

# **A Guarantee Systems Classification: The Latin American Experience.**

**Pablo Pombo**

**Horacio Molina**

**Jesús N. Ramírez**



**INTER-AMERICAN DEVELOPMENT BANK  
2013**

© Inter-American Development Bank, 2012

[www.iadb.org](http://www.iadb.org)

The Documents published in the IDB working paper series are of the highest academic and editorial quality. All have been peer reviewed by recognized experts in their field and professionally edited. The views and opinions presented in this working paper are entirely those of the author(s), and do not necessarily reflect those of the Inter-American Development Bank, its Board of Executive Directors or the countries they represent.

This paper may be freely reproduced.

Pablo Pombo: [PPOMBO@telefonica.net](mailto:PPOMBO@telefonica.net) , Horacio Molina: [hmolina@etea.com](mailto:hmolina@etea.com) , Jesús N. Ramírez: [jramirez@etea.com](mailto:jramirez@etea.com)

## **Abstract**

Guarantee systems are financial tools designed to mitigate the dysfunctions, within credit operations, generated from the entrepreneurs' demand for collaterals. The present work diagnoses the unwanted effects, triggered by international rules, on the access to funds by micro, small, and medium enterprises; it posits as well the guarantee systems as solutions to these specific circumstances. Thus, it examines their legal configurations, their operational features, their relation to the financial system, and the performance levels they have achieved in Latin America. This paper has deemed virtually all the existing systems so that the results are highly significant, providing an outstanding contribution of knowledge to this field of study.

This work purposes and introduces an original compilation of guarantee financial schemes, unveiling a new reality from the perspective of an empirical classification for Latin America. The set has been sorted by the different forms in which they have operated and supported the guarantee coverage on its assets or whether they have merely acted as operators and managers of an autonomous and liquid resource known as guarantee trust or fund –which is predominant within public participation schemes that not often bear the collateral coverage on their own financial equity. This classification defines and establishes diverse operational and administrative situations.

**Clasificación, JEL Code:** G21, G32, G01

**Keywords:** Guarantees, Credit institutions, financial crisis

## 1. Introduction

Guarantees are mechanisms or instruments traditionally utilized by the financial system to hedge the risk of financial operations. Guarantees, in addition to providing security, help mitigate the information asymmetry problems between lender and borrower described in scientific literature (Stiglitz and Weiss, 1981, 1983 and 1985). This tool enjoys such acceptance today that the same standards of solvency regulation for financial institutions incorporate it in the assessments of credit risk, generating an effect of reduction in its capital requirements and provisions (Pombo, 1993, 1995 and 2006; Freedman, 2004, Schmidt and van Elkan, 2006).

The financial regulatory intervention on risk control mechanisms is not exempt from some sacrifices; one of the most noteworthy renunciations turns to be projects -entrepreneurially viable- that could be adversely affected in obtaining funds or cutting financing cost as a result of the requirements of international banking regulation. To solve the unwanted effects of international norms in the allocation of resources, credit guarantee systems offer and reinforce collateral coverage to feasible business projects<sup>1</sup> that, in the absence of these securities and terms required -due to banking regulation-, are left out of the traditional financial network. Thus, the credit allocation procedure is not a pure market mechanism since credit-granting institutions must submit their activity to a prudential regulation that requires certain levels of own resources and provisions, based on the characteristics exhibited by credit guarantee coverage. Ultimately it is needed higher capital requirements and provisions for the coverage of lower quality guarantees than for higher quality collaterals. This circumstance represents a credit orientation to borrowers, who have such securities, at the expense of those without them -even if the expected cash flows for the latter's projects turn to be stronger than those of the former's. Concisely, for financial institutions, guarantee embodies an unquestionable strategic "value" for their business plans and expansion. In fact, they charge lower interest rates to projects with better quality or greater guarantee coverage (Bester, 1985 and Llorens, 1996).

Furthermore, guarantees are a scarce commodity, especially those highly qualified and valued, being this fact significantly critical for micro, small, and medium enterprises (MSMEs) to access funding. As a consequence of the paucity of good collateral, access to credit results more restrictive (John, Lynch and Puri, 2003). Additionally, the shortage of guarantees produces

---

<sup>1</sup> They do not seek projects from entrepreneurs willing to pay more to lender, but precisely viable projects to get access to competitive conditions or the best rates and terms.

imperfections in business financing, making access difficult and worsening conditions for interest rate and term for entities (Meyer and Nagarajan, 1996 and Hubbard, Kuttner and Palia, 2002).

The lack of collateral, especially the best qualified and weighted, reproduces a selection of factors –on the basis of the Basel’ risk mitigation criterion- against others as quality of projects, or the effort and ability of entrepreneurs to compete in market. In short, guarantee, which is an instrument intended to cover and mitigate moral hazard, becomes a selection criterion.

This situation causes undesirable outcomes: on one hand, the MSME is an important generator of employment and wealth; on the other hand, the same rules of the financial system discriminate these sorts of businesses against other corporate and even territorial structures (Pombo, Molina and Ramirez 2008).

Guarantee systems arise as an alternative to moderate these adverse effects. However, these entities evidence their effects in the long term, so that the support for business sector to access funding -utilizing guarantee systems- requires a state policy of permanent status<sup>2</sup>. A reflection of the current situation, within a historical perspective, reveals that in recent decades guarantee systems have been extended and integrated into the financial systems of many Countries: the most developed systems are in North America, Southeast Asia, and Europe, utilizing schemes of "guarantee programs administered by a state agency" or schemes of corporate guarantee company (mercantile) and/or schemes of mutual guarantee company or reciprocal respectively. For the remaining geographical areas, it can be said that their developments still remained at the very early stages of advancement (as in Africa and some Latin American territories): there is a fresh impulse of the existing mechanisms, especially through guarantee programs and new schemes of reciprocal guarantee societies (as in Latin America).

As a result, guarantee systems are in need of taking into account this heterogeneous reality for their own safety, quality, efficiency, effectiveness, impact, and relevance. The reverse side of this analysis is the transfer of the borrower’s opportunistic behavior, known as moral hazard, to the managers of the guarantee entity (Levitsky, 1997; Reig and Ramirez, 1998; Camino and Cardone, 1999 and Freedman, 2004), so that the characteristics relative to managing

---

<sup>2</sup> This is a broader concept than that of public policy in the sense that guarantee system embodies the spirit of permanency -as such subsystem of the financial system-. Thus, it should be integrated into the financial system of the country concerned.

grants and monitoring risks, by the collateral institutions, are crucial for its proper control. In some cases, they can cause a possible relaxation in the supervision, monitoring, or control of operations performed by financial institutions, with a clear increase in the risk of delinquent and failed loans (Manove, Padilla and Pagano, 2001).

Within this framework, how to configure the study of guarantee systems? What are their characteristics? What is their impact? These subjects are not overlooked by academic literature although it is an issue that has been recently addressed as a field of research (Pombo and Herrero, 2001; Pombo, Molina and Ramirez, 2006, 2007a, 2007b and 2008); this has happened, in some cases, through the collaboration of multilateral agencies with specific and isolated approaches closely related to consulting projects and, therefore, more focused on technical, administrative, and operational matters than on scientists. Hence, the first objective of this work is to characterize the diverse existing models of guarantee systems in Latin America that are being utilized to address the problem of the lack and/or need of collateral; and the second is to propose a classification for these schemes, which is required in order to identify and define a potential model for the implementation of future public policies on this subject.

## **2. Methodology**

### **2.1. - The statistics methods**

Our work primarily aims to characterize guarantee systems in Latin America, with the intent of formulating, on a second place, a classification based on their features: legal forms, the role assumed by the operator and its responsibility, how it is capitalized, and who makes the decisions. The response to our first objective is grounded in the descriptive results obtained.

Subsequently, we address the labor of classification and description of the influencing variables for each model; we have tackled the goal of categorization utilizing taxonomy techniques (cluster approach), which allow us to set a classification sorted by the institutional distinctiveness of the guarantee systems/entities in Latin America. To determine this typology, it has been applied a compositional technique –the hierarchical cluster analysis (hierarchical cluster)-, which has enabled us to decide the number of groups that actually exist in the population under study; during the process, it has been dismissed one of the observations due to some missing values observed in one or more of the variables utilized in the study. The number of steps taken to form the clusters amounted to twenty. Asymptotically, it has been determined

that the maximum distance at which observations should join to form homogeneous clusters is 7.5 in units of rescaled distance; in other words, those observations (cases) that bind to a distance less than 7.5 are so homogeneous that have to be considered as part of the same group (cluster); those which are attached to a rescaled distance exceeding 7.5 are not homogeneous with each other and, therefore, belong to different groups. Thus, if we draw a perpendicular line in the dendrogram to the abscissa axis -passing through the point 7.5 of the rescaled distance- it is noted that the number of lines intersected by such theoretic axis reaches to 2, which indicates that the number of clusters or conglomerates should be 2.

## **2.2. - The variables**

In our work we have utilized primary sources of information, which have proved to be valuable since responses were obtained from all the systems that comprised the entire population, so statistical inference was not required.

The presentation of results is divided into five thematic sections: legal and regulatory form, financial rebonding, associations to the financial system, products and operations, and statistical data and key figures.

On the other hand, the variables that have enabled us to establish a typology for guarantee systems in Latin America, in terms of its institutional characteristics, are as follows:

### *a) The legal form of the entity that operates the guarantee (V1)*

The concept of "legal personality" indicates, by itself, a legal establishment and, ultimately, a transcendent nature intended to exercise any activity in any field of the economic and commercial subject. The same is applied to the sector of guarantee systems.

Three variables are conclusively proposed to be employed from this construct: a) corporate entities (this value is presented as V1.1), b) the public entities and institutions (V1.2), and c) the foundations or non-profit entities (V1.3).

### *b) The functionality of the entity that operates the guarantee (V2)*

This variable distinguishes the guarantee operators that support the financial collateral on their own assets from those that are mere administrators of an autonomous and liquid asset -as a fund- or trustees of a trust that support guarantee coverage. This distinction is really important since it lets us know whether the operator embodies a guarantee entity that exerts its own function as such or just merely supervises an autonomous and liquid resource endowed for such purpose. Three different scenario are proposed from this variable: a) an entity that directly grants and

supports guarantees with its own capital (V2.1), b) a mere administrative entity of a guarantee or risk fund (V2.2); c) a mere fiduciary entity of a trust (a mere trustee that manages a trust and is identified as the actual operator of the guarantee) (V2.3).

*c) The responsibility of the entity that operates the Guarantee.*

This variable sets apart those guarantee operators that back the guarantee coverage with their own wealth from those that do not take risk on their own assets. The variable embodies two possibilities: a) an entity that assumes the risk from its own financial equity (it is responsible for the guarantee coverage to third parties with its own capital or assets) (V3.1) and b) a body that do not assume the risk of guarantee coverage from its own financial equity (it is not responsible, materially speaking, for guarantee coverage) (V3.2).

*d) The capitalization of the guarantee scheme.*

This variable differentiates those guarantee systems capitalized by net equity from those capitalized by an autonomous and liquid resource. The variable can adopt two variants: a) by the use of net equity or own financial resources -part of the equity- under the corporate and/or legal figure corresponding to the legal entity that operates the guarantee coverage (V4.1) and b) by the utilization of an autonomous liquid resource (guarantee fund, risk fund, guarantee trust, etc.) managed by a third party -which is the one that operates the guarantee coverage- that does not integrate these resources in its equity account. (V4.2).

*e) The administration of the resources.*

This variable is to distinguish how to manage the guarantee system resources. The variable raised two options: a) an administration conducted by corporate or societary governing bodies -representing the capital of the entity that provides or operates the guarantee (direction, advice board, general board, etc.) (V5 1) and b) an administration performed by a third party (public institutions, private or international agencies, etc.) to manage the autonomous and liquid resource that provides guarantee coverage (V5.2).

### **2.3. - The population**

For this work, the research instrument was a survey that had been previously used and contrasted (Pombo, Molina and Ramirez, 2006b and Pombo, Molina and Ramirez, 2007) to study the structure of guarantee systems in Europe and America. The questionnaire was answered by the responsible authorities of the guarantee entities. The answers obtained were double checked against information (published on paper and online) concerning these entities, and have

undergone a consistency analysis between data, proceeding to clarify all the doubts that arose in connection with the stakeholders.

**Table 1: Origin, Seniority, and Number of Guarantee Systems and Entities in 2010**

Guarantee System/Entity (Name)	Country	Year	# of Entities
<b>Programa de Garantías NAFIN</b>	México	1997	1
<b>FEGA del FIRA</b>	México	1972	1
<b>SAGARPA-FONAGA</b>	México	2003	1
<b>PROGARA</b>	El Salvador	2000	1
<b>PROGAPE</b>	El Salvador	2000	1
<b>PROGAIN</b>	El Salvador	2002	1
<b>Garantías y Servicios, SGR, SA de CV</b>	El Salvador	2001	1
<b>IMAS-BANCRÉDITO-BNCR</b>	Costa Rica	2002	1
<b>FINADE</b>	Costa Rica	2008	1
<b>FODEMIPYME</b>	Costa Rica	2002	1
<b>FOGABA</b>	Argentina	1995	1
<b>SGR Argentina</b>	Argentina	1995	24
<b>FONDO DE GARANTÍA PROPYME UNIÓN</b>	Bolivia	2010	1
<b>FAMPE-SEBRAE</b>	Brasil	1995	1
<b>FGPC-BNDES (extinguido)</b>	Brasil	1997	1
<b>FGL-BNDES</b>	Brasil	2009	1
<b>FUNPROGER-BB</b>	Brasil	1999	1
<b>FGO-BB</b>	Brasil	2009	1
<b>AGC da Serra Gaucha</b>	Brasil	2004	1
<b>FOGAPE-BANESTADO</b>	Chile	1980	1
<b>Programa de Garantía de COBEX CORFO</b>	Chile	2001	1
<b>Programa de Garantía FOGAIN CORFO</b>	Chile	2007	1
<b>IGR de CHILE</b>	Chile	2007	10
<b>FAG-FINAGRO</b>	Colombia	1985	1
<b>FNG, SA</b>	Colombia	1982	1
<b>FONDO DE GARANTÍA CREDITICIA FOGAMYPE</b>	Ecuador	2009	1
<b>FOGAPI</b>	Perú	1979	1
<b>FONDO DE GARANTÍA EMPRESARIAL (FOGEM)</b>	Perú	2009	1
<b>Sistema Nacional de Garantías SIGA</b>	Uruguay	2009	1
<b>SGR-Venezuela</b>	Venezuela	1990	22
<b>Gran Total</b>			<b>83</b>

Source: Own elaboration

The sample practically coincides with the total Latin American population, consisting of 30 security systems or schemes: three (3) of them are found in North America, seven (7) in Central America, and twenty in South America. They all represent eighty-three (83) guarantee entities in operation (one extinct but still with data). There are no known guarantee schemes or systems operating in Guatemala or Dominican Republic; for the case of Panama, its not so relevant guarantee program was not included due to the impossibility to obtain accurate data. It is specified that not only Argentina and Venezuela, but also El Salvador, Brazil, and Uruguay have procured their own legislative frameworks, for those systems of reciprocal guarantee companies or assimilated societies, to develop a certain number of reciprocal guarantee societies, mutual societies, and homogeneous societies.

There have been identified, as well, programs from multilateral institutions: experiences that, in any case, are no longer operating and, therefore, left out of our study.

Although the number of observations is limited, the sample enjoys of a great representation since it almost involves the complete population of cases; thus, it is not necessary to make any extrapolation of results.

### **3. Results for the guarantee systems or schemes in Latin America**

#### **3.1. - Descriptive results**

The main global descriptive results reflect the typology of the existing guarantee systems or entities in Latin America, and let us know information concerning their particular activities and evolutions. For the presentation of the results, we have proceeded to describe a scheme similar to that previously utilized for the European (Pombo, Molina and Ramirez, 2006b) and American cases (Pombo, Molina and Ramirez, 2007). Thus, we have divided our analysis into seven sections: 1) institutional framework, 2) origin of resources and decision-making, 3) activity and scope of users, 4) characteristics of the rebonding, 5) association to financial system, 6) characteristics of products and services, and 7) evolution of guarantee systems in Latin America.

##### **3.1.1. - Institutional framework**

The institutional analysis highlights that the Latin American systems happen to be regulated in the majority of cases: 70% by specific legislation -compared with the 30% covered by the general legislation of the country. If this is combined with the existence of certain specific regulations procured in all the countries where there is a guarantee system, the interest of numerous States to regulate the specificity of these sorts of entities and develop the concrete tools to address the problematic of guarantees can be more than confirmed.

A second feature to note is the predominant existence of just a single guarantee entity. In 30% of cases, the guarantee bodies act subordinated to a guarantee system; that is to say, within a legal framework that promotes the development of homogeneous guarantee entities (e.g. the reciprocal guarantee societies in Argentina, Venezuela, El Salvador, Chile, etc.) compared to those -the remaining 70%- which are mere individual and independent entities (e.g. the Argentinean society known as FOGABA S.A., the Mexican programs called SAGARPA-FONAGA and NAFIN, or the Colombian corporation referred to as FNG, among others.).

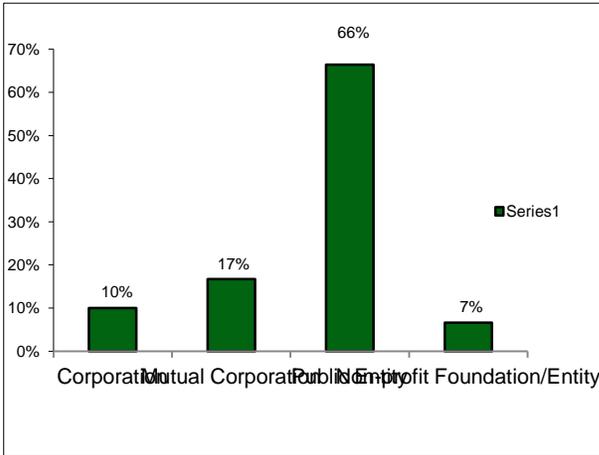
The relevant role of governments in the implementation of guarantee schemes goes beyond the establishment of a specific regulation, taking part as well of the conformation of

those actors who will operationalize the collaterals. As can be observed, the institutions or entities within the public sphere are predominant (66%), followed by mutual corporations (17%), non-mutual corporation (10%), and non-profit foundations (7%) -like AGC foundation in Serra de Gaucha (Brazil) and the FOGAPI foundation in Peru; both have, within their own resources, direct or indirect business participation (bringing together business chambers).

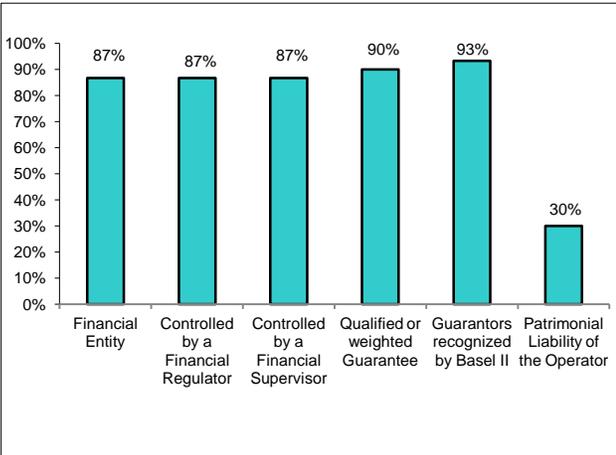
These results illustrate the predominance of public sector in the provision of resources to the guarantee entities or systems, when it comes to their capitalization or rebonding schemes. In fact, this condition has increased in recent years.

In public institutions, the activity is performed through a public body, with capital or financial resources integrated into its own equity account (bank or public development agency; company, entity, or public institution, etc.), or through a public and autonomous liquid source - called guarantee funds (GF) with delegated administration, or guarantee trusts with public capital and managed directly or vicariously by a trustee.

**Figure 1. Legal form**



**Figure 2. Integration to the financial system**



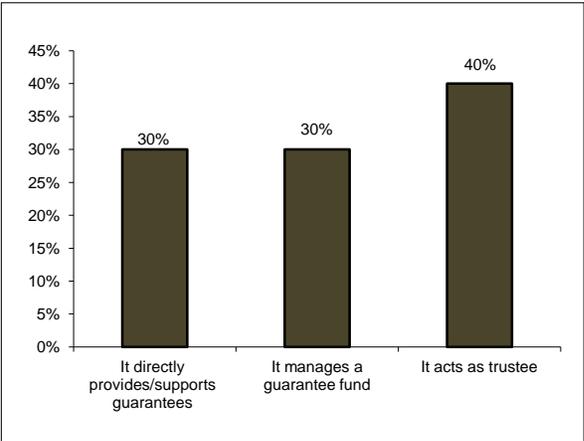
Source: Own elaboration.

On the other hand, more than three quarters of the entities that operate or manage guarantee systems are financial or assimilated institutions (87%), even when the funds or trusts do not share the same origin. As financial institutions, the 87% of them are subjected to financial regulation and supervision conducted by the supervisory agency. The guarantees given are qualified and weighted for the 90% of the systems, so that it allows them to reduce the capital and provisions requirements for the lending banks. The large presence of guarantee trusts and

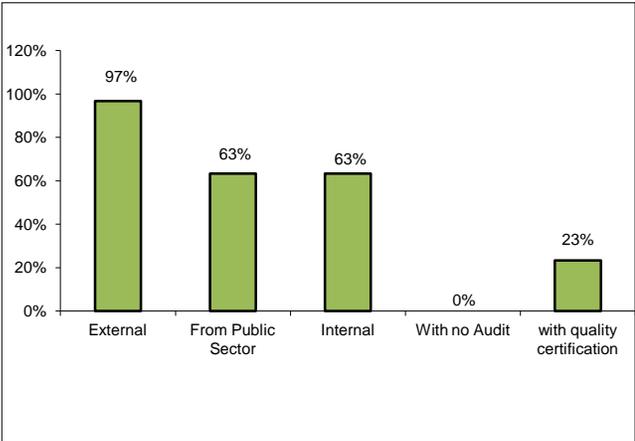
funds ensures that the responsibility of the entity that operates the guarantee remains out of risk on its assets over the losses; only the 30% of cases assume the risk on their equity.

The function of the guarantee operator is highly characterized (see figure 3). The figure of trusts, in which the operators act as trustees, prevails in a more significant percentage (40%): while 30% of the systems operators manage a fund, the remaining 30% supports with their own financial equity the guarantee granted. In the first two figures is traced a line between the operator's equity and the fund it supports; the capitalization of the systems is accomplished in a 30% of the cases with their own resources/capital and in a 70% with an autonomous liquid resource that is not integrated into the guarantee operator's equity.

**Figure 3. Functionality of the operator**



**Figure 4. Type of audit**



Source: Own elaboration.

The contractual characteristics of guarantees in relation to Basel II are quite homogeneous and, as indicated above, qualified and weighted. Guarantees, therefore, substantially meet the contractual features of being direct (individual guarantees should represent a direct protection on behalf of the guarantor), explicit (credit protection should be linked to specific financial exposures; its scope should be clearly defined and incontrovertible), irrevocable (no contractual clause should allow the guarantor to cancel unilaterally the credit coverage, increase the cost of protection, restrict the demand expiration, and avoid a payment in a timely manner), and enforceable (in all the competent jurisdictions). In addition, the guarantee payment is often conditioned: only the 23% are unconditional (no contractual clause prevents the guarantor to pay, in a timely manner, if there is a default).

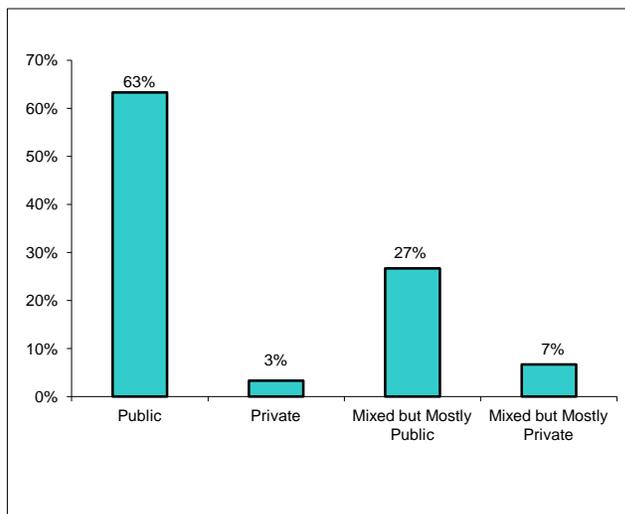
Due to the high percentage of public institutions, a large number of guarantee entities are audited by public audits (63%). These entities are generally subject to external audits (97% of the cases). When there are no external audits, these are performed by public sector representatives; only in 63% of the cases, they resort to internal auditors as a means to inspect their accounts and internal control systems. It has to be kept in mind that many of the guarantee systems or schemes, or even their operators, are supervised (87%): only 23% of the systems preserve their quality processes certified.

### 3.1.2. – Origin of the resources and decision-making

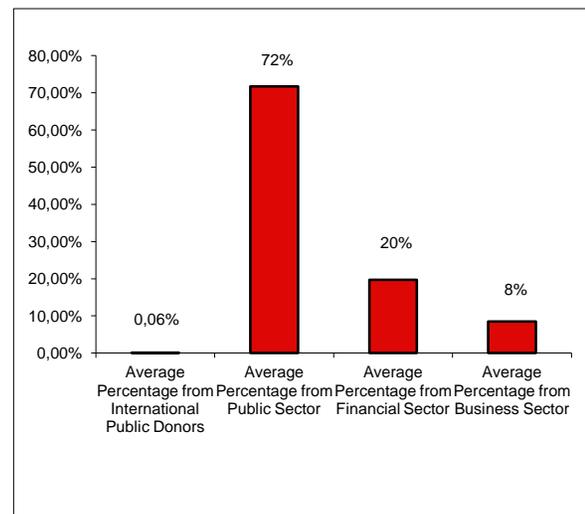
Governments play a significant role in the capitalization of guarantee schemes. The structure of Latin American business fabric<sup>3</sup> determines and gives reasons for a more active support from the States to facilitate access to credit, as observed in the guarantee systems of most Latin American countries (Pombo and Ramírez Molina 2007a).

In Latin America, 63% of the entities put only and exclusively into operation public resources, while a 27% of them manage, as a majority portion, public funds. Given this remarkable total of 90%, a 10% turns to be of mixed nature: 7% of private majority and 3% of just private. This predominant situation, in terms of public participation, has increased in recent years.

**Figure 5. Origin of resources**



**Figure 6. Resources from each sector involved**



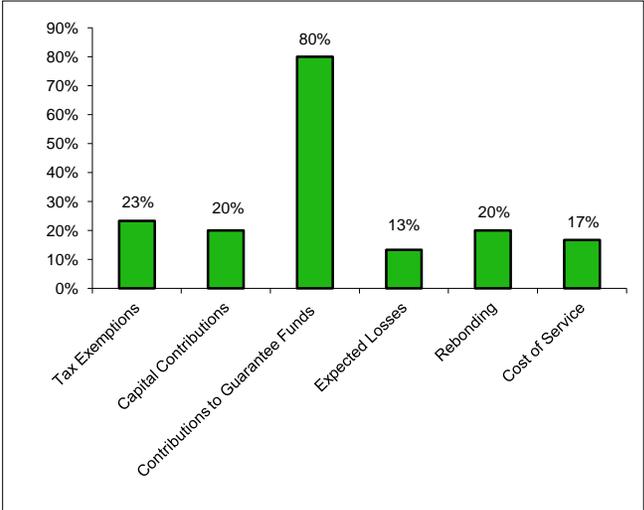
Source: Own elaboration.

<sup>3</sup> It represents, by and large, 99% of the companies in the region; its contribution is important in terms of employment, less relevant in production, and slightly relevant in exports, Stumpo, G. (2012)

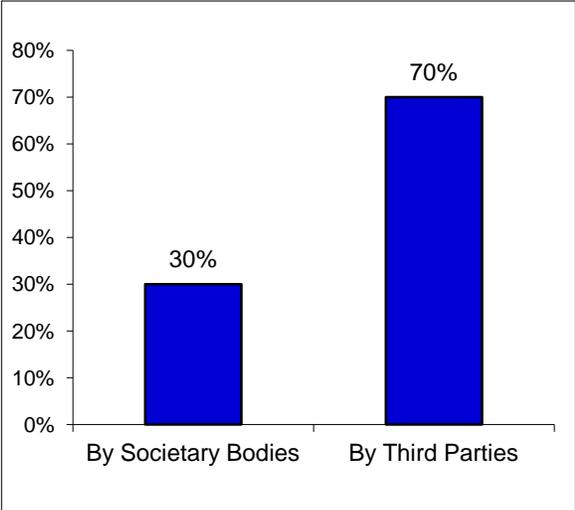
Capitalization form and resource origin are crucial in the conformation of the different guarantee system/scheme models and their modus operandi in Latin America. As we will confirm, this form of capitalization, based on a strong provision of public funds, determines a specific manner of administration that is materialized through the figures of guarantee trusts or funds, and performed by an operator -different from the contributor of resources- that does not assume the operation risks on its own financial assets. The guarantee operator is usually a financial entity instead of a development bank.

The public support mechanisms are: contributions to risk coverage funds (80%) - guarantee funds or trusts-, contributions to permanent resources in the form of capital (20%), contributions to leverage expected losses (13%), concessions to refinancing programs<sup>4</sup> (20%), subsidies to the guarantee costs (17%), and tax exemptions (23%). Autonomous liquid resources -guarantee funds or trusts- are a characteristic capitalization formula of public nature supporting Latin American guarantee schemes/systems.

**Figure 7. Supports provided by public sector (Destination)**



**Figure 8. System administration**



Source: Own elaboration.

With respect to the control of the entities, in a 70% of cases the administration is carried out by third parties (such as guarantee fund or trust administrators), compared to the 30% in which the governing boards of the operating guarantee entity is the one that manages the capital resources and executes the activity. The predominance of the public sector leads to a reduced

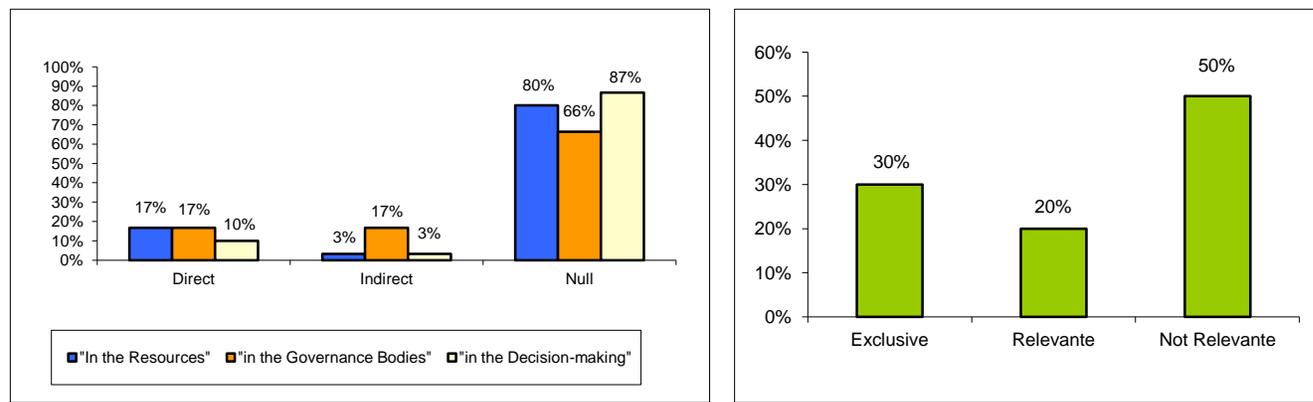
<sup>4</sup> The guarantee coverage scheme -of second floor- is a predetermined percentage of the transactions secured by the guarantee entities or systems on the first-tier floor.

participation of the beneficiaries in the resources, governance, and grant decisions, which distances decision-makers from beneficiaries in the knowledge of their needs.

A general characteristic is the moderate participation of the beneficiaries in the permanent resources and governing bodies (for both cases, it is practically null at the 80% and 66% of the cases, respectively).

Participation in the decision of granting guarantee is also very low -10% of the participation happens to be direct and 3% indirect<sup>5</sup>.

**Figure 9. Participation of beneficiaries in: resources, control, and decision-making**      **Figure 10. Guarantee activity level**



Source: Own elaboration.

### 3.1.3. - Guarantee system activity: characteristics and scope of users

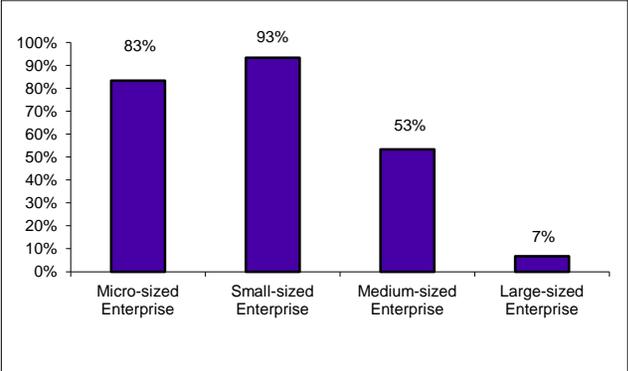
One third of the guarantee systems or entities dedicate themselves exclusively to the guarantee activity (30%). Collateral activity turns to be quiet relevant -over 50% of the operator activity- in a 20% of the systems and not relevant in a 50% of them. With regard to Latin America, for the models of capitalization through guarantee funds and trusts, it has been taken into account the situation of the administrators or executors of the fund and/or trustees of the trust; since these entities are financial institutions, their guarantee system administrators do not perform exclusively the guarantee activity and, in many cases, it is considered as non relevant issue.

The beneficiaries are usually the MSMEs; not for nothing is this policy of guarantee qualification being implemented to tackle the micro (83%), small (93%), and medium (53%) business problem of getting access to funding. For this reason, there is virtually no attention to

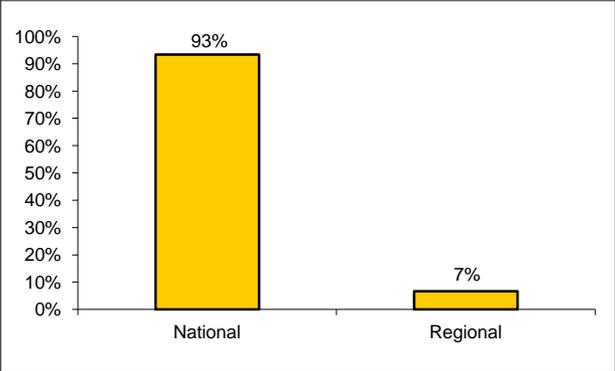
<sup>5</sup> The term *direct* refers to the individual participation of enterprises within the guarantee system/entity. The expression *indirect* refers to its participation through associations or chambers of representation.

large business by guarantee systems in Latin America (7%); some specific cases of guarantee entities that provide services to large companies are CORFO-PROGAIN and COBEX programs, both located in Chile.

**Figure 11. Size of beneficiaries**



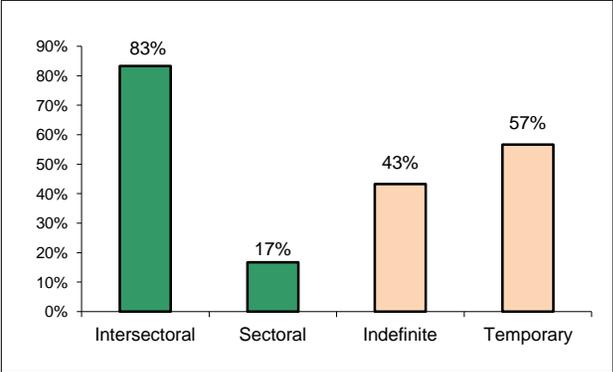
**Figure 12. Geographical scope of action**



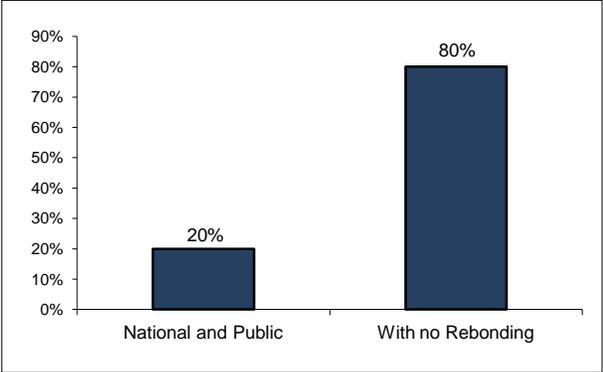
Source: Own elaboration.

The guarantee systems activity is basically circumscribed to the national or federal sphere (93%) and poorly to the regional or state one (7%). It is observed as well that the guarantee systems or entities are predominantly intersectoral (83%). As intersectoral guarantee systems, in particular for the agricultural sector, are included the following: FAG -Colombia-, PROGARA and PROGAIN -El Salvador-, FEAGA de FIRA and SAGARPA -Mexico-; they all combined represent the 26.90% of the beneficiaries and the 19.77% of the current guarantees in Latin America for 2010.

**Figure 13. Sector and temporality.**



**Figure 14. Source of rebonding**



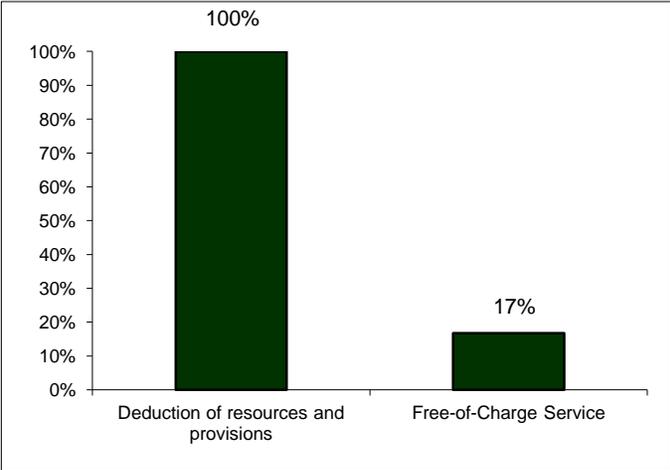
Source: Own elaboration.

Those systems with limited and temporary resources (60%) have in common that their resources come from the public sector<sup>6</sup> and, consequently, the level of dependency and temporality to this financial source turns to be critical. On the other hand, the guarantee systems/schemes of indefinite nature or with permanent resources (40%) demonstrate by themselves the will for permanence in time by some of these schemes; for that, they frequently implement corporate formulas for their organizational structures.

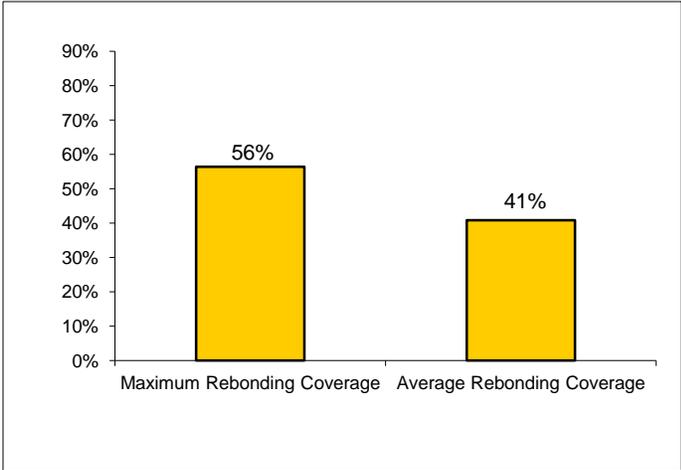
**3.1.4. - Characteristics of the rebonding system**

The rebonding system allows the guarantee entities to redistribute the risk involved in the activity of the collateral. However, this instrument is not often utilized to channel financial support at government level in Latin America. Significantly, the 80% of the guarantee systems or entities in the region do not put into practice this instrument. Only 20% of the cases benefit from a national rebonding that focuses on those systems of first-tier societies -such as the RGS's (reciprocal guarantee societies) or mutual companies-, as it would not make sense for a national public rebonding to assist national public bodies. The systems in Latin America with rebonding are: NAFIN, the Salvadorian RGS's (the FDSGR Trust), the Venezuelan RGS's (FONPYME, SA), the Chilean RGI's (FOGAPE and CORFO), and the Argentine RGS's (FOGABA and FOGAPYME).

**Figure 15. Characteristics of the rebonding**



**Figure 16. Rebonding coverage in %**



Source: Own elaboration.

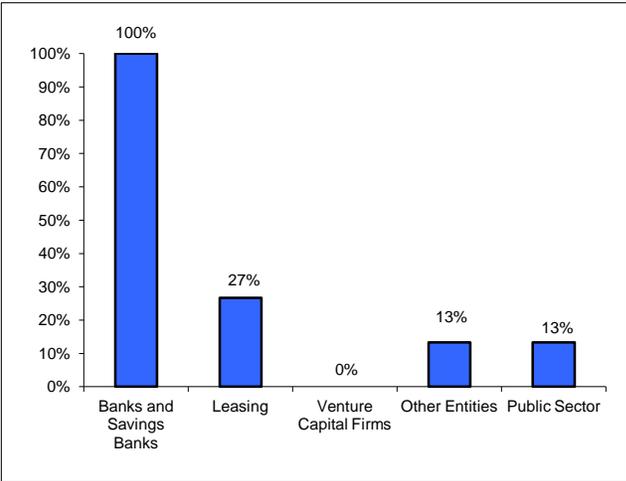
<sup>6</sup> The resources of permanent nature are typical of societary schemes -intended to be permanent since its formal establishment-, while the resources of public programs exhibit a strong temporal nature.

Finally, as part of the policy of public support for the attainment of guarantee, the systems or entities receive the rebonding free of charge in 17% of cases (just 1 of 6), compared to 83% that use it with charges or fees. This cost ranges from 0.20% to 1% annually on current balances. The average for the maximum coverage reaches 56% of the operation, while the average for the rebonding coverage stands at 41%. In all cases, the rebonding scheme and counter-guarantee are perceivably understood, in the context of Basel II, as an effect to reduce their own capital and provisions; this effect gives important added value to their coverage.

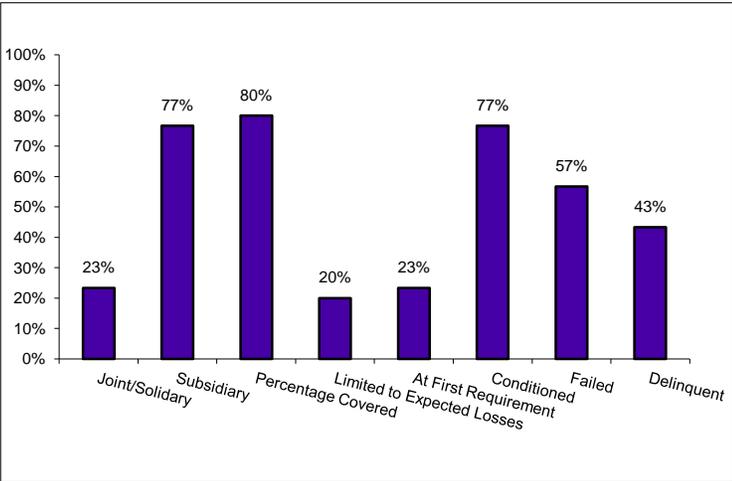
**3.1.5. – Institutional relations with the financial system**

The receivers of the guarantee are usually financial institutions (for all cases -100% -, banking sector happens to be the receptor of the guarantee). Further receiving entities are: other financial institutions (27%), other companies and institutions (13%), the public sector (13%), and some venture capital companies (0%).

**Figure 17. Guarantee Receptors**



**Figure 18. Responsibility and form of response**



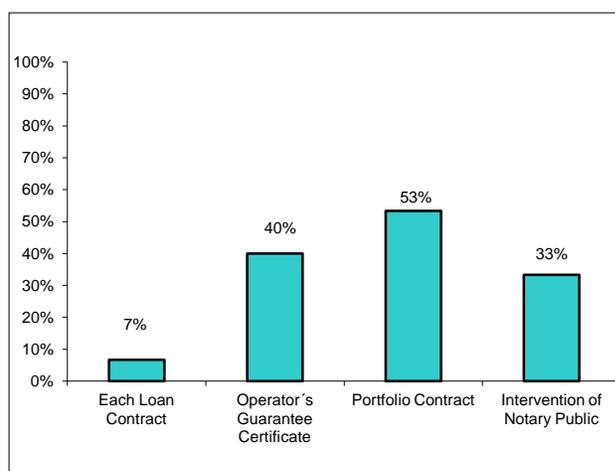
Source: Own elaboration.

The responsibility of the systems or entities are usually revealed with subsidiary nature in 77% of the cases, while 23% of them take place on a joint and several basis, which is consistent with the public origin of the resources. In 80% of the cases, the systems respond for the covered percentage, while 20% do so for the estimating expected losses. Consistent with the foregoing, the most frequent type of default notice is the conditional (77%); this links to a greater extent lenders and beneficiaries, which undermines the effectiveness of the guarantee system/scheme regarding the financial sector -financial institutions should go first against the beneficiary-, and

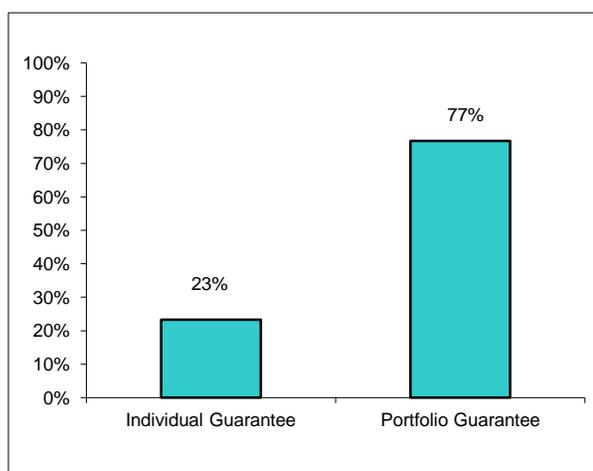
contributes to a greater moral hazard coverage for the sake of the guarantee system or scheme. The payment is made for delinquent cases in 47% and for failed in 53%.

The guarantee documentation is usually arranged with a financial entity under the modality of portfolio management contract (53%) or through the issuance of a guarantee certificate from the guarantee operator (40%) to the beneficiary itself. In 7% of cases, the guarantee contracts are associated with a concrete loan that is secured directly by the guarantee entity. 33% of all these contracts or documents are formalized with the intervention of a public notary.

**Figure 19. Guarantee administration**



**Figure 20. Guarantee mechanism**



Source: Own elaboration.

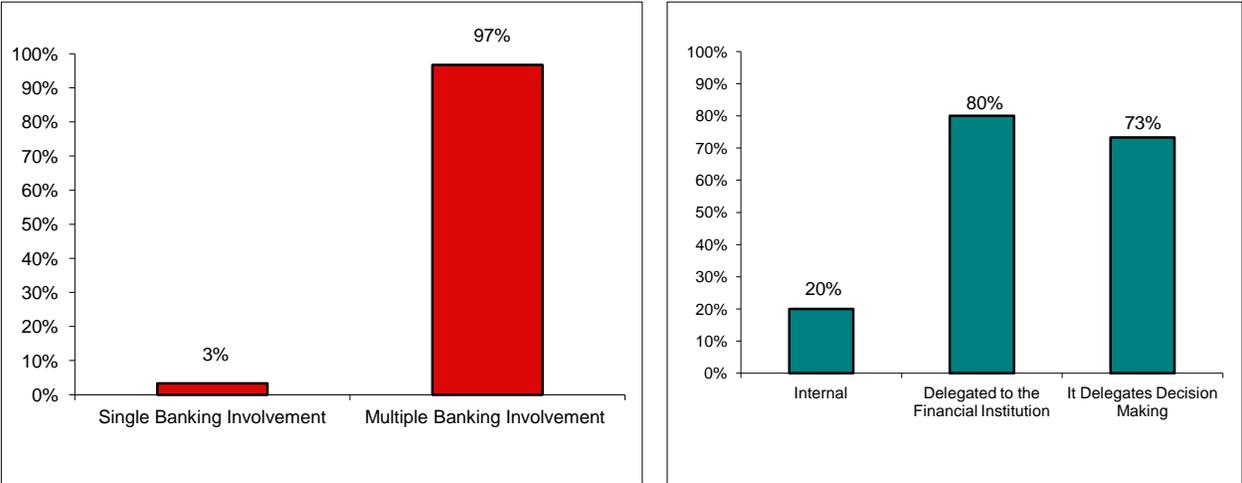
Guarantee happens to be individual in 23% of cases, compared to the portfolio guarantee that turns to be 77%. All these characteristics or variables are in some way related<sup>7</sup>, in the sense that within those systems where public capital results predominant, the financial hedges tend to be lower<sup>8</sup>; in other words, they are shared with the financial institution to reduce moral hazard and improve the sustainability of the system in the long run. The average coverage level, as a desirable practice, is in line with Levitsky's suggestions (1997).

<sup>7</sup> Pombo (2006b) and Pombo, Molina, and Ramirez (2006 and 2008) state that a higher percentage of coverage, a greater cost saving in guaranteed financial transactions, and a fixed price in guarantee service characterize the mutual systems/schemes in European. The financial sector particularly appreciates a high coverage percentage because it is this measure that allows it to make better use of the rating of its assets, reducing capital requirements and provisions and, ultimately, risk mitigation (Basel Accords). This, among other things, clarifies the best capacity to negotiate the terms of the "mutual" loans.

<sup>8</sup> Pombo (2006b) and Pombo, Molina, and Ramirez (2006 and 2008) claim that a higher average coverage percentage of the guarantee characterizes the group of a private majority. In our case, the relation has the same trend but it is not statistically significant.

On the contrary, the mechanism is predominantly of portfolio guarantee and the analysis is usually delegated to the financial institutions; that allows the involved entities to save management costs, being consistent with a system typology in which the knowledge of the borrower resides in the financial entity). Our data highlight a significant relationship between the entrepreneurial participation, a responsibility profile in the joint guarantee, and a payment mechanism on first claim (the payment for a failed loan by itself is already a constraint).

**Figure 21. Institutional relations with the financial systems**      **Figure 22. Analysis of the operations**

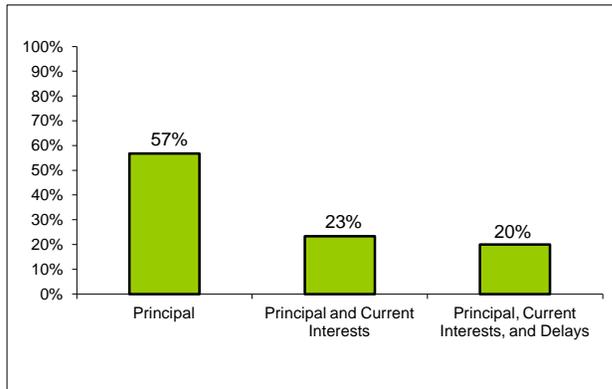


Source: Own elaboration.

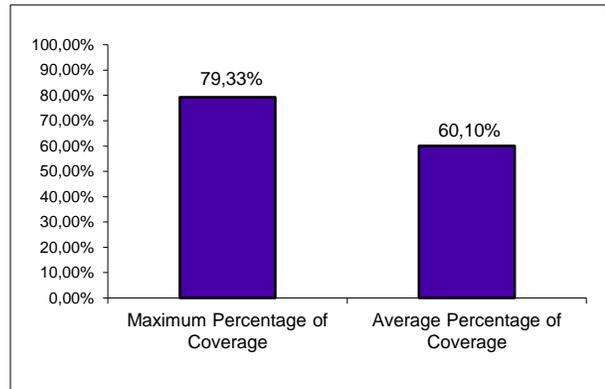
The institutional relation with the banking system is of an open or multibank nature in a 97%. The practice of just one bank (3%) to operate exclusively with a credit network or institution is sparsely widespread: only for the case of IMAS BANCREDITO from Costa Rica (in reference to public bank).

Consistent with the systems that secure portfolios, the analysis is delegated to the financial entity, which provides the loan in 80% of cases. However, the type of analysis for the operations turns to be internal in 20% of cases. This corresponds with a delegation of the decision to grant guarantee to the financial institution in 73% of cases. This procedure involves moving the risk assessment to financial intermediaries.

**Figure 23. Guaranteed concepts**



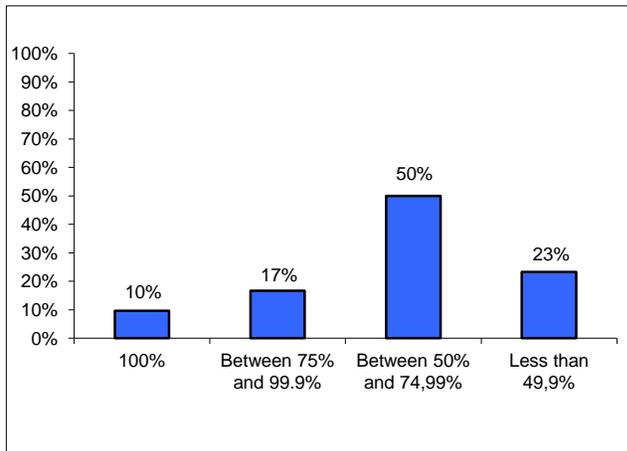
**Figure 24. Average percentage for maximum coverage**



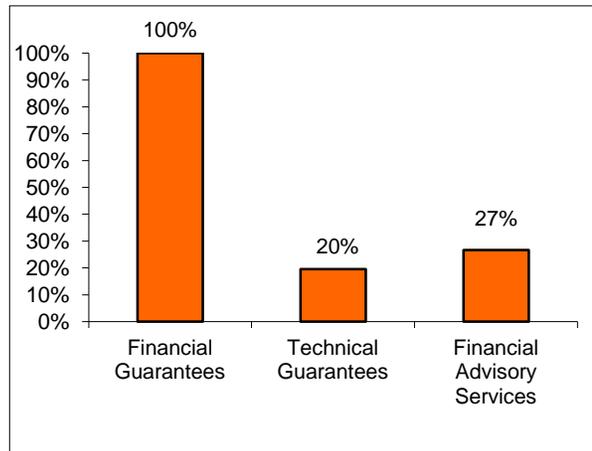
Source: Own elaboration.

The Latin American guarantee schemes or systems, in more than half of cases (57%), ensure just the principal of the operations; 23% of systems guarantee interest and principal and 20% include, in addition to the above, default interest.

**Figure 25. Coverage level**



**Figure 26. Type of products and services**



Source: Own elaboration.

The average for the maximum coverage percentage stands at 79.33% of the operations, with a reduced standard deviation of 20.11%. Meanwhile, the average coverage for the usual percentage happens to be 60.10% of the transaction amount, with also a reduced standard deviation of 21.34%.

### 3.1.6. - Characteristics of products and services

The guarantees offered by the entities and systems are usually financial guarantees (93%), technical guarantees (17%), and financial advisory services related or linked to the guarantee operation (27%).

Figure 27. Application by products and services

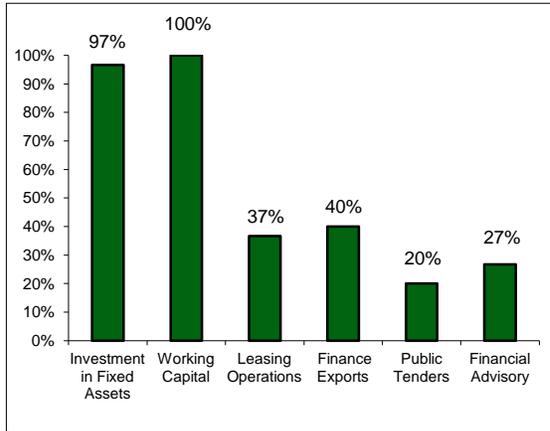
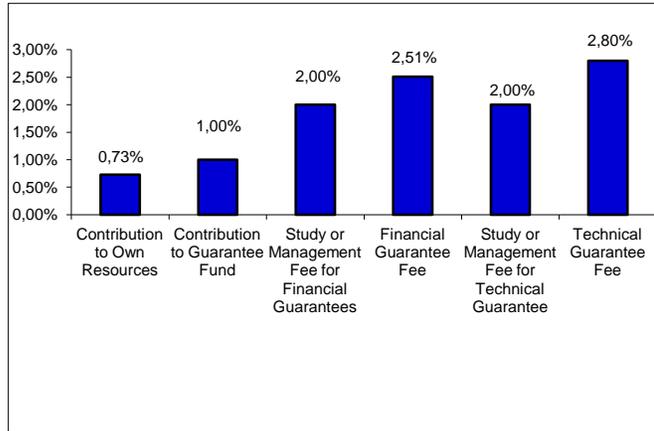


Figure 28. Average price by cost and products

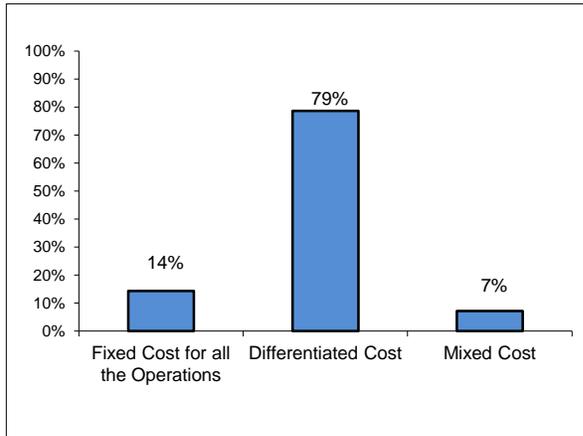


Source: Own elaboration.

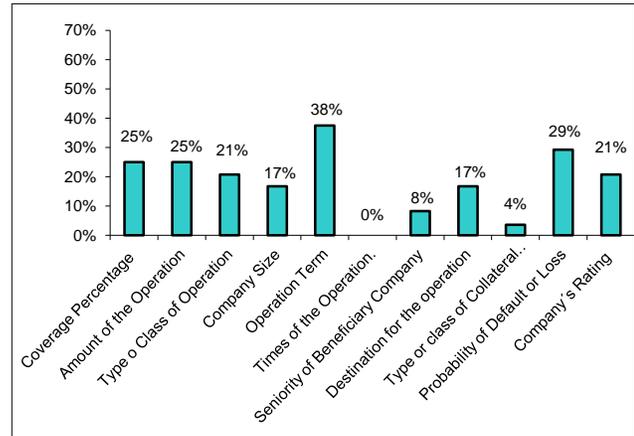
The application of guarantee to investments in fixed assets is expected in virtually most of the systems (97%) -in all of them to the working capital (100%)-, being this somewhat lower to export operations (40%). It is only applies to leasing transactions in 33% of cases, to risk capital in 0%, and to public tenders in 20%. Financial advisory activity occurs in 27% of cases.

The pricing policy is heterogeneous. 14% of the guarantee entities apply a fixed cost to all the operations and in 79% of cases the cost is differentiated. Nonpublic systems exhibit as a whole tiered pricing systems; however, public systems utilized both fixed and tiered pricing systems. Among the most important factors of cost differentiation are payment period/term and probability of default, followed by the percentage of coverage, the amount and type of operation, and the rating of the company. In 93% of the cases, the guarantee user assumes a cost – being this the average guarantee fee (guarantee)- of 2.51% on the amount covered per year.

**Figure 29. Pricing policy**



**Figure 30. Factors for price differentiation**

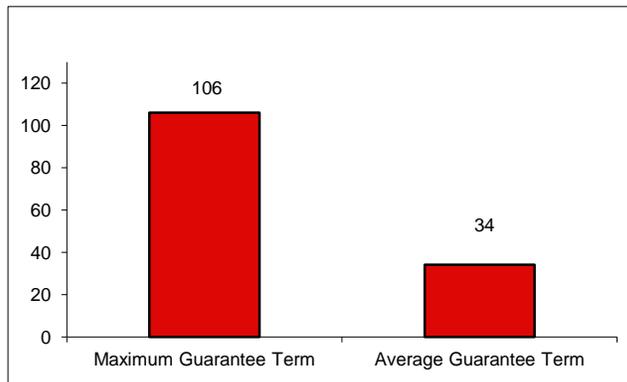


Source: Own elaboration.

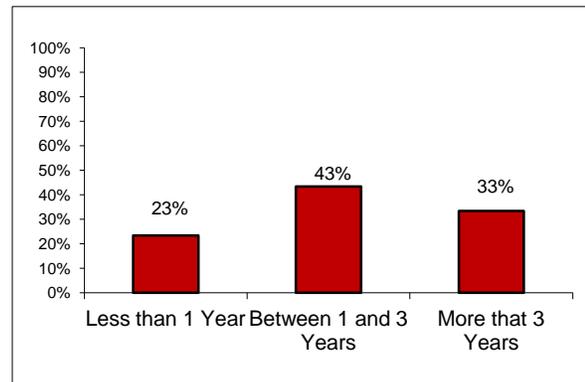
Some entities charge no cost to MSMEs<sup>9</sup> users; two examples are IMAS BANCREDITO from Costa Rica and SAGARPA-FONAGA from Mexico.

The mean for the maximum guarantee period is 106 months, while the mean for the average guarantee period turns out to be 34 months; thus, we can state that the granting of guarantees is executed keeping in mind a short-term horizon and fundamentally supporting operations of this nature. In 47% of cases, the predominant period of the portfolio happens to be between 1 and 3 years. The mean for the maximum guaranteed amount is U.S. \$ 1,098,970 while the mean for the average guaranteed amount is U.S. \$ 40,344; these two figures register a high deviation.

**Figure 31. Means for maximum and average period**



**Figure 32. Dominant period of the portfolio**

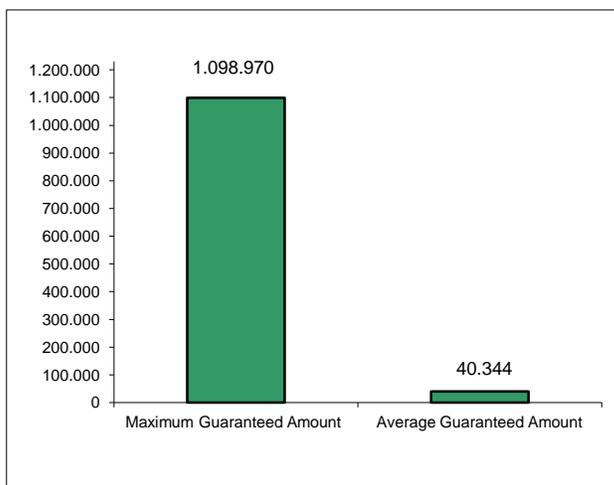


Source: Own elaboration.

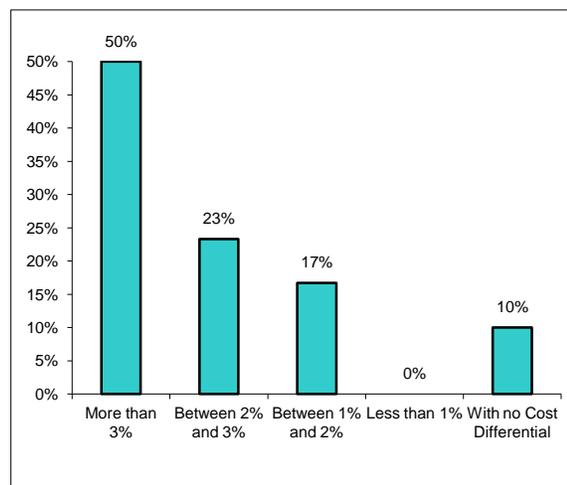
<sup>9</sup> In these cases and others, such as the guarantee programs from Canada or the U.S. SBA program, the financial entity is the one that pays the cost for guarantee services although later it can pass on to the beneficiary within the interest rate that is charged for the loan.

The surveyed entities point out that in 90% of cases the access, through the guarantee system or entity, implies a cheapening of the financial costs -specifically a 50% of the respondents cite a cost improvement of more than 3% (figure 34)-. This reflects and confirms that guarantee systems not only allow access to financing, but also perform an important role by providing lower interest rates, which facilitates access to long terms. This finding reveals additionality in 90% of the systems since its intervention entails some sort of reduction for the MSME's financing cost.

**Figure 33. Maximum and average amount**



**Figure 34. Financial cost saving**



Source: Own elaboration.

### 3.1.7. – Evolution of guarantee systems in Latin America

The general evolution of these entities has been characterized by a remarkable growth in this precise economic period in which the global economy has suffered a major adjustment; this has probably affected to a lesser extent the Latin American Countries. The average values, presented in Table 2, clearly indicate an increase in the number of beneficiary MSMEs (15.5% between 2007 and 2010) since the activity these systems achieve needs time to get consolidated. This growth requires increase in permanent resources; these have nearly doubled -from 104,616 to 188,123 thousands of US dollars- within the period under consideration

As a result of the above, current guarantees have also doubled at annual year-end during 2007-2010 period, escalating from 359,548 to 641,215 thousands of U.S. dollars. The mobilized credit has increased a 75.7%, with a high turnover in the operations, as the mobilized credit and granted guarantees for all the exercises are close to or above the year-end balance.

The seniority of these entities is relatively short in time; thus, it is still unveiled their ability to mobilized credit in many of the cases. A 53.30% of them have less than 10 years and 30% less than five (by 2010).

**Table 2: Average values for the activity of guarantee systems/schemes from 2007 to 2010**

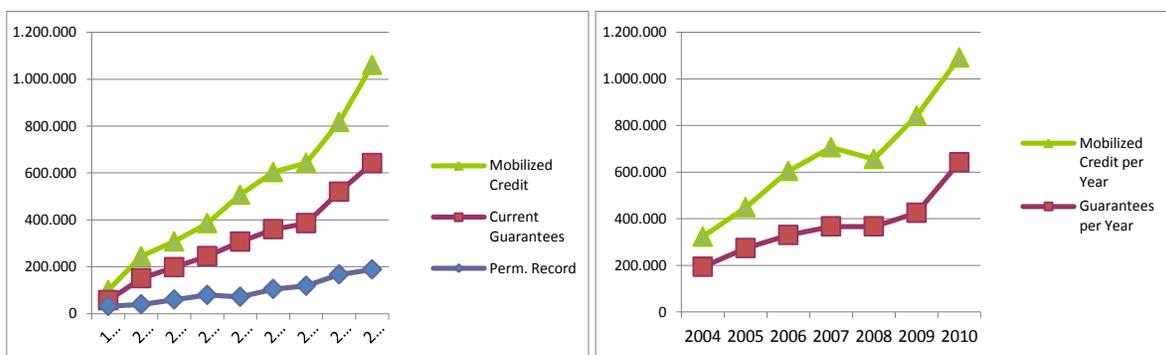
In thousands of U.S. \$	2007	2008	2009	2010
Number of beneficiary SMEs	67.542	61.824	60.255	77.999
Permanent resources	104.616	118.310	166.852	188.123
Current guarantee (portfolio)	359.548	393.354	519.304	641.215
Formalized guarantees by year	366.555	366.487	424.603	641.290
Beneficiary SMEs by year-end	35.821	27.554	31.095	48.599
Balance/mobilized credit portfolio <sup>10</sup>	602.978	642.537	816.391	1.059.899
Mobilized credit by year	705.854	655.352	841.259	1.090.726

Source: Own elaboration

Support for the access to guarantee is a key for the door of credit, and the systems -both for the mobilized credit and for the number of beneficiary MSMEs- turn to be a public policy that contributes to benefit access for financing SMEs under the best conditions.

Moreover, the development of Latin American guarantee systems or schemes has been spectacular both in average values and in grand totals (see figures 35, 36, and 37).

**Figure 35. Evolution of average values for the main magnitudes 1998-2010**

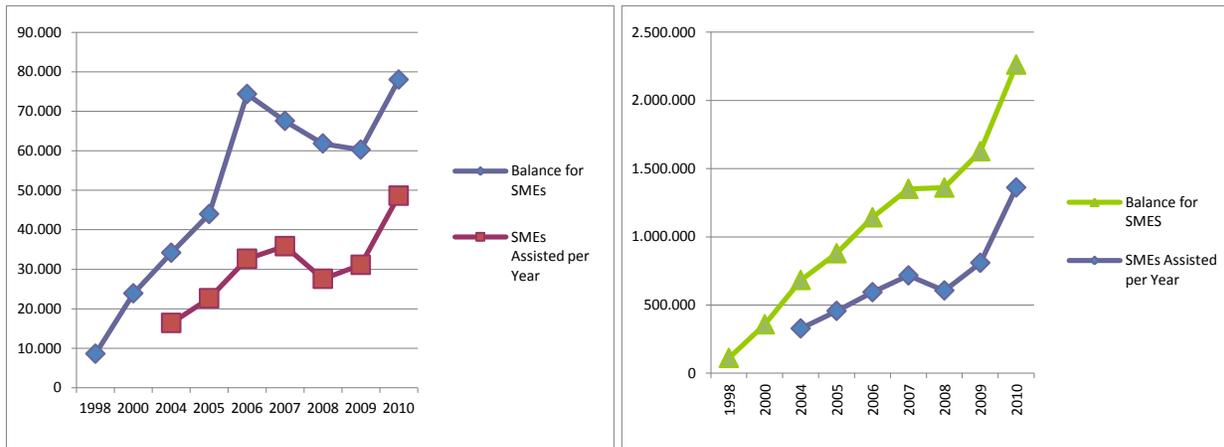


Source: Own elaboration. 1998-2010 data series

For all the periods of reference, both in average (Figures 35 and 36) and in absolute values (Figures 36 and 37), it is observed a very strong and positive progression with a big boost as of 2008. In 2007 and 2008, there is a certain slowdown in the figures, even with a slight decrease of the assisted SMEs per year, growing back as of 2008.

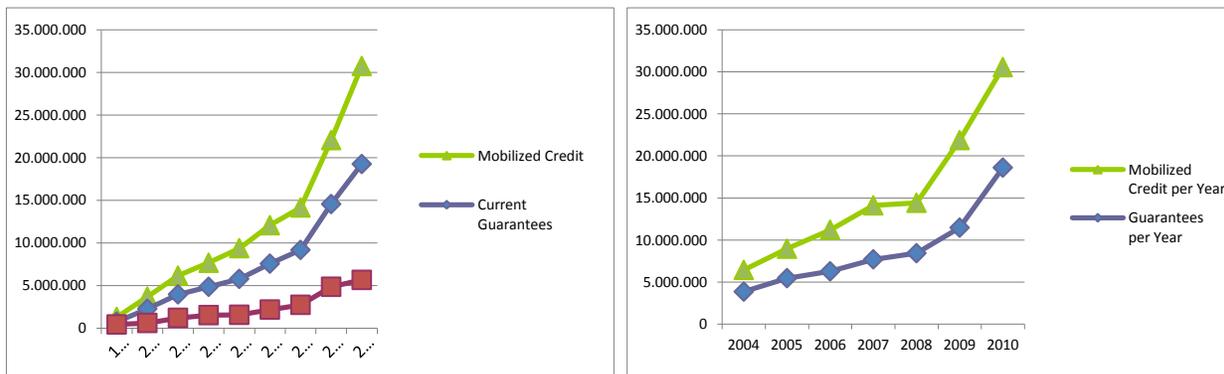
<sup>10</sup> The mobilized credit amount is associated with all the credit transactions with guarantee coverage. It generally exceeds the guarantee coverage amount as this is usually lower than the credit received by the beneficiaries.

**Figure 36. Evolution in average and absolute values for beneficiary SMEs 1998-2010**



Source: Own elaboration. 1998-2010 data series

**Figure 37. Evolution of absolute values for main magnitudes 1998-2010**



Source: Own elaboration. 1998-2010 data series

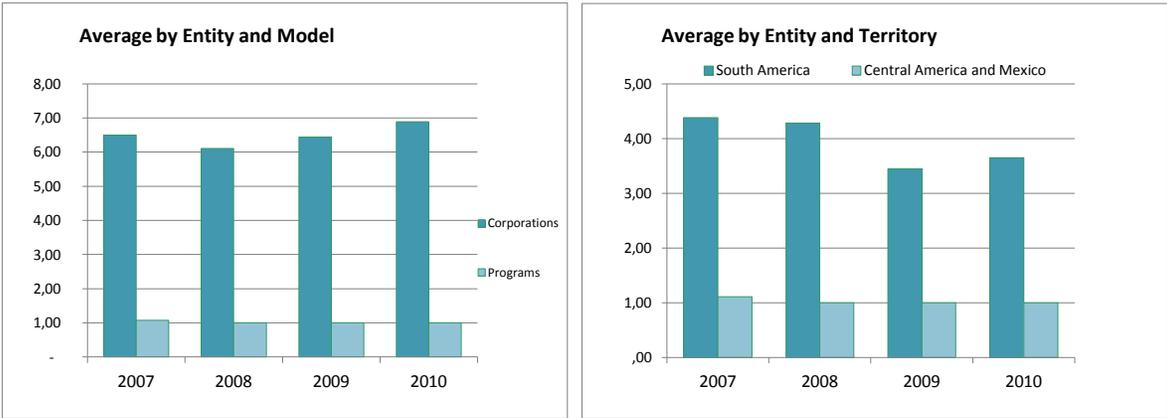
If these systems are analyzed according to their legal characterization, it can be observed that the average performance happens to be different. For this purpose, we distinguish, on the one hand, the mutual and mercantile companies and, on the other hand, the public institutions and the non-profit foundations that often operate through guarantee programs.

In guarantee programs (70% of the systems), the system pivots on an resource or autonomous liquid financial equity that is allocated for the purpose of supporting collaterals; this is managed by an entity that tries to define the policies needed in accordance with the type of credits, entrepreneurs, periods, or risks -among others- taken by each of the parties that wants to assume the fund. However, the direct relation with the borrower is often delegated to the financial intermediary, as its instrumentation through a portfolio guarantee happens to be frequent. By contrast, these companies (30% of systems) base their business model on the direct

knowledge of the borrower, analyzing the credit quality of the borrower. The risk of this model lies in balancing an attractive guarantee for the financial system -which must assume a significant portion of the risk- with the moral hazard that can be adopted by the financial system as its functionality for the analysis of operations declines.

In the corporate model, proximity to the borrower can be instrumentalized through a network of entities -such as the reciprocal guarantee societies-, which is in charge of interacting directly with borrowers. On the contrary, in the case of the programs, since the delegation of the commercial and analytic work is transferred to the financial institutions, these programs usually set up themselves with a single entity. The figure 38 reveals a very similar behavior for the two models, both in terms of the number of beneficiary SMEs and in terms of the balance for the collaterals portfolio. The dissimilar dimension, however, is not proportional to the difference in capitalization between systems of different models -in 2010, the programs exhibited a permanent resource average of 221,493 thousands of U.S. dollars, against the 110,259 thousands that belonged to the corporations-; it brings as consequence a greater impact of corporations on the programs both for the number of beneficiary MSMEs and for the current guarantee balance.

**Figure 38. Distribution of entities by model and territory**

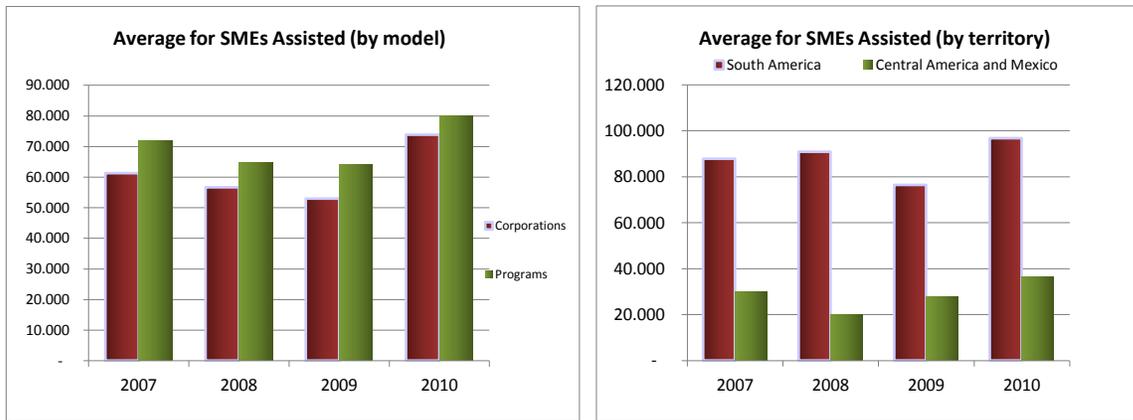


Source: Own elaboration. 1998-2010 data series

If we analyze the systems distribution, taking into account the geographical areas (South and Central America and Mexico), we can observe in figure 38 how the schemes with a larger number of entities are found in South America; this is mainly because the guarantee systems of mutual nature, developed and based on homogeneous corporations, are all practically concentrated in Argentina, Venezuela, and Chile.

Furthermore, South American systems assist on average a greater number of beneficiaries, compared with Central America and Mexico, due to the large volume of cases supported by several Brazilians entities, the FAG S.A., and the FAG from Colombia (Figure 39). In this regard, it has to be pointed out that the guarantee system known as FEGA del FIRA and SAGARPA from Mexico has established its data based on the guarantees granted to producer groups called FINCAS. If it were taken into account the direct beneficiaries, the producers, and the farmers, it would be surpassed the one million beneficiaries.

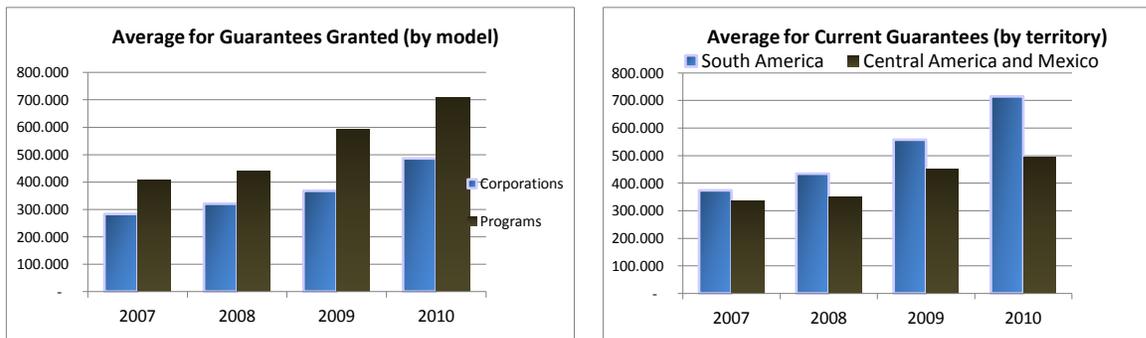
**Figure 39. Distribution of MSMEs by model and geographical areas**



Source: Own elaboration. 1998-2010 data series

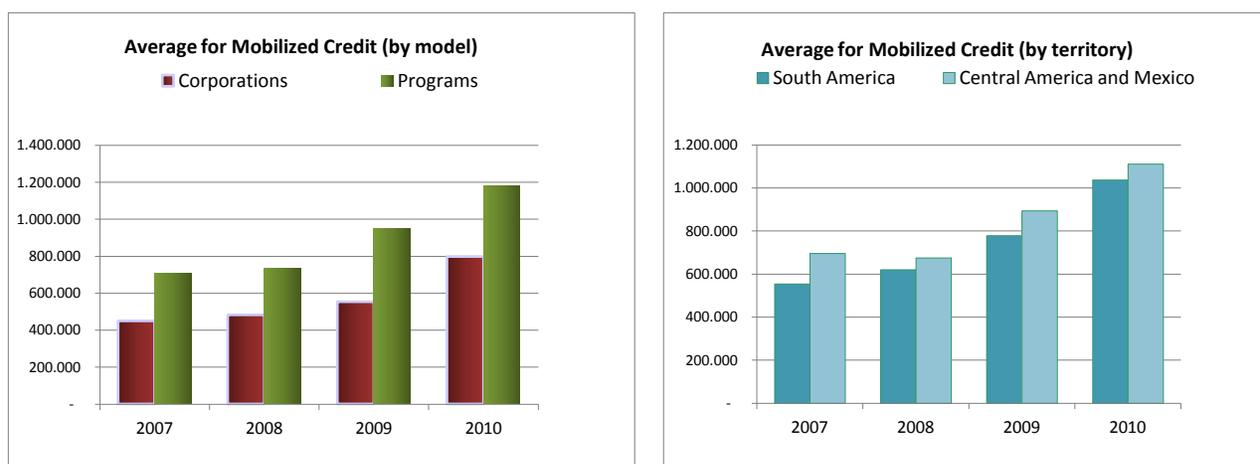
On the other hand, the current guarantees averages (Figure 40) increase steadily in both geographical areas and beneficiaries, although the difference is not as pronounced as in the case of the latter.

**Figure 40. Distribution of current guarantees by model and geographical areas**



Source: Own elaboration. 1998-2010 data series

**Figure 41. Distribution of mobilized credit by model and geographical areas**

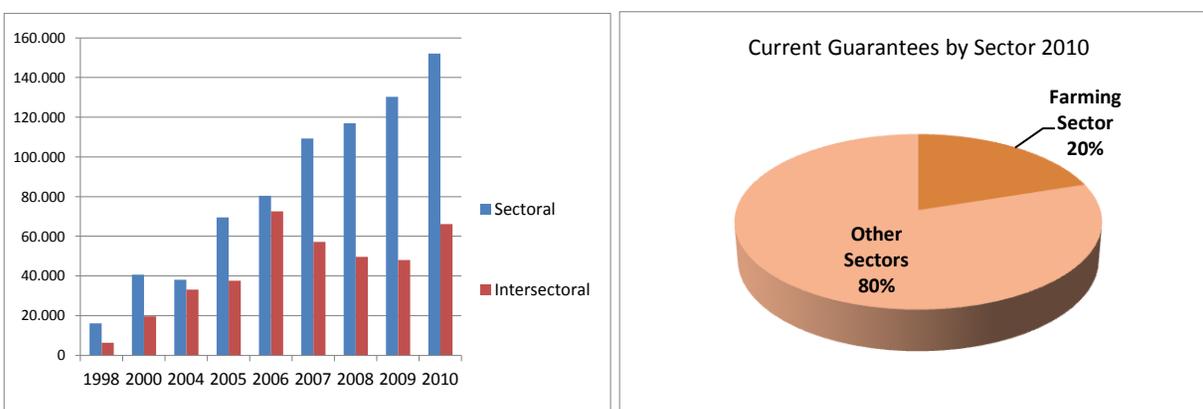


Source: Own elaboration. 1998-2010 data series

Concerning the mobilized credit, it can be observed in figure 41 how in Central America and Mexico this variable turns to be slightly higher than the value registered in South America, even though the collateral amount happens to be lower. The mobilized credit has increasingly evolved both in terms of the number of guarantee programs and companies (Figure 41).

For its part, guarantee systems are significantly present in the agricultural sector (20% of the general activity). The sectoral systems (Figure 42) mobilize a higher average number of beneficiary MSMEs, compared to those of intersectoral nature, although, as discussed above, the final beneficiaries are not computed for the particular case of Mexico.

**Figure 42. Average beneficiary MSMEs by sectoral classification**



Source: Own elaboration. 1998-2010 data series

This systems growth is generating a greater efficiency in the use of permanent resources, even though they currently maintain a solvency structure with core capital levels, understanding

this ratio -measured as permanent resources divided between current guarantees- close to the value 30. In this sense, the agricultural sectoral guarantee entities are 16 points above the former value.

**Table 3: Core capital and additionality from 2007 to 2010**

Core capital and additionality	2007	2008	2009	2010
<i>Core capital</i> = 100x (Permanent resources/Guarantees)	29,10	30,08	32,13	29,34
Additionality = (Mobilized Credit/ Permanent public resources)	8,95	7,22	6,00	7,30
Annual additionality = (Mobilized Credit in the exercise/ Permanent public resources)	10,55	8,13	8,45	9,61

Source: Own elaboration

On the other hand, the level of additionality -measured as the credit mobilized with the permanent resources provided by public sector- reached the 7.30 in 2010, being very similar during the last three years and slightly higher for 2007 (Table 12). The evolution turns similar when analyzed by annual grants. In 2008, there was a mobilized credit crunch, within the economic exercise, and a credit balance slowdown; this fact explains the drop in the additionality of public resources.

The core capital levels by system and country reveal that some systems are still in the initial launch phase, which is the case of Bolivia and Ecuador and some others with an excess of permanent resource on the needs that the guarantee activity claims for itself -as in FODEYPYME from Costa Rica. It seems clear in which countries the guarantee activity seems more intensive: Brazil, Chile, and Colombia; this ratio registers a similar level just above 20%, exhibiting a greater efficiency in the use of the involved but certainly surplus resources, in accordance with the recommendations of Basel II and III. In the case of Mexico, the core capital almost doubles with respect to the three aforementioned countries.

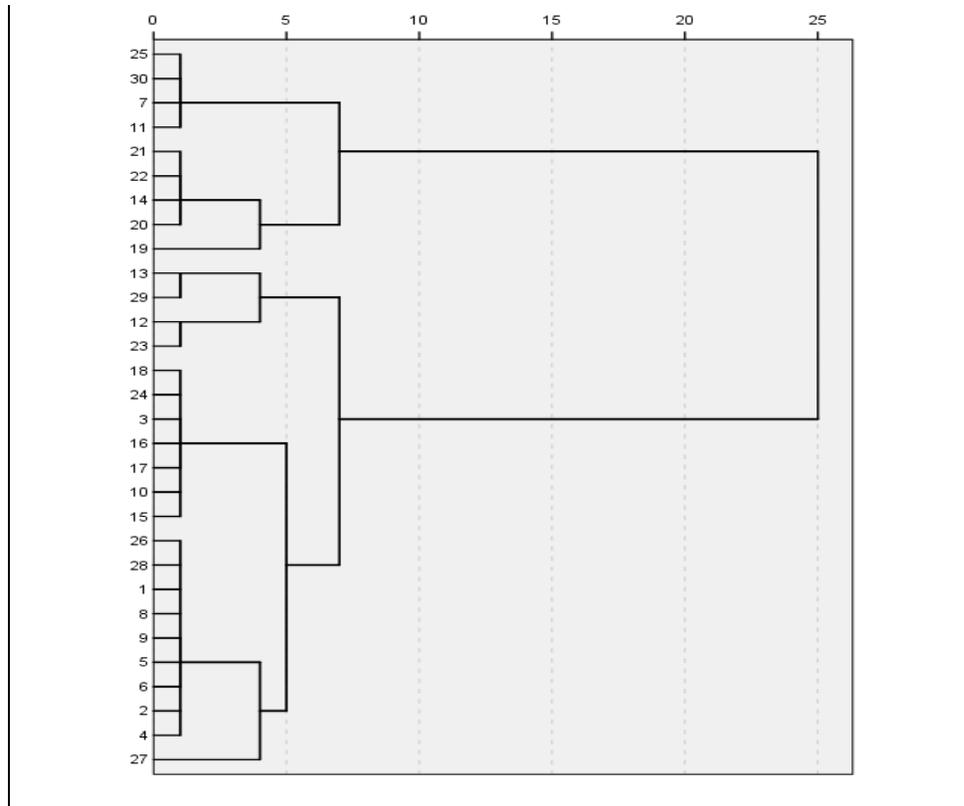
Finally, we should not forget when analyzing the additionality that a large number of guarantee systems manages, with its participation, to reduce the MSMEs' financing costs. This finding reveals a additionality in 90% of the systems, as shown in Figure 34 on page 23.

### **3.2. - Classification of the systems**

Table 4 depicts the dendrogram for the hierarchical cluster analysis where it can be observed two conglomerates.

**Table 4. Dendrogram for classification of guarantee systems in Latin America**

**Dendrogram utilizing an average relation (between groups)  
Cluster Combination with rescaled distance**



Source. Own elaboration

The allocation for each different cluster or group observation is displayed in Table 5.

**Table 5. Cluster allocations for the different systems**

<b>GUARANTEE SYSTEMS / ENTITIES</b>	<b>Clusters</b>
NAFIN Guarantee Program, FEGA DEL FIRA, SAGARPA-FONAGA, PROGARA, PROGAPE, PROGAIN, IMAS-BANCREDITO-BNCR, FINADE, FODEIMIPYME, SGR Argentina, GUARANTEE FUND PRO PYME UNION, FGI-BNDES, FGPC-BNDES, FUNPROGER-BB, FGO-BB, IGR Chile, FAG-FINAGRO, POGAMYPE CREDIT GUARANTEE FUND, FOGAPI, FOGEM BUSINESS GUARANTEE FUND, SIGA National Guarantee System	1
GyS SGR FOGABA, FAMPE-SEBRAE, AGC da Serra Gaucha, FOGAPE-BANESTADO, COBEX CORFO Guarantee Program, FOGAIN CORFO Guarantee Program, FNG, SA, SGR-Venezuela	2

Source. Own elaboration

The first conglomerate registered twenty-one guarantee systems and the second just nine observations. This interpretation is supported by the distance matrix results. The group homogeneity degree within each cluster justifies its structure of two blocks and no less than that.

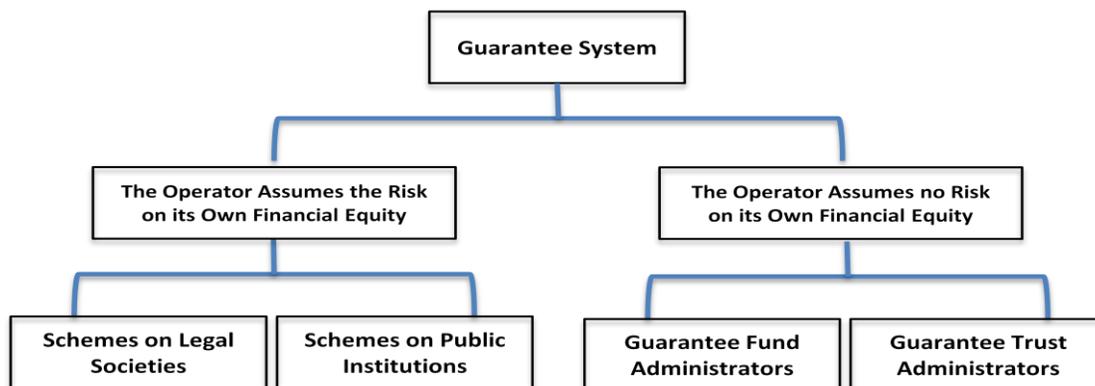
In summary, the hierarchical cluster analysis, along with the additional information in Table 6, presents two basic situations:

1. A group or set of guarantee coverage operator (entities/systems) that supports the collateral on its own financial equity (making a total of 9 entities) through legal/business corporations or public entities -FNG, SA (25), SGR-Venezuela (30), GYS SGR (7), FOGABA (11), CORFO-COBEX (21); CORFO-FOGAIN (22), FAMPE (14), FOGAPE (20), and AGC from Serra Gaucha (19)

Within this group there are two distinct clusters that stand out as being very homogeneous in terms of:

- 1.1. Group or set of guarantee coverage operators (entities/schemes) that supports the collateral on its own financial equity and represents legal companies or business corporations in four situations (of which three are of mutual nature)
- 1.2. Group or set of guarantee coverage operators (entities/schemes) that supports this collateral on its own financial equity and represents public and non-profit institutions in four and one case respectively.

**Figure 43. Empirical scheme of classification for Latin American guarantee systems (by groups)**



Source. Own elaboration

2. A group or set of guarantee coverage operators (entities/systems) that does not support the collateral on its own financial equity but merely manages an autonomous liquid resource - guarantee trusts or funds- (up to a total of 21): PROPYME FUND (13), SIGA (29), SGR Argentina (12), IGR Chile (23), FGO (18), FAG (24), SAGARPA-FONAGA (3), FGPC (16), FUNPROGER (17), FODEMIPYME (10), FGI (15), FOGAMYPE (26), FOGEM (28),

NAFIN (1), IMAS (8), FINADE (9), PROGAPE (5), PROGAIN ELS (6), FEAGA DEL FIRA (2), PROGARA (4), and FOGAPI (27).

Within this group there are two distinct clusters that stand out as being very homogeneous in terms of:

- 2.1. They are mostly public institutions that act as guarantee coverage operators; they do not support the collateral on their own financial equity, but do merely manage an autonomous liquid resource constituted by a guarantee trust or fund. There are 17 cases within this block, comprising a sort of group that is differentiated depending on whether its cases are guarantee funds (6 cases) or trusts (11 cases).
- 2.2. Business corporations that play the role of guarantee coverage operators; they do not support the collateral on their own equity but do merely manage an autonomous liquid resource. There are four specific cases within this block characterized by operators with a legal personality of corporate society. It actually involves four observations that represent "deviations" or "hybrids"; that is, companies -two mutual societies- in administration of guarantee funds (two cases) and corporations in administration of trusts (two cases).

There are, in each of the main group, two concrete or residual observations under the figure of foundations or nonprofit entities.

Table 6 pinpoints the values, for the diverse systems, that are registered by the variables employed to establish the classification, from which we will be able to infer the features that shape the two groups of systems obtained after the dendrogram analysis.

In the first place, it can be observed how legal personality does not appear to be the criterion by which guarantee systems are clustered, although it certainly exerts its influence on the subgroups. Our results indicate that other criteria happen to be more relevant, as the responsibility, the capitalization of the system, or how resources are managed.

Thus, the variables that describe the functionality of the guarantee operator –in other words, whether they support the collateral with their own financial equity or manage an entrusted fund or trust- distinguish as well the two large clusters (figure 43).

- ✓ V.2.1 operators that support the guarantee coverage on their own financial equity -first section and first column of the group: from FNG, SA (25) to AGC of Serra Gaucha (19) included (a total of 9 cases).

- ✓ V2.2 y v2.3 operators that do not support the guarantee coverage on their own financial equity -second section and first column of the group: from PROPYME UNION GUARANTEE FUND (13) to FGI (15) included (a total of 21 cases).

**Table 6. Cluster analysis and variables selected**

Clusters	System/Scheme/Entity	#	Legal Form			Functionality			Responsibility		Capitalization		Administration	
			v1.1	v1.2	v1.3	v2.1	v2.2	v2.3	v3.1	v3.2	v4.1	v4.2	v5.1	v5.2
Grupo I	FNG, SA	25	X			X			X		X		X	
	SGR-VENEZUELA	30	X			X			X		X		X	
	GARANTIAS Y SERVICIOS, SGR - SA de CV	7	X			X			X		X		X	
	FOGABA	11	X			X			X		X		X	
	PROGRAMA DE GARANTIA COBEX CORFO	21		X		X			X		X		X	
	PROGRAMA DE GARANTIA FOGAIN CORFO	22		X		X			X		X		X	
	FAMPE-SEBRAE	14		X		X			X		X		X	
	FOGAPE-BANESTADO	20		X		X			X		X		X	
	AGC DA SERRA GAUCHA	19			X	X			X		X		X	
Grupo II	FONDO DE GARANTIA PRO PYME UNION	13	X				X			X		X		X
	SISTEMA NACIONAL DE GARANTIAS SIGA	29	X				X			X		X		X
	SGR ARGENTINA	12	X					X		X		X		X
	IGR CHILE	23	X					X		X		X		X
	FGO-BB	18		X			X			X		X		X
	FGA-FINAGRO	24		X			X			X		X		X
	SAGARPA-FONAGA	3		X			X			X		X		X
	FGPC-BNDES	16		X			X			X		X		X
	FUNPROGER-BB	17		X			X			X		X		X
	FODEIMPYME	10		X			X			X		X		X
	FGI	15		X			X			X		X		X
	FONDO DE GARANTIA CREDITICIA FOGAMYPE	26		X			X			X		X		X
	FONDO DE GARANTIA EMPRESARIAL FOGEM	28		X			X			X		X		X
	PROGRAMA DE GARANTIA DE NAFIN	1		X			X			X		X		X
	IMAS-BANCRECITO-BNCR	8		X			X			X		X		X
	FINA.DE	9		X			X			X		X		X
	PROGAPE	5		X			X			X		X		X
	PROGAIN	6		X			X			X		X		X
	FEGA DEL FIRA	2		X			X			X		X		X
	PROGARA	4		X			X			X		X		X
FOGAPI	27			X		X			X		X		X	

Source. Own elaboration

As we move down the list of guarantee systems/schemes and entities from the first column, we practically go, in a successive sequence, from those that support the guarantee coverage with their own financial equity to those that do not.

The variables v1.1 / v3.1 / v4.1 / v5.1, with respect to v1.2 / v1.3 / v3.2 / v4.2 / v5.2, clearly illustrate and highlight even further the differences between some groups and others. In the end, the legal form of the entity turns to be the variable -revealing certain differentiation nuances- that help set apart two distinct groups among those systems that assume guarantee coverage, and two other groups among those schemes that do not -although for this second block we have to clearly

differentiate the systems that manage guarantee funds from those that administer guarantee trusts.

In brief, we have found two types of guarantee systems or schemes: one operating the guarantee coverage on its own financial equity (group 1) and another assuming no risk on its own assets -the operators of the guarantee coverage- (group 2).

From this perspective it could be concluded that an analysis of the different variables - utilized for the examination of guarantee systems/schemes in Latin America-, in relation to the variable *functionality of the guarantee operator*, could clearly point out the differentiating characteristics from one group to another. In this sense -according to Table 7-, to exemplify the Group 2 (operators -entities/schemes- that do not support the guarantee coverage on their own financial equity but do merely manage a autonomous liquid resource), it turns to be that all the cases do not assume the risk on their own assets (v3.2); they represent schemes of capitalization based on autonomous liquid resources (V4.2), being controlled by third parties that operate as trustees of the guarantee activity (V5.2).

**Table 7. Characteristics of the guarantee systems according to certain variables**

<b>Variables</b>	<b>Operators that Assumes Coverage on it own Financial Equity</b>	<b>Operators that Assumes no Coverage on it own Financial Equity</b>
<b>Variable 1.</b> Legal Personality	Both corporations and public institutions coexist simultaneously.	Public institutions are largely present.
<b>Variable 2.</b> Guarantee Operator's Functionality	They operate the guarantee coverage on their own financial equity.	They operate the guarantee coverage as mere administrators of autonomous and liquid resources: guarantee funds or trusts provided by others.
<b>Variable 3.</b> Responsibility for the Guarantee	They assume the guarantee coverage on their own financial equity.	They assume no guarantee coverage on their own financial equity.
<b>Variable 4.</b> Capitalization	Equity capital is the capitalization formula.	Autonomous and liquid resources, guarantee funds or trusts, are the capitalization formula.
<b>Variable 5.</b> Administration of Resources	The resources are managed from corporate governing bodies (by their owners).	The resources are managed by the operator (different from the owner or contributor of resources).

#### 4. Conclusion

The analysis of the guarantee systems in Latin America reveals a tendency to the growth, development, and implementation of both existing and novel experiences -recently launched projects that will certainly culminate in imminent realities-. The activity has grown tenfold in the last decade and virtually all the territories are served by guarantee systems.

Additionally, the State plays an important role in the implementation and development of guarantee systems, coexisting even in an incipient form with mixed systems of private nature; at present, it highlights the relevance of public guarantee programs, without underestimating an remarkable boost of private and public mixed systems/schemes as SGR's. Nowadays it is also confirmed the entry of the private sector (mainly financial institutions) to the guarantee funds and trusts market. In this sense, our analysis brings to light the existence of two groups of guarantee systems: a) a set of nine systems that support the guarantee coverage on their own financial equity and b) another group of twenty operators (systems/schemes) that do not support the guarantee coverage on their own financial equity but do merely manage autonomous liquid resources known as guarantee fund or trust. The latter is largely predominant in the public schemes. This categorization is, for all purposes, an absolutely new groundbreaking classification for guarantee entities and gives a realistic and practical view of the Latin American activity on this subject. It can be observed in Table 8 the various characteristics of these two groups based on the different variables analyzed.

A relevant evidence of this issue is the trend towards the implementation of efficient and quality regulatory/supervisory frameworks with regard to the guarantee systems. Thus, in the coming years, it will not be probably conceived a guarantee system or scheme without its full integration in the corresponding country's financial system, with all its implications. The business model consolidation of a guarantee system involves the recognition of its guarantee "value" per se; it is definitely achieved through the rating and weighting of its coverage and respective rebonding -recognized in the mitigation of its own financial equity and provisions-. Undoubtedly this will mark new ways of working and interacting with the financial system as it extends and consolidates.

The guarantee is not a product for SMEs and micro entrepreneurs; it is a product designed for financial institutions and must be understood in the traditional scheme of security (maximum coverage), profitability (rating and weighting of the collateral), and liquidity (first requirement); in brief and as a result, it is tool to facilitate credit to entrepreneurs in the best conditions, and from the guarantee coverage provided by the national guarantee system. In the mixed guarantee systems, the support of the State can take place through rebonding, granting counter guarantees to first-tier guarantee institutions.

The implementation and increasing development of the Latin American guarantee systems become apparent due to the results of the evolution in the activity, in the number of MSMEs assisted, and in the additionality variable -defined as the mobilized credit level for each guaranteed unit. A second evidence of this additionality is found in the elevated levels of systems that are able to reduce the MSMEs' financing costs. In our opinion, guarantee systems manage to mobilize more credit and improve credit conditions. Our results reveal as well that the secured transactions exhibit medium or high terms and the average guaranteed amounts seem reasonable for the profile of an entrepreneur.

On the other hand, the current sustainability is grounded on a philosophy of shared risk with the financial sector, reaching for the average coverage rates the 60% of the credit. Financial guarantee costs stand at an average of 2.00% for study fee and 2.51% for guarantee fee. The prices tend to be differentiated, using some criteria derived from the risk assumed -as the type of operation, the terms/periods, or the amount. Regarding the management of incidences, the dilemma of sustainability versus additionality is resolved in favor of the former since the payment is conditioned -predominating the failed payments (loss)- and seems less attractive to the financial entity, while the liability happens to be subsidiary on a covered percentage. These situations, with exceptions, are consistent with the study delegation and granting decision for the financial entity; in this way, it helps control the lender's moral hazard but turns the product less attractive for the bank. Perhaps the public nature of the resources influences on this moral hazard control. The alternative would be a greater involvement in risk control by the system and the provision of a much more attractive product to the financial sector, with a more immediate payment. The risk control by the system results more effective when business sector takes part actively, as is the case of Western Europe.

In conclusion, the entirely public model has a reason to be present in weak business environments since it acts as a triggering mechanism to tackle financial exclusion and improve the access conditions; however, as business fabric gets strengthened, the guarantee system can get strengthened as well due to its participation; this makes advisable the evolution of the system to input private resources that enable higher degrees of additionality for public investment and stability for the system -balancing the increasing requirements in relation to the state fiscal budgets. Under this scope, the guarantee system moves on to consider that its guarantee product

turns really attractive for the credit sector, which reduces its own capital needs and provisions with low credit and operational risk.

## 5. References

- Bester, H. 1985. "Screening vs. Rationing in credit markets with imperfect information". *American Economic Review* 75(4): 850-855.
- Camino, D. y Cardone, C. 1999. "The Valuation and Cost of Credit Insurance Schemes for SMEs: The Role of the Loan Guarantee Associations". *International Small Business Journal* 17(4): 3-31.
- Freedman, P. L. 2004. "Designing loan Guarantees to Spur Growth in Developing Countries". US Agency for International Development.
- Hayek, F. 1990. *Camino de Servidumbre*. Madrid. Alianza editorial.
- Hubbard, R. G. Kuttner, K. N. y Palia, D. N. 2002. "Are the banks effects in borrowers' cost of funds? Evidence from matched sample of borrowers and banks". *Journal of Business* 75(4): 559-581.
- John, K., Lynch, A. y Puri, M. 2003. "Credit Ratings, Collateral and Loan Characteristics: Implications for Yield". *Journal of Business* 76(3): 371-409.
- Levitsky, J. 1997. "Credit Guarantee Schemes for SMEs – An International Review". *Small Enterprise Development* 8 (2): 4-17.
- Llisterri, JJ et al. 2006. *Sistemas de garantía de crédito en América Latina: orientaciones operativas*, BID, Washington DC.
- Llisterri, J. J. 2006. "Alternativas operativas de sistemas de garantías de crédito para la mipyme". Serie de informes de buenas prácticas del Departamento de Desarrollo Sostenible del Banco Interamericano de Desarrollo. Washington.
- Manove, M., Padilla, J. y Pagano, M. 2001. "Collateral versus Project Screening: a model for lazy Banks". *Rand Journal of Economics* 32(4): 736-744.
- Meyer, R. y Nagarajan, G. 1996. "Sistemas de garantía de crédito: Experiencias internacionales y lecciones para América Latina y Caribe: Criterios para la Evaluación de los Programas de Garantía de Crédito". Banco Interamericano de Desarrollo. Washington.
- Pombo, P. 1995. "Las Sociedades de Garantía Recíproca, una experiencia de financiación de las pymes". *Boletín Económico de la Junta de Andalucía* 19: 285-302.

- Pombo, P. y Herrero A., 2001. *Los sistemas de garantía para la micro y la pyme en una economía globalizada*, DP Editorial, Sevilla.
- Pombo, P. 2006a. *¿El modelo de garantía recíproca es un modelo relevante para América latina?*, Publicaciones técnicas PROGRAMA ALIDE / BID / FOMIN *Banca de Desarrollo de España y Europa, prácticas relevantes para América latina*, pp. 69-95, Lima (Perú).
- Pombo, P. 2006b. *Aportes conceptuales y características para una clasificación internacional de los sistemas/esquemas de garantía*. Tesis Doctoral. Universidad de Córdoba (España).
- Pombo, P., Molina, H y Ramírez, J. 2006. “The European Framework of Guarantee Systems/Schemes: Main Concepts and Characteristics”. *Journal of Small Medium Enterprise Development* 1 (sept): 127-166.
- Pombo Pombo, P., Molina, H y Ramírez, J. 2007a. “The American Framework of Guarantee Systems/Schemes: Main Concepts and Characteristics”. *Journal of Small Medium Enterprise Development* 4 (june): 39-68.
- Pombo, P., Molina, H y Ramírez, J. 2007b. “Propuesta para una clasificación y terminología internacional de los esquemas/sistemas de garantía: conceptos, características, tipologías y definiciones”. *Revista Facultad de Ciencias Económicas de la Universidad de Granada* XV (1): 53-76.
- Pombo, P., Molina, H y Ramírez, J. 2008. *Conceptual Contributions and Characteristics for Classifying Guarantee Systems/Schemes*. Prize UNICAJA for Economic Research 2007, Servicio de Publicaciones, Serie Premios UNICAJA, Málaga..
- Reig Pérez A. y Ramírez Comeig, I. 1998. “Efecto de la información asimétrica sobre el riesgo y el comportamiento de las sociedades de garantía recíproca: un análisis empírico”. *Revista Española de Financiación y Contabilidad* 95 (abril-junio): 469-497.
- Schmidt, A. y van Elkan, M .2006. “The Macroeconomic Benefits of German Guarantee Banks”. Ed. Institut fur Mittelstandsökonomie. Berlin.
- Stiglitz, J. E. y Weiss, A. 1981. “Credit Rationing in Markets with Imperfect Information”. *American Economic Review* 71(3): 393-411.
- Stiglitz, J. E. y Weiss, A. 1983. “Incentive Effects of terminations; applications to the credit and labor markets”. *American Economic Review* 73(3): 912-927.

Stiglitz, J. E. y Weiss, A. 1985. "Credit Rationing with collaterals". *Bell Communications Research. Discussions Papers*, 12: 1-45.

Stumpo, G. 2012. "Microempresas y pymes en América Latina). CEPAL

## **APENDIX**

### **GUARANTEE SYSTEMS IN PANAMA, DOMINICAN REPUBLIC, AND MEXICO**

#### **PANAMA**

Panama has a native initiative of guarantee systems in operation since 2005. This is the year in which it is developed the guarantee program for the agricultural and farming activity, being its operator the Agricultural Insurance Institute of Panama.

Before this action, the only scheme known in the Country was the Multilateral Guarantee Program for Latin America –FUNDES- (from 1985); it was already closed in the early nineties, having a low and uneven influence in the region: the FUNDES Guarantee Program<sup>11</sup> administrators understood that, as a private institution working with private resources, it should not have limited its financial risks and could not have created guarantee programs in each country. In its 1994 annual report, it is stated an average loan of U.S. \$ 28,318 for the guaranteed loans. Specifically, with respect to Panama, it points out 92 borrowers out of a total of 1,781 of the program, with a grand total of U.S. \$ 2.2 million on U.S. \$ 22.3 million of the total portfolio. The delinquent loan was U.S. \$ 2.4 million (a 6.8% of the portfolio) of which Panama had U.S. \$ 326,000. The losses or failures of the total portfolio in 1994 amounted to 1.1% (a total of U.S. \$ 243,000) of which U.S. \$ 23,000 was from Panama. There was also the circumstance that from this concrete portfolio it was granted a series of financial operation –without applying guarantees- to a direct microcredit program in Panama (1,187 transactions totaling U.S. \$ 4.3 million).

---

<sup>11</sup> Brugger, Reichmuth, and Stocker "Impacto de los programas de garantía de FUNDES sobre pequeñas empresas en América Latina". (1996) y Ochring, BID "FUNDES modelo, resultados y perspectivas" (1996).

By 1988 it was established in Panama<sup>12</sup> a guarantee fund for U.S. \$ 2.0 million under the supervision of the National Banking Commission; its losses reached the 5%. It operated with 12 banks under consensual contracts. The premium was 5% per year and it closed its activity few years later.

In some recent verification efforts it has been identified a germinal intention -on the part of the Authorities of the Micro, Small, and Medium Enterprises (AMPYME), specifically in the Department of Financial Services- to encourage the creation of a guarantee program for the support of MSMEs in the Country.

On this new situation for Panama, we believe it would be convenient and appropriate to conduct an analysis on the reasons and circumstances that have hindered so far the promotion of a guarantee system/scheme of intersectoral nature in Panama. These reasons and circumstances, based on experience, could be related to the public sector ineffectiveness to define these programs as a potential policy of support to MSMEs in the Country, facilitating the access to capital; moreover, business unions have failed conveying this need to the community.

Experience tells us as well that it is normally the public sector the responsible for leading the proposal of policies in this regard, together with the stakeholders. Therefore, the emphasis of further research could be based on assumption. The financial sector is usually much more passive; it reacts, mobilizes, or takes a stand when a public policy is proposed and oriented in the right direction. Anyway, in recent years the circumstances have made the financial sector a much more proactive entity; this situation will continue as long as the quality of the risk and the guarantees coverage are perceived as a necessity –concerning Basel II and III- and a strategic element for the development of the guarantee activity. Among the business unions has been a certain concern since the nineties but it does not seem to have experienced further support or lobby in that regard. A table with the historical development of the guarantee activity in Panama, which in this case reflects a national and current initiative, is outlined below.

**Historical description of the guarantee systems/schemes in Panama**

Year	GUARANTEE SYSTEM/SCHEME
1985	The Guarantee Program for Latin America -FUNDES- (closed)
1988	Guarantee Fund (closed)

<sup>12</sup> Information provided by the USAID

2005	The Guarantee Program for Farming Activity – the Agricultural Insurance Institute ISA
------	---

❖ **Guarantee entity: The Guarantee Program for Farming Activity**

This guarantee program was established by the Law No. 25 of July 19, 2005. In the Article 3 is stated that this guarantee program for farming activity will be managed by the Institute of Agricultural Insurance ISA and capitalized through an amount, transferred from the Agricultural Development Bank to ISA, that reaches the 10,000,000. Millions of Balboas (national currency).

It aims to promote competitiveness in agribusiness sector and to strengthen agricultural sector through the access to agricultural financing; it pays special attention to small and medium producers in order to improve the national economy performance and raise the living standards of rural population in Panama.

**Online reference:** <http://www.isa.gob.pa/>

**DOMINICAN REPUBLIC**

By 1983, it was created in Dominica Republic an initiative called the Special Credit Guarantee Reserve, which was cancelled after a short activity. The same happened to the following initiatives: the Shared Guarantee System SIGAC (1996) and the Guarantee Fund for the Small Business FOGANPE (2003).

It is from 2007, through the project "Design of a Guarantees System for the MSME's Sector in Dominican Republic" -with technical assistance provided by international consultants<sup>13</sup> within the Program of institutional and policy development framework for the support of the micro, small, and medium enterprises (IDB 1474/OC-DR)- when it was possible to achieve, as a policy based on a consensus by virtually every involved institution in the Nation, the implementation of a reciprocal guarantee system SGR<sup>14</sup>.

Since 2008 it has been autonomously shaped the last draft for the SGR law in the Central Bank of the Dominican Republic. The information gathered indicates that at the end of June

---

<sup>13</sup> Conducted by the international consultant Paul Pombo Gonzalez, according to a methodology developed and experienced in various Latin American countries: Venezuela (1997-1999 and 2003-2004), El Salvador (1999-2001 and 2002-2004), Guatemala (2002-2005), Honduras (2005 -2007), Dominican Republic (2007), and Mexico (2011).

<sup>14</sup> "Mutual or Reciprocal guarantee societies": these entities are aims at granting guarantee to micro, small, and medium entrepreneurs that act not only as beneficiaries but also as part of the society.

2011 it had been accomplished a substantial progress in the elaboration of the legal document. The legislative lobbying was expected to begin by 2012. A table with the historical development of the guarantee activity in Dominican Republic is outlined below.

**Historical description of the guarantee systems/schemes in Dominican Republic**

<b>YEAR</b>	<b>GUARANTEE SYSTEM/SCHEME</b>
1983	The Special Credit Guarantee Reserve (closed)
1996	The Shared Guarantee System SIGAC (closed)
2003	The Guarantee Fund for Small Business FOGANPE
2007	The outset for the elaboration of the reciprocal guarantee system (SGR) law

**MEXICO**

In Mexico the existing guarantee systems are quite recent, but the guarantee mechanism for the micro, small, and medium enterprise has a history that dates back to 1932 when certain organizations started their activities in this context as mutual entities focused on granting credit and oriented to contemplate the possibility of providing guarantees to their partners. After several legal reforms, its activity as a mechanism turned to be very focused on the credit activity. By 1954, the Development and Guarantee Fund for Small and Medium Industry (FOGAIN) - now extinct- was founded. The FEGA of FIRA was launched in 1972 and later -during the eighties- it was followed by the diverse and current guarantee programs, all sponsored by the Federal Government through public financial institutions considered development banks. In 2002, the Secretariat of Economy moved to centralize and bring together the guarantee activity, emphasizing how these programs were part of the Federal State policy measures to assist the micro, small, and medium enterprise sector.

In 1989, it was created the guarantees program known as Nacional Financera -NAFIN- which was restructured under the name of National Guarantee System<sup>15</sup> in 2002. In this same year it was founded SAGARPA as a guarantee entity for the agriculture sector, complementary to FIRA and the program for the promotion of exports called GLIEX. A table with the historical development of the guarantee activity in Mexico is outlined below.

**Historical description of the guarantee systems/schemes in Mexico**

<sup>15</sup> Technical assistance provided by the Spanish consultant Pablo Pombo.

YEAR	GUARANTEE SYSTEM/SCHEME
1932	Credit Unions
1954	The Development and Guarantee Fund for the Industrial SME FOGAIN (closed)
1972	The Agricultural Guarantee Program FEGA del FIRA
1987	The Guarantee Program for the promotion of exports BANCOMEXT (closed)
1989	The Guarantee Program <i>Nacional Financiera</i> NAFIN
1991	The Support Fund for Solidarity Enterprises FONAES
2002	The Guarantee Program of the Secretariat of Economy
2003	The guarantee program/scheme known as SAGARPA-FINCAS-FONAGA
2005	The Liquid Guarantee Program for exports GLIEX-BANCOMEXT

In Mexico the predominance of public guarantee systems is absolute. This model is built out of an autonomous liquid resource (a guarantee trust) as a capitalization formula administered by a bank or public development agency. Consequently, it handles the guarantee and manages the resources without assuming the risk on its own financial equity. The entirely private model/scheme is articulated through credit unions that have little effect on this activity at present.

Nowadays, there is in a very advanced process of reflection to integrate the private sector along with the different programs. On this basis FOCIR initiated the implementation of a reciprocal guarantee system SGR in 2011; with the assistance of international consultants<sup>16</sup>, it has achieved during in the first phase of the project the support of virtually all the institutions involved.

Mexico, compared to the rest of Latin America, represents a 24% of current guarantee and a 27% of mobilized credit balance, which has been undergoing significant growth rates in recent years. This country stands out as well for the number of beneficiaries: 24% of all Latin American guarantee clients belong to the Mexican system. It actually ranks fourth in the current guarantees index/GDP. Therefore, it is a nation where public policy, concerning these guarantees

---

<sup>16</sup> Conducted by the international consultant Paul Pombo Gonzalez according to a methodology developed and experienced in various Latin American countries: Venezuela (1997-1999 and 2003-2004), El Salvador (1999-2001 and 2002-2004), Guatemala (2002-2005), Honduras (2005 -2007), Dominican Republic (2007), and Mexico (2011).

intended to facilitate access to credit, happens to be determinant and quite relevant for the economy of recent years. Within Mexico the FEGA del FIRA, along with SAGARPA -which is a complementary guarantee-, account for almost 70% of the guarantees in Mexico and 8% of SMEs assisted; with respect to this point, we must clarify that it operates through intermediaries called FINCAS and the beneficiary farmers are close to one million.

**Guarantee systems/schemes in Mexico (Table for the activity during 2010)**

MEXICO 2010	AÑO	ENTES	REC. CAP.	REC. FG	SALDO GAR.	PYMES	GAR. AÑO	PYME AÑO	SALDO CTO.	CTO. AÑO	CORE	GV/PIB
FEGA DEL FIRA	1972	1		997.500	2.309.974	25.000	2.900.000	31.500	3.948.538	5.965.960	43,18	0,0022
NAFIN	1997	1		847.662	1.881.281	285.130	2.631.671	251.020	4.118.358	5.641.765	45,06	0,0018
SAGARPA	2003	1		335.286	394.000	0,00	596.000	0,00	0,00	0,00	85,10	0,0003
TOTAL 2010		3	0	2.180.448	4.585.255	310.130	6.127.671	282.520	8.066.896	11.607.725		0,0043

**Guarantee systems in Mexico (Table for the activity during 2010 in percentages)**

MEXICO 2010 %	AÑO	ENTES	REC. CAP.	REC. FG	SALDO GAR.	PYMES	GAR. AÑO	PYME AÑO	SALDO CTO.	CTO. AÑO	CORE	GV/PIB
FEGA DEL FIRA	1972	1		45,75	50,38	8,06	47,33	11,15	48,95	51,40	43,18	0,0022
NAFIN	1997	1		38,88	41,03	91,94	42,95	88,85	51,05	48,60	45,06	0,0018
SAGARPA	2003	1		15,38	8,59	0,00	9,73	0,00	0,00	0,00	85,10	0,0003
TOTAL 2010		3	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00		0,0043

## **Special Fund for Technical Assistance and Agricultural Credit Guarantee (FEGA) of the Trusts Instituted in relation to agriculture (FIRA)**

### **Creation and Legislation**

It was established in 1972 and is one of the four Trusts Instituted in Relation to Agriculture (FIRA). The trustee is the Bank of Mexico, while the trustor is the Secretariat of Treasury and Public Credit, which is the institution that provides the tax resources.

### ***System/entity scope. Institutional and Operational Structure***

The financial resources it manages are 100% public, working through financial intermediaries and covering credit operations granted by the FIRA or by other financial intermediaries that provide services to the target clients of the FIRA. The system is capitalized by an autonomous liquid resource managed by a technical committee. The fund's assets are invested in banking and government bonds since the fund has to be self-sustainable.

Each of the four trusts that comprise FIRA has its own technical committee. In the case of the Fund committee, the members of the committee appoint the chairman annually, while a representative appointed by the Secretariat of Treasury and Public Credit chairs the rest of the committees. The president has no executive position at FIRA. The role of the General Director is to lead the institution in accordance with the policies, strategies, goals, and provisions adopted

by the technical committees, and to supervise as well the implementation of these agreements. (Article 17 of the Federal Law for the Parastatal Entities).

The scope of the program is national and sectoral, and its procedures have been certified under the ISO-9001 quality standards; it has experienced public, external, and internal audits.

FEGA de FIRA works through commercial banks. Its maximum coverage can reach 90% -being the authorization of FEGA's technical committee required-; although the average coverage turns to be 50%, the most common scheme reaches 90%. The coverage includes both principal and interest.

The beneficiaries have to assume a cost of collateral fee (an annual fee on current risk balance) ranging between 0.60% and 4%. Depending on the type of operation that the agency endorses, there are charges differentiated for the MSMEs -according to criteria established- and primarily related to the coverage percentage and the type of collateral guarantee (the so-called liquid guarantee).

The maximum period for those credit operations that finance working capital is 36 months; for the case of fixed investment, this term escalates to 180 months. The average period for the guarantee portfolio is around 23 months, while the average guaranteed amount reaches the U.S. \$ 77,000.

The beneficiaries of those guarantees granted by FEGA de FIRA improve their financial conditions due to an interest rate cutback, against the regular market conditions that register a cost differential between 2% and 3%.

**Basic information of the activity during 2010:** see table on page 43

**Online reference:** <http://www.fira.gob.mx/nd/index.jsp>

**National Guarantee Fund for the Agriculture, Fisheries, Forestry and Rural sector (FONAGA), operated by the Secretariat of Agriculture, Livestock, Rural Development, Fisheries, and Food (SAGARPA)**

#### *Establishment and Legislation*

The Fund was created in 2003 as a second level entity to ensure the portfolios of various financial intermediaries. SAGARPA defines by itself its priority funding lines.

*System/entity profile. Institutional and operational Structure.*

Its resources are 100% public and it operates through financial intermediaries to which it complements their guarantee requirements. The system is financed by autonomous liquid resources or funds (FONAGA) administered by SAGARPA; these resources are not integrated into the operator's assets. This fund is the means for the system capitalization, so that the operator does not assume any risk on its own financial equity. Additionally, the public contribution turns explicit when a regulated risk coverage fund is provided.

The scope of the program has a national, sectoral (agriculture, fisheries, forestry, and rural), and temporal nature; its procedures have not been certified by any quality standard and it has to go through public audits.

Its maximum coverage can reach 10%. The coverage includes both principal and interest. The primary product it offers to its beneficiaries is the financial collateral intended to: Investments in fixed assets and working capital (current assets). The beneficiaries and financial intermediaries assume no cost for the guarantee. The maximum period turns to be 36 months while the average term reaches the 12 months. The predominant term is between 12 and 36 months. The maximum guaranteed amount goes up to the U.S. \$ 60,902, with an average amount of U.S. \$. 30,000.

The beneficiaries of the guarantees granted by SAGARPA improve their financial conditions due to an interest rate cutback, against the regular market conditions that register a cost differential higher than 3%.

**Basic information of the activity during 2010:** see table on page 43

**Online reference:** <http://www.sagarpa.gob.mx/Paginas/default.aspx>

**Guarantee entity: The Nacional Financiera Guarantee Program S.N.C. (NAFIN)**

#### *Establishment and Legislation*

Nacional Financiera -S.N.C. (National Credit Society)- is the development bank of Mexico and operates according to its own organic law: the Law for Credit Institutions and general provisions issued by the National Banking Commission and Securities. The guarantee system began operating in 1997, although the company was established in 1934. The strategic objective of the Nacional Financiera guarantee program (SNC) is to facilitate access to credit for micro, small, and medium enterprises in the industry, trade, and service sectors, both to finance fixed assets or current.

### ***System/entity Profile. Institutional and Operational Structure***

NAFIN manages two trusts that form the National Guarantee System. One of them is supported by its own resources and the other acts as administrator of the Secretariat of Economy; its main mission is to rebond the operations of the other trust. The Secretariat of Economy provides the funding for a second trust that is managed by the Nacional Financiera since 2005 and complements the trust funded by the NAFIN's resources, which create effects similar to those generated by the rebonding. The maximum rebonding coverage reaches 33%, being the average coverage 20%. NAFIN controls almost 95% of the resources that the Secretariat of Economy allocates for this purpose.

The guarantee program NAFIN is a national and sectoral project; its procedures have been certified under the ISO-9000 quality standards. It regularly goes through to external, public, and internal audits.

The Nacional Financiera guarantee program (S.N.C.) accomplishes relevantly its guarantee activity, even when, as a development bank, it is engaged in other financing activities for the MSME. The maximum coverage for investment assets goes to 70%, while the average reaches 50%; in particular and exceptional circumstances (e.g. natural disasters) it can go up to 100%. The coverage includes both principal and interest.

The primary product it offers to its beneficiaries is the financial collateral; it marginally provides financial advice. The financial guarantees are granted to cover: investments in fixed assets, working capital (current assets), lease transactions, and additionally operations that facilitate access to public acquisitions programs. The beneficiaries have to assume a maximum guarantee fee of 3%, which is annual on current risk balance. The maximum period of operations is in 240 months, while the average term is 40 months. Regarding the quantities, the maximum guaranteed amount per company/operation is U.S. \$ 1,250,000, with an average amount of U.S. \$ 32,000.

The beneficiaries of the guarantees provided by NAFIN (S.N.C.) improve their financial conditions due to an interest rate cutback, against the regular market conditions that register a cost differential higher than 3%.

**Basic information of the activity during 2010:** see table on page 43

**Online reference:** <http://www.nafin.com/portalfn/content/home/home.html>