has proposed a new financial package for the MISME amounting to US\$750 millions, which however is less than 0.5% of the GDP.
8. The Gini Coefficient adopt values between zero and one, been closer to one as higher may be the degree of concentration.
9. A new project (2007) has reinstalled this idea, with some modifications regarding a larger amount of taxes in arrears and a lower downpayment.
10. As it could be expected, the large enterprise has made plenty use of this benefit originally thought for the MISME sector.
11. Data obtained from the Portal Chile Compra ([www.chiulecompra.cl](http://www.chiulecompra.cl)) for the year 2006.
12. The Director of the Chile's IRS has declared that 90% of corporate taxes are paid by the 1.8% of the private firms, clearly large firms. That is, only 10% of taxes which reflect corporate profits, are associated to the MISME. With little fiscal effort, the MISME could reinvest profits, this having a significant impact on employment and the economic activity.
13. In Chile this subsidy is managed by the National Training and Employment Service (SENCE).