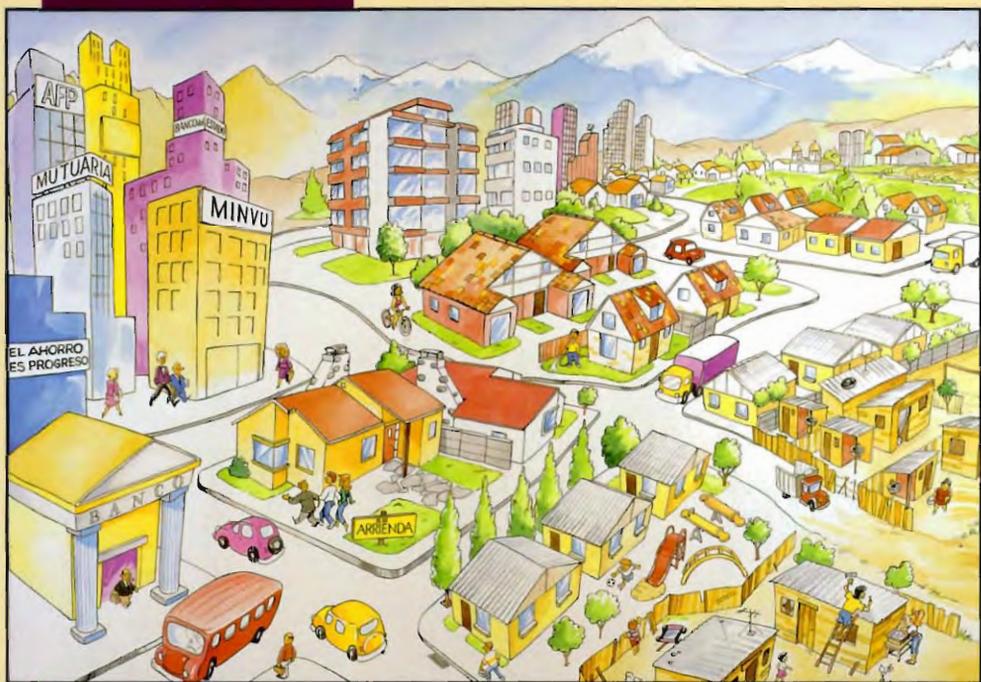


Policies for Financing Housing in Chile



**The First
International Seminar
on Chilean Experience
in Financing Housing.
CIEDESS
September 1993**

United States Agency for
International Development (USAID)
Quito, Ecuador



SPONSORS

The Corporation is a private, non-profit institution, created in 1976 as an initiative of the Cámara Chilena de la Construcción. Its objective is to unite, organize and coordinate the activities engaged in by individuals, organized groups and companies (preferably those linked with the trade association), with the aim of solving their workers' housing problems.

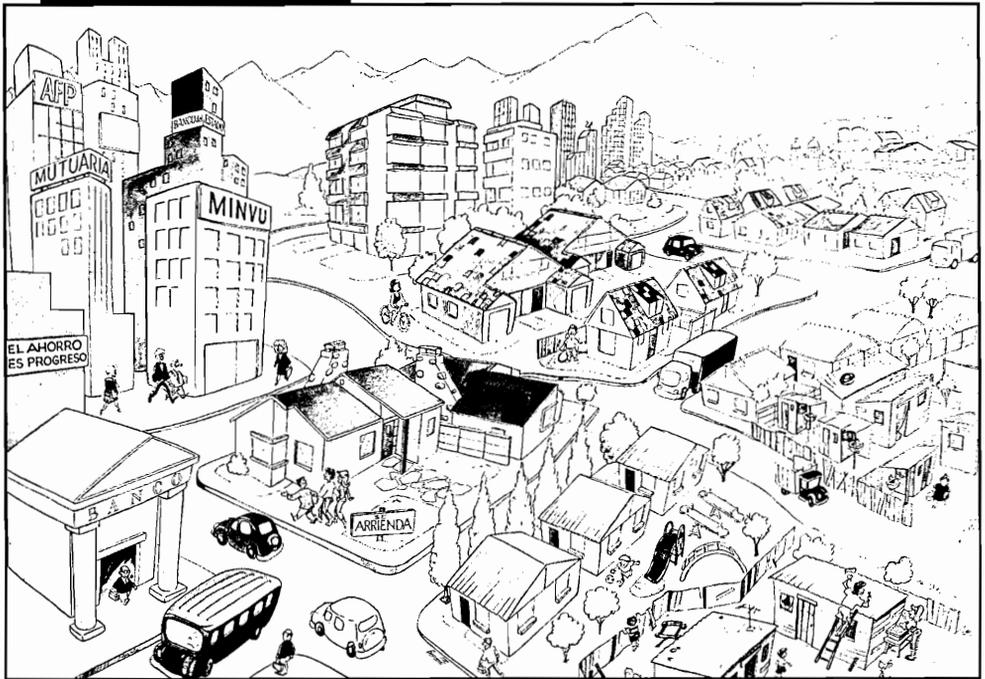
Its main initiatives are linked fundamentally with savings programmes for the different types of subsidy, technical and administrative support, applications for subsidies and finally, the development of housing programmes and/or house purchase.

The Caja de Compensación de Los Andes is a private-law, non-profit corporation, whose objective is the management of social security benefits dedicated to the development and welfare of the family.

Aware of the fact that the development of society calls for social security which can be adapted to people's new requirements, in such different fields as economics, recreation, health, food, culture, sport and leisure, the CCAF de Los Andes has created services which cover the various wants and needs of the human being, thus bringing benefits to the employees of all member companies.



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PROLOGUE

This book offers a comprehensive look at Chile's experience in solving housing problems. In many ways, the Chilean experience is the most successful in Latin America; it is also undoubtedly one of the most significant worldwide.

The authors show how Chile has progressed rapidly with an integrated housing access model by redistributing roles appropriately among the private sector and government.

Basically, the strategic guidelines of this successful Chilean experience are:

- a) Development of flexible, open, transparent markets (capital, financial and housing markets);
- b) The government's facilitating activities: generating mechanisms to adjust for inflation or recession and promoting security for operations among investors, savers and borrowers; and,
- c) A demand-side subsidy system that stimulates the markets, ensures efficient use of public funds and promotes equity.

As a concrete result, Chile is one of the few developing countries that is reducing its housing deficit.

The efforts of certain individuals, known for their high-caliber professional abilities, social ethics and sense of mission, should be especially noted:

- * Obviously, the Chilean Ministers of Housing and Urban Development, **Alberto Etchegaray** (1990 - 1994) and **Edmundo Hermosilla** (since March 1994).
- * From USAID's Regional Housing and Urban Development Office for South America (RHUDO/SA), **William H. Yaeger**, (RHUDO/SA Director from November 1990 to January 1995); **Claude Bovet** (RHUDO/SA Regional Housing Policy and Financial Adviser); and USAID/Chile's Directors, **Paul Fritz** and **Thomas Nicastro**.
- * Governmental Advisors, such as **Sergio Almarza**, **Vicente Domínguez**, **Pedro Melo**, **José Gabriel Varela** and **Ramón Santelices**, who have been deeply involved in these changes for several years, generating concepts, designing new mechanisms and trying to continually increase effectiveness of instruments to mobilize savings and private capital for housing, focus state subsidies and create a climate of security, confidence and responsibility among government, the private housing

and shelter finance sector, and families interested in finding housing solutions.

Clearly, the political will of Chile's governmental administrations and Congress to allocate a significant proportion of public spending to a focussed system of housing subsidies has helped ensure the success of these ambitious efforts. In fact, some 4% of Chile's public spending and some 1% of the country's Gross Domestic Product have been allocated each year to finance this efficient system of demand-side housing subsidies.

The role of the Directors of the Chilean Chamber of Construction, **José Antonio Guzmán M., Alfredo Schmidt M., Víctor Manuel Jarpa R. and Eugenio Velasco M.** should also be noted. Having conceived of their organization's role in the best way possible, they have helped not only to formulate and implement housing policy, but also to perfect, intensify, and generalize Chile's progress in economic and institutional development by creating and sponsoring (along with ten other related entities) the Social Security Research, Study and Development Corporation (CIEDESS).

Specifically, since it was founded in 1991, CIEDESS has held numerous events and produced outstanding publications. This book, which I have the honor of presenting, is one example of the excellence of CIEDESS' mission and of the far-reaching, serious nature of Chile's progress toward modernizing its financial institutions, capital market and shelter policy concepts and mechanisms.

Nevertheless, given the complexity of public problems, each step forward raises new issues, such as:

- * How to coordinate housing policy with urban policy, and this latter with macroeconomic and fiscal policy
- * How urban land markets should function
- * How to deal with deteriorating urban environments: specifically environmental pollution, traffic congestion and water and solid waste treatment, through modern mechanisms of proven effectiveness (not regulations, either exclusively or mainly)

These topics are currently of utmost importance. It is our hope that Chile's pacesetting experience in modernizing its economic system will very soon be reflected in critical aspects of shaping future urban systems:

- * New forms of municipal organization and management;
- * Decentralization;

- * Mobilization of private-sector managerial and financial resources for urban services and infrastructure;
- * Coordination between housing policies and urban policies;
- * Combination of local information gathering hardware and software to understand processes and interrelate families, businesses and the educational system; and,
- * Consolidation of mechanisms for intensive citizenry participation in mobilizing public resources.

This publication is in keeping with the Regional Housing and Urban Development Office for South America's (RHUDO/SA) interest in publicizing conceptual developments and outstanding experiences within our focus of laying the foundation for sustainable urban systems.

MARINO TADEO HENAO
Executive Director
Latin American Center for
Urban Management (LACUM)
Regional Housing and Urban Development
Office for South America (RHUDO/SA)

PRESENTATION

One of the main objectives of the *Corporación de Investigación, Estudio y Desarrollo de la Seguridad Social, CIEDESS*, is to spread and exchange knowledge regarding social security systems, especially those models which are characterized by beneficiaries having the freedom to choose between various managing institutions; private administration of social security systems, in profit or non-profit-making institutions; competition between different operators; and the subsidiary role of the State.

Although the Chilean experience has been successful in many ways, deficiencies still remain, especially in those aspects which depart in certain respects from the principles stated above. However, the country is, at present, undergoing an intense modernization schedule, tending to produce a more mature market, to incorporate new financial technologies and to rationalize the way in which the State participates, all aspects which will introduce institutional innovation in housing matters.

In order to fulfil the objectives mentioned above, *CIEDESS* organized a seminar in 1993, to present Chilean experience in financing housing. This was designed for businessmen, authorities and executives in those public and private sectors related with this subject, in Latin America and the Caribbean.

CIEDESS, with the object of sharing the experience of the seminar and contributing to knowledge about this area, has felt that it would be a useful idea to present in book form the Chilean experience in financing housing. This book is based on the lectures given at the seminar, which have been revised and in some cases updated by each of the lecturers. There can be no doubt that this publication will make a valuable contribution to international debate and will produce a positive impact, so that the systems for financing housing in Chile and Latin America may be further improved.

Santiago de Chile, april 1995.

THE EDITOR

The *Corporación de Investigación, Estudio y Desarrollo de la Seguridad Social, CIEDESS*, is a private, non-profit, Chilean institution, with its legal domicile at Alonso Ovalle N° 1465, Santiago, Chile.

CIEDESS was created in 1991 by the Cámara Chilena de la Construcción and 10 related institutions, all in positions of leadership in their respective fields (pension funds, life-assurance, health insurance, hospital services, housing finance, loans to low-income sectors, etc.). It was allotted the task of improving, deepening and spreading the experience gained in Chile in private-sector management of social security systems, and for this reason it directed its attention towards:

- The training and developing of human resources;
- Research and study into new services and technologies;
- The spreading and exchange of knowledge;
- National and international consultancy and advisory services in studies and disciplines related with social security.

In the area of international consultancy, *CIEDESS* has concentrated its labours in Latin American countries on:

- Organizing international meetings to analyze and discuss specific subjects;
- Developing studies for, and with, government organizations from other countries;
- Training human resources;
- Exchanging various types of information; and
- Offering human resources with expertise in private administration models of social security.

As its scheme of work, *CIEDESS* organizes teams of professionals and executives related with the subject being investigated or dealt with, and belonging to the associated institutions or those registered in the data bank kept by *CIEDESS* with the CVs of the most important people connected with social security and similar topics. These people contribute their wide experience in the fields of pensions, health, recreation, housing finance, family services, education, the capital market, insurance, legal framework and supervision.

This scheme of organization, together with a permanent structure for managing projects, makes it possible to achieve an excellent level of knowledge, and at the same time, to offer efficient solutions both from the technical and costing points of view.

In brief, the *Corporación de Investigación, Estudio y Desarrollo de la Seguridad Social*, is an institution created to assist in improving, extending and consolidating modern social security systems and related sectors (the capital market and financial market) in the field of ideas and in the training of human resources.

LECTURERS

The lectures on which this publication is based were given during the First International Seminar on Housing Finance, organized by CIEDESS in September 1993, by the following speakers:

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Translator's note:

"Commercial engineering" involves studies in economics and business administration.

The SURNAME of each lecturer is printed in capital letters.

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CHAPTER I**THE OVERALL INSTITUTIONAL FRAMEWORK
OF THE CHILEAN SOCIO-ECONOMIC SYSTEM***José Alberto Bravo***INTRODUCTION**

Historically, the social security sector has been of great social and economic importance, its dynamism and potential varying according to the methods adopted in administering it, and it may be observed that it has gradually become a lever for the progress of individuals and families, which reaches much further than simply ensuring minimum living conditions in terms of health, pensions, and social and distribution services.

The magnitude of the funds involved and the importance of the services rendered make it vital to ensure that these constitute a motor to stimulate development. It is only fair to recognize that this is not what has usually happened. On the contrary, it has been common for inefficient or ill-conceived mechanisms to be utilized, with consequent loss of opportunity and productivity. Even where specific objectives are achieved, social security may constitute a brake on progress if it is not well channelled, and even better managed. The experience of history offers numerous examples of this, as does the present situation in Latin America in general and Chile in particular.

The challenge is enormous. The existence of services and products related with the social security systems, and of companies and institutions which generate them and go beyond the basic levels laid down by the law, indicate that the limits of this sector are not fixed. On the contrary, they continue to move, both qualitatively and quantitatively, together with the economic, social and cultural development of the population, and this should give rise to a constant process of adjustments and corrections to these social security systems. This is happening with the new, extended services connected with recreational and holiday activities, job training and re-training, financial services, and of course, housing.

Access to housing occupies a special place in the public and private concerns of many American countries, since home ownership radically changes people's perception of their dignity, their role in society and their family's prospects of development.

In today's modern economies, the private sector bears a very large quota of responsibility for the achievement of positive results in the community. This was understood at an early stage by the Cámara Chilena de la Construcción, which took on a decisive role in creating and maintaining a broad, complete social network made up of 14 institutions, plus their subsidiaries, which directly serves about 24% of the country's working population, through a widely diversified range of services in the areas of family and social services, housing, health, pensions, technical and professional education and training, social action, recreation and culture.

Housing finance systems, as will be seen in detail further on, are being built up in Chile on the basis of an intensive use of market mechanisms, notwithstanding the State's role in such relevant aspects as ensuring that these are efficient and fair.

Making the most of the best experiences in the structure and management of markets, and incorporating advances in financial technology at the right moment, are actions which undoubtedly encourage the development of the country and lead to high productivity in the housing sector.

In this sense, Chile is at a very interesting stage in the maturing of its housing finance systems and is on the way to launching new mechanisms of accessibility and financing in this area, such as residential leasing and the securitization of loans, instruments which accentuate the participation of the private sector in financing housing directly for the segments of the population with the lowest income.

THE OVERALL INSTITUTIONAL FRAMEWORK

In a brief synthesis of the overall institutional framework of the Chilean socio-economic system, where financing for housing is inserted and is being developed, the first point to be underlined is the stability of the economic public order achieved by the country, characterized by a market economy open to the outside world, with non-discretionary, generally applicable rules, even for the treatment of foreign capital. This new order began to be set up with structural reforms in 1974, and the task has continued without interruption, even during the two international economic crises and the change of government from a politically

authoritarian and economically liberal regime to the centre-left coalition at present in office. For anybody who knows the Chilean situation, it is clear that the basic rules of the economic system have the majority support of the political parties and public opinion in general, and this may be the country's main asset in its determined advance along the path of development.

The modernization and deep transformation of Chilean society in the past two decades has not been an easy process. It must be recognized that there have been high costs both in the working and business sectors; for producers and consumers. A politico-technical leadership which gives priority, consistently and without quarter, to economic policies with no popular appeal, often implies costs in the short term in order to achieve long-term objectives. It also implies, however, treading a path full of difficulties, in which circumstantial political considerations provide a constant temptation to deviate from the correct course.

We are convinced that it is quite possible for Latin American and Caribbean communities to obtain favourable results through renewed socio-economic systems. It should not be thought, however, that such results can be achieved simply by introducing some sectorial structure or other in isolation; the policies must be applied completely and coherently and must involve all the components of the socio-economic system, including of course those social sectors which, in addition to their intrinsic importance, generally contribute a significant proportion of the funds.

A large dose of political stability and confidence are also indispensable requirements. It is fundamental that those who share the new currents of economic and social modernization should promote the systematic, longterm task of convincing wide and varied circles of citizens of the enormous benefits which the changes will bring.

Chileans do not forget that until the beginning of the 1970s they had one of the most closed, state-run socio-economic systems in Latin America, with enormous distortions and artificial, regressive transfers of wealth. Chile has been capable of replacing this scheme with one whose main aim is to shift the power of decision as far as is possible from the State to individuals, who are called upon to manage their own destinies. A surge of enterprising spirit may be observed, and a growing confidence in their own abilities, complemented by an appreciation of efficiency in business and professional circles. At the same time, the gradual formation of a majority opinion may be seen, which places value on the importance of public policies to balance society's efforts to achieve the

joint aims of income redistribution in the present and investment for growth in the future.

All the above goes hand-in-hand with a general awareness that the social aid of the State needs to be directed to the poorest sectors of the population.

As in every piece of work, there are still important sectorial aspects that need further advance; areas which are confused, or immersed in old schemes which are precisely those with the greatest concentration of problems. However, the new way of approaching these, causes one to look with optimism for the achievement of solutions and there is a sense of certainty that we will continue along the correct path. An example illustrating this change is the result of a survey carried out last year, in which all segments of the population, including the poorest, indicated education and personal effort as the main causes of personal progress. Only a tiny minority attached importance to State aid.

This cultural change has taken place as the population has been able to prove the benefits which accompany the new institutional system, and this has reinforced and given continuity to the modernization process, broadening and consolidating the majority support which today upholds the system.

In synthesis, the institutional system is founded on certain principles which are clearly recognized by the community, such as:

- the need to maintain a macroeconomic balance, which means financed fiscal spending and a healthy relationship in external accounts;
- free, fluid markets, with free entry and open competition; openness to the outside world, stable, non-discriminatory rules for the private sector; objective, technically-prepared regulations for those markets with natural monopolies; and flexibility in labour law.

Within this framework, the State has no place in productive-type activities, though it has a subsidiary and regulatory role of enormous importance. It should be pointed out however, that in Chile the State still has a significant presence in certain areas of production. One would visualize that this state of affairs corresponds to the remains of historical situations and that debate will lead in all probability to the discovery of solutions more in accordance with the needs of the country. This should obviously mean the complete, final withdrawal of the State from that type of activity, thereby releasing funds to be invested in social development

It must be recognized that the privatization process started by Chile has lost momentum, unlike what has happened in other countries of the continent which, although they began much later, are showing far more significant advances and breadth in the process.

On the other hand, the State supports the training of human capital, contributing funds for the benefit of the middle-to-low sectors, with private operators, some profit-making and some not, as the executors of their education and training effort; i.e. a scheme in which society strongly supports the training of human capital by means of the state financial contribution and the execution of the programmes by private companies. All this, with the aim of facilitating the country's insertion in a global economy which places a high value on knowledge and information. It is therefore of the utmost importance that this investment take place, since it has bearing on productivity, the good use of new opportunities, continuing social progress and the general development of individuals.

In this respect there is a subject which is not yet finally resolved, and which would seem to be crucial to the continuation of this economic and social development. It concerns the form in which state aid should be channelled to particular sectors, and the choice of the most efficient option; i.e. to subsidize demand or to subsidize supply. If one evaluates the case of financing for housing, in which the decision was taken to opt for subsidizing demand, it may be clearly observed that the results have been successful, in contrast with what has happened in the health sector, where they have continued to subsidize supply, maintaining services which have been very poorly rated by the population, both in the last government and this.

For systems of financing for housing, it is particularly important within this general framework that there should exist a solid capital market, in which suppliers and demanders can trade the multiplicity of instruments representing long-term debt, such as those generated by the housing market, under market conditions.

It is the task of this capital market to generate the agents and instruments which will make it possible for financial resources to be created and built up for trading between parties and periods, without detracting from the subsidiary action of the State in providing funds in insufficiently developed markets.

In Chile the creation of a pensions system based on individual capitalization and private management has been especially relevant as a basis for the development of the capital market, both because of the size of the funds which are accumulated and the attraction of external capital

which occurs, and the generalized technological modernization of business management which goes along with it. It is thought that this experience is especially valid for the majority of countries which do not have a modern, solid capital market. The pension funds belonging to working sectors in Chile now represent 35% of the GDP, a share which will rise to 67% over the next 20 years, even supposing that the economy grows at a rate of only 5% per annum.

In this financial market the main task of the private sector is to distribute funds to the client and subsequently recover them, generate instruments to facilitate the community's financial saving, and provide other services directed towards satisfying the needs of companies and individuals.

The fact that the State adopts the role of moneylender to direct clients means that the system inevitably obtains bad results, since, on the one hand, the detailed operational aspects of its functioning are incompatible with state structures, and on the other hand, it is both easy and attractive to avoid the essentially technical factors which must take priority in the adoption of decisions to do with granting and administering finance. Further on the reader will be able to appreciate that the empirical evidence in this respect is overwhelming.

More than this, the participation of the State as an operator produces a not inconsiderable impact on the markets, applying a brake to their growth and development. In effect, the State acts as a disloyal competitor or creates expectations that it will act as one. This fact is considered by private institutions to be a very high risk and in some cases an incalculable one, and this obviously means that such institutions do not enter, or withdraw from, activities where the threat of state competition exists.

The situation is different in the case where the State can provide funds through the second-level banking mechanism, which has worked effectively in Chile in recent years in the development of financial services for small firms.

Some especially important aspects to enable these capital and financial markets to fulfil their vital social function satisfactorily are:

- Freedom to compete and freedom in prices, so that funds may flow and be assigned correctly.

- Legislation and regulations which encourage operators to behave responsibly. Particularly important are the rules regarding diversification of risks, provisions, rules for matching, etc.
- Agile, effective supervision, with the object of avoiding undesirable situations. It is worth pointing out that Chile's institutional weakness in this fundamental aspect proved very expensive in the 1982 crisis.
- Reliable, timely financial information, and an efficient system of risk-rating.
- Development and interconnection of secondary markets.
- Concrete savings incentives and constant promotion of laws encouraging it.
- Extension of economic culture to the whole population. To achieve this, a good, close permanent relationship between authorities, economists and the press is indispensable.
- The authorities' willingness to introduce timely legal changes to facilitate the incorporation of new institutions and instruments to the financial market, as this becomes more sophisticated and new needs arise.

To the important advances obtained in this sector should be added such opening of the capital and financial markets as may be necessary for them to be fully integrated into the world. The fact of our not having taken more decisive steps in this direction is interpreted as an intellectual bias against freedom in these areas, a bias which is still present due to decades of closed economy and the consequent crises in our limited interchange with the outside world. Another factor which may be contributing to delaying this integration could be a certain reticence on the part of the authorities to extend the economic freedom which is so closely linked in this scenario with full integration with the international markets.

Since Chile has succeeded in developing healthy free markets in various areas of its economy, the restrictions to the financial flow with the outside world seem inconsistent with the rest of the current institutional order, preventing more funds from being channelled to those sectors, and consequently imposing limits on much faster economic growth and complete satisfaction of the demand in these markets. This position, which has been questioned by distinguished analysts, will no doubt be overcome by debating the ideas under discussion.

Chile considers that it has significant contributions to make, especially in subjects related with residential financing, but believes that it also needs to learn through exchanging ideas and working together with other nations.

CHAPTER II

HOUSING POLICY

Alberto Etchegaray

INTRODUCTION

Man began to live in cities about 5,500 years ago, thereby expressing his desire not only to shelter in a house to protect himself from the inclemencies of the weather and external harrassments, but also to interact with his fellow-men in a common space - the city.

Over the past 100 years, the world of men has been changing with incredible speed into an urban world.

Towards the end of this present decade humanity will reach a critical point, demographically speaking: for the first time in history, more people will be living in cities and their environs than in rural areas.

The French, who are renowned for their ability to put names to historic situations, say that we are living in an "Urban Civilization".

According to a World Bank report, some cities in Africa are growing at a rate of 10% per year, which is the highest rate of urbanization ever recorded. On the other hand, it is worth mentioning that Latin America has the greatest urban concentration in the world.

* Between 1950 and 1990, world population rose from 300 million to 1,300 million inhabitants (4% per annum) approximately.

Between 1990 and the year 2000 the cities of developing countries will add 600 million inhabitants to their present population (2/3 of the total rise in world population). In Chile about 82% of the population lives in urban areas.

By the year 2000, 17 of the 21 cities with more than 10 million inhabitants will be in developing countries.

Mexico City at present has 20 million inhabitants and Calcutta 12 million.

This accelerated urbanization process has produced terrible hardships, beyond all comprehension, but in spite of this, cities continue to be the cradle of creativity and greatness in civilizations.

It is for all the above reasons that the dwelling-house, symbol and basic element of a human being's skill and his insertion in city or rural environment, acquires fundamental importance as a factor of a country's social and economic development.

SOCIAL GROUNDS FOR EQUITY IN A HOUSING POLICY

All housing policy must fulfil two requirements if it is to be defensible as time goes by; it must be both socially equitable and technically and economically efficient.

a) The right to housing

Within the broad field of social and economic rights, the right to housing, already codified in the Universal Declaration of Human Rights in 1948 (Clause 25 N°1), forms an important part of the aspirations of wide sectors of modern societies. A home, seen as an indispensable possession, allowing other fundamental rights to be enjoyed, has for many years been considered an essential part of the international system for the protection and promotion of the rights of man and of the family.

The concern of the International Community for this right was expressed through the organization of the "International Year of Housing for the Homeless" in 1987, as a means of stimulating and sensitizing governments and non-government institutions round the world, regarding the urgent need to make human and material resources available in an attempt to solve the acute housing deficit.

Since we are aware of the huge housing shortage affecting Latin America, the implementation of housing policy should tend towards transforming people's right to have decent housing into reality. It seems natural that each family should need and aspire to a roof under which to shelter and live, and a modern society should guarantee this for all its inhabitants. It is dangerous, however, to emphasize only this right, without reference to its counterpart, namely the obligation of the person who receives a housing solution, especially in those countries where it constitutes a real privilege for the beneficiary, due to the dearth of such solutions compared with the demand. So then, the first obligation of the beneficiary is to fulfil the economic commitments entered into in

connection with the acquisition of his home, and to maintain and collaborate with the development and improvement of common spaces for the benefit of the community.

b) Preferential attention for those in extreme poverty

The most painful scourge of current socio-economic reality is that demonstrated by the extreme poverty and indigence in which a large proportion of the peoples of Latin America live today. This is concentrated in the first quintile of income of the population, and is often found also in the third decile. Its most obvious manifestations are the precarious health and nutritional conditions of these segments of society, which present high indices of malnutrition and infant mortality, a minimal level of schooling, sometimes illiteracy, and, what is very important, precarious housing and frequently gross over-crowding, realities which corrode the national soul like a cry of anguish in these times.

In the words of Pope John Paul II, "the poor cannot wait", and for that reason they should, without any doubt, be the most urgent concern of governments. For this reason, it is a governmental duty to design programmes with at least the following characteristics:

- they should generate sufficient housing solutions to prevent the problem growing;
- they should implement initiatives which take into account the participation of the future beneficiary, including his contribution, however small it may be, since this is the only way to achieve a dignified solution;
- they should provide solutions which mean, at least in the first stage, giving the beneficiary a site with access to all the basic services of water, electricity, main drainage and paving, and definitive sanitary installations.

It may be said that in Chile equity in the distribution of public funds is really beginning to be seen, since special consideration is given to the poorest sectors of the country when these funds are allocated, with the

result that today more than 60% of funds for housing investment is destined to these sectors'.

However, every policy has to take into account that this priority cannot be exclusive, because if it is, the target group of such a policy will be dislodged from its housing solution by the social group with slightly higher income, which by renting or future purchase, will take over the housing solutions intended for the very poor. For this reason, it is very important to make a permanent study of supply and demand in each of the social sectors, so as to be able to structure programmes which are as efficient as possible for the community as a whole.

c) Redistribution of income

Although redistribution of income is not a fundamental element of housing programmes, it is a desirable by-product which is achieved by giving most to the person who most needs it, i.e. giving greater state aid to the very poor.

This can be achieved by precisely determining and quantifying the total number of subsidies granted by the State to lower-income groups, whether these subsidies arise from preferential interest-rates applied by the State to the mortgage loans of these groups, or from administrative services of different types which the State provides for the most needy.

The above permits state housing policies to be designed without self-deceptions, allowing the population to understand clearly the benefits they are receiving.

However, it must be said that Chile is still a long way from achieving total consistency in this area.

* In Chile the part of the budget dedicated to the very poor by the Ministry of Housing and Town-Planning has evolved as follows over the past few years:

Year	Percentage
1989	47
1990	42
1991	59
1992	60
1993	64

d) Quality of life

A housing policy can be sustained long-term if it is situated within a framework of urban development. This is an inescapable, urgent reality at this present time. Cities continue to expand incessantly with a natural growth caused by high birth-rates and migration from the country to the city. This brings with it an increase in pollution, a change in the destiny of vast tracts of arable land, often of first-rate quality, growing vehicular congestion, and an increase in delinquency and drug-addiction; in synthesis, a considerable deterioration in the quality of life for the inhabitants, especially those living in poorer neighbourhoods.

For this reason, the subject today is becoming crucially important, since one cannot permit different types of city, with all kinds of segregation, to exist and proliferate within the same city boundary.

Thus, the urban development of human settlements must include adequate planning and construction of public places (streets, parks, and community amenities), to provide the development and social interaction which is hindered by the small size of the homes. It should also include the densification of central areas, which are frequently neglected today, producing great wastage of resources due to poor utilization of existing infrastructure and forcing the growth of more infrastructure and transport services.

It is worth mentioning in this respect that the State is gradually advancing towards achieving equitable distribution of its resources with the aim of improving the quality of life in poorer sectors by such practical actions as surfacing urban streets and creating pavements, city parks and community amenities*.

* The evolution of contributions to the Ministry of Housing and Town-Planning in Chile for the execution of works in urban areas has been as follows:

(Figures in Millions of Pesos)

Year	Urban Paving	Urban Road Services	Community Amenities	City Parks	Total
1990	10.925	5.126	382	-	16.431
1991	13.711	3.674	929	-	18.314
1992	16.748	5.171	1.639	1.195	24.753
1993	20.250	9.803	2.128	2.089	34.270

Nonetheless the challenge of financing is not yet resolved, especially as regards collecting the contribution of the poorer people, and private investment.

e) The concept of housing

Finally, it must be emphasized that a home, by its nature, represents an asset which occupies an relevant place in the concerns of the population. It is of first importance as protection against the rigours of the weather, for social interchange, for the use and development of the family, for the improvement of social standards, for health and education. It is a long-term, tradeable investment, and finally it is an asset which converts its owner into a person who participates actively in the economy which rules his life, and gives him back something which is essential for any human being, - dignity.

ECONOMIC AND TECHNICAL GROUNDS FOR A HOUSING POLICY

The Chilean housing policy is essentially characterized by a scheme of housing accessibility which has incorporated the private sector as a major protagonist, under the so-called "Subsidization Principle". This consists in the State limiting itself to its own tasks and the private sector taking on all remaining roles.

Under the Chilean system, the above may be seen in the fact that:

- Financing for homes is provided by the initial effort of individuals (savings), the direct contribution of the State (subsidies) and access to the financial market (mortgage loans); and
- The promotion and planning of projects and the construction of housing estates corresponds to the private sector.

In consequence, the State has kept for itself the following primary obligations:

- Urban development
- Attention for the neediest sectors (directly, if the private sector does not take action)
- Formulation of regulations and norms and
- Support for the creation of a competitive market, by financing part of the demand by means of subsidies.

These aspects are dealt with in detail below:

a) Promotion of saving

Saving is an irreplaceable way of arriving at economic development. It generates productive investment and encourages conduct and attitudes in people which have evident social repercussions.

Saving should be an effort shared by the public and private sectors. From the point of view of the public sector this is achieved by making the inescapable tasks of the State as efficient as possible, in other words, by achieving the same results or better with fewer resources. In the social sector, of which housing is part, this is even more evident and quantifiable; for this reason it may be said that an efficient housing policy contributes towards greater saving in the economy.

Home savings consist of that amount of money which a family puts aside from its normal consumption or other uses to pay part of the value of the housing solution it has applied for.

It may be said that the Chilean housing programme has been a permanent stimulus to popular saving, giving it a safe, liquid, profitable channel and rewarding it with the state contribution known as subsidy.

b) Freedom and the inclusion of the individual in the economic system

As has already been mentioned, saving generates conduct and attitudes which have evident social repercussions, and the same should be true of mortgage loans which link people through the fulfilment of long-term monetary obligations.

The liberal, or social market economy, whatever one calls it, is socially justifiable if it succeeds in incorporating the population on a large scale, as has happened in the developed countries; however, that justification is less clear for those sectors which remain on the fringes of growth and development, or live within an informal economy parallel to the activities of the rest of society. This phenomenon is known in economic literature as "dualism".

Without any doubt, the fact that people with very limited resources can occasionally have access to banking services, for example, is in itself an achievement which goes far beyond the transaction itself, which may even be uneconomic. This is not always understood by the financial system, which sometimes fails to give access to these incorporations, due perhaps to short-sighted vision or too much involvement in harsh everyday competition.

Neither is this really understood by the public sector, which refuses to recognize that these operations may often be unprofitable, and believes that doing them directly is more economical, simply because they do not identify or clearly specify the costs which are involved.

As a result of both positions, which fail to recognize certain fundamental facts, the Banking system has not involved itself in extending long-term mortgage loans to people with very limited resources, thus excluding vast sectors of the population from economic reality and literally handing them over to the State, which has a long tradition of social aid. The State then manages to solve the problem by improperly incorporating more subsidies.

This is the main weakness of the Chilean system in this area.

Nonetheless, as regards freedom, which is a difficult concept where social problems are concerned, there have been interesting advances. There is now:

- Free choice as regards which housing programme a person wishes to join,
- Freedom to choose the institution in which to save,
- Freedom to fix the term and amount of the operation in certain programmes, and also to apply individually or collectively for these, and finally,
- In most of the programmes, freedom to choose the home and its location.

c) The contribution to the country's product, employment and investment

The construction sector in Chile, as in other countries, is very important. It generates 5.9% of the GDP (according to the 1992 figures) and, as is well-known, also has an important influence on other productive sectors such as industry (intermediate goods for construction), transport, services etc..

In a study carried out by the Banco Internacional de Reconstrucción y Fomento (BIRF) called "Housing: Enabling Markets to Work" it is stated that housing represents between 2% and 8% of the GDP and gives rise to housing services between 5% and 10% of the GDP.

Construction produces direct employment for over 331,100 people (May 1992) including all its areas: infrastructure (road networks, irrigation systems, ports, airports etc.); industry, commerce and financial establishments; services (health, education, sports etc.) and housing.

The results of various studies carried out in the country show that the sectors whose products are in greatest demand for construction are the following:

- Non-metallic mineral production
- Manufacture of metallic products
- Basic metal industries
- Timber industry
- Oil refineries
- Manufacture of other chemical products
- Services to companies
- Machinery, equipment and electrical accessories
- Stone, sand and clay.

70% of the GDP in the construction sector corresponds to housing.

On the other hand it is worth pointing out that investment in construction corresponds to the total value of production in the sector, in other words the added value of this, plus intermediate purchases, which represent about 50% of the total investment.

Proving and highlighting the economic importance of the construction sector is an essential task, if one's aim is to persuade the State to dedicate sufficient funding to it.

Some countries have successfully used the building of houses as the main motor to boost the economy, especially in periods following depressions. (In the BIRF report quoted above, it is pointed out that this was Chile's case in 1975.)

Unfortunately, in Chile we do not have precise, detailed figures on this subject, since although the 1992 census determined that there were 3,260,674 housing solutions in existence for a population of 13,231,803 inhabitants, which would imply one home for every 3.75 persons, there is no standard of separation available to determine with any degree of accuracy which homes are worthy of the name and which not.

In calculating the deficit and estimating the number of new homes required annually, there are various influencing factors whose importance is not easy to quantify. These are as follows:

- Informal construction, both of complete buildings and of extensions, an area which some analysts believe to be almost as much as 20% of the formal production*.
- Demolition sites, obsolete constructions and those whose use has changed, all activities where statistical evidence is unreliable.
- The number of families possessing a second home for recreation and rest, though this factor is less relevant than the previous two.

In general, considering other available information, such as the number of active savings accounts and applicants listed in the housing subsidy systems, the total housing deficit has been estimated at 800,000 units, of which 200,000 would correspond to deficiency in quality, and the remaining 600,000 would be those missing.

It also seems important to take into account the causes of the problem and the form it takes at this moment in time. The reason for the problem is fairly clear, since the level of housing construction in Chile in the past decades has been lower than the net number of families constituted during the period.

In order to freeze the housing deficit, it is estimated that no fewer than 80 to 85 thousand units would need to be built every year, and this has been taking place in the country only since 1989.

The housing-shortage phenomenon has been exacerbated by the large-scale migrations from the country into the towns in the first stage, and later from small and medium-sized urban centres into the large cities.

* The home building approved and started by the public and private sectors in Chile as regards new buildings and extensions in the past six years was as follows (not including Progressive Homes and the Neighbourhood improvement Programme):

Year	New Housing			Extensions	
	Number	Total Area m ²	Average Area m ²	Number	Total Area m ²
1987	60.316	3.554.110	58,92	8.594	245.709
1988	77.501	4.013.977	51,79	7.938	217.375
1989	83.891	4.826.912	57,53	8.021	244.858
1990	78.904	4.495.370	56,97	6.578	237.262
1991	88.481	5.212.547	58,91	7.457	248.726
1992	105.646	6.875.350	65,08	8.588	288.951

The capacity of these cities to absorb such large-scale contingents has been overwhelmed and this has given rise to the formation of the so-called peripheral belts of marginal development, whose most visible characteristic is the precarious nature of its habitat.

In Chile the housing shortage has shown itself very obviously in the phenomenon known as "allegamiento", which simply means the housing situation of families which share the house or site of other people, who may be relatives, either free of charge or by renting. They occupy rooms in the house, or a wooden room built at the back of the site, thus producing gross overcrowding, saturation of the sanitary facilities, densification of the poor neighbourhoods and medium-to-low sectors, resulting in great deterioration of buildings and urban services. This is the clearest manifestation of the present housing shortage situation.

It can also be shown that there are enormous differences in the quality of life or habitat in the different neighbourhoods of Chilean cities. Large sectors are cut off from the benefits which towns should offer their inhabitants; i.e. provisions for health, education, leisure, green areas and communications, among others.

While facing this, it is also evident that, due both to political and social pressures, though not for reasons of equity or technical efficiency, State investment has been concentrated on urban zones, to the detriment of the rural areas. Within these areas, which suffer from unequal distribution of space, a growing deterioration in the poorest residential areas has occurred.

In brief:

The way which has already been trodden by the country, personal experiences and the analyses which can be made, lead one to determine certain key elements in setting up a housing policy which is fair and can be maintained as time goes by; in other words, a just housing policy which is accepted by the population, which is economically viable and which encourages development.

For this, certain requirements must be fulfilled, and these are tentatively listed below:

- a) The housing problem has to be tackled as a national problem, which all sectors of society need to be aware of; i.e. the public sector, the private sector and the population in general.

- b) Housing policy must be consistent with the existing socio-economic system.
- c) The role of the State must be reliable. From the point of view of social justice, there must be norms governing access or eligibility for benefits, and these must be objective and impersonal. From the economic point of view, state stimulus should energize the markets, regulating them but not intervening.
- d) State action must be efficient, allowing and promoting free, competitive private activity in markets with a plurality of operators and instruments. On the other hand the costs of its action through subsidies should be spelt out, preferably directly to the beneficiaries.
- e) Housing policy should constitute a wide, integrated network which reaches all social sectors, formal and informal, according to the merits, needs and possibilities of each person. In this way, options can be provided from the most minimal (sites with basic services in Chile's case) to complete homes.
- f) Housing policy should be long-term, and should be flexible enough to allow for gradual changes. The stability thus achieved is essential to the efficient performance of all the participants (State, private sector, population).
- g) The private sector, apart from being efficient, must act in a specialized form without creating vertical integrations. This specialization should be manifested at least in:
- Financing supply and demand in housing
 - Production and distribution of building materials
 - Design and construction of homes
 - The organization of housing demand
 - Property promotion and brokerage.
- h) The person aspiring to a home must make an effort to obtain it, so advance saving is the first condition for healthy accessibility and eligibility. For this reason saving must be encouraged and protected. Likewise, the person receiving a housing loan must pay it off regularly.
- i) Providing homes for the population must be a priority objective in housing policy, together with the development of actions designed to increase the number of new home-owners; at the same time, renting

should also be encouraged as a positive element in attracting new investment to the sector.

Finally, it may be concluded that housing today is a subject of wide-spread debate and political concern at every level, a fact which is shown not only in the governing superstructure of society but also in popular base organizations.

The marginal belts existing in the cities of Latin American countries cry out urgently for housing solutions, battering the consciences of the governing classes with the evidence of their poverty.

Curiously enough, this is beginning to be an important problem in developed countries too, as is the case of the homeless in the United States.

This reality has a great effect on the quality of life in both urban and rural sectors, and brings with it great instability for the democracies which suffer from it.

Eliminating both the housing deficit from urban populations and the insufficiency in quantity and quality of homes in general, will be the great challenge for Latin American societies in the twenty-first century; the task of preparing to discover suitable solutions, by facing the problems in a manner which is efficient, technical and socially equitable is therefore inescapable.

Finding an adequate solution to the challenges presented is also a complement to actions of ethical motivation which are fundamental to society, namely the progress and welfare of the family.

CHAPTER III

THE RESIDENTIAL PROPERTY MARKET

Eugenio Velasco

1. INTRODUCTION

It is quite impossible to speak about the property market, the sale-prices and risks of the business, about marketing and purchaser profile, without mentioning such subjects as mortgage loans in their different forms, the secondary market and institutional investors, housing subsidies based on demand, interest rates and the country's growth.

The structure of the residential property market is a subject with a definitely commercial connotation, and is therefore a subject of interest to the business sector. Because of this commercial aspect, if one is to acquire an adequate knowledge and feeling of the situation at present being experienced in Chile, it is necessary to look back at what the Chilean property market was like in the past. Certain lessons have been learned from that past, which it seems sensible to explain, so that it can be evaluated and compared with the problems existing in other countries.

2. FIRST PERIOD

With regard to the financing of housing, the name "First Period" will be applied to the years prior to 1976, since the foundations of the present system were laid in that year, as will be explained below.

This first period may be divided into two notably different stages: the first of these was characterized by high inflation, a restricted demand channelled almost entirely through social security institutions, and an even more restricted supply, also channelled through these same institutions. The second stage is that in which the so-called "National System of Savings and Loans" appeared on the scene.

In what we have called the first stage, mortgage financing occupied a prominent place in Chilean financial intermediation; thus in the thirties the mortgage bank represented nearly 50% of the banking system's

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placements, through Mortgage Bonds. These instruments were issued in pesos with nominal interest-rates which always fell below the rise in the cost of living. This meant in practice a negative interest-rate in real terms - a concept which nowadays all Chileans grasp perfectly but at that time was virtually unheard of. Investors' capital therefore grew smaller and a transfer of wealth in favour of mortgagors was created. The market, inexorable judge of all commercial activities, ended up by burying the system.

Later it was the social security institutions which channelled funds to the property market. They collected the numerous compulsory social security contributions, which by law had to be set aside to pay old-age pensions (retirement pensions) in the long term and invested most of them in building large housing projects which they then sold to affiliated workers, issuing mortgage loans at nominal rates of interest too. By doing this, an undesirable transfer of wealth to mortgagors occurred once again, eroding the real value of the accumulated funds and incidentally affecting the value of pensions. This created the need for growing contributions from public funds, which in turn fed inflation.

It took thirty years to arrive at the conclusion that the worst enemy of property development is inflation.

Various generations of Chileans have had to suffer the negative consequences of this unwanted transference of wealth through the miserable retirement pensions they have received, because it produces negative rates of interest in real terms, while favouring only the mortgagors.

In view of the situation which had been created, the social security institutions had to withdraw from residential financing, thus producing an increase in the existing housing deficit and also a decrease in economic activity in general.

In the years 1959 and 1960 the government of the period found a way of solving this problem by creating tax incentives on supply, and other even greater ones on demand, contained in the now famous Decree having Force of Law N°2 - 1959 (DFL2), which established a system of monetary correction for long-term operations, with indexing of asset and liability operations. The System of Savings and Loans, which has already been mentioned, began functioning at that point, in what has been called the second stage of the first period, and, as has been said, its fundamental characteristic was the indexing of the System.

The new System of Savings and Loans, which developed an important role in collecting public savings, revitalized housing activity and ratified the system of readjustability indexes, which have formed the basis of the subsequent success of the new residential financing systems which came into force from 1976 onwards.

It has been demonstrated that in the housing field, at least in Chile, high rates of inflation, which have been a chronic problem in Chile, and have unfortunately spread like an epidemic in the majority of Latin American countries since the sixties, can be weathered satisfactorily endured with the systems of indexing which have been brought into use. This is not to say that inflation is unimportant, or does not matter to economic agents. In fact, high inflation rates gobble up a considerable portion of wages and salaries, and although these may be improved by periodic readjustments or the signing of collective agreements between workers and employers, this is never enough to compensate for the sums lost day after day as a result of deteriorating income. It has been proved empirically that demand for housing is notoriously sensitive to rises in the indices of inflation. The market perceives them as being of greater importance even than the rise in interest-rates.

However, in countries with high rates of inflation the indexing of savings and loans is vital to maintain the functioning of the system. Otherwise there would be no people with capital prepared to invest in the business, and this would lead to its demise, as has occurred with other systems in the past.

The System of Savings and Loans, which functioned reasonably well in Chile over a long period, representing 80% of private financing by the year 1970, finally collapsed between 1976 and 1978.

Apart from reasons such as the political and economic uncertainty which occurred in Chile at the beginning of the seventies, and the breakdowns in flows which this caused in the system, perhaps the fundamental reason for its final failure lies in the fact that, in practice, operations in the long term were being financed with funds collected in the short term.

3. THE PRESENT SYSTEM OF RESIDENTIAL FINANCING

The structural reforms introduced into the economy from 1976 onwards, with the aim of modernizing it and moving it towards a free market scheme, while at the same time re-ordering it internally, meant that interest-rates were set free. The banking system evolved into a multi-bank scheme in which not only mortgage banks but also commercial

banks were authorized to carry out all the financial intermediation operations established in the corresponding legislation, including the granting of mortgage loans. The system of adjustable savings had already been authorized.

In 1976 the Banco Central, with contributions from AID, ordered a study on a new system of residential financing from the University of Chile. This was implemented in 1977 and is practically the same as the one in force at this present time.

In overall terms, the financing of housing is carried out using various combinations of private and public funding, varying from operations financed entirely with private funding, to those where there is a government contribution (to be analyzed below) which may constitute a significant proportion of the total value of the transaction.

This system is based on the extension of readjustable long-term loans, running from eight to thirty years, which are granted in two different forms: Mortgage-Backed Certificates issued to the bearer, or Endorsable Mortgages.

The Certificates (MBCs) are issued for the same nominal amount and with the same term and interest-rate as the loan underlying the operation which is extended to the mortgagor. To cash the MBCs, and to be able to use them to finance the purchase of a home, they must be sold in the secondary market, an operation which is carried out on the Stock Exchange. These instruments are very acceptable, because they are long-term investment instruments with bank and mortgage guarantee, and this makes them into very suitable investment instruments for the Pension Fund Managers (AFPs) and the Life-Assurance Companies. These latter institutions have to match their long-term liabilities, such as old-age and disability insurance, with assets of the same characteristics.

Regarding their par value, the sale price of the MBCs on the secondary market is subordinated to the Internal Rate of Return (IRR) which the market is asking on that occasion. That is to say, if the IRR of the market is higher than the nominal interest-rate of the security, this will be sold below par, thus producing a difference which the mortgagor must settle in cash with the vendor of the house. If the situation is reversed, the securities will be sold above par value, thus producing a difference in favour of the mortgagor.

Experience has shown that the rise in the IRR of the market produces a penalty which is directly proportional to the difference between this and the nominal interest-rate of the security. The same is not true

however when the situation is reversed. The higher value of the security's nominal interest-rate compared with the IRR of the market is not rewarded proportionally by the demand.

Endorsable Mortgages are in their turn instruments which may be endorsed as many times in succession as desired, and unlike MBCs, they do not have the uncertainty of being traded on the secondary market. They are also very suitable instruments for the same institutional investors, whose buying capacity today is several times greater than the supply both of these instruments and of mortgage-backed certificates, with the result that there is an unsatisfied demand for investment instruments.

Although the legislation for Endorsable Mortgages dates back to 1960, certain reforms introduced recently in their regulations mean that they have been operating in their present form in Chile since 1988 and although commercial banks are authorized to issue them and in fact do so, their real impetus has come from new institutions created especially for the purpose, called Endorsable Mortgage Managers. Excluding loans extended by the Banco del Estado, these institutions in 1992 achieved an annual share estimated at over 15% of the total amount of loans granted for home-purchase.

At present five Mortgage Managers are operating in the market, and of these Hipotecaria La Construcción S.A., an institution belonging to the corporate network of the Cámara Chilena de la Construcción, has a volume of over 50% of the loans extended annually by this type of institution.

Both MBCs and Mortgages are expressed in an accounting unit which is readjusted daily according to the variations in the Consumer Price Index. This is called the Unidad de Fomento (UF), and its aim is to maintain the real value of the funds loaned, as time goes by. The UF is thus a kind of theoretical currency.

Speaking in more general terms, it may be said that the financing of the Chilean housing system is based on a free market, where the State, after various experiments, has concluded, quite correctly, that the building and supply of homes speed up rapidly when demand is vigorous and the saver, or investor, is guaranteed an adequate return in real terms.

The policies currently in force fulfil these objectives and they seek to stimulate personal and family saving to acquire homes, and to encourage investors to direct funding towards the sector.

4. THE SECONDARY MARKET

Although it has already been mentioned, it is worth repeating that among the characteristics of the present system of financing for housing, the existence of a strong secondary market, allowing free, fluid trading of the instruments created by the system, is of vital importance.

This secondary market is no more than the buying power of public or private commercial agents, individuals, companies and institutions, channelled through intermediaries which are authorized by law and strictly controlled. These are the brokers, who operate on the Stock Exchanges, where they carry out buying and selling operations in well-regulated public transactions, dealing in all kinds of negotiable instruments, including those to which we have already referred. In the same way, the buying power exercised by the institutional investors is also part of the secondary market. They do not pass through the Stock Market, but invest funds by direct transactions, governed by norms and dispositions given by the competent authority and inspected by established supervisory bodies, such as the Superintendency of Pension Fund Managers, The Superintendency of Securities and Insurance and the Superintendency of Banks, depending on the case.

In order for a powerful secondary market to exist, with capacity to absorb the supply of instruments generated by a large amount of construction, it is necessary for important financial resources to exist at the same time, and this has happened in Chile, not only because of the numerous national and international Investment Funds, both for property and chattels, but also because of the Pension Funds administered by the AFPs and the funds accumulated in the Life-Assurance Companies, destined for future use in paying old-age pensions.

In Chile it has been demonstrated that the growth in buying power of this type of negotiable instrument has been greater than the supply, and this has solved the shortage of funds produced in the market when it is the banks which have to resort to buying securities issued by themselves, in order to produce the liquidity needed by a buyer to settle the purchase of his home.

5. TAX INCENTIVES

The Chilean authorities have often shown a certain amount of anguish when considering the need to solve the housing shortage. This has never been calculated accurately, but is sizeable.

It is worth noting that the housing shortage in the country is arrived at by comparing the number of houses in existence with those which are theoretically necessary, an evaluation which includes qualitative as well as quantitative factors. Thus, what is considered to be an acceptable home today may no longer be one tomorrow, according to the degree of culture, and the expectations with which the country and the population value existing properties.

The granting of tax relief has been widely used as a tool to encourage the promotion of house-building. In this aspect the benefit incorporated in the previously-mentioned DFL 2 of 1959 regarding homes with less than 140 m² of usable space, is the only one which still exists in Chile.

This benefit consists in: exemption from inheritance tax, partial exemption from rates contributions or real-estate tax over a certain period and exemption from taxation on income generated by renting these properties.

There is no doubt that the above-mentioned tax incentive has had a positive effect in increasing the total stock of homes in Chile, creating an additional incentive to the demand and thus helping to give more impetus to the construction of housing.

6. MARKETING AND PURCHASER PROFILE

The different systems of marketing homes are intimately related with the profile of the purchasers. In Chile it is possible to distinguish between different kinds of purchasers according to the source of their funding, and this leads to different types of marketing systems being established.

After lengthy studies, the State decided that it would a good idea to include in the budget something which in fact it was already doing: paying off periodically some part of the unpaid loans of low-income mortgagors. In this way, and in accordance with the free market policies introduced in the seventies, it implemented a system of direct subsidy to demand, which is still in force. The amounts involved and the methods of awarding them varied according to the characteristics of the beneficiary; i.e. depending on his/her degree of need and poverty, his/her geographical location and the effort to save which he/she had shown previously. The number of subsidies, the amounts and the dates on which these are awarded during the year, are known in advance, and they are granted to a beneficiary once only in his/her lifetime.

The profile of one section of the purchasers, i.e. those possessing a state housing subsidy, depends in part on Chilean housing policy, which takes into consideration the demands occurring in the different regions of the country, including rural areas, when deciding where to give the benefit.

Depending on the form in which potential purchasers obtain resources to buy their homes it is possible to affirm, in a *sui generis* fashion, that there are basically two types of buyer in Chile: those interested in a "basic home" and those interested in a "market home".

To clarify this further, it is worth pointing out that housing subsidies are divided on principle into two types: those extended to people at the lowest socio-economic level, who can only opt to buy a Basic Home; and those given to people at slightly higher levels, who can opt to buy lower-priced Market Homes, with an upper price-limit. Within this second scheme there are three sub-systems: the Unified System (SUN), the Special Workers' Programme (PET) and the Rural System.

These last subsidies, once assigned to the beneficiaries, are presented in the form of a document called the Subsidy Certificate, issued in their name, which functions as a certified cheque on the Ministry of Housing and Town-Planning. This from the buyer's point of view is an additional resource towards the acquisition of his/her home.

The basic home is a type of residential construction in which the buyer has no direct contact with the builder, since it is the State, through the Ministry of Housing and Town-Planning, which is responsible for contracting the construction by the system of public bids. This Ministry pays the builder for the completed work, and then assigns the homes according to the subsidy mechanisms laid down in current regulations. In these cases the builder receives payment cash down, and his client is the Ministry. The sale price of these homes to the Ministry, though it is not fixed, nor exactly the same throughout the country, is considered for practical purposes to be equivalent to 220 UF, approximately US\$5,500.

It is worth underlining that the private sector plays a vital role in this system, since the Ministry fixes only the minimum characteristics of each home and the amount of funding available, leaving to the company the responsibility for the design and number of homes, and also occasionally their location.

Market housing may also be divided into two large sectors: that which is sold freely to buyers who have some sort of state subsidy, and that in which the buyers have no subsidy at all, in other words, they are completely free.

The distribution and amounts of the above-mentioned systems of subsidy in 1993 were as follows (projected figures):

Name	Number of subsidies	Average amount in UFs	Total amount of subsidies UFs
Unified System (SUN)	29,000	130	3,770,000
Spec. Workers' Prog. (PET)	16,000	90	1,44,000
Rural System	8,000	110	880,000

Nota: 1 UF is equivalent to approximately US\$ 25.

Table N^o 3.1 gives a break-down of the maximum sale-value authorized in 1992 per type of house, the average resulting from the subsidies awarded in each section, and the number of non-subsidized market homes built in Chile.

Type of housing	maximum sale-price UF	Average price UF	Maximum subsidy UF	Average Subsidy UF	Number of houses built
SUN:					
Category 1	400(1)	368	150(4)	139	12,543
Category 2	900(2)	625	130(4)	119	4,162
Category 3	2,000(3)	1,335	110(4)	101	841
Others					1,094
PET	360		90		16,218
Rural System:					
Individual	260		150		8,485
Collective	400		150		
Without subsidy					28,295
Total					71,638

Notes: (1) Project under discussion to raise this to 500 UF.
 (2) Project under discussion to raise this to 1,000 UF.
 (3) Project under discussion to lower this to 1,500 UF.
 (4) Project under discussion to lower this by 10 UF.

It may be deduced from an analysis of Table N^o 3.1 that there are cases in which the amount of the subsidy is low in relation to the value of the house. In these cases the granting of subsidies has little bearing on the direction of supply. The same cannot be said of the PET, nor of sections 1 and 2 of the Unified System, especially section 1, where the subsidy represents a significant proportion of the value of the house. In these

cases the granting of subsidies, their date and their geographical location are of decisive importance in the direction of supply.

The property promotor must know the number of subsidies to be granted, the amounts involved and the distribution of these throughout the year and throughout the country, in order to be able to programme his activity adequately and satisfy the demand produced by the beneficiaries of the subsidy.

Although Table N° 3.1 shows that the number of homes built in 1992 for buyers without state subsidy was only 28,295 out of a total of 71,638, in other words 39.5%, it is in this stratum that the greatest marketing margins occur, as also the greatest risks for the property promotor. For this reason it is interesting to analyze the factors influencing residential building in this area.

Before concluding this chapter, it is worth making a few extra comments regarding those buyers who supplement their own resources with state subsidies.

The buyers included in the PET System, the Rural System and section 1 of the Unified System, a total of 37,237 in 1992, constitute in some senses a captive demand, since the amount of state subsidy which they receive constitutes a high proportion of the value of the home, and therefore other economic variables are less important in their decision to buy. To this may be added the fact that a sizeable part of the present housing shortage is concentrated in these strata. This is an additional spur in deciding to buy and generally overcomes economic considerations which are common in buyers at a higher level, on whom employment and income conditions, interest and inflation rates and especially expectations of stability and growth in the country, have an important influence.

7. THE ECONOMIC SITUATION, INDICATORS OF ACTIVITY AND VOLUMES OF CONSTRUCTION.

The noticeable increase in the new homes market in Chile has been one of the signs of improvement in the country's economic situation over the past few years. To evaluate this process we will give a brief description of the trajectory of the main activity indicators.

a) Gross domestic product (GDP).

In the thirty years between 1959 and 1989, the average growth per annum of the GDP was 3.3%.

Between 1986 and 1992 its average growth was 6.66%.

b) Relation between investment and GDP.

Investment, which plays a key role in the economic evolution of the country, has been growing in recent years, increasing from 14.2% of the GDP in 1985 to 19.4% in 1992.

c) Consumer price index (IPC).

In order to analyze inflation over the last 30 years, it seems sensible to exclude the period corresponding to the government of Salvador Allende (1970-1973), since the extremely high indices of those years constitute a distorting factor.

Average annual inflation levels, grouped arbitrarily for different periods between 1958 and 1992, are as follows:

Period from 1958-1964 = 26.6% per year
Period from 1964-1970 = 26.3% per year
Period from 1979-1989 = 20.7% per year
Period from 1986-1992 = 18.8% per year

More detailed figures for the three variables mentioned are given in Table N° 3.2 for the period 1985-1992:

Table N° 3.2
Evolution of the main economic indicators

Growth Rates

Year	GDP		Investment in fixed capital		Variation IPC
	%	%(1)	%	%(1)	%
1985	2.4		14.2	17.7	26.4
1986	5.7	5.6	14.6	17.1	17.4
1987	5.7	6.6	16.0	19.6	21.5
1988	7.4	7.3	16.3	20.8	12.7
1989	10.0	10.2	18.4	23.9	21.4
1990	2.1	3.0	19.5	24.6	27.3
1991	6.0	6.1	17.8	22.3	18.7
1992	10.4	10.3	19.4	25.1	12.7

Note: (1) Data taken from the new version of the National Accounts prepared by the Banco Central de Chile.

There are, in addition, other relevant indicators both as regards the behaviour of demand and the growth in volumes of construction, such as the indices of salaries, of growth in employment and of growth in interest-rates. These variables for the period 1989-1992 appear in Table N° 3.3.

To give an example, it is interesting to analyze in this latter table the effect of the economic adjustment applied in January 1990, which is reflected in a marked slowing down in the growth of salaries and employment during that year, and a parallel increase in the average internal rates of return (IRR) of mortgage-backed certificates with a life of over 15 years, from 7% in January 1989 to 9.5% in January 1990. At the same time, the real placement rates for 90-365 day loans, i.e. rates measured over readjusted currency (UF), rose gradually until they reached a maximum of 16.5% per year in March 1990.

Table Nº 3.3
Certain indicators of overall and construction activity

Period	Quarterly GDP		Employment		Real wages		Interest rates	
	Overall	Construction	Total for country	Const. sector	Total for country	Const. sector	Placements of AIRR 90 - 365 days	M.B.C. x + 15 yrs
	% Variation compared with same quarter of previous year		Percentage variation in 12 mths				Real annual %	
J 89			6.4	30.4	3.7	12.6	8.1	7.0
F			6.6	26.7	4.2	12.4	8.2	7.0
M	9.8	13.7	6.3	27.9	4.1	11.2	8.4	7.0
A			5.7	23.7	4.7	6.9	8.3	7.1
M			5.4	17.3	3.4	4.6	8.7	7.5
J	12.2	10.0	5.2	11.0	0.9	2.3	8.6	7.5
J			5.1	9.6	-0.1	0.4	9.0	7.7
A			4.9	10.0	-0.1	0.3	9.4	7.7
S	10.3	16.7	4.8	12.8	-0.4	6.8	9.9	8.2
O			4.4	7.8	-0.6	4.1	11.1	8.3
N			3.8	7.0	0.6	10.8	11.5	8.2
D	7.6	10.5	3.7	8.3	3.1	8.7	11.7	8.4
J 90			4.2	7.6	2.8	9.5	13.6	9.5
F			4.1	2.4	1.6	11.3	14.9	9.4
M	5.5	9.5	3.4	-2.0	1.5	11.6	16.5	9.0
A			2.8	-3.1	1.2	13.3	15.3	8.9
M			2.1	-2.5	2.0	20.2	15.1	8.8
J	0.8	5.2	2.1	-2.1	1.7	19.1	14.0	9.0
J			1.6	-3.3	2.7	20.7	13.3	8.4
A			1.4	-1.5	2.1	22.5	12.7	7.8
S	0.2	-3.0	0.9	-2.4	-0.6	14.2	13.1	7.3
O			0.8	-2.8	0.6	14.1	11.7	7.3
N			0.5	-2.9	1.4	10.5	10.1	7.2
D	2.1	-1.0	0.8	-4.3	5.0	13.4	9.2	7.0
J 91			0.0	-3.5	6.7	11.4	9.2	6.9
F			0.2	-1.1	6.8	6.8	9.2	6.3
M	2.4	2.0	0.7	-0.2	7.2	5.4	8.8	6.3
A			0.5	1.8	5.8	3.4	8.4	6.6
M			0.1	2.0	4.1	-1.3	8.8	6.7
J	5.6	3.0	-0.4	4.9	4.1	-7.8	8.8	6.7
J			0.0	6.4	1.8	-8.0	8.3	6.6
A			0.9	5.7	1.1	-10.1	8.5	6.4
S	6.2	6.0	1.5	5.5	6.7	-6.0	8.1	6.5
O			1.7	8.5	6.5	-5.3	8.1	6.3
N			1.9	8.6	5.8	-6.2	8.0	6.1
D	9.9	8.0	1.8	12.4	2.7	-5.4	7.7	5.8
J 92			2.6	12.8	1.4	-4.3	7.7	6.0
F			3.0	13.2	2.8	-1.9	7.6	6.5
M	9.2	9.0	2.9	15.0	3.3	-0.8	8.3	6.4
A			3.6	14.8	4.5	-0.1	8.2	6.8
M			4.6	13.4	5.2	-1.9	8.0	7.2
J	8.4	10.0	5.1	11.5	5.8	5.6	7.8	6.7
J			4.8	10.1	7.5	6.5	8.0	6.6
A			4.6	10.2	7.8	6.5	8.0	6.9
S	14.5	14.7	4.3	12.4	4.4	7.4	8.2	7.4
O			4.5	12.1	4.5	6.8	8.3	7.2
N			4.6	11.9	3.2	4.6	8.8	7.7
D	9.8	19.5	5.1	5.4	3.9	5.8	8.8	7.5
J 93			5.0	4.9	5.3	6.4	9.0	7.4
F			5.0	7.8	3.5	5.7	9.1	7.3
M	8.3	16.1	5.2	12.1	3.0	7.9	9.0	7.5
A			5.1	10.5	2.2	7.8	9.1	7.5
M			4.9	15.3	2.7	10.2	9.3	7.8
J			4.9	17.7			9.1	7.4
J							9.6	7.2

Banco Central

National Institute of Statistics

Banco Central Stock Exchange

Table Nº 3.4
Construction Activity Indicators

Period	Employment in construction firms	Real wages	Real sales building mat.	Physical shipments of materials			building of housing	
				Cement	Iron reinforcement	Index of indust. ship	G. Stgo.	Country
Percentages of variation in 12 months							Houses accumulated in 12 months	
J 89	2.8	9.4	25.4	9.7	-34.0	8.5	31,575	72,436
F	8.0	10.0	7.9	-2.0	-27.2	-6.8	32,439	74,707
M	5.8	9.1	3.3	-2.3	46.0	16.2	34,640	78,620
A	2.9	10.2	12.7	3.2	1.0.6	23.0	34,101	78,332
M	3.5	9.3	14.8	7.4	47.0	13.4	35,236	80,302
J	-1.4	8.4	8.0	14.4	22.6	12.1	36,125	81,445
J	0.0	7.2	-2.9	7.5	58.2	19.0	33,942	81,249
A	1.8	7.3	6.3	8.5	76.8	26.2	34,969	83,805
S	-0.9	6.6	-4.7	0.7	1.5	-5.6	35,267	84,902
O	-0.4	4.2	21.1	17.5	-8.1	5.2	34,709	87,215
N	6.4	4.0	-14.1	14.6	68.2	14.9	32,972	87,134
D	5.0	4.5	-12.5	-0.7	8.0	-1.6	32,934	83,981
J 90	7.9	6.7	2.0	12.2	160.1	22.0	36,839	90,092
F	10.5	6.5	8.8	4.4	24.9	9.0	36,809	90,278
M	10.0	7.5	1.4	8.1	-34.0	-14.0	34,579	88,143
A	10.6	6.1	-16.9	-0.0	3.4	-2.6	34,789	90,727
M	6.3	6.0	-25.6	-3.2	-38.5	-16.5	32,541	87,374
J	4.3	7.7	-21.4	-8.4	-22.4	-16.9	29,144	83,697
J	0.8	6.8	-11.6	1.8	-2.8	-5.8	29,687	81,905
A	-1.6	6.8	-15.7	7.3	-33.6	-14.3	28,403	79,089
S	-2.9	4.6	-25.2	-10.3	-34.7	-19.1	28,693	77,572
O	-5.3	5.4	-15.4	8.0	38.8	6.3	28,113	74,343
N	-6.1	5.0	-0.4	-0.4	-28.4	-15.5	25,390	71,929
D	-5.6	4.8	-0.2	9.3	-0.3	-5.1	28,690	78,904
J 91	-0.2	5.4	-10.0	2.8	-30.6	-3.5	28,447	77,958
F	-3.8	5.8	3.2	4.1	13.8	2.7	26,429	78,638
M	-2.6	5.5	-3.8	-2.8	19.9	8.1	27,022	77,122
A	-1.7	5.5	18.7	20.0	34.4	30.0	27,304	75,845
M	-0.5	5.2	5.5	0.2	71.8	27.0	27,754	79,330
J	-1.0	2.7	13.8	-3.3	-28.1	-3.1	31,232	81,763
J	-1.5	3.1	21.4	8.3	-57.6	-4.2	32,374	85,325
A	0.7	3.4	5.1	6.8	-56.2	-10.0	32,523	85,267
S	1.2	6.6	24.5	15.2	-16.3	10.5	24,758	89,689
O	2.6	5.9	21.8	9.4	-45.0	11.9	33,766	91,267
N	4.6	7.0	17.4	8.9	-63.9	-6.7	34,998	93,468
D	4.3	6.7	31.7	15.9	42.5	4.6	37,974	88,481
J 92	2.0	6.6	22.2	11.4	65.2	30.9	41,520	88,177
F	2.5	6.3	20.3	21.4	-21.1	10.6	38,487	87,634
M	3.5	6.7	33.1	20.5	-3.0	19.0	38,582	90,212
A	5.2	6.5	19.1	5.9	27.4	11.9	38,998	91,957
M	3.3	6.6	18.0	15.1	42.6	14.3	40,803	92,737
J	7.5	6.7	21.0	21.1	152.4	52.0	41,623	93,435
J	9.7	5.5	29.6	30.1	79.5	32.9	41,682	93,150
A	13.8	4.7	21.1	21.4	82.2	19.8	41,755	96,003
S	13.2	4.2	47.3	29.2	39.2	40.2	48,496	101,148
O	22.4	4.3	19.8	17.6	61.1	16.2	45,315	101,671
N	19.8	4.1	26.4	21.5	215.7	46.7	49,917	105,394
D	20.7	4.9	19.1	16.8	37.6	54.4	49,779	105,669
J 93	21.9	4.8	19.0	13.5	-5.3	0.0	50,039	108,347
F	23.0	4.0	19.8	14.8	5.2	31.8	51,028	109,814
M	22.5	4.7	23.5	31.2	55.9	25.6	53,120	101,131
A	23.1	5.0	14.5	17.7	-5.0	0.4	55,674	111,567
M	21.7	4.6	13.6	21.5	2.4	9.2	57,870	114,600
J	21.3	3.3	12.0	28.2	12.4	15.4	60,258	
J		7.0	3.1	11.3	69.3	10.4		
Mutual								

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As a result of the negative movement, of the economic variables mentioned, there was a reduction in home-building at the beginning of 1990, and this may be seen in Table Nº 3.4, which shows the variations in real sales of building materials, shipments of cement, iron and industrial products, as also the amount of building in Greater Santiago and the country as a whole. It may be observed that in the whole of Chile the increase in the number of new homes in 12 months was, in November 1990, only 71,929, compared with the 90,278 built in the 12 months up to February of that same year. In the same way, growth up to November 1990 in Greater Santiago was only 25,290 homes compared with 36,839 built over the same period up to January 1990.

Coinciding with the gradual decline in interest-rates, which reached their lowest values in November 1991 for Mortgage-backed Certificates with a life of over 15 years (5.8% per year) and in February 1992 for placements between 90 and 365 days (7.6% per year), growth in building was sustained throughout 1992, culminating in 105,669 homes and housing solutions over the whole country by December that year, a growth which continued during 1993, and began to slacken off only because of the restrictive measures applied by the government via an increase in interest-rates in the middle of 1992, (though less rigourously than in 1990), due to their concern about a growth in activity which they considered to be excessive.

The high rate of growth of the GDP in 1992 (10.4%), the low inflation index (12.7%), and the positive projections for both indicators for 1993 (6% and 12-13% respectively) have exercised an influence on economic agents which has been very important for this growth in housing construction.

To give a complete view of the picture regarding volumes of homes built and ways of financing them, we are including Tables Nº 3.5, 3.6, and 3.7 which show the operations carried out with mortgage loans and their interest-rates between 1983 and 1993, as also the structure of the housing market between 1989 and 1993.

In Tables Nº 3.5 and 3.6 it may be seen that, of the last five years, 1992 was the year when most mortgage loans were extended. The highest average IRR was that corresponding to 15-year loans, 9.45% in January 1990, and the lowest 5.81% in December 1991. On the other hand the highest average IRR for the market was 10.3% in February 1990 and the lowest 5.75% in December 1991.

Table Nº 3.5
House Mortgage Operations
1988 - 1993

Period	General total			With mortgage-backed certificates								
				Banco del Estado			Other banks					
	Nº operat.	Amount M UF	Average UF	Nº operat	Amount M UF	Average UF	Nº operat	Amount M UF	Average UF	Nº operat	Amount M UF	Average UF
1988	28,393	11,232	396	18,976	2,946	155	9,373	8,182	873	44	104	2,364
1989	36,886	12,612	342	27,926	4,509	161	8,502	7,064	831	458	1,039	2,269
1990	39,815	12,118	304	33,616	6,520	194	5,639	4,520	802	560	1,078	1,925
1991	39,816	16,634	418	31,730	7,419	234	7,324	7,803	1,065	762	1,412	1,854
1992	40,314	20,014	496	31,068	7,736	249	8,135	10,189	1,252	1,111	2,090	1,881
J89	4,095	1,365	333	3,044	480	158	1,015	809	797	36	76	2,111
F	3,677	1,143	311	2,939	451	153	715	647	905	23	45	1,957
M	2,935	1,119	381	2,155	373	173	754	683	906	26	63	2,423
A	2,624	985	375	1,908	318	167	686	599	873	30	68	2,267
M	2,774	1,089	393	1,922	329	171	805	654	812	47	106	2,255
J	2,880	1,090	378	2,189	386	176	657	622	947	34	82	2,412
A	2,679	1,000	373	2,079	350	168	562	551	980	38	99	2,605
J	2,533	1,048	414	1,907	325	170	561	577	1,029	65	146	2,246
S	3,824	813	213	2,887	288	100	906	457	504	31	68	2,194
O	2,784	1,022	367	2,040	340	167	697	568	815	47	114	2,426
N	2,667	978	367	1,984	351	177	632	520	823	51	107	2,098
D	3,414	960	281	2,872	518	180	512	377	736	30	65	2,167
J90	3,640	955	262	3,086	526	170	514	348	677	40	81	2,025
F	3,181	889	279	2,680	490	183	472	339	718	29	60	2,069
M	3,372	916	272	2,744	479	173	559	365	653	39	72	1,846
A	2,806	795	283	2,345	427	182	429	308	718	32	60	1,875
M	3,529	931	264	3,074	549	179	412	308	748	43	74	1,721
J	2,769	868	313	2,287	433	189	430	336	781	52	99	1,904
J	3,174	924	291	2,573	432	168	560	411	734	41	81	1,976
A	2,629	949	361	2,056	468	228	523	384	734	50	97	1,940
S	3,493	1,154	330	3,047	679	223	395	372	942	51	103	2,020
O	3,905	1,335	342	3,312	722	218	541	511	945	52	102	1,962
N	3,819	1,198	314	3,313	696	210	454	407	896	52	95	1,827
D	3,498	1,204	344	3,069	619	202	350	431	1,231	79	154	1,949
J91	2,755	1,101	400	2,273	538	237	435	468	1,075	47	95	2,025
F	3,490	1,135	325	3,043	685	225	418	392	938	29	58	1,992
M	2,769	1,041	376	2,214	489	221	506	466	922	49	86	1,748
A	3,270	1,279	391	2,613	605	232	588	547	930	69	127	1,847
M	2,967	1,278	431	2,354	542	230	563	631	1,121	50	105	2,094
J	2,720	1,259	463	1,958	454	232	703	687	977	59	119	2,016
J	3,611	1,579	437	2,864	704	246	675	742	1,099	72	133	1,843
A	3,813	1,608	422	2,969	660	222	775	818	1,056	69	129	1,875
S	3,276	1,371	419	2,653	671	253	563	590	1,048	60	110	1,838
O	3,470	1,641	473	2,737	710	259	666	811	1,217	67	120	1,787
N	4,023	1,656	412	3,196	701	219	743	816	1,098	84	139	1,654
D	3,652	1,686	462	2,856	659	231	689	835	1,212	107	192	1,791
J92	4,115	1,616	393	3,411	750	220	607	705	1,162	97	160	1,652
F	4,064	1,494	368	3,491	781	224	505	594	1,175	68	120	1,766
M	4,332	1,685	389	3,723	834	224	504	646	1,282	105	205	1,952
A	3,053	1,545	506	2,401	658	274	554	697	1,259	98	190	1,936
M	3,056	1,604	525	2,279	580	255	674	846	1,255	103	178	1,727
J	2,649	1,429	540	1,928	471	245	638	780	1,222	83	178	2,147
J	2,933	1,730	590	1,991	518	260	828	1,001	1,209	114	211	1,853
A	3,390	1,942	573	2,514	698	278	763	1,026	1,345	113	218	1,929
S	2,807	1,501	535	2,081	521	251	644	830	1,288	82	150	1,827
O	3,228	1,815	562	2,219	569	257	952	1,130	1,187	57	116	2,028
N	3,926	1,977	504	3,087	785	254	755	1,018	1,348	84	174	2,073
D	2,761	1,675	607	1,943	569	293	711	916	1,288	107	190	1,778
J93	2,569	1,577	614	1,800	547	304	660	825	1,250	109	205	1,883
F	3,219	1,526	474	2,547	667	262	584	709	1,214	88	151	1,717
M	3,541	1,887	533	2,712	708	261	738	1,009	1,367	91	170	1,869
A	3,471	1,861	536	2,612	727	278	767	976	1,272	92	158	1,713
M	3,866	1,956	506	3,025	804	266	758	985	1,299	83	168	2,023
J	3,387	2,057	607	2,644	711	269	651	1,174	1,803	92	173	1,879
Period January - June												
1988	9,648	4,542	471	5,486	862	157	4,162	3,680	884	0	0	
1989	18,985	6,791	358	14,157	2,337	165	4,632	4,014	867	196	440	2,245
1990	19,297	5,354	277	16,246	2,904	179	2,816	2,004	712	235	446	1,898
1991	17,971	7,064	395	14,455	3,313	229	3,213	3,191	993	303	590	1,946
1992	21,269	9,374	441	17,233	4,075	236	3,482	4,268	1,226	554	1,031	1,861
1993	20,053	10,865	542	15,340	4,163	271	4,158	5,677	1,365	555	1,025	1,846

(*) Operations of Mortgage Managers. Does not include loan operations in Bank Mortgages.

Table N° 3.6
Real annual average internal rate of return (AIRR)
of mortgage-backed certificates and fixed-income
instruments traded on the Santiago Stock Exchange

Period	Mortgage-backed certificates							AIRR M-BC	AIRR F-I Market
	Year to Maturity								
	0.0-2.0	2.1-5.0	5.1-8.0	8.1-10.0	10.1-12.0	12.1-15.0	15.1 y +		
Año 1983	11.12	10.23	10.37	9.27	10.60	10.00		10.04	9.61
Año 1984	8.65	9.16	10.41	9.26	8.28	8.11	8.17	8.89	8.01
Año 1985	10.20	9.54	9.11	9.52	8.72	8.81	8.65	8.88	8.65
Año 1986	9.69	7.03	7.07	9.10	6.43	6.77	6.78	6.78	5.08
Año 1987	6.48	5.67	5.93	6.89	6.22	6.31	6.72	6.31	5.95
Año 1988	7.47	5.84	5.85	5.89	6.11	6.21	6.35	6.14	5.81
Año 1989	7.86	7.79	7.55	7.34	7.50	7.65	7.54	7.54	7.69
Año 1990	10.57	8.60	8.42	8.73	8.37	8.42	8.17	8.34	8.56
Año 1991	7.89	6.95	7.00	6.68	6.72	6.84	6.43	6.64	6.38
Año 1992	7.67	7.06	7.04	7.07	7.00	7.01	6.89	7.01	6.77
1989 Jan.		6.73	6.73	6.96	6.96	6.96	6.99	6.95	6.88
Feb.		6.72	6.89	6.97	6.91	7.29	6.99	6.96	7.19
Mar.		6.80	6.94	6.69	6.94	7.01	7.04	6.96	6.82
Apr.	11.74	6.94	6.83	7.27	7.02	7.12	7.12	7.04	7.21
May.	6.60	7.00	7.12	6.98	7.26	7.46	7.48	7.31	7.19
Jun.	9.58	7.61	7.66	6.62	7.42	7.47	7.51	7.47	7.13
Jul.		8.01	7.59	7.17	7.61	7.81	7.65	7.64	7.31
Aug.		7.94	7.89	7.69	7.70	7.98	7.70	7.75	8.02
Sep.		8.26	8.03	8.84	7.97	8.12	8.21	8.08	7.84
Oct.	11.74	8.03	8.17	8.20	8.24	8.34	8.34	8.24	8.21
Nov.		8.19	8.33	8.57	8.26	8.63	8.21	8.26	8.59
Dec.		8.80	8.49	8.29	8.22	8.41	8.36	8.31	8.27
1990 Jan.	8.53	10.20	9.58	8.55	9.34	9.08	9.45	9.40	9.70
Feb.	10.92	10.65	10.02	9.25	9.70	9.87	9.43	9.66	10.36
Mar.		10.25	9.61	9.32	9.30	9.37	8.99	9.24	10.27
Apr.		10.20	9.64	9.29	9.28	9.37	8.85	9.11	10.33
May.	10.25	10.08	9.56	9.13	9.08	9.11	8.79	9.03	10.11
Jun.	10.59	10.23	9.53	9.21	9.29	9.29	9.02	9.22	10.01
Jul.	13.69	9.69	9.18	9.15	8.78	8.85	8.39	9.69	9.16
Aug.	11.29	7.95	7.98	8.33	7.95	8.27	7.76	7.93	8.07
Sep.	9.00	8.26	7.92	8.27	7.92	7.93	7.30	7.74	7.76
Oct.	9.98	8.40	8.12	7.46	7.92	7.68	7.26	7.69	7.68
Nov.	11.50	8.25	7.97	7.80	7.59	7.60	7.17	7.48	7.39
Dec.	9.17	8.00	8.01	7.95	7.27	7.79	6.95	7.32	7.30
1991 Jan.	7.67	7.72	7.71	7.43	7.39	7.50	6.87	7.19	6.92
Feb.	7.83	7.11	7.22	6.90	6.95	7.07	6.25	6.66	6.31
Mar.		7.22	7.48	6.89	6.95	6.95	6.26	6.68	6.30
Apr.	10.94	7.06	6.91	6.27	6.78	6.75	6.57	6.69	6.64
May.	8.48	7.07	7.12	6.67	6.74	6.80	6.71	6.78	6.54
Jun.		6.97	7.06	6.69	6.88	6.76	6.73	6.82	6.64
Jul.	8.01	7.50	6.85	6.63	6.74	6.75	6.63	6.74	6.46
Aug.	6.96	6.79	7.32	6.87	6.57	6.76	6.39	6.64	6.39
Sep.	7.03	6.82	6.73	7.16	6.49	6.65	6.48	6.52	6.24
Oct.	5.97	6.17	6.29	6.18	6.48	7.02	6.29	6.50	6.37
Nov.	7.97	6.51	6.67	6.27	6.47	6.57	6.13	6.38	6.02
Dec.	7.99	6.51	6.61	6.17	6.21	6.44	5.81	6.09	5.75
1992 Jan.	7.02	6.59	6.60	6.11	6.36	6.71	5.98	6.21	6.01
Feb.		7.11	6.79	7.19	6.69	6.65	6.50	6.62	6.38
Mar.	8.00	6.82	6.60	6.50	6.58	6.59	6.38	6.49	6.39
Apr.	10.00	6.82	6.91	6.62	6.71	6.74	6.76	6.74	6.59
May.	8.75	7.04	7.13	7.21	7.13	6.87	7.16	7.10	6.75
Jun.		6.68	6.80	6.88	6.84	6.86	6.74	6.79	6.49
Jul.	5.62	6.53	6.54	6.42	6.67	6.70	6.58	6.61	6.35
Aug.	7.53	6.82	6.90	6.93	6.89	6.88	6.86	6.88	6.59
Sep.	6.99	7.43	7.48	7.42	7.48	7.41	7.39	7.44	7.31
Oct.	7.14	7.15	7.11	7.03	7.23	7.26	7.19	7.20	7.10
Nov.		7.86	7.80	8.85	7.75	7.74	7.66	7.72	7.71
Dec.	8.00	7.87	7.82	7.68	7.63	7.75	7.47	8.32	7.62
1993 Jan.	8.65	7.63	7.79	7.78	7.59	7.67	7.44	7.57	7.66
Feb.	9.28	7.59	7.61	7.30	7.50	7.52	7.25	7.41	7.56
Mar.	7.97	7.73	7.71	7.63	7.69	7.59	7.54	7.62	7.60
Apr.	7.26	7.61	7.57	7.66	7.66	7.77	7.49	7.52	7.60
May.	7.70	8.02	8.08	8.39	8.01	7.83	7.76	7.92	7.77
Jun.		7.75	7.74	7.55	7.63	7.56	7.39	7.55	7.42
Jul.		8.50	7.57	7.24	7.40	7.51	7.15	7.35	7.21

Source: Santiago Stock Exchange.

Table Nº 3.7
Structure of the housing market
 1989 - 1993

Market Segment	Year				
	1989	1990	1991	1992	1993p
	Number of homes				
Unified subsidy	22,551	21,971	19,519	18,640	20,100
Section 1	17,704	15,923	14,607	12,543	14,000
Section 2	3,802	4,250	3,323	4,162	4,100
Section 3	967	1,156	912	841	1,000
Special workers'	78	642	677	1,094	1,000
Programme PET	16,409	15,640	16,252	16,218	16,000
Rural subsidy	8,088	6,307	4,912	8,485	7,500
Priovate market	21,306	13,905	19,993	28,295	27,600..
SUBTOTAL	68,354	57,823	60,676	71,638	71,200
Progressive homes		2,186	2,483	8,169	8,000
Basic homes	15,537	18,895	25,322	25,862	27,000
TOTAL HOMES	83,891	78,904	88,481	105,669	106,200
Sanitary installations	13,195	6,379	14,349	8,292	7,500
	M ² / per home				
Unified subsidy	50.48	52.54	51.40	51.20	51.39
Section 1	45.92	47.83	47.51	47.53	47.80
Section 2	62.19	61.25	61.16	57.55	57.80
Section 3	87.02	86.58	79.76	79.95	79.45
Special workers'	61.01	50.43	49.31	47.09	47.30
Programme PET	42.16	42.69	42.95	45.44	44.19
Rural subsidy	35.54	34.90	37.05	38.13	37.59
Priovate market	102.49	140.51	115.01	130.54	127.80
SUBTOTAL	62.93	69.11	68.94	79.69	77.94
Progressive homes		33.08	27.67	19.43	20.00
Basic homes	33.83	36.56	37.67	39.03	38.35
TOTAL HOMES	57.54	56.97	58.91	65.08	63.51
Sanitary installations	6.63	7.03	6.83	7.32	7.00
	US\$ per home (*)				
Unified subsidy	10,416	11,224	10,898	11,274	11,310
Section 1	8,259	8,820	8,837	8,808	8,925
Section 2	14,981	15,092	15,184	15,191	15,196
Section 3	31,140	31,550	29,163	31,018	30,669
Special workers'	20,643	8,639	9,716	9,454	9,407
Programme PET	6,525	7,120	7,490	7,554	7,598
Rural subsidy	3,958	3,915	4,215	4,433	4,462
Priovate market	56,265	77,915	65,126	77,187	64,736
SUBTOTAL	23,009	25,354	27,312	35,655	30,465
Progressive homes		4,826	3,860	2,702	2,840
Basic homes	4,823	5,080	5,004	5,170	5,186
TOTAL HOMES	19,641	19,930	20,270	25,647	21,957
Sanitary installations	2,141	2,267	2,203	2,364	2,259

(e) Estimated

(*) Includes value of land

p Projected

Sources: NIS, MINVU, C.CH.C.

Economic Studies Department, Cámara Chilena de la Construcción.

8. THE ORGANIZATION OF THE MARKET, SUPPLY, DEMAND AND PRICES

The evolution of the general economic situation reaches different social strata with varying degrees of intensity, and is felt in various ways in the different regions of the country, depending on their level of development and their contribution to general growth.

Demand for housing is a result of the above, and supply follows demand in order to satisfy it.

There are also government actions which have great influence on the development of the property market, such as the above-mentioned housing policy (for the low and medium-to-low strata) and the announcing of communal regulating plans to establish building guidelines at a regional level.

The impact of both these factors on the market is seen in the large number of homes partially financed by the State, as has been seen above, and the important increase in the number of homes built in such cities as Temuco, Concepción, Viña del Mar, La Serena and Iquique, and in certain Santiago boroughs, such as Las Condes, Vitacura, Maipú, La Florida and others.

We believe that in this present analysis, we have succeeded in demonstrating that property development is noticeably and adversely affected by high interest-rates, and even more by inflation, while it grows apace when these variables evolve gently.

In common with most Latin American countries, Chile is a country with a large housing deficit due to massive migration to the cities and a developing, unstable economy plus inadequate housing programmes in the past and a shortage of financial resources, both public and private.

The improvement in the Chilean economy reflected in the positive indices analyzed above, and the implementation of new, intelligent housing plans, have produced a sustained growth in housing demand over the past few years. Between 1980 and 1989 a supply deficit was produced which led to potential buyers having difficulty in finding enough houses on the market to satisfy their needs in a timely and appropriate fashion. The profitability of the property business rose sharply to figures in the order of 15% to 20%, causing a rise in house prices and producing well-founded uncertainty as to whether the yield of the business would be sufficient to replace this scarce commodity.

The market has undergone various changes since the beginning of 1990, when the government introduced the economic adjustment already mentioned. As a result of this a decrease in activity was produced, though this situation was reversed towards the end of 1991, when an explosive increase in supply occurred to satisfy a still unsatisfied demand.

The buying public perceived the development of the market and began little by little to increase their demands, especially with regard to quality. Today buyers expect even low-priced homes to have aluminium window-frames, and good-quality carpets and tiles. This situation was unknown in previous decades.

On the other hand the competitiveness of the market has restrained price-rises, with the result that in Chile houses are being built extremely cheaply by international standards. A house worth 400 UF (US\$ 10,000) has a value per square metre of US\$ 220; for middle-range apartments this value is approximately US\$ 600; and in homes destined for medium-high sectors the square metre reaches values close to US\$ 1000.

Trading margins have been reduced and the alternative cost of money has begun to be relevant again in deciding to develop the business, while at the same time the banking system has once more begun to increase its requirements for working in this area.

Following the consolidation of the economic improvement process in the country, the buying public has needed housing loans less frequently. This decrease has reached rates of 50% or more, in relation to the volume of transactions for medium-level housing. Likewise, the number of people applying for state subsidy for section 3 of the Unified System has gone down noticeably.

However, the situation as described has begun to show a certain tendency towards change, probably as a result of the sensation of economic adjustment arising from the restrictive measures applied throughout the first half of 1993, or which people believed might be applied, and also because of the effects that the stagnated situation of the world economy is having on the Chilean economy.

CHAPTER IV

ADVANCE SAVING AND HOUSE-PURCHASE SUBSIDIES*

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María de la Luz Nieto

1. ADVANCE SAVING, MOTIVATIONS AND ATTRIBUTES.

Saving is an irreplaceable means of achieving economic and social development. It generates productive investment and encourages behaviour and attitudes in people, which have evident social repercussions.

Saving should be an effort shared by the public and private sectors. From the point of view of the public sector, this is possible by increasing the efficiency of those tasks which are the inescapable responsibility of the State; i.e. producing the same or better results with less funding. In the social sector, which includes housing, this is even more evident and quantifiable. Thus it may be said that an efficient housing policy makes a contribution towards saving.

From the point of view of housing, saving is that quantity of money which a family subtracts from its normal spending, or other uses, and sets aside to pay for part of the value of the housing solution they are applying for.

If this saving is done before the house is acquired it is known as "advance" saving, and if after, it is used to pay off the quotas or dividends on the loans, whether mortgage or other, which have been requested for the purchase, extension, improvement or modernization of the property acquired.

Seen from another angle, saving is an excellent way of measuring the effort which a family is prepared to make in order to obtain the benefits of a housing subsidy and a mortgage loan, benefits which are achievements worth struggling for.

* The content of this chapter was revised and updated by the authors, on the basis of the lectures given during the seminar.

Every person who saves does so for a specific reason. This may be to cover unforeseen expenses, to accumulate funds for future investment, to acquire a lasting asset, etc. In this case the definitive aim is to acquire a home.

In a first analysis of the subject it may be seen that:

- a) Savings constitute a contribution which is part of the purchase price and which is an initial economic risk assumed by the buyer. From this point of view it is also a sum which does not have to be raised by a loan. This decreases the buyer's level of borrowing, thereby improving the creditor's guarantee.
- b) Advance saving also represents the sacrifice and effort of the family, which adds to their dignity, and means that the home is valued as an achievement and not as a free gift. The family which has saved has a greater stake in its own destiny, and plays a more influential role in the economy.

In addition to realizing specific goals, savers want their savings to be profitable and safe, and to have liquidity; in other words the sums accumulated should not lose value but produce a higher reward than if they had been used for other purposes. People need to be sure that there is no danger of their losing their savings for reasons beyond their control, and finally that if the moment comes when they need their capital, they can retrieve it, even if this means forfeiting profitability, or a decrease in expected prices or benefits.

The above-mentioned attributes must be not only borne in mind, but guaranteed, if there is to be an effective, large-scale move towards saving for housing.

2. ADVANCE SAVING AND ACCESS TO HOUSING.

Any housing policy with pretensions to success must take into account not only people's needs but also, especially, the efforts they are making to satisfy these.

Advance saving is perhaps the best way of measuring this effort, provided this is carried out within a framework of healthy competition between those applying for benefits. This will happen if funds are designated to all the different socio-economic strata and advance saving is directly related to long-term mortgage loans and the prices of the

homes which are acquired. In this way, advance saving will be a factor acting within a self-regulating competitive framework.

There are voices which disagree with this theory and point out that large sectors of society have no possibility of managing advance saving, due either to their very low income levels or to certain social conventions which force them to maintain a high level of spending.

Even though this is in some senses true, it is worth mentioning that people generally do have some possibility of saving, however little it may be, except for those living in conditions of extreme poverty, whose situation should be the direct, priority concern of the State.

The government can also open up other spaces to give access to housing, such as renting with option to purchase (leasing), a method in which advance saving will not have the weighting as a selection requirement, which it has under the traditional system.

In consequence, there seems to be no fairer selection system than that of advance saving, nor one more directed to the development of people and country.

In the Chilean system of housing subsidies, advance saving is a compulsory condition for applying and, of course, for being selected.

3. OPERATIONAL FRAMEWORK OF ADVANCE SAVING FOR HOUSING.

3.1. Institutions for collecting advance saving.

The law has authorized banks and financial companies to collect and certify advance saving for housing. Exceptionally it has added open housing co-operatives and social welfare services, in both cases as regulated institutions bringing together specific groups of people for reasons of the programmes they will be involved in or the similarity of their work conditions.

Thus, advance saving must be done in:

- Banks or finance companies which offer home-savings accounts;
- Social welfare services, which operate home-savings accounts among their other benefits;

- Open Housing Co-operatives which collect capital contributions as a way of accumulating advance financing for the housing programme.

3.2. Regulations of the MINVU and the Banco Central de Chile.

Advance saving for housing, where this is linked to state systems of housing accessibility, is governed both by the Decrees established by the Ministry of Housing and Town-Planning (MINVU) to regulate the different programmes, and by the Compendium of Financial Norms of the Banco Central de Chile.

The legal provisions of MINVU are as follows:

- a) Decreto Supremo (DS) N°44 - 1988, which regulates the so-called General Unified Subsidy,
- b) DS N°235 - 1985, which regulates the participation of housing sector institutions in special programmes and for this the norms of the aforementioned DS N°44 are also applicable in supplemental form;
- c) DS N°62 - 1984, which regulates the system of application, the assignment and sale of homes destined to alleviate situations of housing marginality;
- d) DS N°140 - 1990, which regulates the Progressive Homes Programme; and
- e) DS N°167 - 1986, which regulates the housing subsidy system attending rural areas.

The legal provisions of the Banco Central de Chile consist of the following chapters of the Compendium of Financial Norms:

- a) IIIE.1. regarding Home-Savings accounts;
- b) IIIE.3. regarding Home-Savings accounts; and,
- c) IIIE.4. regarding Home-Savings accounts with deferred withdrawals.

3.3. Treatment of savings. Their profitability, liquidity and safety.

a) Profitability.

Savings which are collected in order to acquire a home have their profitability guaranteed in real terms, since they are readjusted to keep pace with variations in inflation and also receive interest on the readjusted balances.

Readjustments are made quarterly on the basis of the Unidad de Fomento (UF), and they are paid, taking the last day of the month in which each account was opened as the initial date of the first quarter, and the last day of the third month, counting from the initial period, as the termination date.

The payment of readjustments is also related to the number of withdrawals which is agreed, since if the holder makes more withdrawals than have been agreed, the account ceases to earn readjustments.

Interest on the balance is paid annually and constitutes the real profit on the saving, which is already protected against inflation.

When the funds are used to pay part of the cost of the home with right to subsidy, or when the total balance of accumulated savings is transferred to another financial institution, both readjustments and interest must be liquidated and paid, with the date of the last day of the month before the date of the withdrawal, even where twelve months have not passed between this date and the previous readjustment or interest payment.

The financial institutions for their part are entitled to charge commission for managing the account. These commissions are generally applicable and may be changed quarterly on the first day of each quarter. The public will be informed of this by conspicuous notices which must be placed in the banks at least ten days before the date on which they come into force.

Commissions are charged on the same dates as those corresponding to interest or readjustment payments, or on the last working-day in each month. Nonetheless, these are earned by the bank at the moment when the event giving rise to them occurs, so from that date on, the corresponding money is the bank's property. This means that the holder is prohibited from making a withdrawal against the corresponding funds,

or the commissions earned and not yet charged, and if he tries to do so, the bank may block the payment.

b) Liquidity.

The holder of a home-savings account may withdraw his funds at any time, provided he respects the following restrictions:

- He must notify the bank, giving thirty calendar days' notice, using the corresponding application form. Nevertheless, the bank may accept sight withdrawals of up to 30 UF on each occasion, provided they take place on different days.
- He must not be in the process of applying for a housing subsidy, since if the bank issues the certificate needed to apply, withdrawal facilities are suspended with regard to the accredited funds until such time as the result of the application is known. If he obtains the benefit, he may withdraw funds only if the objective is the purchase of the home.

c) Safety.

Savings collected by the banking system are guaranteed by the State. In fact, in accordance with General Banking Law, the State guarantees up to 90% of the savings with a top limit of 120 UF (approximately US\$ 3,480). This state guarantee does not cover savings entrusted to the other entities which are authorized to collect home-savings, such as open housing co-operatives and social welfare services.

3.4. The methodical savings contract.

The relationship between the person wishing to save and the person who collects these savings is usually formalized (in the case of a bank or finance company) in a contract for a home-savings account.

The rights and obligations of the parties are expressed in this document, and these may be summed up as follows:

a) Rights of the saver.

- To make withdrawals: he may make the withdrawals he considers to be appropriate, while respecting the minimum periods of prior notice

and the sanctions which may affect his readjustments and interest if he fails to keep to current regulations.

- To receive readjustments and interest: readjustments according to the variations in the UF and interest (variable) as offered by the bank or financial institution.
- To pay part of the price of his home with the accumulated funds, including readjustments and interest.
- To transfer the funds to another financial institution, while fulfilling the requirements regarding prior notice and the minimum age of the account.
- To modify the amount, term and average balance of savings already established.

b) Obligations of the saver.

- To make the agreed deposits: the correct amount at the correct time.
- To pay the commissions charged by the bank or financial institution.
- To notify the bank or financial institution in the event of the loss or destruction of the savings account book.

c) Rights of banks and financial institutions.

- To fix the prior notice periods for withdrawals and transfer of accounts.
- To fix the limitations regarding number of withdrawals and loss of rights to readjustments if that number is exceeded.
- To suspend withdrawals during the process of applying for and obtaining the housing subsidy, or when transferring the account.
- To fix the interest rate on the readjusted capital.
- To charge commission for the management of the accounts.
- To close the accounts unilaterally.

d) Obligations of banks and financial institutions.

- To pay readjustments and interest.
- To issue certificates of the savings for purposes of applying for housing subsidies.
- To inform the savers of changes in interest rates, the fixing of commissions and the unilateral closure of accounts.

4. SAVING, ITS OPERATION AND USE AS A CRITERION FOR ELIGIBILITY.**4.1. Savings: in money and in an "owned site".**

Advance saving should normally be carried out via the methodical savings contract described above, but it is also permitted to do this by certifying ownership of a piece of land which is suitable for building a house. Described below are the requirements of DS N^o44 which apply when awarding the Unified Subsidy, since these are the ones which place most demands on applicants.

a) In money.

Once the person can prove the payment of the agreed advance saving in money, with the corresponding certificate from the financial institution, welfare service or co-operative, he/she is in a position to apply for a subsidy. This advance saving may be deposited in the name of the applicant or his/her spouse.

The savings certificate must vouch for the period, the minimum half-yearly interim balances and the amount of savings agreed, the total accumulated savings, expressed in Unidades de Fomento, including capital and earned interest, and the interim balances actually maintained in each half-year period. It must also state if the savings have lost the right to readjustment due to excess withdrawals.

Although the minimum period for presenting an application is 18 months, it is possible after 12, provided the total agreed saving has been deposited.

The interim balances actually maintained in each half-year period will be calculated by adding the daily balances for the period and dividing by the number of days in the half-year.

b) "Owned site" contribution.

An owned site may be credited as advance saving in order to apply for a housing subsidy, provided it is free of any encumbrance except easements, and without prohibitions as regards mortgage or embargo, except those which might lapse with the application for the housing subsidy. The site must have been in the possession of the applicant for at least 18 months and, exceptionally, 12 months, with reduction in seniority points.

The availability of a site is credited as saving, by showing:

- A copy of the title deed in the name of the applicant or his/her spouse; or of both spouses in association; or of the association formed by the surviving spouse and children under age, where this is registered with the Conservador de Bienes Raices, with a certificate of validity;
- A certificate of mortgages, encumbrances and prohibitions;
- A valid certificate of fiscal appraisal or the receipt certifying payment of the latest rates contributions.

4.2. Advance saving as part of the financing of the building

Those systems of access to housing which are subsidized by the State come in two forms: those, the majority, designed and executed by the private sector, in which the State provides financing and awards subsidies; and the two remaining categories, called "Basic Housing" and "Progressive Housing", which are an initiative of the MINVU and are contracted directly by the public sector with private firms. In the first two cases, the system permits the supply to be financed, either by advancing the amount of the subsidies or permitting the advance savings (in money) which the beneficiaries vouched for in order to obtain the subsidies, to be used ahead of time.

Thus, the SERVIU may authorize an early withdrawal of advance savings in money in the following cases:

- If the beneficiary requests it because he has signed a contract of purchase, promise to purchase, or house building; or
- If the SERVIU considers that an advance in the building work justifies it, in the case of a building operation on an owned site.

In the former situation, the withdrawal will be guaranteed with a bank guarantee certificate obtained by the vendor, promising vendor or builder. This will be extended on behalf of the beneficiary, on sight with 30 days notice, with an indefinite term, or failing that, a term which exceeds by at least 90 days the validity of the respective housing subsidy certificate, for an amount equal to the savings being guaranteed, including readjustments and interest and a projection of these according to coefficients determined by the MINVU. In the second situation mentioned, the guarantee will be the respective advance in the building work.

These generally applicable regulations have exceptions in the first stage of the Private Progressive Housing Programme, where the advance saving may be used for paying the price of the land; and in the second stage, where the advance saving may be withdrawn against advances in building work.

The great advantage of withdrawing these advance savings ahead of time is that it permits a reduction in the financial costs of building, since the interest rates on building loans are considerably higher than those on Bank Guarantee Certificates.

4.3 Incorporation of savings into housing subsidy programmes and their weighting.

The following table shows the way in which savings are incorporated into housing subsidy programmes, the minimum amounts required and the points for savings accumulated and time maintained.

4.4. Advantages and limitations of advance saving as an eligibility criterion.

There appears to be no doubt that advance saving is the best criterion for measuring objectively the effort of families to apply for a state subsidy, and thus gain access to their own home.

This is valid, even when it is possible to homogenize applicants according to certain criteria. In Chile, unlike the majority of countries, family income has not been used for this purpose. Instead the upper limit on the value of the home which the family hopes to acquire has been taken. This is due to the fact that a certificate of income may not give a true picture of the real situation and is very difficult to control.

Programme	Minimum savings required	Points per amount saved	Points for time on waiting-list
Progressive Home P.V.P. DS N° 140	8 UF (1 st stage) 5 UF (2 nd stage)	15 points for each UF of accredited savings with a maximum of 5 UF (1 st stage).	0.5 points per month.
Basic Home DS N° 62	10 UF	2 points for each UF accredited, up to 10 UF; 1 point for each UF over 10 UF, up to 20; 0.25 points for each UF over 20 UF.	0.5 points per month.
Rural Subsidy DS N° 167	-	3 points for each UF of accredited savings with a maximum of 10 UF; 1 point for each additional UF.	-
Special Workers' Programme P.E.T. DS N° 235	40 UF	-	-
Unified DS N° 44	50 UF Category I 100 UF Category II 150 UF Category III	1 point for each UF of accredited saving or 0.5 points for each UF of accredited non-compliance. If the saver does not comply with the covenanted saving.	4 points for each month agreed as agreed. Penalty of 24 points per 6 months of non-compliance. If the saver does not comply within the agreed period, twice the difference between the number of agreed months and the number of complete months will be discounted

5. THE EVOLUTION OF HOME-SAVING IN CHILE AND ITS PROSPECTS.

5.1. Recent evolution.

The details contained in the following table show clearly that advance saving for housing has had an interesting evolution in Chile over the past few years:

Year	Number of accounts	Savings accumulated	Mean savings accumulated	Agreed savings	Mean agreed savings
1990	478,853	9,318	19.46	20,273	42.34
1991	579,025	9,966	17.21	23,199	40.07
1992	692,744	11,809	17.05	26,984	38.95
1993	816,026	14,332	17.56	32,436	39.75
1994	929,876	16,722	17.98	37,982	40.85

These figures allow one to see:

- A notable increase in the number of savings accounts, a situation influenced by the advance saving requirement for those wishing to apply for housing subsidy.
- A very important real growth in accumulated savings and agreed savings, a fact which may be explained by the growing confidence in the State's housing programme, in the requirement mentioned in the previous point and the improvement in people's income as a result of the economic growth of the past few years.
- The correlation between accumulated savings and agreed savings has remained practically constant between 43% and 46%.

5.2. Prospects.

The stability of state policy on housing subsidies and the level of requirements established by financial operators allow one to hope that the level of home-saving will continue to rise steadily in the near future.

It is worth asking why only a few banking institutions are interested in the collecting business, despite the large volume of potential resources

and the wide margins which exist between interest on collection and interest on placement. The available data leads one to conclude that it is due to high operating costs, especially in the case of those savings which tend to be erratic; and the fact that the value of each deposit is low, which reduces administrative productivity in the processes of collection, processing and information.

For this reason it might be a good plan for financial operators which are used to working with people from low-income groups to incorporate themselves into the process, to improve and ensure efficiency. Such operators could be the large Savings and Loans Co-operatives, and the "Cajas de Compensación".

Every person who aspires to home-ownership should save. To encourage this saving, the government has established it as a pre-requisite for housing subsidy applications. At the same time the socio-economic system of the country favours the active participation of the person and family, and this guarantees the success of the joint economic effort being made in an open, competitive financial market.

The State makes the most of this effort to select the beneficiaries of its subsidies objectively and to introduce dynamic elements into the markets, helping to fund housing demand in an atmosphere of free, open competition.

The spirit of rewards for people's efforts to save, and regulations which are maintained over a period of time, though constantly being adjusted, constitute an encouragement to save which is giving very good results.

If the country continues growing and people's income increasing, requirements with regard to subsidies should go up, while the unit amount of these should go gradually down, permitting the resources thus freed to be redestined in order to achieve a larger number of housing solutions.

6. GENERAL UNIFIED SUBSIDY.

The network of State-backed housing accessibility which exists in Chile is directed towards solving the housing problems of the poorest sections of the population, facilitating the access of these to housing solutions.

Achieving home-ownership has economic and social effects. Among these are: the encouragement to save, in strata of the population which would not save for other reasons; the stimulus to spend in order to maintain

the home and make small investments to improve it, which increases the country's stock of fixed capital; the satisfaction of the need for "security of tenure", an attribute of the home which is valued especially highly by those members of the population with lowest incomes. etc..

State intervention in systems of access to housing consists mainly in granting a subsidy on demand, once only, with the aim of closing the breach that exists between the price of a housing solution of a certain standard, and the population's real possibilities of paying for it, in view of their income.

The network of housing accessibility is also characterized by its wide coverage, helping people of different income strata; the requirements for gaining access to the different types of funding do not differentiate on the basis of applicants' incomes. Rather they encourage the interested parties to situate themselves in one or other system according to their preferences and expectations, and according to their determination to pay for their own home. The mechanisms used to produce a focussing of benefits on the population with lowest income are based principally on the selection criteria for beneficiaries, and on fixing the price limits for the homes which may be obtained through each system.

Target population.

The General Unified Subsidy is destined for families with medium-to-low incomes, which do not own homes but have some capacity to pay. This makes them eligible for bank loans. In addition the family must show its determination to pay for the home, reflected in methodical savings contributions in a "Home-Savings Account", and this is an indispensable pre-requisite for applying; this requirement may only be replaced by a contribution of capital to an open housing co-operative and, in the case of those people applying in a group, by the ownership of a piece of land, with a project to build housing on it.

Individuals or organized groups may apply under this system, as also people working through an open housing co-operative, corporation or foundation, one of whose main objectives is attending the housing needs of its members or associates.

Product.

It is possible using this system to acquire or build a permanent economical home, either "new or second-hand" in an urban or rural area.

The purchase of a "second-hand" property is accepted, where the operation is carried out during the final eight months of the validity of the certificate.

Price.

The price of the house which is purchased or built using this system may not exceed 1,500 UF*. However, the system is structured in three categories according to the value of the property, and the importance of these varies relative to the volumes of operation, with an incidence of at least 75% of category 1, and no more than 5% of category 3. The limits on the value of the home in each category are as follows:

Home-Value Category	Home-Value Limit
Category 1	Up to 500 UF
Category 2	Over 500 UF and up to 1000 UF
Category 3	Over 1000 UF and up to 1500 UF

Financing.

The home is financed with the beneficiary's savings, a state subsidy and a mortgage loan.

Savings.

The total savings declared when applying must be put towards financing the home, plus the interest and readjustment payments received up to the date when they are used.

The minimum amount of saving defined as a requirement for entering the system varies according to the home value section under which the person is applying, according to the following table:

Home-value category	Minimum savings UF
Category 1	50
Category 2	100
Category 3	150

* UF: Unidad de Fomento, an accounting unit which is readjusted daily. It is extensively used in the housing and financial markets; it has legal existence and its value is fixed monthly by the Government.

Subsidy.

The amount of direct subsidy depends on the home value section and on what the applicant asks for, according to the following table:

Home-value category	Amount of subsidy UF
Category 1	130- 120- 110
Category 2	110- 100- 90
Category 3	90- 80- 70

The subsidy is awarded by means of a certificate, representing a banker's order in favour of the beneficiary, which is paid by the SERVIU when it can vouch for the fact that, in accordance with the regulations, a home has been purchased or built within the validity period of the certificate, which is 21 months. The SERVIU pays the subsidy to the vendor of the home, who must present the certificate, endorsed to him, in addition to documents guaranteeing the fulfilment of the conditions required for the payment.

Loan.

The remainder of the price of the home is financed with a mortgage loan, which the beneficiary may obtain in the Banco del Estado or any commercial bank or financial institution. The maximum value of the loan may not exceed 75% of the value of the property, or 1000 UF.

Subsidy implicit in the interest rate.

Mortgage loans give rise to the issue of mortgage-backed certificates which are traded on the secondary market. In the case where the sale value of the certificates is lower than their par value, the MINVU funds the difference up to a sum of 80 UF. When the sale value is above the par value, the difference goes towards paying the debt, as an extraordinary amortization.

Subsidy implicit in credit risk.

In cases where the mortgage loan is less than 670 UF and the home goes to judicial auction due to default in serving the debt, the SERVIU

covers up to a fixed percentage of the outstanding balance, if the result of the auction is insufficient to do so.

Selection procedure for beneficiaries.

Applicants under this system are selected strictly on the basis of points. The factors involved in the awarding points are:

- a) The total amount saved in money, within which the amount corresponding to the savings contract and any additional amount are considered separately and with different weightings, the points for the latter being lower.

This factor has a great influence on the applicant's final points.

- b) The fulfilment of the terms of the savings contract stipulated in the respective home- savings account, taking into account the fulfilment of the agreed average half-yearly balances.

In practice, the fulfilment of the terms of the savings contract in the early six-month periods (particularly the first), is decisive in the points awarded to this factor, and in the final result which permits the selection of the applicant.

- c) The possible availability of a site. This may be a complement to, or a substitute for money savings, depending on the way in which the application is made.
- d) The size of the family group. In this factor the more immediate family group is included, i.e. the applicant, his/her spouse and children under 18 years of age.
- e) The lowest amount of subsidy being sought. A points system is used which rewards requests for smaller contributions of state funds in direct subsidy.

Historical background.

Though the General Unified System of Housing Subsidy dates from 1988, its immediate predecessors were the so-called Traditional Subsidy, which was created in 1978, and the System of Home-Saving and Financing (SAF) which began in 1984.

7. SPECIAL WORKERS PROGRAMME (PET).

Target population.

This programme serves families without homes of their own, which function in organized groups, preferably groups of workers who set aside funding provided by their employers in order to purchase homes. They correspond approximately to the third income quintile. They may be situated in urban or rural areas, though in practice the programme has tended to function in urban areas.

Unified Subsidy Certificates Awarded

Year	Number of certificates
1978	10,000
1979	10,237
1980	10,002
1981	24,104
1982	9,638
1983	16,938
1984	20,584
1985	27,803
1986	27,287
1987	27,168
1988	27,039
1989	27,910
1990	28,019
1991	28,663
1992	29,461
1993	29,000

The Special Workers Programme was created in 1987 as an Extraordinary Programme in the context of the International Year of Homes for the Homeless. These circumstances explain the relatively lower degree of regulation and access requirements under this system. The other objective was to make this programme attractive for enrolled applicants with certain ability to pay, who demand low-cost homes which are really intended for families with lower incomes.

Product.

This is an improved basic home, with an area of about 40 square metres.

Price.

At present this is about 300 UF, though by law the upper limit is 400 UF.

Financing.

The home is financed with the beneficiary's savings, with a state subsidy and with a mortgage loan.

Savings.

The minimum required under this system is 40 UF.

Subsidy.

The amount of the direct subsidy is 90 UF.

Loan.

The balance in the price of the home is financed with a mortgage loan which is subject to the same conditions and enjoys the same implicit subsidies as the General Unified Subsidy.

Selection criteria for beneficiaries.

Under this system the selection criteria for beneficiaries are not uniform. Different criteria may be determined in each region.

Historical background.

Since 1987, the year in which this scheme began to operate, the number of homes financed through it is as shown in the figures given below:

Special Workers' Housing Programme	
Year	Homes
1987	19,947
1988	15,993
1989	14,950
1990	15,017
1991	15,067
1992	16,257
1993	16,000

8. RURAL HOUSING SUBSIDY.

Target population.

The rural housing subsidy is destined for families which live permanently in rural areas, in poor housing conditions, and are owners of, or possess rights over, a piece of land.

Product.

The rural home which is financed through this system must be new, safe and hygienic (according to the definitions of the ad hoc Manual) and must be situated in a rural area (generally places with fewer than 2,500 inhabitants).

Price.

The home which can be purchased or built through this system has a price of 260 UF, except in the case where such homes constitute a village which fulfils the urbanization regulations required under the General Law of Urbanization and Construction, in which case the price may rise to 400 UF.

Financing.

The main source of financing for homes built through this system is the state subsidy, which may be 110, 130 or 150 UF, depending on the request of the interested party when he/she puts in the application. Under this system there is no requirement of savings in money (though these may exist) and the contribution of the beneficiary is made through the compulsory contribution of the land. The remainder of the price,

(which in most cases is non-existent) is financed with a bank loan, which may not exceed 280 UF, and which is not subject to any special treatment.

Selection criteria for beneficiaries.

Under this system the selection criteria aim to give priority to the applicant's degree of poverty, while ensuring that the benefit is given to people who genuinely live permanently in rural areas. The factors which award points are as follows:

- a) The socio-economic and housing level of the applicant, which is assessed on the basis of information obtained in a special survey when the application is made.
- b) The size of the family group, considered in the same terms as the General Unified Subsidy System.
- c) The way in which the ownership of, or rights over, the land are accredited when the application is made, in the sense that a property which is authentically accredited is worth more points than one which is in process of being acquired.
- d) The amount of savings in money, if this is declared at the time of applying. Under this system there are no seniority requirements and therefore no points for them; however, it is also a requirement that the savings be placed in a Home-Savings Account.

Historical background.

The Rural Housing Subsidy system began experimentally in 1980 and was used sporadically in the years 1980 and 1984. From 1986 onwards it has functioned regularly and the figures of subsidies awarded each year are as follows:

Rural subsidy certificates awarded	
Year	Awarded
1980	2,802
1981	0
1982	0
1983	0
1984	1,959
1985	2,035
1986	7,397
1987	7,317
1988	7,586
1989	7,544
1990	7,579
1991	7,564
1992	7,696
1993	8,000

9. BASIC HOMES PROGRAMME.

Target population.

Homeless families with poor living conditions, belonging to the first or second income quintile. It may be applied in urban or rural areas, though in practice it has tended to develop more in urban areas.

Product.

The basic home is a complete home with an area of approximately 36m², in a site of 100m².

Price.

The price varies between the different regions and localities. The national average is approximately 230 UF.

Financing.

The home is financed with the beneficiary's savings, a state subsidy and a mortgage loan awarded by the SERVIU.

Savings.

The savings must be deposited in a home-savings account and the minimum amount is 10 UF.

Subsidy.

The state subsidy is equivalent to 70% of the price of the home, with an upper limit of 140 UF.

Loan.

The mortgage loan is awarded by the SERVIU and consists of the amount needed to complete the price of the home. The period of the loan is variable, with a maximum of 20 years, so that the dividend is not more than 20% of the beneficiary's salary nor less than 0.6 UF. The interest rate is 8% per year.

Selection criteria for beneficiaries.

Applicants are selected according to their points, which are calculated according to the factors listed below:

- a) The socio-economic and housing conditions of the applicant, which are obtained from a survey showing the socio-economic stratification of the population (CAS Survey). This is carried out by Local Authorities to provide information for a variety of social benefits which the Government allows for poor families. From this survey a number of points are given taking into account the applicant's general condition of poverty and weighting his/her housing situation.
- b) The size of the family group, including the applicant, his/her spouse and children under 18 years of age, awarding additional points in the case of mentally or physically handicapped children, women who are heads of the household and fathers without spouses.
- c) Savings in money, for which points are awarded with greater weighting for the first savings units up to the minimum amount required in order to receive a housing solution, and a decreasing weighting for additional units.

- d) Seniority in registration: applicants under this system are enrolled on a register, and in view of the fact that the number of people enrolled is far greater than the supply of homes of this type, a number of points for seniority in registration increases the possibilities for those families which do not manage to be selected under the other points factors.
- e) The size of the group of applicants, encouraging the participation of groups of not less than 10 and not more than 50 applicants, in the case of collective applications.

Historical background.

This system began to operate in 1984. The number of homes begun each year has been as follows:

Year	Number of homes
1985	23,020
1986	24,596
1987	19,500
1988	19,500
1989	19,989
1990	18,888
1991	25,322
1992	25,862
1993	26,700

10. PROGRESSIVE HOMES PROGRAMME.

Target population.

Homeless families which are living in shared accommodation or other poor housing conditions, preferably those in the first quintile of income, both in urban and rural areas.

Product.

The progressive home is designed to be built in stages, the first of which has an area of about 13m² on a site of 100m². The site has complete urbanization (drinking water, main drains and electricity) and the home has sanitary infrastructure (a bathroom with toilet, hand-basin and shower and a kitchen) and an enclosed area.

Given the basis of this first stage, which includes the elements which are most expensive and most technically difficult to install, a large number of beneficiaries are capable of completing their home privately. However, a second stage has been defined, with state aid to complete the home in the case of those who have not been able to do it for themselves.

(In rural areas the degree of urbanization in the first stage depends on the services which exist in the area).

Price.

The first stage is worth 140 UF and the second 70 UF.

Financing.

The home is financed with the beneficiary's savings, a state subsidy and a mortgage loan awarded by the SERVIU.

Savings.

The minimum amount saved must be 8 UF for the first stage and 5 UF for the second.

Subsidy.

The state subsidy is 132 UF for the first stage and 18 UF for the second.

Loan.

The mortgage loan is awarded by the SERVIU and is sufficient to complete the price of the second stage of the home. The period of the loan is variable, with a maximum of 20 years, so that the dividend is not more than 20% of the beneficiary's salary nor less than 0.3 UF. The interest rate is 8% per year.

The first stage is without mortgage.

Selection criteria for beneficiaries.

Applicants are selected according to their points, which are calculated on the basis of the following factors:

- a) The socio-economic and housing conditions of the applicant, which are obtained from the above-mentioned survey on the socio-economic stratification of the population (CAS Survey).
- b) The size of the family group considering the applicant, his/her spouse and children under 18 years of age, awarding additional points in the case of mentally or physically handicapped children, women who are heads of the household, and single fathers or mothers.
- c) Savings: points are given for savings in money only up to the limit of minimum savings required in order to be the recipient of a housing solution; additional savings do not give the right to more points.
- d) Period of registration: the applicants under this system are enrolled on a register and points are awarded for each month on the register.
- e) Availability of an owned site, in the case of an application to the private programme.
- f) The size of the group of applicants, in the case of a collective application.

Historical background.

This system began to operate as recently as in 1990. The number of homes begun each year is as follows:

Progressive homes programme Homes begun each year	
Year	Number of homes begun
1990	6,431
1991	12,210
1992	12,872
1993	16,500

Number and amount of home-savings accounts june 1994

Region	Period agreed for completing the savings														
	Up to 18 months			Over 18 months and up to 30 months			Over 30 months and up to 48 months			Over 48 months			Total		
	Accumulated savings	Amount of covenanted savings	Number of Accounts	Accumulated savings	Amount of covenanted savings	Number of Accounts	Accumulated savings	Amount of covenanted savings	Number of Accounts	Accumulated savings	Amount of covenanted savings	Number of Accounts	Accumulated savings	Amount of covenanted savings	Number of Accounts
M	UF	M	UF	M	UF	M	UF	M	UF	M	UF	M	UF	M	UF
I	339	1,326	30,408	36	66	943	12	26	384	9	18	278	396	1,436	32,013
II	329	1,226	20,886	36	87	865	25	61	757	11	32	471	401	1,406	22,979
III	134	393	7,723	21	50	428	10	19	143	6	8	72	171	470	8,366
IV	434	1,192	39,667	78	148	2,014	28	59	744	12	26	405	552	1,425	42,830
V	1,086	2,618	72,739	263	482	7,056	124	279	3,878	39	85	1,186	1,512	3,464	84,859
VI	417	966	38,556	92	152	2,545	32	55	847	17	33	502	558	1,206	42,450
VII	477	1,418	56,180	59	99	2,069	28	70	1,217	16	36	846	580	1,623	60,312
VIII	1,008	2,843	62,557	227	377	4,716	94	180	2,213	43	86	1,167	1,372	3,486	70,652
IX	357	1,061	38,586	43	70	930	19	32	425	7	18	325	426	1,181	40,266
X	430	1,219	43,785	56	124	2,120	20	59	1,034	10	42	807	516	1,444	47,746
XI	30	118	3,446	2	9	135	2	5	53	1	7	91	35	139	3,725
XII	80	236	4,991	7	21	236	3	14	136	2	14	66	92	285	6,429
R.M.	4,741	10,434	343,002	2,527	4,135	57,874	2,487	5,093	63,739	813	2,053	28,419	10,568	21,715	493,034
Total	9,860	25,051	762,526	3,447	5,822	81,930	2,885	5,953	75,570	986	2,458	34,635	17,179	39,280	954,661

Source: Superintendency of Banks and Financial Institutions.

CHAPTER V
MORTGAGE LOANS AND THEIR SECONDARY MARKET

José Gabriel Varela
Jaime March

1. INTRODUCTION.

In the light of the experience gained in Chile, the analysis of this subject may be worked out in terms of the relationship between two important modernizations: on the one hand, the system of financing housing, and on the other, the social security reform which set up the private pension funds.

Since the country passed through various stages in the matter of financing housing, it is worth making certain distinctions regarding the nature of the mechanisms which used to be in existence to satisfy housing requirements and which were affordable for middle-income sectors.

2. THE MODERNIZATION OF FINANCING FOR HOUSING.

2.1. The situation prior to 1960.

Until that date there was no mechanism in existence in Chile to provide housing loans on anything approaching a massive scale. Acquiring a house was dependent on the efforts of private individuals, on mechanisms established by state institutions and especially on social security funds (cajas de previsión).

The state institutions tried to direct their labour towards those sectors with least income, in accordance with social priorities, and this effort resulted in the construction of large housing complexes up and down the country.

Besides these examples of financing, certain banks and large building firms also provided opportunities for housing loans.

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In general, funding operations during this period were carried out with loans agreed at a fixed nominal rate of interest, and the mechanisms to ensure the fulfilment of the obligations deriving from the debt were never very strict or effective, especially in the case of state institutions. This whole heterogeneous system functioned under a legal impediment, which prohibited the readjustability of loans, and this, together with the growing rates of inflation registered in the country, was crucial in determining that the supply of funds destined to financing housing remained chronically scarce and increasingly short-term.

2.2. The experience of the SINAP.

The National System of Savings and Loans (SINAP) was set up in Chile in 1960. Its creation took place within the context of the Alliance for Progress, and introduced the readjustability clause, applicable both to deposits and loans, as a new idea. In 1964, after a starting-up period, the system entered the field of financial intermediation. From then on it began to collect funds from the public, and from those who, more than looking for somewhere to live, were actually seeking a safeguard against inflation to protect the value of their savings.

The financial intermediation of the system manifested itself in the issuing of Readjustable Mortgage Securities, which, until May 1974, were the best channel of short-term readjustable deposits within the small Chilean capital market.

Favoured by what was a genuine legal monopoly of the readjustability mechanism, the system experienced very rapid growth, to the point where it financed more than 23 thousand homes in 1974, a very considerable number given the size of the Chilean market. Between 1968 and 1973 the SINAP processed an average of 15,000 operations per year.

Unfortunately, the system was born with an obvious weakness, which, by the way, was not exclusive to the Chilean experience. The same problem was repeated in almost all American savings and loans systems. The fact was, that while the liabilities were "at sight" and could be withdrawn at any moment by their holders, the assets, in other words the loans, were very long-term.

In the early years of the system's functioning, this factor did not create any major difficulties, because in Chile it held the monopoly on readjustable savings. Only the SINAP could receive deposits with a readjustability clause. This form of operating was forbidden to the rest of the financial system. Obviously, in countries punished over long

periods by very intense inflationary processes, the fact of having the monopoly on readjustable savings constituted an advantage so great that it was possible to put up with this and other fundamental errors.

During the seventies, as the country began to be liberalized and modernized, the economic authorities decided to take apart the monopoly which the SINAP had enjoyed up to that time, considering it to be incompatible with the establishment of a real capital market. The decision implied that the system had to enter into competition with the banking system, both to attract new deposits and to keep the old ones. With this competition, the system's margin for action was very small. The banking system, which even then operated different business areas, could pay savers more attractive interest-rates and in a very short time this produced a major crisis for SINAP, since it was unable to cover with its own funds the torrent of fund withdrawals which its clients began to request. As a result of this, the State was forced to intervene to provide the system with liquidity.

Within a very short time, the savings and loans societies ceased to function due to lack of funds, and a process of mergers began, with the aim of reducing the operating costs of these organizations. Unfortunately the sickness was already very advanced, and the remedies at that stage were ineffective. The system ended in bankruptcy and today no longer exists.

It is worth mentioning that the SINAP loans were easily transferable, due to a clause included in all the contracts. A simple endorsement, written at the end of the document or on the reverse, and a marginal note beside the inscription of the mortgage was enough to formalize the transfer of the loan. In fact, it was by using the endorsement provision that the SINAP gradually transferred its portfolio to other institutions as it was being liquidated.

In normal circumstances, the SINAP would have been able to improve its liquidity by this means. However, at that time the secondary mortgage market had unfortunately not yet been developed, so there were no long-term funds available in the market. This lack may seem surprising, but that was how it was, and the SINAP found itself up a blind alley. Nowadays it may seem strange that there were no long-term funds in the country, despite the existence of a complete, functioning social security system. But the form in which the old system was organized, and the criteria by which it invested its resources, produced that result. Long-term funds were, in practice, unknown in Chile.

2.3. Financing for housing with mortgage-backed certificates.

With the collapse of the SINAP, the country was faced with the necessity of creating a new alternative in financing for housing, which would answer the aspirations of middle-range income sectors. In response to this imperative, a select group of professionals from the public and private sectors met together in 1977, with the task of finding an agile, imaginative and efficient formula to counteract the financial problems which had led to the downfall of the SINAP at the root.

With this assignment in mind, the working group rescued an old mechanism which had functioned effectively in Chile up until the crisis of 1930. This was the old mortgage-backed certificate, conceived now to include an automatic readjustability clause, which would bring to a point of balance the interests of savers on one hand and borrowers on the other. Once the instrument to be used in operating the system had been identified, it became relatively easy to define the functional norms for putting it into effect.

The mortgage-backed certificate is a financial instrument payable to the bearer, which is redeemed by payment of coupons which include both amortization and interest quotas. The certificate is issued by a bank, only when it extends a loan, which must always be guaranteed with the first mortgage on a property.

In the interest of the security of the instruments, the maximum amount of the loan may not be more than 75% of the rateable value of the property offered in guarantee.

2.3.1. Attributes of the system.

From the features defined so far, it is easy to infer some of the fundamental attributes of the new system for financing housing.

- a) Assets and liabilities are expressed in the same currency. In fact, both the mortgage-backed certificate, which represents the liability, and the loan, which corresponds to the asset, are expressed in Unidades de Fomento. The UF is an accounting currency which reflects with complete transparency the monetary correction derived from the variations in the Consumer Price Index (IPC), which is the main indicator of inflation in Chile. At present an UF is worth approximately 24 dollars.

- b) Since what the banks lend are mortgage-backed certificates (MBCs) and not money in cash, the term of assets and liabilities is not only similar, but identical. As has already been explained, MBCs are served by paying periodic amortization and interest coupons, usually quarterly. The system is so conceived that the value of the first coupon of an MBC is exactly the same as the sum of the amortization and interest on the first three dividends of the loan. It should be added, in order to understand the system properly, that the coupons of the MBCs are paid when the term is up, while the dividends on the loan are charged in advance. In other words, it is the mortgagor himself who, by paying his monthly dividends, provides the bank issuing the MBC with the necessary funds to respond for the payment of the coupons. Thus, the only financial risk incurred by the issuer is that of having to use other funds to finance the possible default of the mortgagors.
- c) Since people's needs differ, not all borrowers want loans with the same term. From another point of view, since financial markets are essentially dynamic, the interest-rates of operations are changeable, to the extent that they vary according to conditions of greater or lesser liquidity in the economy.

2.3.2. Functional norms and procedures.

Banks wishing to issue MBCs must seek authorization for each issue from the Superintendency of Banks and Financial Institutions. It consists of a permission empowering the issuer to create securities with different characteristics, bearing in mind that they are issued in series. MBCs which have the same term, the same interest-rate and the same method of amortization belong to the same series.

Together with requesting authorization to issue the MBCs, the banks have to present a development table of the series, showing the value of each of the coupons, and separating what corresponds to amortization from what corresponds to interest. A development table must also be presented for the mortgage loans to be extended under cover of the authorization which has been requested. The value of each monthly dividend must appear on this table, with amortization, interest and commission charges expressed separately. The present value of the monthly dividends, discounted at the same rate in which they are expressed, must be equal to the present value of the coupons of the MBCs. The column corresponding to commissions is obviously not included in calculating this present value. It should be underlined that the commission is the issuer's only profit.

Once the authorization from the supervising organism has been obtained, the bank has to order the physical sheets of MBCs. Since these are instruments which will circulate on the financial market for many years, the authorities have been particularly concerned that the printing should incorporate maximum security safeguards, to prevent adulterations; i.e. special paper, inks of great sensitivity and definition, incorporated watermarks, etc.. Issuers normally have these sheets manufactured at the Casa Moneda de Chile (the Mint). As a result, banks have ready-printed sheets for MBCs of the different series that they will be using, in accordance with the conditions prevailing in the market.

The sheets bear the following information:

- The value of the certificate, expressed in UF. Since the exact amount of the loans which clients will ask for is unknown, the reasonable thing is to print sheets for different values or "cortes", so that the amount of any loan may be made up. The most common procedure is to use sheets of 10, 20, 100, 200 and 500 UF. Thus a person wishing to extend a loan of 1,840 UF will use three sheets of 500 UF, three sheets of 100 and two sheets of 20.
- The interest-rate gained by the MBC.
- The currency in which it is expressed, which is normally the UF.
- The form in which the MBC will be amortized. This is expressly stated on each coupon of the instrument.
- The term for which the MBC will be issued, which will determine the number of coupons of the instrument.

All these details, apart from introducing the instrument used in Chile to finance housing operations, serve to demonstrate another of the financial advantages of mortgage-backed certificates, which is that the interest-rate of assets and liabilities remains matched from start to finish. The ups and downs of the market during the period of validity of the loans, which may be very long-term, do not therefore matter either to mortgagors or mortgagees. This fact, by the way, does not by any means imply that the investor or borrower is tied for the whole useful life of the instrument to conditions accepted at one specific moment, since, among other things, there is an active secondary market and the mortgagor can always pre-pay, either because he has funds of his own or because he prefers to borrow under more favourable conditions.

In short, the great advantages of mortgage-backed certificates in extending long-term housing loans is that they produce an absolute match between assets and liabilities from the very beginning of the operation both in term, currency and interest-rate, and this is not unattractive. Naturally, from the point of view of the mortgagor, the operations present the risk implied in contracting any readjustable obligation. It is true that, in processes of inflationary acceleration, important gaps may occur between the evolution of salaries and the persistent rises of the UF. This was precisely what happened in Chile between 1982 and 1985. It was a period of acute economic retrenchment, in which successive drops in salary levels occurred. To solve this problem, large-scale renegotiations had to be carried out with mortgagors, involving substantial amounts of state funds in these programmes.

Since these are bearer instruments, on which the interest-rate earned and the expiry date of each of the coupons is clearly stated, mortgage-backed certificates are easy instruments to circulate and also to sell. Both attributes are attractive to savers. This is true both for people with long-term funds and for those with short-term funds, who know that they can liquidate them when they need to, on advantageous terms.

2.3.3. Guarantees and safeguards.

With the aim of providing due protection for investors' interests, financing with MBCs uses various safeguarding measures, of which the following are the most important:

- In the case of a MBC issuer going bankrupt, the liquidator must call for a special auction, in which the mortgage assets and liabilities shall be sold, quite separately from the bankruptcy.
- The auction takes place exclusively between the remaining financial institutions which wish to apply. If the offer price in the auction is equal to, or greater than, 90 percent of the par value of the certificates which are in circulation, the holders of the instruments must abide by that result. In such a case the certificates shall be restamped with the price of the bid. In consequence, the bank which has acquired the mortgage assets and liabilities shall be the owner of the loans, and shall be obliged to pay the holders of the MBCs only up to the bid value.
- If the offer price in the auction is lower than 90 percent, the holders of the instruments have the right to choose between accepting this

price or adhering to the results of the bankruptcy, together with the rest of the creditors. In other words, investors may escape the results of the bankruptcy, depending on the quality of the loan portfolio of the bankrupt institution. It must be borne in mind that the bankruptcy may be due to dealings which have nothing to do with mortgage operations, as occurred in Chile in the past decade.

- With the aim of giving this instrument wide attributes in the sense of solidity and effectiveness, the regulations established a special foreclosure procedure for judicial collecting of loans which are granted in MBCs. Under this procedure there are only three exceptions that the mortgagor may file to the foreclosure proceedings: prior payment, prescription and a claim that the charge does not correspond to the person being sued. The mortgagor has a very short time in which to file the exceptions or pay what is owed. Once this time is up, the court must order the auction of the property without more ado.

Where a mortgagor pays off his debt in advance, either voluntarily or by means of judicial foreclosure, the bank must withdraw from circulation MBCs of the same series and amount as those paid in advance, so that due parity may be constantly maintained between the certificates in circulation and the loans extended.

To redeem these certificates, the bank has two options: either to buy them directly from their present holders or to hold a lottery to identify those certificates which should go out of circulation. It is not surprising that the latter option is the one most frequently used. It appears much more transparent to investors, and allows the decision as to which MBCs of a particular series should be amortized in advance, to be left to the laws of chance. Of course, the lottery system for instruments does not always appeal to the investor. Everything depends on the difference between the interest-rate at which he acquired the certificate and the interest-rate current at the moment of the lottery. If the interest-rate has not changed, then the result of the lottery will not affect him. If the reinvestment rate is lower than that of the lottery, this will be against his interests, but if it is higher, luck will have come down on his side.

Current regulations also oblige issuers to withdraw certificates from circulation, when it is decided that the value of the guarantees protecting a loan has decreased more than a certain percentage, and when the mortgagor is in frank default with regard to the fulfilment of his obligations.

2.3.4. Opening the market.

Having explained the more general features of the system for extending mortgage loans used in Chile, it is possible to enter fully into the subject of the secondary mortgage market.

As has already been said, before 1977 the Chilean economy left no space for this market. In fact the capital market itself was more of a future prospect than a reality.

For this very reason the situation was delicate. If banks began a large-scale issue of long-term instruments without taking special precautions, there was a risk of wide-spread frustration which could possibly have brought about the failure of the system, with unforeseeable effects on the new Chilean capital market.

Considering these dangers, and with the aim of making the market more dynamic and giving it relevant guidance for development, the Banco Central de Chile established a purchasing facility for MBCs, for a certain length of time, in order to sustain the demand for these instruments provided they fulfilled certain conditions. These had to do with a maximum amount of 620 UF per loan operation, an identical term (12 years), and a uniform cost (8 percent interest and 4 percent commission for the issuer).

The funds dedicated to sustaining this purchasing facility reached a total of 70 million dollars between the years 1977 and 1980.

The purchasing facility for MBCs was kept alive until the moment when the market itself was capable of generating a reasonable demand for long-term instruments. The institutions which showed most interest in these papers at the beginning were, on the one hand, the old social security funds and, on the other, various new financial agents which began to appear due to the rapid liberalization of the capital market during this period. This was the case of the fixed-income mutual funds, which are equities made up of the contributions of individuals and companies, for investment in public offering securities. The mutual funds are managed by a specially created company (plc), on behalf of, and at the risk of, the participants or contributors.

At the end of 1980, the Chilean financial market had reached a level of development which made the continued functioning of the Banco Central's purchasing facility for MBCs unnecessary, and that institution was able to withdraw from the market without any type of mishap.

3. PRIVATE SOCIAL SECURITY AND LONG-TERM RESOURCES.

The Chilean social security reform was a key factor in the development of the mortgage instruments market.

The 32 social security institutions in existence managed more than a hundred different social security schemes, characterized by enormous variety in the benefits provided and the requirements which had to be met in order to gain access to pensions.

For various reasons, which it is not necessary to go into at this point, the financial bases of the old social security system became weaker, and this decided the government to implement drastic reforms in the social security system.

In practice, the setting up of the new social security system has not only meant channelling large amounts of long-term liquid resources. It has also led to a strong expansion process in the business of the life-assurance industry. At the present time, between the pension-fund managers (AFPs) and the life-assurance companies which are linked to social security, the sector is handling funds of the order of 15,300 million dollars. To diversify risks and extract maximum profit from the social security savings of the workers, the AFPs manage an investment portfolio which has expanded over the course of time both in terms of instruments and alternatives. Initially the regulations were very strict, and the AFPs could invest only in securities issued by the Tesorería General de la República or the Banco Central; in time deposits or other securities representing the borrowings of financial institutions; in instruments guaranteed by these same institutions or in loan certificates issued by them. The regulations established very strict and conservative limits in relation to the maximum percentages of investment in each instrument and in papers from a single issuer.

Naturally, with the development of the system, and given the magnitude of the funds which have been building up, investment alternatives are now more numerous than before. The pension funds are at present open for duly rated bonds from public and private companies; stock certificates of open companies; shares of property companies (plc); investment trust units; commercial papers representing bills of exchange and promissory notes; and negotiable instruments, securities or commercial paper issued or guaranteed by foreign governments, central banks or banking institutions.

Simply to give an idea of the significance of the creation of the new social security system in terms of the development of the mortgage

market, it is worth bearing in mind that the two complement one another. In effect, the securities issued to finance a home are, by the nature of the operation, long-term papers. On the other hand, the benefits which the AFPs and Insurance Companies are obliged to provide are also long-term, since they are postponed until the moment when the worker or beneficiaries are ready to receive their pensions.

The reason for having short-term resources within the private pensions system is connected basically and primarily with the right which assists affiliates to transfer their funds from one AFP to another, whenever they believe it to be convenient, and without having to justify their decision in any way. Obviously these transfers create liquidity needs which can only be met by short-term instruments.

From 1981 onwards - the year in which the social security reform came into operation - and until the end of 1985, figures show a steady expansion of the MBC market.

Mortgage-backed certificates in circulation	
<i>Figures in millions of dollars</i>	
Year	MMUS\$
1981	1,231
1982	1,417
1983	1,512
1984	1,741
1985	1,769

These certificates were acquired by the institutions shown in the following table, in the percentages given. It is easy to see that during the five-year period a complete re-ordering of the market occurred.

Investments in mortgage-backed certificates					
<i>Figures in percentages</i>					
Year	1981	1982	1983	1984	1985
AFP	1.8	25.0	44.8	44.0	48.2
Insurance Companies	-	-	2.3	2.8	4.1
Mutual Funds	3.3	5.1	1.0	0.9	0.3
Other Holders	94.6	69.9	51.9	52.0	47.4

These figures confirm the close relationship between the development of the mortgage market and the 1981 social security reform in Chile. The market's absorption capacity, as far as long-term instruments were concerned, was of such magnitude that in a few years the system of financing housing with MBCs had become totally viable, making the support of the Banco Central, expressed in the initial purchasing facility

for instruments, quite unnecessary. In the period 1981-85 the stock of certificates in circulation grew by 565 million dollars and the share of the AFPs and Insurance Companies in holdings of these instruments rose from 1.8 percent to 52.3 percent.

3.1. Liquidation of mortgage-backed certificates.

When a bank extends a loan with certificates, the sale of these instruments normally takes place in a stock exchange. For these purposes, the transaction is registered so that the instruments may be sold on one of the stock-market floors. The certificates will be awarded to whoever offers the highest price. Since these are instruments in series and with a rate of interest which appears on the cover (the rate which the issuing bank will always pay at any time to the holder of the certificate), the price of the deal will be intimately related to the current long-term interest-rate on the market at the moment of sale.

For example, if the certificate for sale is one issued with a 12 year term and a cover rate of 6 percent, the instrument will be quoted below its par value if the market rate at that point is higher, given that in this way (a lower price) the lower yield of the certificate will be compensated for. On the other hand, if the market rate is lower, the sale should take place at values above par.

In general, investors are unwilling to buy instruments at prices above par, since this involves greater probability of their being exposed to the risk of prepayment by the mortgagor with consequent early redemption of the MBCs by the issuer. In this sense the system is fair and transparent both for borrowers and for investors. Transparency is a fundamental value in these operations, since it is mostly institutional investors which operate in this market.

By July 1992, MBCs in circulation represented a total of 2,911 million dollars, and were in the hands of the following investors:

Principal investors in mortgage-backed certificates	
<i>Figures as of July 1992</i>	
Investors	MMUS\$
AFP	1,604
Insurance Companies	383.4
Investment Funds	0.3
Banks	188.7
Mutual Funds	21.1
Other Investors	713.15

3.2. Mortgage Managers.

There are other mechanisms for financing housing loans which have made the mortgage loan market competitive and which allow greater diversification of risk. With this in mind, the Insurance Law was modified to allow insurance companies and banks to extend or acquire endorsable mortgages, granted exclusively for the purchase, extension or completion of urban housing. These instruments have become an interesting source of business for institutional investors.

The mortgage (*mutuo hipotecario*) is an instrument which represents a loan backed by a mortgage guarantee. Until the date of the aforementioned legal modification, the private financing instrument most frequently used in the housing market was the MBC.

In the case of mortgages, the risk of the instrument is directly related to the solvency of the mortgagor and to the quality of the mortgage guarantee associated with each mortgage. With MBCs, the situation is different, since they have the double guarantee of the mortgage and the issuing bank. As has already been mentioned, in the case of the issuer's going into liquidation, the portfolio of MBCs has to be put out to tender separately, which represents an additional safeguard for the financial instruments for which it provides backing.

In general terms, mortgages and MBCs differ not only as regards risk, but also as regards cost and liquidity. However it is not possible to say immediately which of these instruments is superior to the other. Both have substantive advantages, in terms of the different requirements of mortgagors and investors. Logically, the endorsable mortgage overcomes certain limitations which affect MBCs, but also presents some disadvantages.

These disadvantages have to do basically with the secondary market. In fact the mortgage itself has less liquidity than the certificates. This is easily explicable, since MBCs are perfectly typified financial instruments, which makes them easy to liquidate. This is not true of mortgages, due particularly to their great heterogeneity. This factor, though it is not a serious problem for institutional investors, who can compensate for it with other advantages, is a feature which is more decisive in the case of private individuals.

Alternative solutions are being studied at present in Chile to overcome the problems associated with the trading of mortgages. It is worth mentioning in this respect that the experience of more developed economies in this field is being analyzed. The idea is to create a

mortgage instrument which can have a wide secondary market, and at the same time offer flexibility to mortgagors and investors. In other words, it should be an instrument with very good liquidity. To put it another way, the aim is to create an instrument which combines the best characteristics of MBCs and mortgages. In more developed markets, this challenge is met by the so-called "securitization" of these certificates, i.e. through issuing an instrument which grants rights over the flows generated by a portfolio of mortgage loans.

Securitization is a process which is beginning to occur more and more frequently in present-day financial engineering and consists in giving tradeable instrument form to different specific financial credits. The process implies typifying the credit or obligation in such a way that it can be traded without difficulty on the secondary market.

Even though mortgages are relatively new instruments on the Chilean market, they have already achieved placements to a value of 167.2 million dollars. For the moment, while the subject of securitization is being worked on, the banks and the mortgage managers, which are the institutions responsible for operating these instruments, sell them on the institutional investment market. It is in that way that they are able to refinance themselves.

It is interesting to note that endorsable mortgages are very similar to the loans extended by the old savings-and-loans associations. The great difference lies in the fact that in the case of these mortgages, the funds for granting them are long-term (so there is no mismatch between assets and liabilities), whereas in the case of SINAP they were short-term.

Since the investment needs of the Pension Funds are increasing all the time - and will continue to do so until the moment when private social security reaches normal running conditions, with greater parity between the accumulation of funds and the payment of benefits - the authorities are always evaluating and studying ways of widening the field of investment for these funds. So far the growth of the funds has been progressive, and will continue to be so for some time more. The amounts collected monthly by the system are very great and the pensioners are still very few. The time will come, however, when the pension funds will grow only at the same rate as expansion of employment, increase in productivity and the growth of the country in general.

The search for diversification alternatives for investing the funds led to the AFPs being authorized recently to direct funds towards the shares of single-business property companies (plc). These companies may only

invest their capital in buying non-residential urban property and in housing mortgages.

With these companies, new agents have appeared in the Chilean financial and property market, whose activities should also strengthen the secondary market for long-term papers.

At present there are two property companies functioning on the Chilean market, and these have so far invested a total of 38 million dollars, distributed as shown in the table below:

Property company investments	
<i>Figures as of December 1992</i>	
Investments	MMUS\$
Property for rent	28.9
Property leasing	4.3
Mortgages	4.0
Others	0.8

3.3. Investment Trusts.

Chilean legislation recognizes yet another agent with a share in the investment market. In July 1989 special rules were issued permitting the creation of what are known as Investment Trusts. These institutions are patrimonies made up of individual and corporate contributions which are invested in those securities or goods that the law permits. The administering of these is entrusted to a company which manages the fund on behalf of the contributors and at their risk.

These Investment Trusts are very similar to Mutual Funds. The difference lies in the fact that, whereas the participant in a mutual fund may redeem his investment whenever he wishes, at the value which his participation units have at the moment of redemption, the participant in an investment trust does not have that right. He does not have it, because the resources collected by the Investment Trusts are fixed in time and must remain invested for the period indicated in the respective regulations, which, of course, must be known by the participant when he decides to enter the trust. Under these conditions, the person who wishes to withdraw his contribution from an investment trust must resort to liquidating his participation units on the secondary market, since the managing company is under no obligation to refund the units.

The Investment Trusts may be of stocks, property and risk capital, and depending on their nature, are authorized to invest in different types of financial instruments. Among these are MBCs issued by banks,

endorsable mortgages issued by banks or mortgage managers, and property company shares. Property investment trusts may also invest in urban property.

On 31 December 1992 the assets of the Investment Trusts represented a total of 55.12 million dollars, which the managing companies had distributed as shown in the following table:

Composition of the Investment Trust Portfolio	
<i>Figures as of December 1992</i>	
Types of investment	MMUS\$
Bank time deposits	6.50
Banco Central documents	8.84
Mortgages	8.98
Housing leasing	10.33
Properties for rent	14.46
Other debt certificates	5.60
Mutual Fund units	0.04
MBCs	0.31
Shares in plc	0.06

The authorization granted to the Investment Trusts goes in the same direction as the principle which has guided all the development of the Chilean financial market: a diversity of institutions and positions, with different agents and instruments weaving a network of complementary relationships. A bank issuing MBCs can sell them to individuals, Mutual Funds, Pension Funds, Investment Trusts, Insurance Companies, etc. If it issues endorsable mortgages, it can sell them to Insurance Companies, mortgage managers, property investment trusts, property companies and banks.

The sense of this complementation is always the same. Interrelation between the different agents gives the market better dynamics, offering more incentives for competition and development and completely dissipating those fears of long-term investment arising from possible difficulties with liquidating such investments.

Although the description of the structure and range of the secondary market for long-term instruments may give the impression that Chile has already achieved an optimum level of development in this field, in fact there is still a long way to go.

3.4. State mortgages.

The State has had to extend loans to certain people, mainly for lack of institutions prepared to provide the financing they require, either because of the low level of individual credit or because they consider that the risks involved in such loans are excessive.

In general, these loans are guaranteed by mortgage contracts, executed in a duly protocolized notarial or private document. According to the general norms of Civil Law, loans originating in notarial document are personal loans and their transfer must adhere to specific norms which require the notification of the mortgagor or his express acceptance.

This is the reason why it was necessary to issue special legal regulations when it was decided to create Endorsable Mortgages, to specify that those mortgage contracts had a method of transfer which differed from the general rule. It was determined that, as the bearer clause was stipulated in those contracts, their transfer should be effected by written endorsement, at the end or on the reverse of the respective certificate, under the signature of transferrer and transferee. The transfer must be registered in the margin of the record of the mortgage.

If the State wishes at any point to sell the loan portfolio in its possession, a special, exception law will have to be issued, to determine a special way of transferring these loans. Otherwise it will have to use securitization mechanisms.

The bill dealing with securitization firms, which was discussed in Parliament, contained a special rule regarding this matter, permitting nominative loans to be transferred by the originator to the securitizer without needing to give prior notice to the mortgagor. The validity of this ruling is questionable, since it implies in fact a retroactive modification in the conditions stipulated between the creditor and the mortgagor, in a contract validly signed between them.

4. BREAKDOWN OF INVESTMENTS.

It is interesting to know the composition of the investment portfolios of the different financial institutions which operate on the Chilean capital market. The portfolios of the Pension Funds and Investment Trusts have been analyzed before.

The following tables show the breakdown of the insurance companies' portfolio, of the main purchasers of endorsable mortgages and of the investment portfolios of the Mutual Funds.

Insurance Company Investments	
<i>Figures as of September 1992</i>	
Investment	MMUS\$
Shares in plc	300
Time deposits in banks	65
Mortgage-backed certificates	378
Company bonds	522
Banco Central securities	1,162
Bank bonds	66
Properties	210
Mortgages	101
Other investments	61
Total	2,865

Purchasers of endorsable mortgages	
<i>Figures as of July 1992</i>	
Investors	MMUS\$
Insurance companies	104.5
Investment trusts	9.0
Other investors (banks)	53.7
Total	167.2

Mutual Fund Portfolio	
<i>Figures as of July 1992</i>	
Investment	MMUS\$
Shares in plc	242
Time deposits	294
Mortgage-backed certificates	21
Company bonds	34
State securities	391
Total	982

Housing loans with issue of mortgage-backed certificates (end-of-month balance)		
Month	Total number	Total placements UF
Dec. 85	87,254	52,286,482
Dec. 86	103,751	60,162,424
Dec. 87	121,774	61,437,972
Dec. 88	144,132	63,275,719
Dec. 89	182,031	69,366,311
Dec. 90	205,311	73,706,695
Dec. 91	233,291	81,288,873
Dec. 92	263,374	91,043,194

Default in housing loans granted with issue of mortgage-backed certificates (balance at end of each month)				
Month	Total Number	Balance of capital UF	Expired portfolio UF	Amount expired portfolio %
Dec. 85	87,254			
Dec. 86	103,751	58,761,599	1,400,825	2.33
Dec. 87	121,774	59,721,862	1,716,110	2.79
Dec. 88	144,132	62,015,124	1,260,595	1.99
Dec. 89	172,031	68,139,395	1,226,916	1.77
Dec. 90	205,311	72,573,150	1,133,545	1.54
Dec. 91	233,291	80,701,858	537,015	0.65
Dec. 92	262,374	90,474,513	568,681	0.62

Note: The percentage of expired portfolio was calculated by dividing the amount in expired portfolio by the balance of capital plus expired portfolio.

Default in housing loans with issue of mortgage-backed certificates (balance at end of each month)						
Month	Total number UF	Capital balance UF	Expired portfolio %	Expired portfolio	Number expired %	Number expired
Dec.85	87,254					
Dec.86	103,751	58,761,599	1,400,825	2.33	16,625	16.02
Dec.87	121,774	59,721,862	1,716,110	2.79	16,846	13.83
Dec.88	144,132	62,015,124	1,260,595	1.99	13,660	9.48
Dec.89	172,031	68,139,395	1,226,916	1.77	13,816	8.03
Dec.90	205,311	72,573,150	1,133,545	1.54	15,869	7.72
Dec.91	233,291	80,701,858	527,015	0.65	10,778	4.62
Dec.92	262,374	90,474,513	568,681	0.62	25,762	9.78

Note: The percentage of expired portfolio is calculated by dividing the amount in expired portfolio by the balance of capital plus expired portfolio.

5. SECONDARY MARKET IN MORTGAGE INSTRUMENTS.

Since the middle of the seventies, a secondary market in mortgage instruments has begun to develop in Chile, which has made it possible to finance housing for different strata of the population.

The participation of the banking institutions, the Stock Exchange and the institutional investors, especially the Pension Funds and Insurance Companies, has been of great importance in this process.

A financial and capital system which has operated under clear, stable rules, in accordance with the particular circumstances of the Chilean economy, has been the key to the successful performance achieved by the secondary market in mortgage instruments.

Despite the crisis which affected the Chilean financial system during the years from 1983 to 1985, the mortgage instrument market managed to consolidate itself as the main means of financing the building and purchasing of homes.

This secondary market in mortgage instruments was structured on the basis of the principles of a market economy, recognizing free price determination as an efficient method of assigning resources, and on specific factors, such as the process of inflation, which characterize the behaviour of the Chilean economy, and it has been a fundamental pillar in obtaining resources for financing homes, via a systematic process of long-term saving.

In effect the free determination of long-term interest-rates, accompanied by adequate indexing systems for financial instruments, have stimulated the channelling of important resources to financing housing projects, and in this way have permitted thousands of Chileans to become homeowners.

Below we will examine the elements which make up the secondary market for instruments to finance housing, represented mainly by mortgage-backed certificates. These have been a basic element in the development of the secondary market for fixed-income instruments in Chile.

6. MORTGAGE-BACKED CERTIFICATES.

These are defined as fixed-income instruments, representing medium and long-term obligations, issued by commercial banks, the Banco del Estado,

finance companies and the Ministry of Housing and Town-Planning (MINVU).

Their **purpose** is to finance the building and purchase of homes (housing securities) and productive activities of various kinds (general-purpose securities).

Housing securities are **issued** physically on the first day of each month and nominally on the 1^o January of the year in which the physical issue took place.

In the case of general-purpose securities, the physical and nominal dates of issue are the same.

The **basic trading units** of these securities are the Unidad de Fomento (UF) and the Average Value Index (IVP), though by law the possibility of issuing securities expressed in pesos (\$) or foreign currency also exists.

The **face-value** of these securities is freely determined by the issuing institution, but the most common face-values are 10, 20, 50, 100 and 1000 units.

The amortization of the securities may be ordinary or extraordinary.

Ordinary **amortization** corresponds to the regular payments to service the debt; while extraordinary amortization refers to advance payment of the investment by the issuer, who in turn has received advance payment on the part of the mortgagor.

The ordinary amortization scheme may in turn be direct or indirect.

The direct ordinary amortization scheme corresponds to that programmed on the coupons, which include both the amortization of the capital and the interest for the corresponding period.

The indirect ordinary amortization scheme corresponds to the application of the "Amortization Fund" in the balloting, purchasing or redeeming of securities. In this case, the issuer periodically amortizes just a few securities completely.

Securities destined for housing loans are always amortized quarterly by the direct ordinary or extraordinary methods, (as from 01.01.83 for new issues), with services in the months of April, June, October and January each year. The final service of these securities falls in the month of January.

General-purpose securities may adopt any of the methods outlined above.

The **liquidity** of these instruments may be:

1. Immediate in the case where securities are liquidated through the stock market.
2. Periodic and by parts, in the case of securities with direct ordinary amortization.
3. Periodic, depending on the ballots, in the case of securities with indirect ordinary amortization.

The **term** of the investment may be:

- a) Variable until the instruments expires, the most common terms being 12, 15 and 20 years.
- b) Variable, in the case of the instrument being liquidated in advance on the stock market.

From the point of view of **transfer**, these securities may be bearer or nominative. In the case of bearer securities, the transfer is achieved by the simple act of handing over the document, and this is the mechanism most frequently used.

The **interest-rate** of each issue is fixed by the issuing institution.

The **real yield** of this instrument depends on the real issuing rate, the price at which the instrument is acquired and its maturity, where maturity is taken to mean the length of time which has passed since the date of issue.

From the **tax point of view**, these securities are exempt from 1st category tax and liable for general income tax (global complementario) where this is income perceived by individual persons. The exemption from 1st category tax does not apply in the case of income obtained by banking enterprises or finance companies of any kind.

For companies (plc) and stock associations, the interest obtained is liable for 1st category tax.

In the Stock Exchange, the transfers of these securities involve the following costs:

- Broker's commission: variable
- Stock Exchange dues: exempt
- Value Added Tax: 18% calculated on the broker's commission.

7. REGULATIONS FOR THE FORMAL MARKET.

The legal provisions authorizing the issuing of MBCs are contained in the General Law for Banks and in the Compendium of Financial Norms of the Banco Central de Chile. These provisions lay down the general framework governing the issuing of MBCs, i.e. the issuing institutions, types of currency and readjustability which are authorized, the capital amortization schemes, etc.

Now, the listing and trading of these securities on the formal stock market is derived from the terms of clause 3 of the Law for the Stock Market (Nº 18,045) which extends the concept of "stocks" to any transferable instrument "including shares, options on purchase and sale of shares, bonds, debentures, mutual fund units, savings plans, trade notes and in general, any credit or investment instrument". MBCs are included within this definition, allowing the Superintendency of Stocks and Insurance (SVS) to authorize these instruments to be listed and traded in the country's stock exchanges or on the over-the-counter market.

In order for them to be listed on the stock market, each stock exchange must present its regulations for governing the trading of this type of instrument to the SVS for its approval. In practice, this means the SVS giving its approval to a Manual of Operations involving Fixed-Income Instruments in which are specified the regulations, time-tables and procedures governing the process of offering, trading and liquidating in this type of operation on the stock exchange. In view of the characteristics of MBCs, this is similar to the provisions governing the whole of the market for fixed-income instruments, whether the instruments in question are issued by the public sector, private enterprises or banks etc.

The Superintendency also authorizes MBCs to be traded on the market outside the stock exchange, or over-the-counter, provided that "stock dealers" are involved in it, in other words, those stocks intermediaries who are authorized by law to carry out intermediation activities outside a stock exchange. Normally these dealers are specialized in operations involving the purchase and sale of instruments at maturity and in covenant transactions, i.e. repos and reverse repos. The intermediation market for this type of instrument has thus been reserved for

stockbrokers, who execute the orders for the purchase and sale of MBCs issued by banking and financial institutions using the electronic negotiation systems provided by the stock exchanges.

On a different point, the Superintendency of Banks and Financial Institutions (SBIF) plays an important role in issuing specific regulations regarding the issuing of MBCs, as for example, the approval of the development tables of each series, the code by which the security will be identified on the market and the physical formalities of its issue.

The above culminates in the issue of a certificate which authorizes the issuing and subsequent circulation of the security on the national stock market.

Regarding the regulations which govern the participation of institutional investors in the MBC market, it is worth emphasizing that these have the force of law. Specifically, for Pension Fund Managers (AFP), the authorizing regulations are contained in Decree-Law N° 3,500 (1980); for Mutual Fund Managers, in Decree-Law N° 1328 (1976); for Insurance Companies, in Decree having Force of Law N° 251 (1931); for Investment Trusts in Law N° 18,815 (1989); and for Foreign Capital Investment Trusts (FICE), in Law N° 18,657 (1987).

8. STRUCTURE AND FUNCTIONING OF THE MARKET.

The stock market for MBCs is made up of the three stock exchanges which exist in the country: the Bolsa de Comercio de Santiago, the Bolsa de Valores de Chile and the Bolsa de Corredores de Valparaíso, with almost all the trading in MBCs being concentrated in the Bolsas de Comercio.

In fact, during 1992, 95% of the operations with fixed-income instruments were carried out on the Santiago Stock Exchange and 5% on the Electronic Exchange. The Valparaíso Stock Exchange registered no transactions with this type of instrument during the same period, a phenomenon which is explained by the difficulty involved in trading and liquidating this type of stock anywhere other than the financial centre of the country.

Notwithstanding the previous observation, the negotiation systems functioning in the exchanges are completely electronic and very similar the one to the other.

For practical purposes, the following lines will describe the system used in the Bolsa de Comercio, which was the first institution to introduce electronic negotiation to the stock market.

In the first place, it is important to bear in mind that the MBC market involves the issuer, the stockbrokers, the stock exchanges, and the buyers of instruments, normally institutional investors which structure their investment portfolio from a long-term perspective, such as Pension Funds and Life-Assurance Companies.

The Mutual Funds and the commercial banks themselves also participate.

The issuers, backed by a mortgage deal, proceed to issue the MBCs, which are offered for sale by means of an order which must be executed by a stockbroker. To achieve this, the Stock Exchange has implemented a modern negotiation system for these instruments, using an electronic auction which allows offers to sell to be registered at pre-arranged times. The auction is divided into three stages:

- a) Registration of offers.
- b) Selection of offers.
- c) Auction (bidding and adjudication of offers to sell)

In the "Registration of Offers" stage, the broker or direct dealer (an institutional investor authorized by the Stock Exchange to take part in the auction) enters the offers to sell during a pre-arranged 45-minute period. Depending on the time when the offer is entered, and allowing adequate time for the market to become informed, this is assigned to the corresponding auction.

Later, in the "Selection of Offers" stage, which lasts 25 minutes, those intermediaries interested in placing purchase bids may analyze and select such offers to sell as match their investment strategies.

Lastly, in the "Auction" stage itself, the broker or dealer has a period of 10 minutes to place bids for the instruments which interest him, in a multi-concurrent manner. This means bidding simultaneously for different instruments.

The auction culminates when the computer awards the offer to the highest bidder, i.e. the buyer who entered the highest price (the lowest internal rate of return, IRR). The final adjudication price corresponds to one hundredth higher than the second best bid, which is equivalent to

one hundredth lower than the second best bid measured by the internal rate of return. In this way, the adjudication system provides a fair mechanism for allocating prices, on the basis of perfect continuity in purchase prices, thus eliminating the typical distortions of an auction system.

This system has been successful and widely accepted by the whole financial community, since it allows adequate forming of prices for fixed-income instruments, including MBCs.

The above has been guaranteed by the direct participation of issuers and institutional investors. Equipped with a special code from a stockbroker, these may participate directly in the electronic auction, via their own personal computers which are connected to the Stock Exchange network.

9. LISTING ON THE STOCK EXCHANGE.

Securities are listed on the Stock Exchange at a percentage of their par value. Par value is defined for these purposes as the value of the non-amortized capital including interest earned and corresponding readjustments.

This system allows:

- a) .The issuing rate to be compared with the effective return until expiry,

Depending on the percentage of par value at which an instrument is purchased, it may obtain a yield which is higher or lower than that of issue. In accordance with the above, three cases may be observed:

- a.1 If an instrument is quoted above par, its effective return until expiry is lower than the issuing rate.
- a.2 If an instrument is quoted at par, the effective return will be exactly the same as the issuing rate.
- a.3 If an instrument is quoted below par, the effective return until expiry will be higher than the issuing rate.

As may be appreciated, quoting an instrument at a percentage of its par value immediately obtains a ratio of yield or expected rate of effective return.

- b) A probable gain or loss of capital to be evaluated, in the event of prepayment on the part of the issuer.

If there is prepayment by the issuer, in other words, if the issuer amortizes his debt with the holders of the instruments in advance, three different situations may occur, depending on the percentage of par value at which the instrument was acquired.

- b.1 If the instrument was acquired above par, the prepayment at par on the part of the issuer will imply that the effective rate of return calculated at the moment of acquiring the instrument will be less. This situation will cause a loss of capital.
- b.2 If the instrument was acquired at par, the prepayment by the issuer at par will cause neither loss nor gain of capital, since in that case the rate of effective return expected at the moment of acquisition will be maintained, and, what is more, this will occur in a shorter time than expected.
- b.3 If the instrument is acquired below par, prepayment by the issuer at par will cause a gain in capital, raising the rate of effective return which was calculated at the moment of purchase.

10. EVOLUTION OF THE MBC MARKET.

In the past few years, the volumes traded on the stock market have grown hand-in-hand with the greater quantity of mortgage transactions registered in the financial system.

In fact, in 1991 and 1992 respectively, 39,337 and 39,203 mortgage transactions were handled. These operations meant loans of 16,086,274 UF and 18,126,700 UF, that is to say, US\$ 400 million and US\$ 450 million, respectively.

In that same period, stock market transactions in MBCs reached volumes of US\$ 550 million and US\$ 990 million, respectively, registering a ratio of 1.4 and 2.2 times the loans handled.

It may be concluded on the basis of the above that the stock market has not only been the main mechanism for primary placement of such instruments, but has also offered a mature and highly liquid secondary market for them.

According to reports issued by the Superintendency of Banks, there are in the system today 290,000 mortgagors with MBCs, which represents a debt at this moment of 125 million UF, or US\$ 3,125 million. Of this balance, about US\$ 1,767 million are in the hands of the Pension Funds, which makes them the main holders of this type of instrument.

At present, MBCs represent approximately 15% of the investment portfolio of the Pension Funds, being next in importance after state instruments and shares in plc.

Issuers of MBCs have undergone a notable increase between 1980 and the present. In 1980 there were only seven issuers registered with the Stock Exchange, and that number is now 25, covering a substantial percentage of the national banking system.

From the point of view of total transactions, the issuers with most presence in the market in 1992 were as follows:

Banco del Estado	45.2%
Banco de Santiago	14.4%
Banco de Chile	9.5%
Banco BHIF	5.5%
Banco de A. Edwards	4.3%
Banco O'Higgins	3.9%
Banco del Desarrollo	2.8%
18 other banks	14.4%

The yield obtained by investors in the past 10 years, measured by the average internal rate of return for MBCs, has oscillated between 6.14% per year in real terms, at the lowest point, in 1988, and 10.04% per year in real terms, the highest rate verified in 1983.

In 1992, the average yield for this type of instrument was 6.99% per year in real terms, a figure which compares favourably with the general average for fixed-income instruments listed on the Stock Exchange, which reached 6.84% per year in real terms.

It is worth bearing in mind that this yield assumes, on average, financial charges for mortgagors of around 9.5% to 10% per year in real terms, since banking commissions associated with mortgage loans fluctuate between 2.5% and 3%.

The consolidation of the MBC market in Chile has been possible, thanks to the relevant presence of institutional investors in the past few years.

Their need to make up long-term investment portfolios has generated a purchasing power in instruments representing obligations with terms of 12, 15 and 20 years, which has fully satisfied the credit conditions of both issuers and mortgagors. In this way they have found an effective solution to their needs for financing, by using the capital market.

In the future, it is foreseeable that the building sector will stabilize its growth rate around 8% per year, a figure which allows one to expect a similar rise in the number of mortgage loan operations. However, this financing mechanism will have to prove its effectiveness in the face of other alternatives which are beginning to appear in the sphere of housing finance, such as endorsable mortgages and residential leasing.

Table Nº 5.1
Issuers of mortgage-backed certificates
registered with the stock exchange in December 1992

1. BANCO BHIF (BHIF)
2. BANCO BICE (BICE)
3. BANCO CITIBANK (CITI)
4. BANCO CONCEPCION (BCO)
5. BANCO DE A. EDWARDS (EDW)
6. BANCO DE BOSTON (BOT)
7. BANCO DE CHILE (CHI)
8. BANCO DE CREDITO E INVERSIONES (BCI)
9. BANCO DE SANTIAGO (STG)
10. BANCO DEL DESARROLLO (DES)
11. BANCO DEL ESTADO (EST)
12. BANCO DEL PACIFICO (PAC)
13. BANCO DE FOMENTO DE VALPARAISO EN LIQUIDACION (BFV)
15. BANCO HIPOTECARIO DE CHILE EN LIQUIDACION (BHC)
16. BANCO INTERNACIONAL (INT)
17. BANCO O'HIGGINS (BOH)
18. BANCO OSORNO Y LA UNION (BOS)
19. BANCO SANTANDER (SAN)
20. BANCO SUDAMERICADO (SUD)
21. BANCO UNIDO DE FOMENTO EN LIQUIDACION (BUF)
22. CENTROBANCO (CB)
23. EX-BANCO COLOCADORA NACIONAL DE VALORES (CNV)
24. FINANCIERA (FUSA)
25. THE CHASE MANHATTAN BANK (CHA)

Source: Santiago Stock Exchange

Table N° 5.2
Schedules for electronic auction of
mortgage-backed certificates on the Stock Exchange

Admission from	Offers until	Selection		Auction	Admission from	Bids until
		From	Until			
09:30	10:15	10:15	10:40	1	10:30	10:40
10:15	11:00	11:00	11:25	2	11:15	11:25
11:00	11:45	11:45	12:10	3	12:00	12:10
11:45	12:30	12:30	12:55	4	12:45	12:55
15:00	16:00	16:00	16:25	5	16:15	16:25

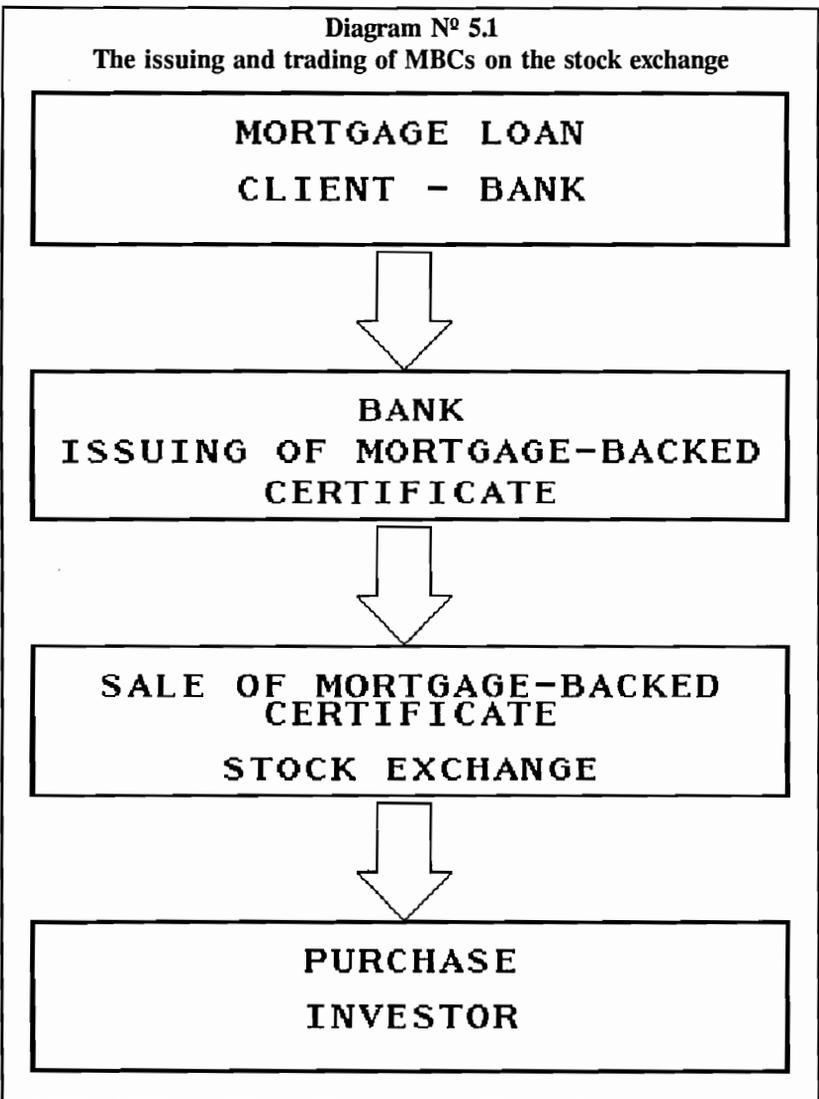
Source: Santiago Stock Exchange

Table N° 5.3
Amounts traded in mortgage-backed certificates
(millions of US\$)

Year	Amount traded auction MBC	Average IRR MBC	Average IRR FII	Number of issuers
1980	n.a.	-	-	7
1981	n.a.	-	-	19
1982	n.a.	-	-	25
1983	n.a.	10.04	9.61	31
1984	n.a.	8.89	8.01	28
1985	n.a.	8.88	8.65	27
1986	n.a.	6.76	5.08	23
1987	n.a.	6.31	5.95	24
1988	n.a.	6.14	5.81	23
1989	n.a.	7.54	7.69	22
1990	317.9	8.34	8.56	22
1991	549.6	6.59	6.34	21
1992	987.1	6.99	6.84	25

FII : Fixed-income instruments
MBC : Mortgage-backed Certificates
n.a. : Not available
Source : Santiago Stock Exchange

Diagram Nº 5.1
The issuing and trading of MBCs on the stock exchange



CHAPTER VI**LESSONS FROM THE CREATION AND MANAGEMENT OF
STATE MORTGAGE PORTFOLIOS***Pedro Melo***1. HISTORICAL AND INSTITUTIONAL BACKGROUND.****1.1. The advance of the State.**

Following the world economic crisis of the early thirties, there began, in Chile as in other countries, a period of confidence in the State and its active participation, regulation and even monopolization of an increasing range of activities. This frequently occurred not by Decree, but by what we would now call disloyal competition with private business. Recognizing these facts in no way denies the importance that decisive state action had in its time in overcoming crises, nor the salvation that it must have signified for large sectors of the population. However, the failure to plan its retreat when it had fulfilled its subsidiary role, and on the contrary, its increasing tendency to replace personal initiative, engendered high social costs.

The process described also occurred in the housing sector. Until 1930, the building of houses designed to be rented by the poorer sectors of the population, was an important and lucrative business'. From that time on, regulations were issued with the intention of protecting the poorer classes, which made this type of investment unattractive, to say the least, and led to the escape of investment funding to other activities, thereby reducing the availability of housing options for the least favoured members of society.

At the same time, the Chilean State began to build houses for manual workers, making them owners of these properties, but unfortunately there

* Andrés Necochea: "Elements for a discussion on renting policies in Chile", Pontificia Universidad Católica de Chile, 1990, mimeo.

is no adequate record of this experience in terms of the loans involved, the collection policy and its subsequent recovery.

1.2. The beginning of the return journey: private participation and subsidies based on demand.

The year 1976 was a milestone in the reversal of the growth process with regard to the functions assumed by the State in the construction sector. Specifically, the job of building housing for poorer sectors was returned to the private sector, by a system of bids. But even today the State continues, among other things, to exercise the function of granting loans to the recipients of these houses, assuming the risk of non-payment. The system of bids begins with the regional de-centralization of the sector, via the creation of the Housing and Town-Planning Services (SERVIU), the institutions which nowadays organize these bids.

The more wealthy sectors of the population have never required state aid in order to pay for the building or purchase of their houses, although the Social Security Funds (Cajas de Previsión) built houses until the 1970s for the middle to high social strata. The "Cajas" and the National System of Savings and Loans financed homes designed for the middle sectors of the population until the end of the 1970s, after which this role was taken over by the banking system*. This task is now shared with mortgage-issuing companies.

In 1978, the Ministry of Housing and Town-Planning (MINVU) began a policy of direct subsidy according to the demand for housing in middle-to-low sectors (with a value no higher than 850 UF**, equivalent to US\$ 13,300 at the end of 1978 and US\$ 20,400 today). Earlier, subsidies had always been implicit in the interest-rates on mortgage loans, or hidden in the sale value of the site and/or in technical assistance and building costs at far less than the real rates (even going so far as not to charge at all). Only in 1984 did the MINVU make an explicit subsidy on those houses which it entrusted to the private sector. Probably taking into consideration the low recovery rate of direct loans granted to beneficiaries in this sector at that time, it was estimated that the State

* The creation of mortgage-backed certificates was fundamental here, since they constitute a partial form of securitization.

** This limit was later raised. The UF is an accounting unit which is adjusted on a daily basis, extrapolating the variation in the Consumer Price Index (IPC) from the previous month.

would award a subsidy of 75% of the value of Basic Homes (around 200 UF*, US\$ 3,500 in December 1984 and US\$ 4,800 today), requiring the remaining 25% to be financed by the beneficiary in the form of a minimal advance saving and the payment of a mortgage loan. This tripartite funding system (advance saving, subsidy and mortgage loan) continues today in the Housing Programmes of the MINVU, though only in the case of the programmes for the poorest sectors does the MINVU itself make the loan.

1.3. The black spot in the system: the state mortgage portfolio.

The historical experience of the way the SERVIUs** have managed the administration and collection of the mortgage portfolio is a low point in this story, which may affect the development of a residential financing market for the middle-to-low strata, and even contaminate the existing market for middle strata by an artificial rate of default and greater "political risk" in efficient collection.

The lack of will to collect on the part of state agents, together with an insufficient system of information about the portfolio and economic difficulties among the population, -subjects which will be tackled further on - all added up to a high, persistent and even increasing level of default.

In the face of this reality, so-called "renegotiations" were periodically implemented. This meant modifying the existing conditions of a debt in the sense of reducing the amount of the dividend, reducing the agreed interest-rate and/or receiving a subsidy on each dividend or on the balance of the debt. Sometimes these benefits were conditional on the debtor's keeping himself up to date in the future. They also "normalized" the debts, transforming the amounts accumulated as default and penalty interest into debt about to fall due. These renegotiations were offered by Supreme Decrees (DS) for defined periods, to all debtors with particular debt circumstances: for example, debtors in good standing up until a

* In 1984, according to the MINVU Annual Report for that year, the average cost in the Metropolitan Region was 151.74 UF for homes of 30 to 35 square metres, built on 100 sq. metres of land. The maximum allowed was 190 UF. In 1992, the average cost was over 220 UF, due to the higher production costs compared with the depressed situation of the period from 1982-1985.

** The MINVU does not have a mortgage portfolio, but each one of the Housing and Town-Planning Services (SERVIU) has one. These are autonomous regional companies working according to the guidelines issued by the MINVU.

certain date. Since they were thought out to help defaulting debtors, but were unable to discriminate (since it was almost impossible) between those who were not paying because they were unable to, and those who were simply waiting around for state aid, they ended up becoming indications against fulfilling mortgage obligations. This phenomenon also affected the private banking portfolio, though to a marginal extent.

This is the general, central problem. The factors behind it and alternative solutions to it will now be described.

1.4. Information problems in managing the portfolio.

Before continuing with the analysis of this subject, it is appropriate to underline one of the constants which may be observed when one investigates the situation of the Ministry's mortgage portfolio: this is the paucity of information, and the partiality of such as there is. It is probable that such difficulties with portfolio information are not really surprising in institutions of this type, both in America and elsewhere in the world, for the following reasons:

- a) The large quantity of current operations (over 300,000 in 1989 in Chile's case).
- b) The variety of contractual specifications (readjustability rates or accounting units in which debts and dividends are expressed).
- c) Modifications to these, due to multiple renegotiations and incentives granted as a means of encouraging the payment of these obligations.
- d) Lack of adequate computational equipment and relatively little experience in the use of such equipment in public institutions; and last, but by no means least,
- e) The secondary importance which has generally been assigned to the public institutional function of debt-collecting.

To this difficulty with information for managing the portfolio must be added the permanent reluctance on the part of users to deliver adequate information about their debts, and their difficulties in understanding the little information they receive, which is normally partial, sometimes out-of-date, and largely incomprehensible to the majority of debtors.

* For a country with approximately three million homes at that time.

In this respect, it is worth emphasizing the incorporation of information technology into the administration of the mortgage portfolio of the SERVIU in 1976. However, up to the present the central computer has not kept a record of the debt situation of the whole portfolio, and it is by no means easy to obtain certain statistics from it which are fundamental for an adequate portfolio management.

1.5. Panorama of the present state mortgage portfolio.

A normal, healthy portfolio is serviced within the stipulated period and according to the terms agreed initially, except in cases of pre-payment. In Chile, it is also expressed in UF, a payment unit which gives it 100% protection from inflation as measured by the Consumer Price Index (IPC). On the other hand, the creditor should possess an exact picture of the number of current operations and their state of servicing, applying debt-collection proceedings in case of default.

The mortgage portfolio of the SERVIU is far from fitting neatly into the above description. According to existing information, it may be deduced that the current portfolio of the SERVIU amounts to between 220,000 and 230,000 debtors, approximately. For the Metropolitan Region more precise statistics are available, based on a single, specific study referring to 31st December 1992, which includes 88% of that portfolio. Using a representative sample, it was possible to calculate the number of debtors according to readjustability system, antiquity and renegotiations carried out. Of a universe of 102,000 debtors, (see Figure N^o 6.1), 19% were already debtors when the computing system was implemented over 17 years ago, and 30% had had no possibility of renegotiating their debt, because they incurred it later than 1988*. Only 9.5% of those who had had the possibility of renegotiating, had not done it at all. As may be seen in Figure N^o 6.2, 55% of the portfolio has daily readjustment for past inflation, while 41% has annual readjustment, which may not be greater than the variation of the IPC, but may be less. The remaining 4% is readjusted monthly, but on average at a lower percentage than the variation of the IPC. Debts outstanding since the middle of 1976 have accrued an average of 24 dividends in default, plus a further 10 in penal interest (Figure N^o 6.3). Often their present debt balance is much higher than the original balance, expressed in a number of payment units, with almost three times the average balances of the debts incurred since 1989 (and with dividends one and a half times the dividends on

* The last general renegotiation was held in 1990, and was applicable to those who were debtors before 1st January 1989.

more recent loans). On the other hand, the category of the most recent debtors, with an average antiquity of about two years, have accrued the equivalent of more than nine dividends in default and penal interest. On average, during 1992, only six payments were made, for the equivalent of eight dividends. The behaviour of older debtors was even worse. Despite this situation, which has presumably been going on for years, debt-collection proceedings have historically been very limited, as will soon be seen.

In any case, it is worth pointing out that, after the last renegotiation, various measures were defined, apart from those already mentioned, to discourage default throughout the portfolio. Some of the most noteworthy are as follows:

- Rewarding debtors who are up-to-date with their payments, by a competition and draw, called "Casafeliz", publicized by a popular television channel.
- The inclusion of defaulting debtors in the Commercial Bulletin of DICOM, which should prevent defaulters from obtaining commercial loans.
- The intensifying of pre-judicial collecting by the portfolio manager, who sends collection letters to defaulters, and if this does not produce the desired results, refers the case to judicial collection, with the prior authorization of the SERVIU.
- The actual auctioning of the properties concerned, as an exemplary sanction in justified cases.

However, the outworking of some of these measures has not been perfect, especially as regards judicial collection. This is obvious if one observes the figures for the auctioning of defaulters' properties on 31st December 1992: only eight, and none of these in the Metropolitan Region.

This description provides the framework of reference for analyzing in depth the causes behind this situation and proposing ways of solving it.

* There are other measures, such as, for example, unemployment insurance and the law of discounting from salary, which were implemented less quickly, because they required legal regulations to be created or modified, and these are still going through parliament.

2. CONCEPTUAL AND REAL CHARACTERISTICS OF THE FINANCING OF THE DEMAND FOR LOW-COST HOUSING AND THE STATE MORTGAGE PORTFOLIO.

2.1. Subsidies: direct, indirect, hidden and implicit.

Despite being somewhat dull, it is useful to explain the precise meaning of the different subsidies:

- Direct subsidies: are those which are related to an activity or "market", via what could be called a complementation of supply and demand, by means of which they cover part of the price or cost of the activity or asset. The subsidy on demand for housing, which complements the advance saving and the mortgage loan assumed by the purchaser, enters directly into the housing market.
- Indirect subsidies: have to do with an activity or market which is different from the one in question, but related to it. For example, a subsidy on the administrative costs of producing a mortgage loan constitutes an indirect subsidy in the housing market.
- Hidden subsidies: are those costs not included in the price of the asset, and of whose existence the agents intervening in this, or related activities, generally have no clear idea, at least as regards the amount. Part of the cost of the bureaucratic structure of the MINVU is a hidden subsidy, which does not appear in the cost of the basic homes which are bid for, nor in the interest charged on the mortgage loans which are extended.
- Implicit subsidy: although in Spanish "implicit" is almost synonymous with "hidden", its use has been kept to refer specifically to direct subsidy on the interest-rate. In this sense, the paradox occasionally occurs where the implicit subsidy becomes explicit, without ceasing to be "implicit". For this to happen, it would only be necessary to express clearly the amount of subsidy involved in "soft" loans, where the State absorbs the difference in interest-rate between what has been covenanted and the market rate.

* In the case of loans extended through the banking system, the State also provides a kind of payment insurance for homes up to 900 UF (US\$ 21,600), for the difference between 75% of the balance of the debt and what is recovered by auctioning the guarantee. In the language of the sector, this category has also been included under the expression "implicit

From the point of view of the objectives to be achieved, direct subsidies are preferable to indirect, since if one wishes to encourage an activity, the greatest efficiency is achieved if resources are dedicated to it directly. On the other hand, hidden subsidies distort the markets, since the prices of the goods or services directly influenced by them do not reflect the real costs of the activity, displacing potential suppliers who cannot compete with such values.

As will be seen further on, many expenses associated with the bureaucratic structure of the sector are hidden subsidies, which normally are not even identified among the costs of social housing. Although the costs incurred in invitations to bid, in the supervision or inspections of building work, and in the processes of application and assignment of building proposals, should, according to the legal regulations at present in force, be included in the total cost under the category of indirect costs of houses, in practice the tendency has been to include only the item of sundry current expenses resulting from this work, plus notarial expenses and the registration of the property. Neither is the cost of soil studies included in the value of the property as presented to the beneficiary, nor work carried out on sites not included in the bidding for the building work. Also, on many occasions the sites belong to the SERVIU and are valued below their replacement value^{*}. It is worth pointing out that the value of the site can be a significant part of the total cost of a building project.

In addition to the cost of financing the adjudicated constructions, which are built on the basis of "advances" without charging interest, the costs of publicizing the programmes should also be included, and those of evaluating mortgage loans, plus occasionally the costs of repairs carried out on houses by the SERVIU, when the quality problems which they present cannot be covered by the guarantees given by the construction firms, either because of an imperfect system of guarantee requirements or because the guarantees are no longer valid.

Although there is no thorough study of hidden costs in existence, which in turn makes it more difficult to collect them today, the following analysis may be taken as a point of reference: of the 20 million UF in the 1992 budget for Housing and Town-Planning (about US\$480 million),

subsidy".

* In all this there is certain heterogeneity of practice between the different SERVIU over a period of time, with some trying to eliminate these hidden subsidies and recognize real costs.

6.30% corresponded to running expenses (personal and other). If one considers that 78.27% of real investment corresponded to subsidies and housing loans, the 988,600 UF of running expenses could be distributed pro rata between 82,000 housing units built that year with certain sectorial participation. This allows one to estimate that the total hidden subsidy in running expenses was 12 UF per unit.

But the existence of a long history of default in the mortgage portfolio of the SERVIU provides the definition of the largest of the hidden subsidies granted by the sector: that which has been given in the form of periodic "debt renegotiations", in circumstances which reduce the real value of the obligations. It may be stated that this is a hidden subsidy which debtors "expect", and this accounts to a great extent for the high rates of default in a context of rising salaries and very low unemployment.

2.2. Renegotiations.

The history of default in the state mortgage portfolio and that of its renegotiations, certainly did not begin in the aftermath of the 1982 recession, or even with that of 1975^{*}. The Annual Report of the MINVU for 1974 recounts the incentive offered to cancel "uneconomic debts" with a single payment (similar to that offered in the renegotiation of low-balance debts in 1990). The report also gives information about a portfolio recovery which seems to correspond, according to the small amount of available data, to recovery rates in 1974 and 1975 of 30 to 35% of the amount accrued, which would seem to reflect the economic disorder reigning in the country in the first half of that decade.

Since 1983 there have been five important renegotiations (Figure N° 6.4):

* After the first world oil crisis, which coincided in Chile with great macro-economic imbalances, the end of the Unidad Popular government and the subsequent fall in the price of copper, plus the structural adjustment and reduction in state organization, the GDP fell 13% in 1975. Due to the coinciding of the second world oil crisis with the end of the "sweet money" period, with Mexico's problems in coping with its external debt, a consumer "boom" in Chile, an exchange hold-up and a large external debt; the inevitable cut-back reduced the GDP by 15% between 1981 and 1983. After these experiences, the country has diversified its exports, both in terms of products and markets, increasing its investment and savings, and reducing the relative size of its external debt, with a result which is clearly visible: in 1992-1993, for the first time, a recession in the United States did not have fundamental repercussions in the national economy.

- a) Decreto Supremo (DS) N° 87 - (1983): temporarily reduced dividends* (up to 40%) for the mortgagor and granted him an automatic loan for the lesser amount paid, to be serviced at the end of the debt period at a real interest of 8% per year. Although the present value of the loan as a whole was virtually unaffected, in practice the extending of the total period increased the obtaining of hidden subsidies and the expected amount of these, as is shown in the data supplied in developing this theme.
- b) DS N° 104 - (1984): extended the period of reduced dividends contemplated in DS N° 87 and halved the interest-rate charged on the automatic loan. It awarded a subvention of 8% for timely payment of dividends, which accumulated in a fund, earning interest at 12% per year in real terms. This type of incentive, while it obviously encourages timely payment, also institutionalizes hidden subsidy.
- c) DS N° 156 - (1986): reduced the interest-rate of the principal loan from 12 to 8%. It applied only to debts in UF, which were expressed in a new payment unit called the Average Value Index (IVP). This renegotiation had the peculiarity that it was applied to SERVIU loans administered by commercial banks**.
- d) DS N° 35 - (1988): granted a 25% reduction on every dividend paid on time in the future, and a subvention of 10% of the total dividends paid since the start of the debt for each 12 months in which payments were up-to-date. This last provision had special influence on the actual value of the renegotiated loans, causing them to fall to less than half their value, (and even to 30%, according to simulations, with the reduction being greatest in the case of those loans with most time to run), although the likelihood of default was also reduced. It also allowed mortgagors to change their payment unit (UF, IVP or CA) to pesos with monthly readjustments (IR), for

* In Chile, the expression normally used to indicate the monthly payment on a mortgage debt is "dividend".

** The loans also had the peculiarity that they had given origin to the issuing of mortgage-backed certificates. Their renegotiation required these to be redeemed and new MBCs issued, and this was carried out at the same time as the sale of the portfolio to the Banco del Estado by a subrogation contract. By means of this, The MINVU guarantees the payment of the issue and the BECH subrogates the right to collect in case of default. Management continued to be in the hands of the commercial bank.

a figure which is lower, on average, than the IPC*. Finally, it allowed Site Operations mortgagors to have the balance of their debt cancelled, if they finished paying 50% of the stipulated price within 6 months.

- e) DS Nº 132 - (1990): granted a subvention of 50% of values to be paid in the future (for debts current up to 1988) and eliminated the real interest on those debts. This reduced the present value of loans in UF and IVP by more than 40%, and those in CA (which already included 0% interest) by over 25%. In addition, a subvention of almost 25 UF was granted to those who paid off the balance of their debt within the period agreed in the renegotiation. Finally, it allowed those debtors with balances of under 25 UF to cancel them by paying \$5,000 if they were up-to-date, or \$10,000 if they were in default. Pensioners with monthly incomes of less than 3.5 UF received a subvention for the whole of their debt, less \$5,000 (if they were up-to-date with their payments) or \$10,000 (defaulters), as did mortgagors with Semi-permanent Homes, regardless of the unpaid balances**. The mortgagors who renegotiated could apply for a reduction in the value of their dividends (postponing the deadline for paying off the debt), and this was granted in cases where social need was considered to exist.

2.3. The high rate of default in the portfolio cannot be explained away by the economic situation.

Traditionally the existence of low wages and high unemployment have been cited as important causes of default. If one studies the unemployment rates since 1960, it may be seen that these do indeed change from levels between 5% and 7% in the period 1962-1970 to rates permanently over 15% (and up to 31% in 1983)*** during the period

* If the monthly variation in the Salaries Index is lower than that of the IPC, (both with a three-month time-lag), this first variation is applied. If it is higher, that of the IPC, multiplied by a factor of 1.05 is applied. In five years, since March 1988, the Readjustment Index (IR) has accumulated a depreciation of 17% relative to the IPC.

** Mortgagors with Self-Built Homes received a similar benefit if they were up-to-date, or a subvention of 75% of their outstanding debt (plus 25 UF minus \$10,000, if they paid it).

*** Adding to open unemployment, those official programmes to absorb unemployment, the PEM and POJH. In fact, unemployment is somewhat less than the total number of people without work, since this last figure includes people looking for first-time jobs.

1975-1986. On the other hand, real wages maintained an upward trend from 1960, doubling in 11 years (reaching a maximum in 1972), but falling to half during the crisis of 1973-1975. After that they recovered until the crisis of 1982-1983 when they fell again, but this time no more than an average of 15% after 1981. Since 1986 (see Figure N° 6.5), real wages have risen and unemployment has fallen (this began to decrease in 1984). Between 1986 and 1992 employment has increased 22% and real wages 23%, meaning that the average income of a worker increased by over 50%. The average rate of unemployment in 1992 was only 4.9%.

It is worth mentioning that, at the end of 1990, average family income in the first three quintiles was 2.41 UF, 5.88 UF and 7.71 UF^{*}; i.e US\$50, US\$122 and US\$160 at the rate of the period. Given that 85% of basic homes and sanitary blocks correspond to those quintiles (29%, 33%, and 23% respectively^{**}) and considering the present average value of the dividends on SERVIU debts (0.663 UF), it may be concluded that, even without taking into account the improvement in employment levels and real wages since 1990, at least those mortgagors belonging to the second and third quintiles did not, on average, have excessively high dividends, compared with their wages. Regarding the first quintile, the reduction offered to mortgagors by DS N°132 in dividends whose values fluctuated between 0.20 and 0.89 UF depending on the balance of debt, leads one to suppose that, even in that case, given the low dividends, many mortgagors did in fact have the ability to service their dividend commitments.

In December 1989, 76% of mortgagors of the SERVIU were in default (66% had more than four dividends in arrears). Considering the high unemployment rates observable during most of the previous government, together with the high rates of penal interest in force at the time, renegotiations of housing debts with the SERVIU were offered at the end of 1990 (DS N°132). Of the 350,000 current debts, 150,000 were cancelled and 76,000 were renegotiated (and considered as up-to-date). 50,000 debts dating from after 1989 had no possibility of renegotiation. Only 25% of those debtors who were authorized to do so, failed to take advantage of DS N°132, while 38% of debtors who remained current were able to renegotiate. Supposing that 76% of the total number of

* According to the National Socio-Economic Characterization survey (CASEN), carried out by MIDEPLAN.

** According to the 1985 CASEN. It is worth mentioning that the Home Secretary (Ministro del Interior) has a programme for handing over "sanitary blocks", and its beneficiaries are more likely to belong to the first income quintile.

124,000 debtors who did not renegotiate were in default, and remain so, post-renegotiation default should have fallen to 47% (94 thousand from 200 thousand), if those who did renegotiate had remained up-to-date. However, by the middle of 1991, total default had fallen only to 65% (38% of debtors being more than four months in arrears), a figure which subsequently began to rise. The latest statistics on the national portfolio show that in October 1992, total default was at 75% (62% with more than four dividends in arrears), a situation comparable with that existing before the last renegotiation, despite the general improvement in the economic situation, the increase and focussing of Social Expenditure, and the reduction, in absolute terms, in the number of poor people in the country.

The only portfolio segment which shows significantly different levels of default is the IVP portfolio, with 25% with arrears of over 3.5 dividends (46% up-to-date). This is the only portfolio which was managed for years by a private bank, to which mortgagors had to go each month in order to pay their dividends and clarify any doubts regarding their debt¹.

2.4. Quantification of hidden subsidies.

It is obvious from the high rates of default that an important, non-explicit subsidy is being granted, which in some cases has been almost 100% of the balance of the loan (through the renegotiation mechanism).

DS Nº 35 - (1988) tried to make the hidden subsidy for default explicit, by means of a mechanism which lowered the present value of debts by a proportion close to 60%. However, of those who renegotiated under DS Nº 35, only 1.4% of the portfolio in the Metropolitan Region was up-to-date by the end of 1992, and 62% of those who remain under the shelter of that Decreto Supremo are in default, (59% by over 3.5 dividends)², which indicates that renegotiation did not bring about significant improvement in debtors' propensity to pay, despite the substantial incentives provided.

¹ It is worth underlining that the average dividend of this portfolio is more than double the dividend of the rest of the portfolio, and more than three times the average value of dividends in UF.

² Data for the Metropolitan Region, according to a representative sample of 88.4% of the portfolio.

The experience with the renegotiation embodied in DS Nº 132 - (1990) confirms the above, since only two years after this was implemented, the default of those who renegotiated is in fact greater than those who remained within the framework of DS Nº 35. Total default in the Metropolitan Region, which is slightly higher than in the provinces, reached 79% (60% with more than 3.5 dividends in arrears).

With regard to Hidden Subsidy, the effect of renegotiations seems to be counter-productive, since it formalizes this subsidy and often increases it, as is obvious in the case of subventions for almost the whole debt, and, in general, with those debts renegotiated under DS Nº 132.

Although default rates seem to remain at figures around 75%, collection on the sum of dividends accrued may give a clearer idea of the real value of the loans' and, therefore, of the hidden subsidy under that heading.

If only those values which should be paid by debtors in the centralized portfolio^{**} are considered as accrued (excluding subventions and rebates on dividends), and this is compared with the real collection in 1992, the collection rate is around 65%. Thus, the hidden subsidy under this heading may be estimated as at least 35% of the nominal value of the loans conceded by the SERVIU^{***}. (See Figure Nº 6.6)

* In reality, only the expected value of future flows produced by the portfolio decides its value, and this passes through expectations related with collection policy. For this reason, the portfolio in private hands may be worth more than in public hands, since collection methods will presumably be softer in State hands. The criterion of valuation by recovery rates, though it may be the best approximation available, has various drawbacks. For example, the issue does not take into account penal interest produced, nor the recovery of extraordinary payments or of dividends which were in arrears, so it would be possible to find collections worth more than 100% of the issue. This would not allow the portfolio to be valued at more than 100% of its nominal value. Thus, this criterion for evaluating the portfolio seems to set a maximum.

** The centralized portfolio is that which is controlled and updated via the nationwide computer system. This centralization of information is of recent date and is still in process of being implemented. The following have still to be incorporated: Regions V, VIII and part of X and certain minor regional portfolios, which in the case of the Metropolitan Region, for example, account for 11.6% of all current loans.

*** The ideal thing would be to have a longer-term series of figures for collection and accrual of debts. However, the fact of dealing with the last complete year at least allows one to use up-to-date figures.

As the average size of the loans granted at present, and which are planned for the future, is 90 UF on average (with an expected variance of about 10 UF), the hidden subsidy amounts to no less than 31.5 UF per operation, under this heading alone. This is an average, since it must be borne in mind that those who put their faith in "free pardons" are rewarded, receiving a larger subsidy for not paying, and those who show a high level of ethical responsibility are penalized.

Another hidden subsidy corresponds to the collection and management costs of the portfolio, which, according to the bidding carried out at the beginning of 1992, represents approximately 5.6% of the sum accrued. So then, for every 90 UF of loan, 5 UF of hidden subsidy are added, without considering that the collection contract rests on a free collection agreement through the Banco del Estado de Chile. The unit cost of collection is estimated at around 0.02 UF per month, which would add a further 2 UF to the updated value of this cost-flow.

There are other hidden subsidies, such as the cost of issuing, which involve human resources in administration and publicity, plus the support costs of the whole organization (indirect costs) which have been estimated by the consultants Bakovic and Balic (for the banking system) at 50% of the direct costs of the operation. The first would be over 4 UF per loan, and the second 3.6 UF (present value)**.

As the interest-rate on the loans is 8% per year based on UF, while the placement rates for bank mortgage loans is around 9.5%, there is a rate difference of a point and a half***, which may be attributed to a subsidy on the base rate ("implicit subsidy") or subsidy on the spread related with costs of issuing, operation and credit risk ("hidden subsidy"). We will opt for recognizing the existence of a hidden subsidy on the spread of 1.5% (compared with the 3% spread usual in the market,

* Assuming a 12-year period and an 8% annual discount rate.

** Bakovic and Balic, in their "Study of the Mortgage Loan Market" (MINVU, 1986), estimate, on the basis of a sample of Banks, that issuing costs are 4 UF in the case of banks dealing with 200 operations per month (9.16 UF if they deal with only 40 operations per month). According to the distribution curve of fixed costs, a number of operations greater than 200 does not significantly reduce the unit cost under this and other headings. On the other hand, the relevant question is to determine the SERVIU cost. Although these are different types of institution, with different structures, it would be conservative to estimate the SERVIU cost by using the private cost of a similar function.

*** As market rates fluctuate much more than the rate determined by the MINVU, especially when they rise, this point and a half has often been greater.

though for loans of higher value), to partially finance administrative costs. Assuming an average term of 12 years and 1.5% of annual commission on the unpaid balance of the debt, the present value is 5.9 UF. This finances part of the operational and issuing costs, plus those associated with credit risk, while the remainder is subsidy*.

In brief (Figure N° 6.7 and Table N° 6.1), at present there are more than 40 UF in hidden subsidy for every loan of 90 UF which is extended: 31.5 for default, 4 for issuing and 10.6 for operation, minus 5.9 which are charged as commission.

Calculations exclude any additional subsidy associated with possible renegotiations of these loans, which have in the past meant subventions of up to almost 100% of debt balances (150,000 mortgagors took advantage of these, via DS N° 132 in 1990), or at the very least, reductions in the actual value of future flows accrued by renegotiated debts (over a third of the total in the case of DS 132, and an average of 60% in the case of DS 35 in 1988), without considering the existence of precedents for modifying the readjustment procedures of debt-payment units, in favour of the mortgagors.

3. AN ANALYSIS OF THE CONSEQUENCES OF PRESENT POLICY AND A PROPOSAL TO TRANSFER THE MORTGAGE-LOAN FUNCTION FOR LOW-COST HOUSING TO THE PRIVATE SECTOR.

To facilitate understanding of the contributory factors and effects of present policy, it is worth making a comparison between the conditions of mortgage loans extended by the SERVIU and those prevalent in the banking system.

* It is worth pointing out that the normal banking commission for "small" (over 250 UF) and "medium" (over 1,000 UF) mortgage loans, is 3%. In the case of a loan of 1,000 UF, the present value of the commission, discounted at 8% per year, is 130 UF, which easily covers issuing and operational costs, which are inelastic with regard to the value of the loan. Also, the rates of default in the Banking system are reasonable, leaving an interesting profit margin.

3.1. Comparison with private conditions for mortgage loans.

- Amount, term and interest-rate.

The financial market caters without difficulty for those strata of society with middle-to-high incomes (the higher strata do not need to borrow in order to buy or build their houses). The Decree which regulates the awarding of subsidies on demand for homes between 400 and 1,500 UF (US\$ 9,600 to US\$ 36,000), fixes a maximum commission of 3% per year on the balance of the debt, which is insufficient where lower-value loans are concerned. This is because the costs involved in the processes of extending and operating the loan are basically the same for a small loan as for a large one.

As a result of this fact, banks do not usually extend mortgage loans for less than 1,000 UF (US\$ 24,000), except for one or two more specialized ones, where they lend from about 400 UF. For lower-value properties, though higher than the "basic homes", the MINVU has had to come to an arrangement with the Banco del Estado, in order to ensure that beneficiaries of subsidies are able to complete the financing required with a mortgage loan.

It is worth saying that these arrangements did not exist originally, but were introduced later for a first category of homes. Less than a year ago these had to be extended to include intermediate-value homes, since the private banking system was finding it increasingly difficult to offer the necessary loans without suffering losses. It is worth mentioning that banking costs, starting with real wages in the sector (and throughout the economy), have risen significantly in the past eight years, while the price which can be charged on each loan has remained fixed. The obvious result is a reduction in the quantity of lower-value loans on offer.

- Collection.

The banks have an incentive to collect the loans which fall into default, even resorting to judicial means, since the provisions which they are forced to make are reflected in their Balance Sheet and financial results. This incentive remains, despite certain fear of political pressures, which usually make themselves felt before auctions.

In the bank mortgage portfolio, which amounted to 345,000 operations in August 1992, almost 9% were in default, with a decreasing trend over time. This percentage is affected by old loans transferred from the

bankrupt National Savings and Loans System, which still represents 15% of the portfolio, with 17% default at that time. In addition it should be borne in mind that 61% of operations are concentrated in the Banco del Estado, and that its default rate is significantly higher than that of the private banks. It is estimated that mortgage default in these is no higher than 2% of their portfolio.

The number of auctions for mortgage debts with private banks amounted to an average of 44 per month during 1991 and up to October 1992, with the Banco del Estado adding almost four per month. In the case of the SERVIU debts, up to December 1992 there had been only eight auctions in the whole country (none of them in the Metropolitan Region); that is, even less than would be necessary to produce some sort of example effect, despite the fact that the cases of defaulting mortgagors who are perfectly capable of paying are very numerous.

It is interesting to point out that seven of these auctions took place in Region VIII, which subsequently showed the highest collection rates of all the SERVIU in the country.

The current official policy of the MINVU as regards default, lays down that if the mortgagor is not capable of fulfilling his commitments, the portfolio manager must analyze the case from a socio-economic point of view, using an established format. In this way it defines whether or not there is any capacity to pay. The SERVIU, with this information, decides which mortgagors should have legal proceedings taken against them, which should result either in the payment of the debt or in the auction of the mortgaged property. In those cases where it is determined that the mortgagor has no possibility of servicing the debt, nothing is done, so the mortgagor sees his debt balance growing indefinitely (due to the accumulation of penal interest), but his home is not taken away while the difficult situation lasts. If the mortgagor dies, the SERVIU will claim its rights. The surviving relatives will have to pay the debt or return the home, and in this latter case may apply to the SERVIU housing programmes.

- Eligibility.

For the Banking System, the eligibility of the potential subject of a mortgage loan is decided by the demonstrable level of monthly income. To obtain a good level of guarantees on the loan, this should not be more than 75% of the value of the mortgage and the monthly income should be no less than four to five times the agreed dividend.

In the case of people using a subsidy, a minimum of 25% of the value of the home should be covered by savings and subsidy, with a tendency to demand a higher ratio between income and dividend amounts. Also, it is more profitable for the Bank to offer relatively short-terms loans, since this allows total operative costs to be reduced.

People buying higher-value properties may do this over longer terms (up to 30 years) and with dividends equivalent to a quarter of their monthly income.

Those who belong to the informal sector of the economy, about a third of the Chilean population, have no way of proving their income level and therefore are not at present creditworthy from the bank's point of view. However, if they have no home and have never before received help from the Sector, they can apply to the Basic Homes Programme, and if they are selected, receive a SERVIU mortgage loan to complement their savings and the subsidy, to finance the purchase of the basic home. When analyzing the composition of the group of people benefitting from this programme, (with very incomplete information, at the beginning of 1992), it could be seen that more than half (53%) were "independent" workers, less than 45% were employed by a firm or individual, and 3% were pensioners.

The dividends of these mortgagors may not exceed 20% of family income. If at that amount they cannot manage to cover the debt in a maximum period of 20 years the person is not eligible for this Programme. However, at present only a sworn declaration of income is required in order for the loan to be granted.

There is no income declaration requirement for entering the Progressive Homes Programme. The mortgage loan which was contemplated initially, (17 UF, US\$ 400), was eliminated in view of its negative social profitability, since the dividends barely covered operating costs even supposing there was no default. In exchange, the amount of subsidy and advance saving required was raised. In order to get into this programme, and the Basic Home Programme, a municipal social worker must visit and make an evaluation of the social situation of the applicant.

3.2. The objectives of the State.

From the previous section, one may deduce at least three implicit objectives in State action, in the context of its function of providing mortgage loans for low-cost housing:

- a) Provision of small mortgage loans, with moderate interest-rates and long terms.
- b) Social criteria in collecting.
- c) Provision of complementary financing, which is especially relevant in the case of workers in the informal sector.

Other objectives may be added to these, which could actually contradict these first ones:

- a) Reduction in bureaucracy and transfer to the private sector of those functions which it can perform more efficiently.
- b) Attracting private capital to contribute to reducing the housing shortage.
- c) Explicit recognition of subsidies.
- d) Strengthening of civic and moral values in society.

- Amount, term and interest-rate.

All historical data, both in this country and abroad, indicates the unsuitability of using the interest-rate as a means of subsidy, though it may be held that in scenarios with low inflation, the significance of these subsidies is less. It is preferable that the direct subsidy on the home be increased, and that the interest-rate conditions of the loan should be those of the market, since otherwise incorrect signals are given regarding the cost of money, and this affects other activities. For example, it encourages users to prefer more borrowing than they need for the home, in order to reduce their cash quota.

Since it has been seen that the market does not assign term and amount spontaneously, the State has opted to decide them. However, there exists the alternative of a direct subsidy on the provision of this type of loan. It has been pointed out above, that this could mean a social saving of a large quantity of funds. Indeed, if loans for basic homes, which are being granted at a rate of about 25,000 per year, include a hidden subsidy of 40 UF per unit, any amount below that, given as direct subsidy to private granting of loans, will mean a net saving of funds. Preliminary consultations with the private sector indicate the need of a subsidy which varies between 2 and 33 UF. If bids take place for subsidizing on the

granting of loans with these characteristics, the agents which would end up granting the loans would be those requiring least subsidy.

In any case, experience shows that once a system is running normally, the cut-points in the bidding processes are obtained at lower costs*.

Though it is not clear whether a privatization of this kind would mean lower costs for the State initially, because it is always difficult for the costs of a public organism to actually decrease, at least it should allow human resources to be reassigned in the short term, in proportion to the fewer functions undertaken, to those tasks where their action is more difficult to replace. In the Chilean case, a large increase may be observed in real investment per government employee since 1976, when the function of production of works was handed over to the private sector (see Figure Nº 6.7). In 1992, the rise in this productivity indicator may be associated with the finalizing of the privatization process of the receiving, management and collection functions of the SERVIU's mortgage portfolio.

- Collection.

With regard to this point, the main thing to emphasize is that the high rates of default in the SERVIU mortgage portfolio are not at present in direct ratio with mortgagors' ability to pay. Indeed, the existence of a heavy direct subsidy on housing allows dividends to be charged in accordance with the income of the vast majority of families. The informal rents charged for these houses are usually two or three times their dividend value.

In the future, if families are assigned homes and cannot pay even these dividends, it will not be appropriate to grant them a loan, since when this cannot be paid, it will contaminate the portfolio and give other mortgagors justification for "demanding" large-scale renegotiations of their debts. The alternative for these families might be to receive the same quality of house with a larger subsidy, but experience indicates that

* When the management of the mortgage portfolio of the SERVIU was offered for bids in the middle of 1988, the cost was fixed at 19.5% of what was collected (giving the manager an incentive consistent with the interests of the Principal). After three years of operation, a reduction was negotiated, arriving at 7.67% of what was collected, plus 0.038 UF per current loan, and by a new bid it has been possible to reduce the costs of this service at present to an average of only 5.6% (3.78% of the collection in the Metropolitan Region and 6.045% of the rest of the country, plus about 0.018 UF per month, per current loan.

this tends to imply a danger of the subsidy being diverted, because the other needs of these families remain out of balance compared with the home, and they often opt to transfer the use and/or ownership of it. A second alternative is to give them a lesser housing solution, without a debt (with a subsidy somewhat higher than the previous one), which is what is happening in Chile at present with the Progressive Homes Programme .

The loan which is granted must be collected. Large-scale renegotiations, which formalize high hidden subsidies, have a sad effect on the ethical standards of the population.

For decades the story of the state portfolio has given people the message that "you don't have to pay the State", and that the person who does so is an fool, to be laughed at by the neighbours. Non-payment has always in the end been, validated by the State, via frequent renegotiations, which have tended each time to increase the benefits to the mortgagors, and although some attempt has been made to differentiate in favour of the few up-to-date mortgagors, in practice the differences have been largely irrelevant. The people have been able to prove quite definitely, by the signals transmitted, that the reasonable thing is not to accept responsibility for one's commitments.

Indeed the moral aspect of not paying mortgage dividends has also changed the values of life in low-income families. It is said in this context that, whereas before, the last thing people stopped paying in times of economic hardship was the dividend on the house, now it is the first, since it appears to have no consequences, which is not true in the case of the water or electricity. This contaminates the atmosphere, making it unattractive for private capital, and discouraging investment in low-cost housing.

So, it is quite clearly necessary to have a general policy for effective collection. The question is, whether the State is prepared to put it into practice.

When a bank manages its own mortgage portfolio, it is in its interest to achieve the maximum possible recovery, since in that way it can reinvest the funds. It is also evaluated on the strength of it. The portfolio

* It must be recognized that providing an incomplete house may produce difficult situations for old people with no possibility of adding a wooden room to the sanitary block on their own account. However, exceptional cases can be dealt with, with the help and solidarity of the local authority and other institutions.

belonging to the SERVIU does not have the incentive of being able to dispose of the funds recovered, and the SERVIU institutions are not evaluated primarily on this basis, but on that of the number of homes completed or the number of square metres paved. Also, the Directorship of the SERVIU is not just a technical post but also one with political responsibilities, and any announcement of a mortgaged property being auctioned is likely to cause political noises. This is apart from the undeniable social responsibility which the sector must accept, since where situations of socio-economic hardship can be proved, the State should not make them worse. The State must act with solidarity to those in need.

Recognizing this State objective makes it extremely difficult to entrust the granting of loans to the private sector at its own risk, since where the socio-economic situation of the mortgagor deteriorates, and he falls into irretrievable default, nobody can deny the private institution the right to realize the mortgage guarantee.

As a way out of this problem, a project for institutional innovations has been put forward and is currently being studied in the country. This visualizes an insurance policy to cover the payment of mortgage dividends in the event of the mortgagor's losing his job and a compensation fund for cuts in real wages, among other things. No doubt this project goes a long way towards solving the problem. However, it must not be forgotten that there is always the possibility of a permanent, rather than temporary loss of family income. Thus the difficulty remains, as also the question as to whether the systems should attempt to solve all possible situations via regular channels, or whether exceptional treatment should be applied in certain cases.

Deciding not to institutionalize a safe way out for the debtor who, despite unemployment insurance and protection against rising inflation, arrives at a situation where his property is about to be auctioned, possibly due to chronic insufficiency in ability to pay, transmits the correct signal to encourage mortgagors to make every effort to fulfil their obligations, without closing the door on the possibility of offering the debtor help, as a gesture of solidarity, in cases where this is really justified. Though this option is consistent with the proposal to put future loan-granting out to tender, the decision as to what should be done with the portfolio at present in the hands of the SERVIU has yet to be taken.

It is a well-known fact that the State has never been prepared to collect. In practice, despite the high level of default, the number of houses with outstanding debts which have been auctioned has been minimal. The explanation may be found in the slight real benefit that the SERVIU

would obtain from doing it, compared with the pressures which would arise. One formula for obtaining efficient collection of these public funds would be a change of destination for the funds collected by the SERVIU, which at present go into the fiscal coffers and not to the Budget of the Sector. Only if the institution responsible for collection were to receive the benefits of it directly, together with weighting the truly social elements, would the situation of widespread default in the state portfolio be significantly and permanently reduced.

One alternative would be to sell the portfolio, but this would only be feasible after admitting the losses corresponding to cases of social need, in order to offer only the portfolio which, according to the social criteria of the sector, should go up for auction in case of non-payment. This would involve considerable expense from the point of view of analyzing the whole portfolio in default, (quite apart from the costs associated with the pressures which would be received in the process).

It would also be possible to put the whole portfolio out for bids without any analysis, which would seem inappropriate both from the social, political, and perhaps economic point of view, since the uncertainty over the feasibility of collection and/or recovery would bring the market value of the portfolio down noticeably. On the other hand, the alternative of giving the SERVIU correct incentives by handing back to them the funds resulting from the recovery of the portfolio, by their own efforts, might be the most appropriate social, economic and political solution.

- Eligibility.

A system of tendering complementary mortgage loans for low-cost or basic homes to the private sector, which obliges participants to dispatch a given number of operations, at their own risk, on pain of severe economic disincentives for each loan not granted within the agreed period, should be sufficient to ensure the continuity of the SERVIU housing programme. The banks or other institutions participating would inevitably end up incorporating workers from the informal sector. Regulations of this nature would undoubtedly put up the value of the subsidies on the loans being put out for bids since the risk on these is clearly greater than that on other operations, and even more so if one considers that the informal sector would not be eligible for insurance policies to cover the payment of dividends in case of unemployment.

For the above reasons, it would be a good idea to set up separate bidding processes for independent workers, recognizing their reality and bearing in mind that the expected value of private collection in the case

of these mortgagors is in any case higher than that of public collection. If this differentiation is associated with some difference in cost for the potential mortgagor, this will provide him with an incentive to formalize his economic activity. However, it should be recognized that difficulties might arise with the possible creation of pressure groups, seeking greater benefits for this segment^{*}.

In any case, it should not be forgotten that the loans in question have mortgage guarantee, and for homes up to 900 UF (US\$ 21,600) there already exists an insurance in case of auction, for 75% of the value of the outstanding balance, including judicial expenses, with an upper limit of 200 UF. This should be sufficient to offset fears of "negative goodwill" occurring in the case of low-cost housing, which is undeniably associated with the direct subsidies granted on these properties, since the subsidy gives families access to an asset which costs more than they could, or would be prepared to, pay^{**}.

3.3. Other elements in favour of bidding for subsidies on granting loans.

In view of all that has been explained above, it would clearly be a good plan to privatize the State's credit function, as far as future housing loans are concerned. Loans should always be granted to those who can repay them; if it is felt that the applicant cannot do so, it is better to reorientate him to a different housing programme, or, as a last resort, increase direct subsidies.

The proposal to gradually eliminate hidden subsidies should also have positive effects on private participation in housing supply: in the Progressive Homes Programme corresponding to the cheapest housing solutions, there is a "private mode" whereby the SERVIU grants the subsidy to the demander without providing the site or inspecting the quality of the construction work, though it still subsidizes the financial

* One way of making this more difficult would be to make the register of applicants a secret.

** This inevitably implies a disincentive to private supply of low-cost housing in the segments of the demand not covered by subsidy. There are people wanting homes who are not prepared to wait sometimes years, to receive the much sought-after assignation of a subsidized home, and people who have lost their home because their marriage has broken up, and they cannot apply again. But, due to the market price of low-cost housing, which is less than its production cost, no new supply of housing is created, and people have to resort to buying or renting second-hand, low-cost property.

cost of the building. The result has not been very significant, since there is no doubt that in the view of the public, the "SERVIU mode", with projects put out for bids by the State, is cheaper. This impression exists because the hidden subsidies (the value of the site and others) are not adequately perceived. If these hidden subsidies were eliminated or compensated, the prospects of the private mode described above would improve.

The system of bids would also allow the total value of subsidies involved to be known longer in advance, and with more accuracy (which does not happen at present due to the level of default and the collection rates in the issuing of dividends).

Finally, much would be gained by applying the proposed system, not only in transparency and reduction of expenses, but also in focussing subsidies, since under the present system the greatest subsidy goes to the most astute, whereas the more responsible lose out.

Figure Nº 6.1
Age and renegotiations of authorized portfolio
Metropolitan Region
December 1992

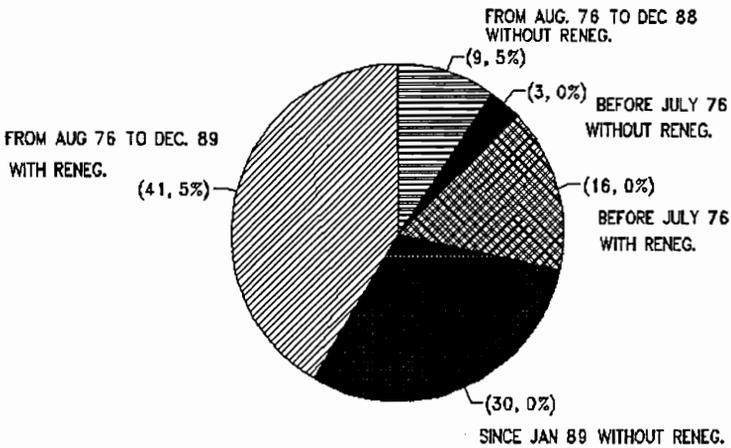
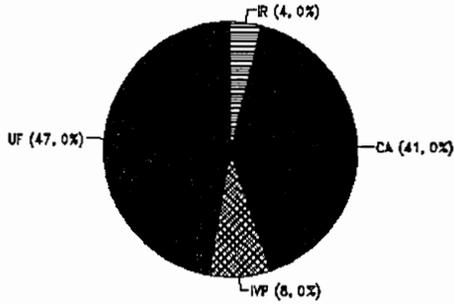


Figure N° 6.2
Readjustability system of authorized portfolio
Metropolitan Region
December 1992



Notes: UF: Unidades de Fomento
 CA: Savings quota
 IVP: Average value index
 IR: Wages index

Figure N° 6.3
Average default
SERVIU portfolio for Metropolitan Region
December 1992

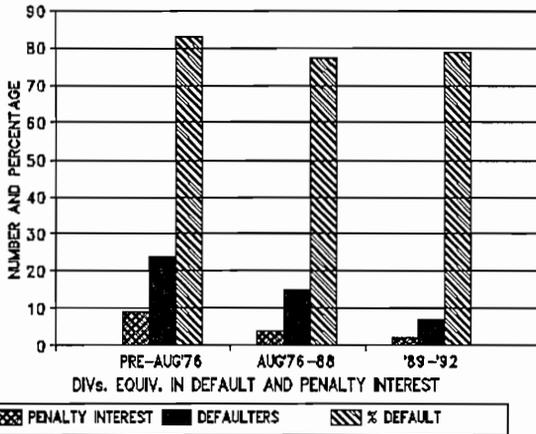


Figure Nº 6.4
Main SERVIU debt renegotiations 1983 - 1993

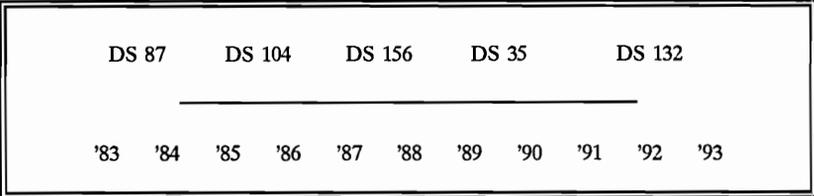


Figure Nº 6.5
Payment ability index
Base 1986 = 100

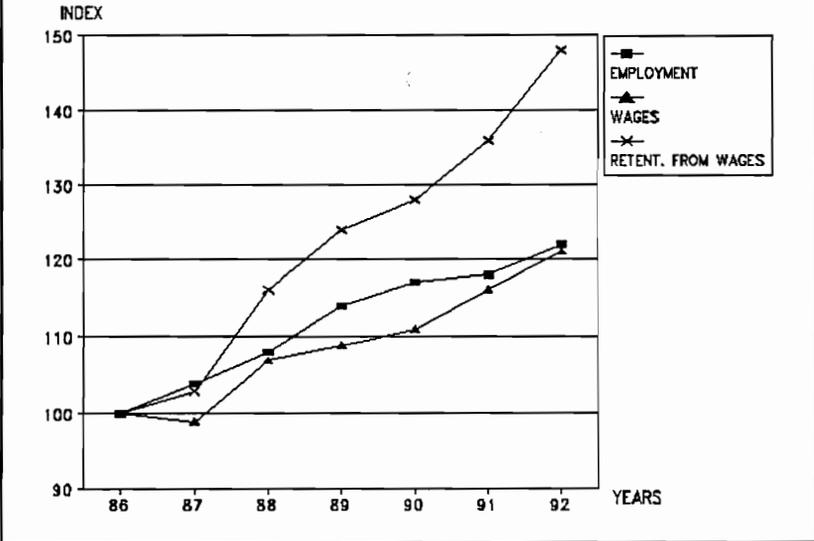


Figure Nº 6.6
Quality of the SERVIU portfolio
in the Metropolitan Region
December 1992

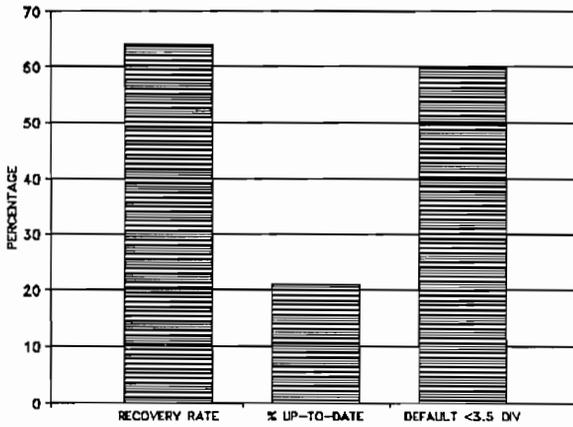


Figure Nº 6.7
Subsidy on a 90 UF loan
(US\$ 2,160)

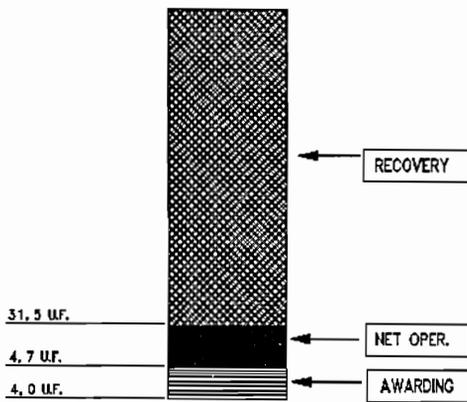
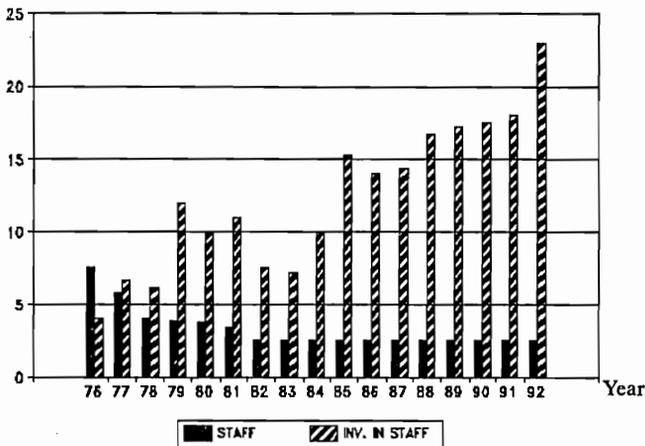


Table N° 6.1
Valuation of the hidden subsidy in the
Serviu mortgage portfolio
The case of 90 UF loans

Hidden subsidy due to default:	31.5 UF
Hidden subsidy in awarding:	4 UF
Hidden subsidy in operative costs:	
- Administration	5 UF
- Collection	2 UF
- Indirect	3.6 UF
Sub-total of hidden subsidy on a mortgage loan of 90 UF(*)	46.1 UF
Less commision charged	5.9 UF
Total net hidden subsidy	40.2 UF

* The calculations exclude any additional subsidy associated with possible renegotiations of these loans, which have in the past meant subventions of up to almost 100% of debt balances (150,000 debtors took advantage of these via DS 132 1990), or at least, reductions in the actual value of the future flows accrued by the renegotiated debts (of over a third in the case of DS 132 and an average of 60% in the case of DS 35 1988). There are also precedents for modifications to the readjustment procedures for debt payment units, in favour of the debtors.

Figure N° 6.8
Investment in personnel
Staff = thousands
Inv. in staff = MM\$ per person, July 1989



CHAPTER VII

INSTITUTIONAL INVESTORS*

Augusto Iglesias

1. INTRODUCTION

For many years the main sources of direct financing for housing in Chile were the banks, the Savings and Loans Associations (which have disappeared), the social security institutions (prior to the 1980 reform) and the State. However, during the past decade, institutional investors, especially the Pension Funds and Life-Insurance Companies, have come to the forefront as suppliers of capital. Thus in 1994 Pension Fund investments amounted to a total of over US\$ 19,000 million, while the investments of Insurance Companies at that date were more than US\$ 4,500 million. The total capital handled by the country's institutional investors reached US\$25,300 million, a figure equivalent to 54% of the GDP or 30% of the total financial assets in circulation (See Figure 7.1).

This phenomenon, which has had obvious repercussions in the market for financing housing, came about as a result of certain structural reforms in the Chilean economy which have taken place over the past twenty years, and which, among other changes, have signified substantial modifications in the social security system and capital market. The change in the method of financing the pensions system, and the great effort being made by the government to cover the deficits in the old system with increases in its rate of saving, are permitting a considerable build-up in this area. At the same time, the liberalization of the capital market and especially the freedom in interest rates, intermediation costs and possibilities of entry into the industry, together with long experience in indexing systems for financial instruments, have allowed these resources to be channelled towards the financing of long-term projects, including those in the property sector.

* The content of this chapter was revised and updated by the author, on the basis of the lecture given during the seminar.

In this chapter we shall very briefly present the origin and development of the country's institutional investors, and at the same time show the extent of their share in the housing finance market.

2. INSTITUTIONAL INVESTORS IN CHILE.

The main institutional investors in Chile are: Pension Funds; Insurance Companies (especially Life-assurance); Mutual Funds; Property (Real-Estate) Companies and Investment Trusts*. Altogether, in the middle of 1994, this group of institutional investors was managing a portfolio of US\$25,300 million, with an annual growth rate of more than 23% over the past three years.

The Pension Funds began in 1981, in the wake of a drastic reform to the social security programme, which established a pensions system based on individual capitalization of contributions and managed by private, competitive companies (the AFPs). This system is compulsory for all persons entering the labour force after that date, and voluntary for those who were already enrolled in traditional social security institutions. By the end of 1994, affiliated workers numbered more than 4.9 million. These people (if they are employees) pay a monthly contribution of 10% of their salary, which is deposited in an individual savings account. The sum of the balances thus accumulated forms the Pension Fund, which is invested by the AFPs in a variety of financial instruments according to their own investment policies, but also subject to pre-established governmental regulations. The workers, or their beneficiaries, only have access to the accumulated capital, generally in the form of a pension, when the moment comes for them to retire, or if they are disabled or die.

As a result of the low average age of the affiliates and the high rates of return obtained by the AFPs for the Pension Funds during the system's first twelve years in operation, the accumulated funds have grown very rapidly, rising from US\$606 million in 1981 to US\$19,300 million in 1994. Taking into account only the compulsory contributions which they collect, the Pension Funds are at present growing at a rate of more than US\$ 140 million per month.

In the same year, 1980, fundamental changes occurred in the insurance industry, especially in those companies operating in the life-assurance

* The Foreign Investment Trusts should also be included, but these do not invest actively in the property sector.

group. In addition to legal modifications which introduced the principles of free competition into the sector with openness to foreign investment, the reform of the pensions system obliged the AFPs to buy collective insurance with some CSV* for all their affiliates, in order to guarantee the capital necessary to pay out disability pensions, and widow and orphan benefit in the course of the active period of life; on the other hand it established that when the moment arrived for receiving a pension, for whatever cause, the affiliate (or his beneficiaries) should have the right to choose between different modes, including the purchase of a life-annuity from one of the CSVs offering the product. At the present time there are 26 CSVs operating in the country, managing total assets worth over US\$4,500 million, a figure which should continue to rise steadily over the next twenty years. (See Figure N°7.2).

The Mutual Fund industry has evolved, following the rhythm of the expansion of the country's capital market, and attracting the shorter-term savings of companies and individuals. After the grave financial crisis at the beginning of the 1980s, which shook public confidence in financial intermediaries, and particularly in the Mutual Funds, the industry is showing a tendency towards sustained growth, affected only by the cycles of the stock exchange. In the middle of 1994, the Mutual Funds were managing a total of US\$1,300 million, a sum representing 5.1% of the country's institutional capital.

The Investment Trusts and Property Companies (plc) are relatively new institutions in the Chilean capital market (1991), and were created primarily as a means of "securitizing" assets, and to allow those same institutional investors access to investment alternatives which they cannot reach directly, either because of their own area of specialization, or because of legal restrictions.

Following the legal reform in March 1994, the law distinguishes between four types of Investment Trust: "Property", where the funds have preferably to be invested in real-estate and mortgage-backed certificates; "Chattels" where these are invested in traditional financial assets; "Company Development", invested in new projects; and "Securitized Loans", invested in loan or collection portfolios. At present 10 Investment Trusts are operating in the country, and these, because of the shortness of their experience, do not as yet manage portfolios of any magnitude (only US\$94 million in the middle of 1994). However, given the increasing interest shown by other institutional investors (especially the

* CSV: Life-Assurance Companies

Pension Funds) in buying units, sustained growth may be expected, especially in the case of the Property and Company Development Trusts.

The two existing Property Companies (plc) began operations in 1990 and have at present a capital of US\$82 million. They were created mainly to channel Pension Fund investment in the direction of the property sector, since legal restrictions prevent them from investing directly in properties and mortgage loans (a summary of the origin of the country's institutional funds will be found in Figure 7.3).

3. LEGAL FRAMEWORK AND POLICIES FOR INVESTMENT IN HOUSING.

Investment by institutional agencies in the housing sector depends both on the various legal restrictions to which they are subject, and on their own investment policies. Since the Pension Funds and CSVs represent more than 90% of the country's institutional capital, the following remarks will refer to these two investors. Nonetheless, Figure 7.4 gives a resumé of the whole range of legal limits regarding investment in housing, which affect all institutional investors.

3.1. Legal framework for investment in housing.

Pension Fund investment is extensively governed by a whole range of regulations which: define the procedures to be followed by the Pension Funds in the management of their respective portfolios; lay down the minimum characteristics of solvency to be fulfilled by issuers of those financial instruments in which the Pension Funds are allowed to invest and the characteristics of the instruments concerned; and fix a body of maximum investment limits, according to type of instrument and issuer, with the aim of diversifying the investment portfolio of each Pension Fund.

Although the Chilean pension system is managed by private companies competing in a market where there are no entrance barriers, regulations appear to be necessary in view of the fact that the system is compulsory, (meaning that state guarantees are implicitly and explicitly involved), to avoid conflicts of interest and to overcome situations of asymmetrical information between suppliers and affiliates.

Thus, as far as the property sector is concerned, the law only permits the Pension Funds to buy mortgage-backed certificates issued by banks, shares of property companies and units of Property Investment Trusts.

The regulations at present in force do not allow direct investment of the Pension Funds in properties - whatever these may be designed for - nor the acquisition of mortgage loans, nor the extending of any type of mortgage credit. On the other hand, the Property Companies themselves and the Property Investment Trusts are not authorized to invest in property (real-estate) designed for housing purposes. As a result, there are only two ways in which Pension Fund capital can be used to finance housing: directly, by the issuing of mortgage-backed certificates, or indirectly, by selling mortgage loans to the Property Companies and Investment Trusts.

The use of Pension Funds to finance mortgage loans for housing - or maybe to build housing for subsequent rent or sale - has been the subject of constant, intense debate, ever since the new social security system began to operate. So far, the more conservative point of view has carried the day, rejecting this type of investment for the following reasons: the risk of conflict of interests, which could prejudice pensions in favour of housing solutions; the heterogeneity of direct property investment, which makes it difficult to make an adequate assessment of the assets concerned; and the AFPs' lack of specialization in the direct management of mortgage loans.

There is a fear that if affiliates were to become mortgagors of their own Pension Funds, this would produce pressures, especially in periods of economic crisis, to take the political decision to cancel or renegotiate the debts, thereby damaging the return on the accumulated funds and consequently jeopardizing pensions in the future. In addition, an attempt has been made to avoid the AFPs' using mortgage credit as just another tool in their commercial strategy, to ensure that the competition between them concentrates on increasing efficiency in producing pensions and on improving those services which are directly linked with these.

On the other hand, emphasis has been placed on the need to have continual market valuation mechanisms for the different assets which make up the Pension Fund, and thus avoid discretionary transfer of wealth between different groups or generations of affiliates and from the affiliates to the managers of the funds or persons related to them.

Finally, the prevailing idea is that the nature of the functions of portfolio management is completely different from that of analyzing, extending and controlling credit, and it is therefore more efficient to divide the tasks and specialize in these subjects.

As a result, the investment of the Pension Funds has so far been authorized only in mortgage-backed financial assets which are perfectly

homogeneous, which have a mature market and are issued by specialized intermediaries (mortgage-backed certificates; shares in Property Companies (plc) and units in Property Investment Trusts) (see Figure N^o 7.4).

Due to the differences in the nature of CSV business (these companies use their own assets to pay their obligations to their clients, and the amount involved is determined in advance), the regulations give them greater flexibility as regards property investment and particularly the financing of housing. Thus, CSVs may invest in mortgage-backed certificates, shares in Property Companies and units in Property Investment Trusts, exactly like the Pension Funds, and they are also allowed to invest directly in property (other than housing) and in mortgage loans.

In the case of the Property Investment Trusts, investment is permitted in mortgage-backed certificates and loans, and in real-estate which is not destined for housing. Lastly, the Property Companies may invest in these same assets, with the exception of mortgage-backed certificates (probably the fact that these institutions were developed primarily as vehicles of investment for the Pension Funds explains the restrictions which they face as regards financing and managing housing directly).

3.2. Housing investment policies.

Increasingly, the managers of the Pension Funds seem to be replacing very active investment styles, characterized by a high rate of turnover in the portfolio, by others based on a complete definition of investment policies and strategies. Thus the AFPs have begun to insist on diversification as being the most appropriate strategy, to minimize the risk of violent fluctuations in the yield of the portfolio. However the industry has not yet acquired the habit of imposing investment limits on itself in the sectors of housing or property in general. Indeed, in this sector there are apparently no explicitly defined investment policies regarding investment in the property sector, nor are there specialists dedicated exclusively to this business area among the various portfolio managers.

This last point may be due to the fact that, as has been mentioned, the investment of the Pension Funds in new forms of mortgage financing (Property Companies and Investment Trust units) has only recently been authorized, and to the fact that mortgage-backed certificates are a debt instrument whose risk depends more on the solvency of the issuing institution than on the cycles of the property sector. Also, the rapid

growth of the Pension Funds in relation to the expansion of the capital market has meant that, in different circumstances, restrictions in the supply of financial instruments have predominated, reducing the portfolio managers' freedom. In consequence it is difficult to analyze the "Housing Investment Policies" of the Pension Funds, and any comment in this respect remains tentative and partial. It may be argued, however, that the nature of this business makes direct investment in real-estate assets somewhat unattractive, and tends towards a preference for investment in mortgage-backed financial assets. The great mobility of affiliates between the AFPs (more than 20% of contributors change from one to another in the course of a year) obliges these institutions to pay attention to the short-term yield results of their respective Pension Funds, even though, in view of the nature of the benefits which they are financing, the relevant period for any comparison should be fairly long. This relative concentration on short-term results explains, among other reasons, why the AFPs look for assets which are being permanently evaluated on the market, a characteristic which direct investment in real-estate does not possess.

In addition, the Pension Funds want properties as financial assets and not as production factors. This means that their interest in them depends fundamentally on comparing their risk and the expected rate of return with those of other investment alternatives. From this point of view, direct property investment comes up against the additional difficulty, that a thorough analysis of its implications in the portfolio has not been carried out, probably because of the heterogeneity of each asset and the lack of complete, reliable data-bases.

Finally, direct investment in the property sector has much higher administrative costs than other investment alternatives, and the AFPs cannot cover these by retaining part of their returns, because of legal restrictions. This is another factor discouraging this type of investment.

To sum up, Pension Fund investment policies should give low preference to direct property investment, and favour instead investment in financial assets with mortgage guarantee.

Investment in financial assets backed by a mortgage guarantee on a property destined for housing presents other nuances. If these assets are to constitute a more important part of the Pension Funds' portfolio, they must overcome the negative perception which exists with regard to the risk of these instruments, and at the same time ensure that the final mortgagors are not in a position to negotiate with the AFP itself. The frequent large-scale reprogramming of housing debts have contributed in Chile to the forming of this opinion among investors, which will only

change when there is a sufficient accumulation of historical evidence regarding the return on this type of alternative, and when sufficiently safe instruments have been introduced.

International evidence for similar investors tend to confirm this impression. Thus, in the United States, direct investment in real-estate represents no more than 4% of the total portfolio, even though investors give preference to this type of asset as protection against inflation. This objective can be attained in Chile by investing in almost any financial asset with a fixed income and a maturity period of more than 90 days, and all of these are completely index-linked.

The case of the CSVs is different, since these institutions have developed a greater degree of specialization in the administration of property investment and have fixed their own investment standards. This difference, as compared with the situation of the Pension Funds, is due to the greater variety of investment alternatives open to them in the property sector, as a result of the legal investment regulations which encourage the CSVs to include long-term assets in their portfolios - distinctive characteristics of mortgage-backed certificates and mortgage documents - and also to the fact that the CSVs want properties not only as a financial asset, but also as a production factor (their own installations).

4. INSTITUTIONAL INVESTORS' CONTRIBUTION TO THE FINANCING OF HOUSING.

The main financial instruments available to the country's institutional investors for investment in the housing sector are: mortgage-backed certificates; mortgage documents; Property Investment Trust units; and shares of Property Companies (see Figures N^o 7.5 and N^o 7.6).

Over the past few years - following the rhythm of rapid growth in the volume of their respective portfolios - these investors have come to constitute the main demand in the market for each of these assets and to concentrate an important part of the total number of instruments issued.

By the end of 1992, institutional investors held 75.6% of all Mortgage-Backed Certificates issued, 62.4% of all Mortgage Documents, 75.7% of Property Investment Trust Units and 100% of Property Company shares in their portfolio (These figures are approximate, due to differences in assessment methods. See Figure N^o7.7). By the middle of 1994, total

investment in these instruments amounted to more than US\$3,600 million and represented 14.5% of all their investments.

It seems probable that these figures will rise in the future, especially as the industry of Property Investment Trusts and Property Companies (plc) develops. It is also probable that in the near future the Chilean capital market will develop technologies to securitize housing loans and will start to offer instruments which will open up new investment alternatives in this sector to institutional investors. Examples of this future trend may be the Property Leasing Companies and Property Funds for Housing.

Table Nº 7.1
Institutional investors
Total portfolio as in December 1994

	Amount MMUS\$
Pension Funds	19,246
Insurance Companies	4,576
Mutual Funds	1,299
Property Companies (2)	82
Investment Trusts (2)	94
Total	25,297
GDP	47,000
Total in financial assets	82,000

Table Nº 7.2
Institutional Investors
Portfolio Growth
(millions of dollars)

Years	Pension Funds	Insurance Companies	Mutual Funds	Property Companies	Investment Trusts	Total
1982	605.9	372.0	429.4			1,407.4
1983	1,136.3	380.1	97.2			1,613.6
1984	1,244.4	523.6	79.8			1,847.8
1985	1,532.7	437.1	109.4			2,079.3
1986	2,116.8	580.6	202.4			2,899.8
1987	2,707.7	747.8	271.9			3,727.3
1988	3,583.6	1,064.4	371.8			5,019.8
1989	4,470.1	1,311.6	327.8			6,109.5
1990	6,658.4	1,855.1	434.1			8,947.5
1991	10,064.5	2,538.8	845.7	32.1	25.4	13,506.5
1992	12,395.3	3,340.3	940.8	59.0	52.7	16,788.0
1993	17,661.0	4,758.0	1,247.8	68.5	80.6	23,815.9
1994	19,246.7	4,576.7	1,299.4	82.2	94.29	25,299.3

Table N° 7.3
Origin of the institutional funds

Investor	Source of funds
Pension fund	Compulsory monthly contribution: 10% of salary
Life-assurance companies	Sale of life annuities
Mutual funds	Direct collection from the public. Sale of shares to pension funds
Property companies	Sale of shares to pension funds and public
Foreign investment trusts	Sale of units to institutional investors and foreign public

Table N° 7.4
Institutional investors: Investment limits

Investors	Instruments									
	MBC		Mortgages		Shares Property plc		Units Inv. trust		Properties(3)	
	Issuer	Rate	Issuer	Rate	Issuer	Rate	Issuer	Rate	Issuer	Rate
Pension funds	Min. 10% FP*Fr MU*Pi	50%	NO	NO	Min. (5%FO*FC*FL*FA; 20% Acc.)	20.0%(1)		20% (1)	NO	NO
Insurance companies (2)	Min.(10%(Rt + Pr),20 % LC, MU* (Rti+Pri/Rtt+Prt)* Pi*Fr	40%	Without limit	30.0%	Min. (5%(Rt + Pr), 20% Acc.	40.0%		10.0%	Without limit	20.0%
Mutual funds	Min (10% fund, 10% issuer)	Without limit	NO		Min. (10% fund, 10% issuer)	Without limit		Without limit	NO	
Property plc	NO	Without limit	Without limit		(4)			NO	Without limit	
Property investment trust	10% of fund		10% of fund	Without limit	Min. (10% assets, 10% Acc.)	Without limit		NO	Without limit	

Continuation of Table N° 74

Notes:

- (1) There are no limits for this instrument, but there are for the pool of capital instruments, equal to 20%.
- (2) They have an overall limit in the property sector of 40% of Rt + Pr (Excluding MBC).
- (3) Non-residential in the case of Insurance Companies. Property plcs may invest up to 2% of their assets in housing, provided this forms part of a building whose use is mainly commercial.
Other restrictions limiting investment in housing are applicable if Investment trusts are to be eligible as investments for the Pension Funds.
- (4) They may not invest more than 10% of their total assets in the shares of other companies.

Abbreviations:

Pr	: Risk capital
LC	: Credit letters
MU	: Single Factor
Pi/	: Capital of the financial institution
Fr	: Average weighted risk-factor
PCía	: Capital of Insurance Company
FC	: Concentration factor
Rt + Pr	: Technical reserve plus risk capital
Acc	: Shares
FL	: Liquidity factor
FA	: Adjusted net assets factor
FP	: Pension fund
Rti	: Technical reserves of Ins. Comp. i.
Pri	: Risk capital of Ins. Comp. i.
Rtt	: Technical reserves of the Companies
CFI	: Investment trust units

Table N° 7.5
Property Investment Instruments

Assets	Issuers	Readjustability	Term	Guarantee	Institutional investors
MBC	Banks	UF, IVP	Long	Bank and Mortgage	FP, CS, FII FM, SI
Mortgages	Banks Adm. of Mort. Investm. Trust Property plc	UF	Long	Mortgage	CS, FII, SI
Property Investment trust units	Investment trust	None	Without term	Portfolio	FP, CS, SI
Property plc shares	Property plc	None	Without term	Networth	FP, CS, SI, FM, FII

Abbreviations

FP : Pension Funds
 CS : Insurance Companies
 FII : Property Investment Trusts
 FM : Mutual Funds
 SI : Property plc
 UF : Unidad de Fomento
 IVP : Average Value Index

Table Nº 7.6
Institutional investors
portfolio diversification

June 1992 (%)	Public sector	Shares	Bonds and commercial paper	Time deposits	MBCs	Real assets	Other assets (1)	Total portfolio MMUS\$
Pension funds	39.8	32.8	6.7	7.6	12.8	0.0	1.1	19,232
Insurance companies	42.1	10.3	15.5	2.7	15.6	7.9	5.9	4,577
Mutual funds	21.3	17.3	3.6	53.8	3.5	0.0	0.4	1,299
Property plcs	18.0	0.0	0.0	0.0	0.0	60.6	21.4	82
Investment trusts	22.8	3.0	0.0	12.3	0.6	65.3	8.9	94
Total	40.7	20.6	10.6	11.8	13.1	1.9	1.3	25,284

(1) In the case of Insurance Companies, Property plcs and Investment Trusts, this category includes mortgages.

Table Nº 7.7
Investment in mortgage-backed certificates
(December 1992)

Institutional investors	Inv. MBC/ total fund	Inv. MBC/ total MBC
Pension funds	14.25%	60.68%
Insurance companies	12.50%	14.38%
Mutual funds	1.68%	0.54%
Property companies	0.00%	0.00%
Investment trusts	0.59%	0.01%
Total	13.10%	75.62%

Investment in mortgage documents
(December 1992)

Institutional investors	Inv. mort.doc./ total fund	Inv. mort.doc./ total mort.doc.
Pension funds	0.00%	0.00%
Insurance companies	3.62%	56.34%
Mutual funds	0.00%	0.00%
Property companies	6.89%	1.89%
Investment trusts	17.03%	4.18%
Total	0.80%	62.41%

Investment in property investment trust units
(December 1992)

Institutional investors	Inv. in units/ total fund	Inv. in units/ total units of IT
Pension funds	0.15%	39.98%
Insurance companies	0.50%	35.69%
Mutual funds	0.00%	0.00%
Property companies	0.00%	0.00%
Investment trusts	0.00%	0.00%
Total	0.21%	75.67%

Investment in property plc shares
(December 1992)

Institutional investors	Inv. in shares/ total fund	Inv. in shares/ total P.plc shares
Pension funds	0.15%	39.98%
Insurance companies	0.50%	35.69%
Mutual funds	0.00%	0.00%
Property companies	0.00%	0.00%
Investment trusts	0.00%	0.00%
Total	0.21%	75.67%

CHAPTER VIII
RISK RATING FOR PROPERTY SECURITIES

Horacio Carmona

INTRODUCTION.

This present chapter will tackle the subject of risk rating for property securities in Chile. Rather than listing the methods which can be used for rating, it will deal with: the need to evaluate risk; the context in which this function occurs in the country; the implications of its existence; the range of risk concepts implied in the classification; and the differences in approach, depending on the type of property security concerned. The above does not preclude a brief outline of the rating procedures used for the different instruments of property financing.

Due to the nature of this work, the condensed resumé presented in this chapter cannot, and does not claim to, reflect the whole nature of risk rating in Chile, an activity which has been under way for the past eight years. Although not completely free of errors, the system of risk rating in Chile has played an important social role, in that it constitutes an insurance which, to a large extent, prevents the repetition of grave financial crises, such as that experienced by the Chilean financial system more than a decade ago. Nonetheless, the existence of this system has also made an effective contribution to a more efficient assignment of resources, which is expressed in a gradation of the demands for return in accordance with the opinions of risk.

1. IMPORTANCE OF MEASURING THE RISK OF PROPERTY SECURITIES.

It is well-known that, among those financing housing projects it is the institutional investors who have the greatest development capacity. These require financial instruments to exist, since they can only participate in the financing of housing solutions through investment in securities. In every financial investment in securities, the purchaser has to concern himself with three variables, each of which must present conditions or levels which satisfy the requirements of the investor as efficiently as

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possible. These three variables are: the yield on the investment, its liquidity and its risk.

For the investor, the ideal would be to find a security with high yield, maximum liquidity and no investment risk. However, if such an ideal financial instrument were to exist, it would be very much sought-after and the price would rise, thereby reducing its yield. On the other hand, there would be potential buyers of that security who would be prepared to reduce the price of their purchase by eliminating certain safeguards, in other words, they would accept an increase in the risk of the instrument. In the same way, an investor who did not require great liquidity could abandon those conditions which make the instrument liquid, in the interests of a higher yield.

In consequence, the ideal instrument suggested does not in practice have any likelihood of existence. We will have to be content with an "acceptable" combination of the three variables mentioned, which satisfies as efficiently as possible the liquidity, security and yield requirements of each particular investor.

If it is not possible, or turns out to be too expensive, to find out the expected yield, risk and liquidity characteristics of a possible investment, this will be assigned a higher risk and there will therefore be less interest in getting involved with it. It is for this reason that those who want to finance housing projects, from large-scale financial sources -in this case the institutional investors- cannot be indifferent either to an insufficiency of financial information or to the mechanisms for measuring the risk or liquidity of property securities, since such mechanisms are fundamental in potentiating those instruments which serve as means of financing.

In general, transparency of financial information acts in the markets like oil in motors, since it produces greater fluidity and makes it possible to take more efficient investment decisions. However, the processing of financial information and its timely transformation into useful tools for decision-taking are not simply immediate consequences of the existence of financial transparency. In Chile there was a period when, despite having a sufficient quantity and quality of financial information, there was no efficient analysis of it, and this led to an incorrect appreciation of the risk implicit in many investments. Only after a major financial crisis in the years 1982 and 1983, one of the ingredients of which was an erroneous appreciation of risk, did Chile opt for setting up mechanisms to measure it. In the event, this was done by imposing a rating scheme, valid initially only for the pension funds and later compulsory for the rating of all issuers of securities on public offer. These requirements

were laid down by the Legislative Authority, convinced that social benefit was far superior to private benefit. This latter benefit was able to give rise to the spontaneous founding of a private, market-based rating system.

The purpose of the above is to emphasize that information has to be processed if it is to be useful. Such processing may be carried out by private institutions, for private use, or it may be public. In the case of risk measurement and opinions of risk, the processing of information is fundamental, since specialized analysis is necessary in order to issue such opinions accurately. In Chile, the results of such analysis is put at the disposal of the public investor.

In brief, the existence of mechanisms to measure the risk of property investment securities is one of the main pillars of the efficiency and efficacy of the housing finance markets. The opinion resulting from a risk rating, even though it is only one of the variables considered in the decision to invest, is one of the most fundamental as far as the institutional investors are concerned.

2. OBJECTIVES OF RISK RATING.

2.1. Analysis process for issuing opinions on relative risk.

Risk rating is a process of financial analysis carried out by specialist firms called "risk-classifiers". The aim of this rating-process is to deliver opinions which are easy to assimilate concerning the relative risks of various investment instruments. These are usually summed up in a single symbol, representing a risk category, for example "A", "B+" or "First Class".

2.2. Different concepts of risk for different types of property instrument.

The concept of risk referred to in the rating differs according to the type of instrument concerned. Thus, for example, the opinion regarding a debt security, which might be a mortgage bond, implies a concept of risk which is very different from that contained in the rating of a capital security, as is the case of a property investment trust unit.

The concept of risk which underlies the case of the rating of a debt security is a single one, corresponding to the risk that what has been previously agreed will not be paid, in amount and/or time.

In the case of the rating of capital securities, the concept of risk is less uniform and more diffuse, since in the case of some instruments (property company shares), it corresponds to the particular interests of certain institutional investors (pension funds) and in that of others (units of property investment trusts), the concept implied has been defined by the authorities supervising the rating process. All in all, underlying the risk opinion both of property investment trust units and property company shares are the concepts of the risk of deviation from pre-established investment policies and the risk of an exaggerated concentration of business, both of which are related to problems of administration.

2.3. Legal obligation in Chile to classify the risk of financial instruments.

In Chile it is not permitted to offer securities publicly unless they and their issuers are included on a special register called the Securities Register. Since public trust is involved when financial instruments are offered for public sale, a certain minimum amount of information about the issuer of the instruments being offered and the securities themselves is required. A way of guaranteeing this minimum is through the authorities' insistence that issuers maintain a constant flow of information to the regulating institution, and this information is available to the public.

Since 1989, one of the requirements for minimum information which an issuer of public-offer securities must meet is the contracting of at least two continuous risk ratings for the securities, with the same number of classifying firms. Before this requirement came into force, in 1985, the pension fund system relied on an institution called the Comisión Clasificadora de Riesgo (CCR), made up largely of representatives of the public sector and also of representatives of pension fund managers, whose task was to form a filter for the maximum risk acceptable in the investments of these pension funds.

In this way, a bank issuing a mortgage bond and an open-end property company are obliged to appoint two risk classifiers to produce two risk opinions on the mortgage bond and the property company share respectively. These opinions are revised periodically and are made known by a succession of publications in the press.

3. PROPERTY INVESTMENT SECURITIES: CAPITAL AND DEBT.

There are various types of property investment securities available in Chile, and all are included in one of the following two categories: debt securities or capital securities. This distinction is very important for purposes of risk rating, as may be gathered from the previous comments.

3.1. Property securities representing debt.

The instruments representing debt are the following:

a) Endorsable mortgage loans.

These refer to mortgage-backed loans which are extended to the purchaser of a property. These loans have the special feature that their originator (the creditor) may transfer them to other investors by endorsing them. At the present time mortgages have no risk rating because the mortgagors (who issue them) are not considered to be issuers of public-offer securities, and they are therefore not obliged to buy risk ratings for these debt instruments. The people behind these mortgages are institutions which extend loans with mortgage guarantees. When these mortgages are extended and held by banks, they receive a non-public risk rating, because of default in re-payment of the loans.

Those institutional investors authorized to purchase endorsable mortgage documents (Insurance Companies and Property Investment Trusts) do not need a risk rating for the securities in order to incorporate them into their investment portfolio.

b) Mortgages issued by banks.

These instruments, in view of their definition as public-offer securities, must obtain at least two ratings carried out by private firms and, in order for them to be included in the investment portfolios of the pension funds, they must also be approved by the Comisión Clasificadora de Riesgo.

c) Bonds based on the securitization of mortgages.

These bonds do not yet exist in Chile, but they will shortly become available on the national market. They consist of securities issued by a

securitization company, which will pool endorsable mortgages with differing characteristics. These will probably have restricted markets. The securitization company will finance the acquisition of the mortgages by issuing and positioning a bond, backed by the mortgages themselves, which will be worth more than the value of the bond obligation or debt (i.e. an over-collateralization).

The bond will be structured in such a way as to obtain the highest risk rating (Category A). This is a special case, where the risk rating will be a fact rather than the result of a later evaluation. The security is designed according to the terms of risk-category A (that of least relative risk), offering investors all the safeguards necessary to obtain that rating. The securitization company will have various packages of mortgages and bonds with separate risks. From the risk point of view, the difference as compared with bank mortgages lies in the fact that in the case of bank mortgages there is one single risk for each of them, that of the totality of the mortgage portfolio, since they cannot be assigned selectively to back particular mortgages. In the case of bonds from a securitizing company, there are as many risks as there are packages made up by the company.

d) Bonds based on the securitization of residential leasing contracts.

These securities have not yet appeared on the national market either, but it is hoped that they will be in circulation when the deferred subsidy mechanism comes into force, to work in conjunction with the residential leasing mechanism. This instrument corresponds to a security, a bond, issued by the leasing company which acts as securitizer, grouping not mortgage loans this time, but rent contracts containing an option to purchase. In this case the securities will be rated by private classifiers under the same conditions as the bonds based on securitization of mortgages.

3.2. Property securities representing capital.

The instruments representing capital are as follows:

a) Shares of property companies (plc).

These correspond to the shares of companies whose exclusive function is property investment, whether this be purchasing, renting or leasing properties, or extending or selling mortgages. Property corresponding to

agricultural land, waste land and housing have been excluded. These securities do not today fulfil the minimum requirements as regards involvement of public trust which would make risk rating compulsory. Thus this type of instrument, as a means of financing, does not at this point in time have risk ratings, but only the approval of the Comisión Clasificadora de Riesgo, which allows these shares to be incorporated into the portfolios of the pension funds.

b) Property investment trust units.

These correspond to participation units in a portfolio of property investment which includes property, endorsable mortgages and property company shares as mentioned above. These units must be approved by the Comisión Clasificadora de Riesgo if they are to be acquired by the pension funds.

4. RISK REQUIREMENTS FOR INSTITUTIONAL INVESTORS.

4.1. Compulsory reference to risk rating.

Institutional investors must refer to the opinions issued by the different classifiers, both regarding their capacity or incapacity to incorporate new securities into their portfolios (eligibility) and the maximum amount of the funds that they may invest in them (investment limits).

4.2. Eligibility.

The Pension Funds, Mutual Funds and Insurance Companies which at present exist in Chile are not allowed to acquire debt instruments rated as Category D (highest risk) or E (no information). Thus, a mortgage instrument rated in Category D could not form part of a mutual fund or pension fund.

Neither may the Pension Funds acquire capital securities (property company shares or property investment trust units for example) which have not been previously approved by the Comisión Clasificadora de Riesgo, and unless their issuers fulfil the proven solvency requirements or hold securities of solvent issuers, they must also be rated in the category "First Class" by private classifiers. Insurance companies, for their part, may not back their technical reserves with shares or investment trust units which are not rated as "First Class".

4.3. Investment limits.

Both Insurance Companies and Pension Funds have their investment margins in debt securities tied by law to the risk rating category obtained by these instruments. Thus, for example, the maximum margin for one of these institutional investors in a mortgage rated at risk-category C is equivalent to only 40% of the maximum margin admissible for a mortgage rated as risk-category A.

5. RISK RATING OF PROPERTY SECURITIES: DEBT.

Debt securities typically contain the promise of one or more payments of predetermined amounts on dates stipulated in advance. As indicated above, the object of risk-rating these securities is to rate the risk of default of the agreed payments. Notice that the rating of debt securities does not refer either to the yield of the security nor to its liquidity in the market. Indeed the additional risk for lack of liquidity, in other words the risk of loss due to a hurried sale, is not considered in the opinion of the instrument given by the classifying institution even though lack of liquidity constitutes one of the risks of investment. Likewise, the risk rating does not take into account the risk of premature payment, in other words the risk of the disappearance of the investment business with the security and the consequent risk of reinvestment at a lower rate of interest. It should be made clear that in the case of property securities of debt, this risk is an important one.

5.1. The case of mortgages issued by banks.

The risk-rating of mortgage bonds, as is the case with mortgage-backed certificates, aims to measure the ability to pay the previously agreed flows of the security.

The analysis carried out by the risk classifiers concentrates on two fundamental elements: the rating or classification of the debtor's ability to pay (the bank, in this case) and the rating of the instrument's characteristics.

a) Classification of the legal debtor's ability to pay.

The classification of ability to pay applied to the issuers of bank mortgages is based on measuring the solvency of the issuing bank. The main components of this solvency are specific indicators of indebtedness,

which take into account corrections in the value of assets, measurements of the matching of terms and currencies between the bank's assets and liabilities, and yield indicators. As a complement to the vision of solvency which may be gained from the above factors (and only in order to correct the previous opinion downwards), measurements of asset diversification, sources of financing, composition of income and costs, and the relative efficiency of the bank are considered, as also details of management and ownership.

b) Rating the instrument's own characteristics.

These characteristics are those proper to each security, which may or may not produce an effective additional protection to the solvency of the issuing bank. In the case of mortgages, this additional protection is given by the special characteristics of separability typical of the portfolio of residential mortgage loans. This additional protection is rated according to the quality of the portfolio of mortgage loans, specifically by measuring the maximum loss expected in recovering these.

5.2. The case of bonds based on securitization.

In the case of bonds based on securitization, the point must be made again that here the risk rating corresponds not to a rating of companies but to one of securities. This is especially clear in the case of bonds backed by assets, where the main source of repayment is not related fundamentally with a legal debtor, but rather with the characteristics of the portfolio of assets which have been packaged together.

While everything said at the beginning of this section remains valid regarding the risk on which the rating is pronounced, the method for measuring the risk of non-payment of the security differs substantially from that used in the case of a mortgage-backed certificate issued by a bank.

The measurement of the issuer's solvency, here that of the securitizing company or residential leasing company, is far less relevant in this case than in that of the mortgage.

The bond, being backed by a portfolio of loans or contracts, which means committed flows, has the risk of the securitized assets as its prime source of non-payment risk. That is to say, the first and most important risk involved in the non-payment of the coupons of the bond is that of non-payment by mortgagors or leaseholders. A mechanism much used to

minimize this risk (so that the risk rating achieves the highest category, AAA) is that known as "over-collateralization", i.e. an excess of backing obtained by securitizing mortgages or rent contracts for amounts greater than the obligations generated by the issuing of the bonds. The size of this excess is determined by estimating the maximum possible loss, so that if such a loss were to occur, the obligations arising from the bond could be covered anyway.

To this risk should be added others, such as uncertainties pertaining to lack of accuracy or precision in the design of the security, or derived from possible insufficiencies in coverage.

The legal risks of the security must also be considered, and those associated with the norms to be applied to regulated institutions (as will be the case of securitizing and leasing companies in Chile). In this respect, investors will not be indifferent to legal stipulations which, for example, oblige the securitizer to maintain a minimum ratio of capital to volume of bonds issued.

Finally, the credit risk of those exercising functions associated with the security should also be taken into consideration; that of the custodian of the securitized assets, for example, or of those who act as guarantors of payment (there may exist credit enhancement mechanisms, belonging to the securitizing institution itself or to third parties).

6. RISK-RATING OF PROPERTY SECURITIES: CAPITAL.

The instruments under consideration are property company shares and property investment trust units.

This subject is less important than the previous one, because there is as yet no clear consensus in Chile regarding the type of risk which should be reflected in the opinions of the risk-classifying institutions with regard to capital securities representing property investment.

Despite the lack of consensus regarding which risk the ratings should reflect, in Chile we have opted to believe that the most relevant aspect is the diversification of the assets of those institutions issuing property capital securities.

Although the analysis of risk deriving from a high rate of unoccupied property, or a heightened rate of default in the portfolio of mortgages should not be disregarded, the risk-rating of property investment trust

units and the approval of both these and property company shares rests largely on diversification criteria.

For property as a whole, diversification is considered according to the type of property, the tenant and also the value of the property.

In the case of the mortgage portfolio, diversification in terms of the par value of the mortgages, and diversification in terms of the loan to value ratio (LTV) of each mortgage are taken into account.

Complementing the above picture, consideration is given to possible concentrations of renting or leasing, or granting or holding mortgages in the same economic sector.

Analyses regarding the management of the property investment trust and the management and ownership of the property company are also considered.

CHAPTER IX
SECURITIZATION OF MORTGAGES IN CHILE

Eduardo Bitrán

1. INTRODUCTION.

The reform of capital markets introduced by the government includes the incorporation of a new section in the law for Stock Markets, which refers to the creation of the so-called "Securitizing Companies". In this section, the legal structure for developing securitization in Chile is established and the securitization of mortgages is authorized.

The aim of this chapter is to analyze the economic, financial and legal aspects of securitization in those countries where this instrument has been developed and, in particular, the way in which it can be developed in Chile, considering the characteristics of the new legal initiative on this subject. It will deal specifically with the securitization of mortgages.

1.1. Principles of Securitization.

Securitization consists in transforming loans or financial assets which are heterogeneous, non-liquid and of significant credit risk into a negotiable, liquid instrument with low credit risk. To achieve this, a credit originator who possesses these loans must sell them to a specialized institution which issues bonds backed by the loans, or participation units which represent a right to receive a fraction of the current of payments produced. The main source of payments for the obligations contracted with holders of bonds - or participation certificates - is represented by the cash flow generated by a pool of loans, net of administration costs and tax obligations. In some cases mortgage-backed bank securities, loan insurance policies or guarantees from specialized insuring institutions are included in the "pool" of assets backing the issue.

The first securitization was carried out in the United States at the beginning of the seventies, with a set of mortgages originated by a government agency. Securitization of mortgages originated by private institutions began only at the beginning of the eighties, as a way of

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avoiding the interest-rate risk implied in financing fixed-rate, long-term mortgages with short-term deposits. At present, the mortgage-bond market in the United States amounts to four thousand billion dollars, the largest debt market after the market of public debt.

1.2. Benefits of securitization.

The main advantages of securitization over traditional forms of bank financing are:

- i) To remove assets from the balance-sheet, thus reducing capital requirement or lowering the level of borrowing.
- ii) To reduce the risks from the interest-rate, by allowing better term-matching.
- iii) To increase the availability and diversity of long-term investment instruments.
- iv) To diversify the credit risk of individual debtors and gain independence from the credit risk of the originators of the loans.

2. GENERAL ASPECTS OF SECURITIZATION IN DEVELOPED MARKETS.

In the Anglo-Saxon countries, the legal structure of securitization is based on that of a "trust". Each time that one wishes to carry out a securitization, a loan-originating institution sets up a "vehicle" or single-purpose company which acquires the loans and issues a debt-instrument backed by these same loans. This mechanism, known as "pay-through", requires a "trustee" who administers the flows produced by the loans and pays the obligations with the bond-holders and with those in charge of collecting the loans. In many cases these "vehicles" do not own capital. A debt instrument is issued with preference over the flows of the loan-pool and one or more subordinated debt instruments, or, in other cases, insurance company guarantees take the place of capital.

As will be seen below, in Latin American countries, with a Napoleonic legal tradition, the "trust" figure has not been developed, and to do it involves a modification of the judicial structure.

2.1. Credit risk.

In the United States, securitization of mortgages requires that "senior" debt instruments may be issued only with risk ratings AAA and AA. Similar requirements have been laid down in stock market law in Chile.

Achieving low credit risk implies the existence of a high probability that, even with unfavourable economic events, the asset-pool acquired by the securitizing institution will produce a flow sufficient to fulfil the obligations laid down in the contract of issue. Individual debtors may have liquidity problems which mean a transitory default in the payment of their loans, or they may even cease paying the loan altogether. The probability of non-compliance with the obligation to the bond-holders as a result of the non-payment and non-liquidity risk of individual debtors, is reduced by the acquisition of many loans, with adequate diversification in terms of the characteristics of the debtor and by means of a mechanism for improving credit quality, either by:

- i) Over-collateralization of the bonds (by acquiring mortgages of a higher value than the preference debt issue),
- ii) Acquisition of other safe financial assets, in excess of the preference obligation, or
- iii) Guarantees established by insurance companies.

The risk-classification process must decide whether the mechanism chosen to reduce credit risk is sufficient to obtain AAA or AA. To obtain a rating of this level, it is normally necessary for the asset fulfilling the role of extra collateral, or guarantee, to be issued by an institution which has at least the same credit risk rating as that which is being sought for the bonds. At the beginning of the 1980s, the additional guarantee was represented by mortgage-backed certificates from banks. With the debt crisis, the risk rating of bank instruments deteriorated significantly, necessitating the replacement of MBCs by guarantees from insurance companies with good risk rating.

The risk classification of mortgage bonds is achieved by studying the expected loss from non-payment of mortgages in the event of a recession. This expected loss determines the amount of additional guarantees, or extra collateral, required to obtain a certain risk-rating. The risk-classifying firms have estimated that, to obtain an AAA rating implies a level of extra collateral sufficient to pay off the bond, even in the event of a recession of the magnitude of that which affected the State of Texas in the eighties.

In the first place the accumulated frequency of default on loans must be determined. For example, in the case of loans in which the relation between the amount and the value of the house is 75%, it was estimated that between 13 and 14% of these would not be paid. 40% reduction in the value of the property was assumed. The following assumptions were also made: on average, the loans cease to be paid 19 months after being extended; the period until the liquidation of the property is 18 months; and the cost of liquidation formalities is 15% of the final value of the house. On the basis of the above, it may be concluded that the loss for each loan which is not paid would amount to between 40 and 45% of the original loan.

With these details, an AAA rating would mean in the case of a basic portfolio, having an extra collateral or AAA guarantees for an amount equivalent to the product of the 13% of loans which are not paid, times the 40% of loss for each unpaid loan. This is equivalent to a 5% capital or extra collateral requirement. For an AA bond, the assumed adverse scenario is more favourable than for an AAA bond. In this case, the extra collateral requirement has been estimated at about 3%. In the case where guarantees or extra collaterals have issuers with a lower risk rating than that of the bond to be issued, a higher level of suitably diversified extra collateral will be required per issuer.

The creation of insurance companies specialized in granting guarantees for the issue of mortgage bonds has played a fundamental role in the development of the mortgage market in the United States. To the degree that such companies have an excellent reputation for solvency and are able to obtain good information regarding the credit-risks of specific issues, they will be adding value by reducing the asymmetry of information about those issuers and originators of loans which are not known to the capital market.

This type of intermediation has succeeded in significantly reducing the costs of financial intermediation in the United States. It is estimated that the costs of traditional intermediation, which fluctuated within a range of 3 to 4%, have been reduced to a level between 1.5 and 2% with the development of securitization. This reduction in intermediation costs has increased the possibilities of being able to finance housing for vast sectors of the population.

2.2. Separation of the source of payments and the originator.

One essential aspect of the success of securitization lies in the fact that a real sale of the originator's loan takes place. It is fundamental that the

source of payment should be completely separate from the originator, so that if this latter should go bankrupt, the continuity of payment of the bond is not affected. In order for this to occur, the loan of the originator must be sold to a third party, completely removing the loans from the originator's balance sheet. In the United States there are strict rules to determine what constitutes a real sale of a loan to a third party. In this sense, it states that the originator, a bank, may not for example hold on to any risk of loss in the loan which has been sold. Otherwise, the transaction is considered as a borrowing with the loan as guarantee, in which case it does not disappear from the originator's balance sheet. Likewise, if the corporation which acquires the loans, and issues the debt instruments is a subsidiary of the originator, there is always the risk that in case of its insolvency, there might be legal compulsion to give financial consolidation to the originator with its subsidiary, the single-purpose securitizer. In the United States, the legal separation of the securitizing institution is not sufficient to guarantee non-contamination in the case of the bankruptcy of the originator. There are numerous situations in which the courts have ordered a substantive consolidation; in such circumstances, the bankruptcy of the originator would imply the bankruptcy of the securitizer, with its assets becoming part of the assets of the originator's bankruptcy.

Another aspect which is necessary for the separation of the credit risk of the originator from that of the securitizing institution, is that there should be no mixing of the funds collected on the loans with the funds of the originator during the period in which the originating company could be exposed to bankruptcy proceedings. In general the originator will keep the responsibility for collecting, which is not incompatible with the concept that a sale has taken place, provided that the following conditions are fulfilled:

- i) that the originator acts as a collecting agent under exactly the same conditions as any other collecting agent;
- ii) that the vendor and collector receive only a collection commission as a result of the sale, without keeping part of the subordinated obligations issued by the securitizing institution;
- iii) that the purchaser has the right to replace the collecting agent at any time.

The carrying out of a real sale means that in no case may a contract be signed in which the sale price is later altered to reflect actual collection. The sale price must be fixed on the basis of the expected collection, without subsequent alterations. Each loan must be sold with a discount

containing implicitly the expected loss for non-payment, and the rate of the cost of the funds of the securitizing institution, net of expenses. Once this discount has been negotiated, this is not modified, whatever may be the rate of placement of the bond or of default. However, the collection contract with the originator or other agent may include a fixed commission plus a contingency payment, depending on the level of default and the recovery of the loans. Nevertheless, these earnings will be included in accounting procedures only as they occur.

2.3. Tax treatment.

Tax treatment, as regards income tax, is important due to the incentives it gives for carrying out securitization. On the other hand, there will be different tax effects depending on the current legal structure, :

- i) an effect on the originators' income tax, if they sell the loans at a value different from the book value,
- ii) taxes which the securitizing institution has to pay, and
- iii) tax treatment for those investing in this type of instrument.

a) Taxes for the originator.

The sale of a loan by an originator at a value different from that established in the books will produce accounting profits or losses with immediate tax effects. These effects may give the originator incentives or disincentives to sell his loans.

Where the securitizing institution is a subsidiary, for tax purposes a sale is not considered to have taken place, and the operation has to be consolidated with the originator for paying taxes; thus the profits and losses on the sale have no tax implications, and taxes may be paid as the loans are recovered. Only where the securitizing institution is not owned by the originator must the tax effects of the sale be allocated.

b) Taxes affecting the securitizer.

There will be different tax implications, depending on the legal structure of securitization. In the "pass-through" scheme, participation certificates are sold, structured on the basis of a fiduciary institution which transfers the collection, net of expenses, to certificate-holders, without any active

administration of the funds collected. The role of this fiduciary agent is simply one of transference. In this case the fiduciary agent pays no taxes, these being the responsibility of the investors.

In the "pay-through" scheme, the securitizing institution issues debt instruments and is obliged to manage the cash-flow actively, in order to comply with the payment of the obligation. In this case, income-tax is paid on the difference between the interest earned and the interest paid, the administration costs and the losses for non-payment of loans.

In the case of securitization for residential mortgages, a special tax legislation was created in the United States, exempting securitizing institutions from the payment of income-tax (this law is known as "Remic").

c) Taxes affecting investors.

If the securitization is carried out via the "pay through" scheme, the investor acquires a debt instrument which receives the same treatment as any instrument of that type, i.e. interest earned is counted as income. The payment of the principal is not considered to be income, unless it has been bought at a discount, in which case the excess collected over and above the purchase value will be treated as income.

If the instrument represents a participation in the securitized loans, the interest produced by the set of loans will be treated as income, and the payment of the principal will not be liable to tax, unless recoveries greater (or less) than the purchase value of these occurs, in which case there will be an tax effect.

3. SECURITIZATION IN THE CAPITAL MARKET PROJECT.

In the reform of the capital market, two mechanisms are established to carry out the securitization of loans. On the one hand, a new section has appeared in the law for the Stock Market, called "Of securitization companies", which permits securitization to evolve by means of issuing debt instruments. On the other, in the law for Investment Trusts there appears a Securitized Loans Investment Trust. This mechanism allows participation certificates to be issued, representing part of a set of relatively homogeneous loans.

3.1. Securitizing companies.

Since the Chilean Civil Code does not include the concept of commercial trust, which in Anglo-Saxon countries makes securitization possible, a different legal model was set up, which was closer to the national legal tradition. This permitted special companies (plc) to be set up which will have a common capital, and as many separate capitals as there are separate issues of securitized debt-instruments. Each capital will include in its assets the loans and other assets to back the bond issue, with one series or several.

The concept of separate capital modifies the general bankruptcy regulations, since in the case of the bankruptcy of the securitizing company, the assets of each separate capital do not pass over into the assets of the bankruptcy. In this case, each capital is disposed of separately as a patrimonial unit, the assets of the bankruptcy being increased only by the sale price of each capital. In the event of its not being possible to dispose of the capital separately, the representative of the bond-holders, who acts on their behalf as liquidator of the separate capital, may proceed to dispose of it in any case, or decide to continue managing it, in order to maximize recovery for the bond-holders. From the other point of view, the bankruptcy of one separate capital does not mean the bankruptcy of the securitizing company, and in that case the separate capital must be liquidated.

With this scheme, a problem in one issue is prevented from causing more problems in another.

3.2. Securitizable instruments.

The law for Stock Markets authorizes the securitization of endorsable mortgages issued by:

- i) Banks and financial institutions,
- ii) Property Companies (plc) and Property Investment Trusts, and
- iii) Mutuary Agencies under the law for Insurance.

Under generally applicable regulations, the Superintendency of Securities and Insurance (SVS) may also authorize the acquisition of other negotiable instruments by these companies. The range of loans and the type of originators which may be incorporated into securitization is very wide; for example, receivables of public service companies, receivables of

credit-card companies, medium-term loans for the purchase of fixed-assets, etc..

3.3. Mechanism for structuring securitization.

If one wishes to set up a mortgage securitizing company, one should proceed in the following manner. To obtain authorization to exist, a capital of at least ten thousand UF must be contributed to the common capital of the securitizing company, of which at least five thousand UF must remain permanently in the common capital, invested in instruments which are not liable to encumbrances. The common capital begins the acquisition of mortgages with its own capital and borrowing from the banking system. The mortgages remain as guarantee of the bank loans.

Once a sufficient volume of mortgages has been acquired to justify an issue, the corresponding procedures must be carried out. These include registering the issue, with precise identification of the mortgages which are in the common capital, and which will be in the separate capital, and the other assets and guarantees which will be included in that capital, and the contracting of two risk ratings, by those in charge of the custodial care of the assets of the separate capital, and by the representative of the bond-holders.

The management contracts for the portfolios must be established together. Once the issue has been placed, the funds are collected by the representative of the bond-holders. In the first place, he pays the creditors of the common capital, who financed the purchase of the mortgages which were to make up the separate capital. This allows him to raise the encumbrances on these mortgages.

After certifying that all the committed assets have been incorporated into the separate capital, free of encumbrances and protected by custody, he pays the remainder of the funds collected into the common capital of the company.

3.4. Operation of the securitizing company.

The contract of issue establishes the minimum value of assets which must be kept permanently in the separate capital, for the security of bond-holders. The salaries of the credit managers, the representative of the bond-holders and the custodian must be paid out of this, plus any income-tax resulting from the operation of the separate capital. If, after making these payments, the year's operations show such an exceedent that

the value of the assets in the separate capital exceeds the commitment in the contract of issue, the securitizing company may withdraw assets from the separate capital in order to include them in the common capital and pay dividends, if it so desires. In the case of a successful securitization, in which default is less than expected and there are therefore cash surpluses, the owners of the capital may receive remuneration before the separate capital disappears due to the liquidation of the debt.

3.5. Tax treatment of securitizing companies.

In the case of bonds issued with the backing of mortgages, such bonds are exempt from stamp duty, in the same way as mortgage-backed certificates.

With regard to income-tax, the securitizing company should calculate the tax accrued for the operation of each separate capital, placing these funds at the disposal of the common capital. The contributor is the securitizing company, which answers with its common capital for the tax obligations of the company and of the separate capitals. In the case of the bankruptcy of the company, the state is the preferent creditor of its common capital. Where the liquidation of the common capital does not allow the debts with the state to be met, the state shall have preferential rights over the balance of the separate capitals being liquidated, once the bond-holders have been paid.

3.6. Risk rating.

The law of stocks only permits the issue of debt instruments with ratings in categories AAA and AA. The government, together with the AID, has contracted statistical studies, to be able to determine the level of guarantees and extra collateral which would need to be set up in Chile in order to obtain a rating of AAA and AA. The Superintendency of Securities and Insurance (SVS) will determine, in the initial development phase, the minimum level of extra collateral required for a basic reference mortgage portfolio. Private risk-classifiers may adapt these requirements, bearing in mind the specific characteristics of the loans chosen. Key aspects for deciding the requirements for extra collateral are:

- i) The ratio of the value of the loan to the value of the property;
- ii) The interest-rate of the loan;

- iii) The relation between the dividend and family income;
- iv) The economic sector in which the head of the household works;
- v) The economic diversification of the area in which the properties are being built;
- vi) The socio-economic level of the family;
- vii) The speed, time and cost with which foreclosure proceedings against defaulting debtors can be processed.
- viii) The amount of guarantees or state subsidies, in the case of loss due to non-payment of the loan.

In Chile, the maximum ratio between the loan and the value of the property is 75%.

This level compares favourably with the United States, where this variable may be up to 90%. In the case of sectors with low or middle-to-low incomes there is a state subsidy for those who pay cash, which may reduce to less than 50% the ratio of loan to value of the property. Due to the high incidence of the cost of the land, structural work and sanitary instalations in this type of loan, and the lesser dependence of the value of this type of property on the economic cycle, it is to be expected that the loss of value should be less than in property in high-income sectors. There is also a state guarantee which covers 75% of the loss which may occur in case of foreclosure on the mortgagor. With this information, and assuming that the political risk entailed in action by organized debtors is minimized, the requirements for guarantees and the additional collateral should be quite low. This would allow the development of this business with low capital, and therefore at a reduced intermediation cost.

3.7. Loan Investment Trusts.

In the reform of the law for Capital Markets, a modification to the law regarding Investment Trusts was incorporated. This modification, in addition to improving the general regulations for investment trusts, authorized the creation of Investment Trusts for Securitized Loans. This type of trust makes it possible to structure securitization operations in a way which is similar to the "Pass through" scheme in the United States. It allows the creation of a Fund Management Company which can structure these funds with pools of relatively homogeneous loans.

Investors can acquire participation units in these trusts, which are traded on the formal secondary markets, their main potential purchasers being the Pension Funds and Insurance Companies. Each of these trusts must have two risk ratings, meaning that the loan portfolio must be identified before issuing the units.

4. ECONOMIC VIABILITY OF MORTGAGE SECURITIZATION IN CHILE.

4.1. The securitizable mortgage market.

In Chile, the profitability of the securitization business depends on economic, financial and political variables. The government's main objective in developing securitization was to create a private market for housing mortgages corresponding to mortgagors with middle-to-low incomes. In the past four years, the private sector's share in the mortgage market for low-income sectors has been considerably reduced, with the Banco del Estado becoming almost the only source of financing for housing in these sectors. This situation should be reversed, since the risk of default is very high, due to the fact that when the creditor is the State, organized action by mortgagors is not to be expected.

From the point of view of fiscal discipline and management efficiency, there are great advantages in having a private mortgage securitization industry. These advantages become apparent to the extent that the State does not discriminate in favour of the intermediation of the Banco del Estado when awarding possible subsidies to low-income sectors for purchasing houses. It has been argued that this intermediation constitutes an implicit subsidy, which may be the reason why a private mortgage market for low-income sectors has not been developed. In particular, it has been claimed that the Banco del Estado does not charge all the administration costs of the loans, and that this bank is seen as an institution with state guarantee, meaning that it can borrow funds at a lower rate of interest than the private sector. Finally, mortgagors believe that it is more advantageous to be in debt to the State than to the private sector, since in the event of a crisis in the system, it is easier to obtain collective remissions when these are set against the result of a state company, than when it is necessary to establish a transfer of subsidies to the private sector by law.

These competitive inequalities could be counteracted in part by the greater efficiency and dispatch which would be produced by developing specialized private institutions for granting mortgages. In the United

States, these specialized institutions were able to significantly reduce administration costs and increase the speed of granting loans. In Chile, the candidates for becoming originators of mortgages are the banks which have developed the housing loans area, the mortgage agencies which are subsidiaries of insurance companies and the property companies (plc). In addition, mortgage bonds may be structured in various series, with different pre-payment risks. This transforms the series with least risk of pre-payment into excellent instruments to fulfil the matching standards required by Life-Assurance Companies.

One policy alternative which should be considered in order to encourage the development of this private market, is to substitute the implicit subsidies via the Banco del Estado with explicit subsidies for all the intermediaries operating in the low-income segment. This could be positive, even from the fiscal point of view, since expected future default would be reduced significantly if the private sector were to be incorporated as a major creditor. In specific terms, if the Banco del Estado borrows at lower rates because depositors believe it to be insured by the State, a tax or differentiated provisions could be introduced to standardize such fund costs with those of low-risk private institutions. If it is not considered desirable to increase the cost of money for house purchasers, these funds could be returned to the private sector via a subsidy on all mortgage borrowing. In the case where securitization companies are developed as subsidiaries or associates of banks, an additional provision should also be made for those which are not associated with this type of institution, to avoid the competitive inequality implied by the market view that the Bank, and definitively the State, will not allow a subsidiary to go bankrupt, due to the contamination that this could produce on the deposits within the banking system.

The yield of the business of securitizing mortgages for low-income sectors will depend on all these aspects of regulations and policy. At present, the conditions for developing mortgage securitization in middle-income sectors already exist.

4.2. Illustrative exercise.

A fundamental aspect to be taken into account when estimating the yield of the business is the extra collateral which is required to obtain a risk rating of AAA or AA. The statistical studies commissioned by the government in conjunction with AID are still incomplete, and therefore it is not yet possible to draw definitive conclusions.

One exercise, which may serve to illustrate the viability of the business, is to estimate the extra collateral requirements, with assumptions which must be revised later. In this context, let us consider the 1000 UF housing segment. Let us assume that in order for a debt instrument to be rated AAA, the mortgage bond has to be payable, even in the event that the accumulated frequency of loans to be liquidated reaches 20% (in the United States this figure is 13% for a basic loan "pool"). It is estimated that the relation between the loan and the value of the property is 75%; that the period of time between the first month in which the loan ceases to be repaid and the moment in which the income from the liquidation of the property is received is 36 months (in the United States less than twenty months is assumed); that the cost of the legal procedures for eviction and liquidation of the property is 12% of the original value of the property; finally, it is assumed that the reduction in the price of the house at the moment of sale is 40%.

It is worth mentioning that all these parameters are more pessimistic than those estimated by FITCH and Duff & Phelps, in the United States, for a basic set of loans in a scenario like that of the recession in Texas in the decade before. However, in the Chilean case, provided that the legal procedures for eviction and liquidation are followed, the government subsidizes 75% of the difference between the value of the debt and the auction price of the house. With this assumption, the expected loss for each unpaid loan is only 26% of the original debt of that loan (in the United States, the loss in value is over 40%). This implies that, given the assumptions of default in case of catastrophe, the extra collateral requirement would be 5.1% in Chile, compared with 5.2% in the United States. If administration costs can be reduced, with these results it might be possible to develop mortgage securitization cost-effectively, with a total intermediation margin of around 2%, which is lower than the existing margin in the mortgage-backed certificates market. If, in addition, AAA bonds with low risk of pre-payment were to obtain a market premium, it is possible to think in terms of a substantial cut in housing costs in Chile.

CHAPTER X

RESIDENTIAL LEASING

Sergio Almarza

A NEW ACCESSIBILITY SYSTEM THROUGH PROPERTY RENTAL WITH OPTION TO PURCHASE

1. ORIGIN AND BASES OF THE PROJECT.

Widespread debate about the size of the housing deficit began in Chile in 1988, as a result of the publication of partial information regarding studies carried out by the Ministry of Housing and Town-Planning (MINVU), in the context of an arrangement with the World Bank. Depending on the source, the estimate of the real housing shortfall ranged between 400,000 and 800,000 homes (between those needing to be replaced due to their irreparably bad condition, and those lacking, for families living as unofficial tenants in other people's homes). The difference needed to make up the 1,2 million which was agreed to be the total housing deficit, corresponded to homes with improvable deficiencies.

On the other hand, public spending to provide housing subsidies increased during the same period to a level sufficient only to balance the construction of new homes with the demand caused by the growth in the number of new families and the replacement of buildings which had changed function or been demolished (80-90 thousand per year). It was not considered possible, however, to envisage further increases in the state contribution in the short term.

It was therefore essential to think of other courses of action, if the desire to erradicate this great social disgrace was really serious. In response to this, a series of core ideas for a new policy, with this goal in view, were suggested within technical areas of the Cámara Chilena de la Construcción, (CChC) to complement existing policy.

This proposal was formulated, also bearing in mind the following important diagnostic aspects:

- Though it was difficult for the State to increase its short-term contribution significantly, it was financially feasible to commit large amounts of future funding, since the economy of the country was forecasting sustained growth rates of no less than 5% average per year.
- Public contribution towards social-welfare housing will continue to be an obligatory expense for Chilean society unless the acute housing shortage is solved and unless, at the same time, there is a significant rise in income in the poorest sectors. This is so, although it does not feature in any law, because it has represented the attitude of all political groups and reflected the position of the community for various decades.

For that reason, it was politically feasible to think in terms of committing future funds to speed up the construction of homes in the present.

- Traditionally, housing policies have aimed at immediate ownership. However, this laudable aim, as the only alternative, condemned many young families, whose low incomes made them bad prospective tenants, to live for years in "callampas" (makeshift accommodation) or as "allegados" (unofficial tenants in other people's homes). The rental market for those sectors -which include middle-to-low segments- still operates informally and at very high cost in Chile today, though to a more restricted extent.
- In addition, there are many families in low-income sectors whose independent form of working makes it very difficult for them to be considered creditworthy. This means that their possibilities of gaining access to the benefits of existing housing subsidies are permanently limited, since these presuppose complementary financing via a mortgage loan.
- The development of a vigorous local capital market, with institutional investors expanding their supply of financial resources much faster than the growth of the economy, and therefore keen to find new options in which to channel their investments, may be a possible solution to the serious problem before us.

An analysis of the diagnosis led to the conclusion that it was essential to improve housing policies in order to achieve two objectives simultaneously:

- a) to produce an addition channel to increase investment in social-welfare housing, especially with private funding, since the State's maximum effort was necessarily going to be restrained;
- b) to support families with middle-to-low incomes, so that they can rent adequate housing under market conditions, during the period when they do not yet own their homes.

In concrete terms, the proposal consisted in creating a family subsidy for renting a house with option to buy it, where the total up-dated value would be similar to the subsidy awarded all at once for the purchase of a home under the present policy.

This subsidy would be paid monthly by the State and would be added to the amount contributed by the family, according to a scale compatible with their net income.

The aim of the subsidy would be to capacitate the beneficiary to rent an adequate home under market conditions and at the same time generate sufficient savings to become its owner within a reasonable time. A period of 20 years would be considered when fixing the monthly amount of the subsidy.

With the amount made up of the subsidy and the family contribution, the first priority would be to pay the rent, and the remainder would be deposited in an individual account managed by an institutional investor. Families would be able to make additional voluntary deposits in their individual account.

The houses would belong to property companies created for this purpose, and these would sign rental contracts with the families receiving subsidy benefit. The contracts would include an option-to-purchase clause on the property, to be put into effect when the balance in the individual account was equal to the initial value of the house.

The rental contracts would be covered by special regulations, specifying: retention from wages of the amount which the beneficiary would use for rent; application of funds from the individual account to cover corresponding payments in the event of rent arrears or damage to the property; unemployment insurance to cover rent; prohibition to withdraw funds from the individual account for purposes other than the purchase of the house, or to use the funds as guarantee; non-attachability of funds for causes unrelated with the house; and a foreclosure procedure to terminate rental contracts in cases where this is justified.

In 1990, the Ministry of Housing and Town-planning called a meeting of those public and private institutions linked directly or indirectly with the building and marketing of homes, in order to analyze the subject together. They were looking for ways to meet the demands of those sectors of the population with middle or middle-to-low incomes more adequately. Those invited organized themselves into the "Financing Commission" to make a thorough survey, go through known ideas and projects for solutions and draw up a programme of concrete action, by evaluating all the information collected and putting it in order of importance. The Financing Commission unanimously backed the suggestion to use leasing as a slow-working mechanism to ensure that, in the course of time, ownership of the home would pass to the lessee, always providing that he kept to the agreed payments, entitling him to the use and possession of it.

2. TARGET MARKET.

The new system is open to anybody who is interested. However, it is thought that it will be especially attractive to the following segments or social groups:

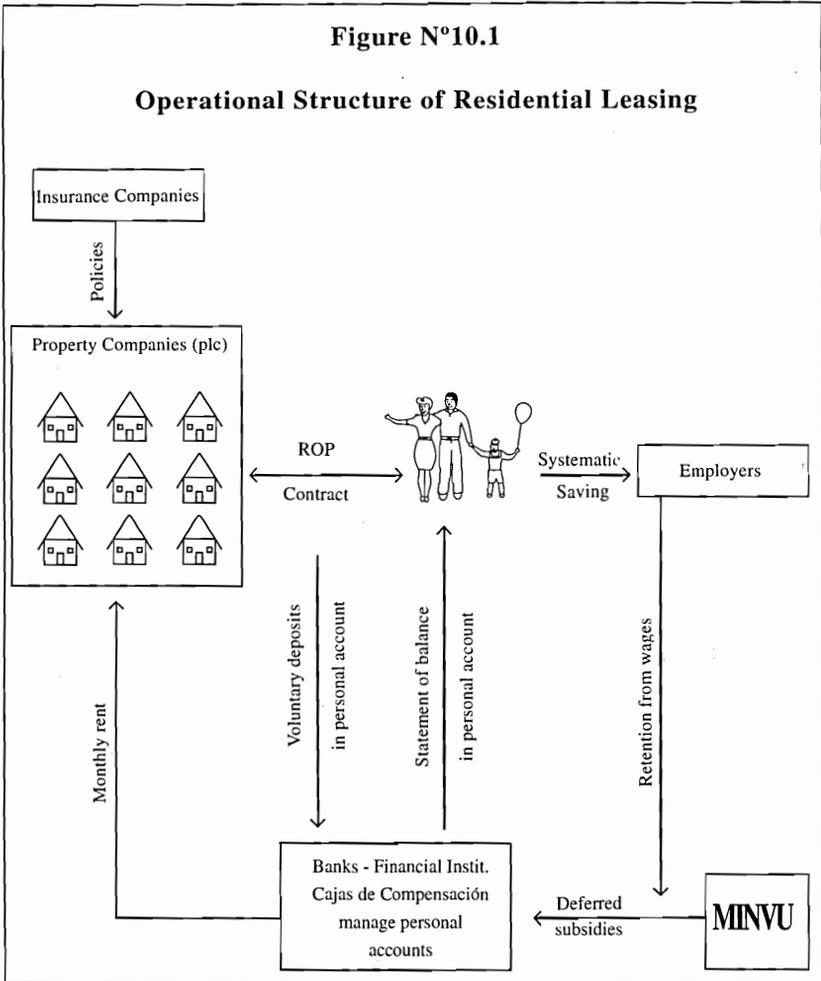
- a) Middle-class families who rent homes and find it difficult to build up savings at the same time, due to other heavy expenses in education, health, durable goods and clothing.
- b) Independent workers and owners of small firms, who have regular flows of income but are not creditworthy, because of the difficulty in guaranteeing their income.
- c) Young families with low incomes, since there is no appropriate rental market for this sector.

3. OPERATIONAL SCHEME AND ANALYSIS OF THE MAIN ELEMENTS OF THE NEW SYSTEM.

The system, which has become popularly known as "residential leasing", would serve to establish a new way of acquiring homes. The scheme is relatively similar to financial leasing, with certain peculiarities in its design which take into account our national idiosyncrasy and the development of the local market. Legally, it is a system of housing rental with option to purchase. The interested party will rent the home from a property company and will at the same time be building up savings in an individual account. These, plus the interest they earn, will allow him to

become the owner of the home at the end of the agreed period. The law establishing the system has recently been passed in the National Congress.

The operational structure which this new accessibility mechanism will have may be seen in schematic form in **Figure N° 10.1**. Its most relevant aspects are analyzed below:



3.1. Property companies.

These are the owners of the homes which may be rented out with option to purchase.

The following corporate entities may act as Property Companies in the business of housing rental with option to purchase:

- Open stock companies (plc)
- Closed stock companies which stipulate in their by-laws their obligation to prepare their financial statements according to the regulations applicable to open stock companies, and to submit these to the revision of the Superintendency of Securities and Insurance (SVS).
- Property companies (plc) referred to in letter j) of Clause 98 of Decree-Law Nº 3,500 (1980) (in conjunction with the share participation of the pension funds).
- Banking subsidiaries specially constituted for this type of business, or leasing subsidiaries.
- Agents managing the mortgages referred to in Clause 21 (bis) of Decree with Force of Law Nº 251 (1931) (issuers of mortgages for life-assurance companies).
- Cajas de Compensación de Asignación Familiar (non-profit private organizations, set up by business associations, which offer various social services and grant loans to their affiliates).

3.2. Rental with option to purchase (ROP) contracts.

These contracts may refer to completed properties (new or second-hand) and those being built (the fact of having municipal building permission will be sufficient). This type of contract may also be signed with owners of houses which will be transferred by sale to a property company at the same time as a ROP contract is agreed for the house. This option is directed towards financing the extension, rehabilitation and improvement of existing houses.

The contracts must establish the amount of the rental, the minimum quota of systematic saving, the purchase price of the house, and the time-limit within which the sale must take place.

There will only be upper limits on the type and maximum price of house involved in a ROP contract, where this is an operation involving a housing subsidy. Likewise, in these operations a time-limit of not more than twenty years must be fixed for signing the purchase contract. At the same time, the systematic saving to which the future purchaser commits himself may not be more than 25% of the monthly net income which he can prove at the moment of signing the ROP contract, including the income of any person who may stand as his guarantor or joint co-debtor.

The lessees may come to special arrangements with the property companies with regard to extending or repairing the house to which the contract refers.

The property company may dispose at any time of the property which has been rented with option to purchase, to a company of the same type, and the acquiring company remains subject to the encumbrance of keeping to the contract in the form agreed by the lessee and the original company. This remains true however often the process occurs.

If the house is totally or partially destroyed, or suffers damage which is not attributable to the deed or fault of the lessee and which, in the opinion of the corresponding Municipal Works Department, makes it uninhabitable, the corresponding cost will be assumed by the property company throughout the life of the ROP contract. This obligation will include the provision of a house of similar characteristics for the lessee and his family to live in, for the time that it takes to repair the house or until it is replaced by another.

The non-payment of three contributions in succession or the accumulation of four contributions which are not paid, even though these are not in succession, will give the property company the right to ask for the legal cancellation of the ROP contract.

The judge who will be competent to deal with law suits aimed at cancelling or terminating the ROP contract, at fixing the date by which the house is to be handed back, or with any other controversy arising between the parties, including compensation for damages, mutual services and questions concerning the interpretation of the contract, shall be a combined judge-arbitrator, as referred to in subsection four of Clause 223 of the Código Orgánico de Tribunales. He must be designated by the parties in the contract itself, from the special list to be compiled by MINVU for these purposes, or by the judge, if there is no agreement by the parties regarding a substitute for him, in the event of the refusal, disqualification or absence of the person designated. It will also fall to

ordinary justice to designate the combined judge-arbitrator, where the parties have omitted to do so in the respective contract.

3.3. Individual accounts.

The lessees must open and keep individual savings accounts to receive the systematic and voluntary savings deposited by account-holders in order to pay the rent and build up sufficient funds to finance the purchase of the rented house within the period agreed by the parties. The account-holders may only be natural persons.

The funds kept in the accounts shall be non-attachable and shall not be subject to any type of precautionary measure.

The institutions authorized to open and keep these accounts shall be banks, finance companies and cajas de compensación de asignación familiar. These institutions shall be entitled to a fee, fixed on a commission basis, at the expense of account-holders, which shall be deducted from the balance accumulated in the accounts.

Resources deposited in the accounts shall constitute a "Housing Fund" which is separate from, and independent of, the networth of the institutions. The resources in this Fund shall be invested in the same way and under the same conditions as are established by law for the Pension Funds.

Once the contract promising to rent with option to purchase, or the ROP contract itself has been signed, the account-holder may not withdraw the funds in the account nor use them as any kind of pledge.

The lessee may, with the agreement of the property company, transfer the rights deriving from his contract, but this transfer must include the balance in his account with its interest.

3.4. Subsidy of demand.

The holder of an individual account who does not possess another home, and who fulfils the legally stipulated requirements, may apply for the housing subsidy awarded by the MINVU. The object of this is to supplement his systematic and voluntary savings, contributing towards paying the rent and the purchase price of the house.

The subsidy, expressed in real currency, will be paid out in regular, equal, successive instalments, with a maximum of 240 instalments, which will be paid into the individual account.

If the beneficiary transfers the rights deriving from his ROP contract, the transfer may include the remaining instalments of the subsidy obtained, provided that the transferee fulfils the legal requirements for obtaining this benefit. The transferor may also opt to apply the remainder of the subsidy not yet received to another legally regulated contract.

3.5. Other relevant aspects.

a) Retention from wages

The systematic savings instalments, which will be compulsory payments agreed in the contract, must be retained from wages by the employer. In this case, the legislation governing the retention of social security contributions will apply, since this contemplates effective mechanisms for judicial collection in the event of non-compliance.

b) Financing of the property companies

The project regulates the issue of securitized bonds, i.e. those backed by shares. It will be able to issue debt instruments with collateral on rent-income and bonds, guaranteed at the same time by mortgages and by pledges on the rights of the lessee and promised vendor.

These bonds may be acquired by institutional investors such as pension funds, insurance companies, mutual funds, closed-end funds and foreign capital investment funds.

The property company may also dispose of the house rented with option to purchase, and transfer the contract to those persons authorized to acquire them by the Superintendency of Securities and Insurance (SVS) in generally applicable rules. This option is directed towards capturing the funding of those investors who require fixed-income investments at expiry-date, such as the life-assurance companies.

c) Insurance

The project encourages the transfer of risks of involuntary non-compliance from the housing market to the insurance industry, with the aim of keeping the system functioning normally, even in periods of crisis.

With this in mind, it has been made obligatory for the property company to buy fire insurance and for the promised purchaser to buy disencumbrance insurance. The property company must also buy, on its own account and at its own expense, a policy to cover the unemployment of the lessee, or the loss of his source of income. This will cover the risk of non-payment of the compulsory savings instalment. The law leaves to the regulations the application of this last disposition, so that it may be adapted to the real situation in the development of insurance policies on the market.

In the case of lessees who are not in the category of employee, the property company may insist that they form a guarantee fund to be answerable in the event of their not complying with the timely payment of the compulsory savings instalment.

4. IMPACT OF LEASING IN THE MODERNIZATION OF THE CHILEAN MODEL OF RESIDENTIAL FINANCING.

Several years have gone by since the government took the decision to go ahead with the system of access to home-ownership through rental with option to purchase, and during that period there has been intense debate and analysis of the new system, face-to-face with public opinion, and with frequent references to the subject in the news media.

Authorities from the present and previous government have taken part in it, as also members of parliament, business associations in property, finance and capital market sectors; regulating institutions; professional associations; academics, and other persons interested in the subject from various angles. It is probably the most ample study and revision process ever undertaken in the preparation of a law, at least in recent years.

The explanation for this would seem to lie in the fact that it is a highly innovative initiative, compared with the way things have been done over the past few decades, in a sector -housing- which concerns everybody, and in a society which, though it may not be entirely aware of it, is actually quite conservative.

One redeeming feature of the long discussion is that various agents have become aware of this new field of activity, and are now prepared to participate in the new business, and that there is a level of information among the general public which will facilitate a rapid response in demand once the system is launched.

There are three elements in the project, which will certainly play a modernizing role, and have great impact on residential financing systems. We mention them, because the effects which are expected of them could be perfectly valid for other countries in the continent. These have to do with the second-hand property market, the normalization of the rental markets and the maturing of the market for property instruments.

4.1. Expected impact on the second-hand property market.

In Chile there are upwards of three million "used" properties. This figure represents about 97% of the total stock, if one considers that about a hundred thousand new houses will be added in 1994. In the light of this elementary empirical evidence, it may be concluded that what happens in this market is of enormous importance, especially since the second-hand property market frequented by middle-to-low income sectors works quite inefficiently, creating a problem which affects between 80 and 90 percent of the population.

Traditionally, housing policies have focussed on encouraging the purchase of new houses. Second-hand properties were left completely on one side. There was certain ignorance about the functioning of the market, so it was thought that dedicating funds to new housing by force would produce a higher level of building activity. In fact the reverse is true, since if existing, or second-hand, housing is a liquid asset with a good secondary market, meaning that it can compete with new housing under the same conditions, capital will not be lost, but will, on the contrary, reach the housing sector in larger quantities. On the other hand, barriers to the outflow of this capital are the most effective obstacle to the entry of new capital.

From another point of view, diminishing the liquidity of an asset like housing implies in practice that it loses value. In other words, properties which belong to middle-to-low income sectors tend to lose value, thus causing a very retrogressive effect on the national distribution of wealth.

In order for a house to be an asset with good liquidity, the owner must be able to change his investment at any time, either for another house or indeed for another type of asset (cash deposit, shares, etc.), and for

this to happen it is essential to have the option to sell the property without great loss. Nevertheless, in Chile this is not possible, even in the case of middle-to-low value properties, because the demand for these has been hard-hit by the housing subsidies awarded by the State, which still mean discrimination against second-hand properties.

In this sense, the law about renting homes with option to purchase introduces a radical change, since it puts second-hand properties on an equal footing with new ones. This makes the subsidies neutral, since they can be applied equally to the purchasing of any property. The project also contains other operational mechanisms to improve the position of second-hand properties, such as facilities to finance extensions and maintenance, and greater flexibility for selling them. As support for second-hand property deals, the incorporation of financial agents which, like the Cajas de Compensación de Asignación Familiar, are used to operating with small placement amounts for workers with middle and low incomes, will no doubt be very important.

It is expected that, in this way, the secondary market for middle-to-low value second-hand property will take off. In the country's present circumstances, with a stable economic and social horizon, a sustained increase in per capita income and a rapidly expanding female labour-force, family income levels are rising considerably. This in turn increases the demands for quality in housing services and gives people the incentive to sell their house and buy a better and more expensive one. It is therefore indispensable, and of great social benefit, to create conditions which facilitate transactions at every level -developing the second-hand property market-, so that those who wish to sell can find the corresponding buyer. This will make possible a continuous adjustment process between supply and demand, which in practical terms means greater satisfaction for families and an improvement in their quality of life.

4.2. Expected impact of leasing on the housing rental market.

As a result of decades of hostile attitudes and legislation towards the house-rental business, aggravated by serious macroeconomic distortions and erroneous housing policy at certain periods, this market operates today with a reduced supply, made up almost entirely of private individuals.

The average rental rate in middle-to-high groups has been historically about 12% of the value of the property per year. In the case of middle-to-low and low sectors there are no studies on the subject, but

information from different sources indicates that the values are higher than those paid by the high-income sectors -with rents reaching 20% per year- as a result of the informality and risk of these markets.

With these values, it is sometimes impossible for tenants to get savings together at the same time, in order to gain access to the traditional subsidy and mortgage loan, with the result that the family remains incurably trapped in the situation. By way of illustration, one can mention the case of basic homes -the first step up from the solution with a site and basic services- where it is a well-known fact that they are rented at a rate equivalent to three or four times the amount of the monthly servicing of the mortgage loan which is assigned with these houses.

When the possibility of renting with option to purchase becomes an activity with adequate regulations and legal protection, without the commercial risks typical of simple renting -periods without tenants and maintenance or repair expenses- the lessees may become owners of their homes without having to put up with the excessive rental rates which they pay today.

Thus it is logical to expect that the new system will produce a growing impact on the rental market, leading to a lowering of prices which will allow it to continue capturing an important part of the demand for housing services.

4.3. Impact on the property securities market.

Regulations envisaged in the system for issuing bonds will allow the development of the new financial instruments which the continual expansion of the institutional investment market requires. Property securities will be pre-eminent, because the assets of the issuers guaranteeing each bond issue will be considered as separate capital, destined exclusively to the payment of these bonds. In this way, these assets will not be attachable by third parties as a result of any obligation which the issuer may have agreed to with them. With the new securitization regulations which are being incorporated into the law regarding stocks, a similar procedure will be used for issuing mortgage-backed bonds.

In this way, it will be possible to overcome the objection to mortgage-backed certificates, in the sense that they are affected by changes in the risk of the guarantees which back them. Since all the guarantees will back all the mortgage-backed certificates, the risk is not that of an

individual loan or a limited group of loans, but the average risk of the whole portfolio. This risk will vary according to the quality of the new loans extended by the issuer in the future, and added to the collection. This could imply a negative evolution of the average risk, a situation beyond the control of investors in mortgage-backed certificates (MBC).

Also, the existence of a contractual relationship with the debtor, based on rental with option to purchase, added to a more agile judicial collecting procedure and incentives in the law itself to ensure collection, improve the guarantee objectively in relation to mortgage guarantees.

It is therefore to be expected that there will be a positive reaction from private securities originators to provide more funding for the potential housing demand in the middle and low sectors -which is enormous- and at the same time satisfy the long-term institutional investors' need for fund placement. These amount to about US\$20,000 million at this point in time, and their placements in property securities are well below the normal position for capital markets.

5. OTHER BENEFITS OF THE NEW SYSTEM.

The new system does not aim to replace anything which already exists, but simply to fill gaps and weaknesses which have been clearly diagnosed over several years of discussion. In addition to the positive results mentioned above, other benefits are visualized which could derive from its implementation. These may be summed up as follows:

5.1. Leasing from the point of view of housing policy.

- a) It offers new opportunities to obtain a home in adequate conditions for those who today have difficulties, or simply cannot manage it. At the same time, those who do have the possibility today of using existing systems, will also benefit from the greater competition in the supply of residential financing services which will be created.
- b) The housing market will be improved, making it more flexible, adding mobility to home-ownership and reducing trading costs.
- c) Home-saving by the beneficiaries themselves is encouraged, worked out by using a systematic payment of one compulsory monthly contribution and also voluntary contributions. This is possible because families with lower incomes, or middle-class families with many obligations, will at the same time be enjoying the advantages

provided by the home. Without this, a significant number of these family groups would not be in conditions, or would not have the discipline to do the advance saving. In this way, funds which at present are dedicated to consumption will be channelled into investment in housing.

- d) New possibilities are opened up for capturing private resources for the housing sector.
- e) Systems for collection and for resolving conflicts between financial institutions and clients are improved, which is important in preventing the risks of crises in financing systems.
- f) It will enable the building of houses to be brought forward, using the same state funds that society has regularly committed itself to, and making the most of capital market and financial technology. Likewise it allows the private sector to place the financial resources that it recovers over a period. There is no doubt as to the social benefit.
- g) It will familiarize the population with the idea of renting, and in general with new concepts belonging to well-functioning housing markets (participation of institutional investors, mobility between houses, property liquidity, etc.) This will provide the incentive to expand housing supply.
- h) It will ease the transfer of the function of direct financing to users from the State to the private sector, increasing the participation of the latter in managing social-welfare housing programmes.

5.2. From the user's point of view.

- a) **People who are in a position to choose between buying outright with a mortgage loan and renting with option to purchase.**

The costs of both systems would have to be similar since the functions and risks are approximately equivalent. (See Appendix N^o 10.1)

- b) People who could manage to reach the situation of being able to choose either option, but in the time it takes an average family to become mortgage-worthy.**

The State's capacity to significantly increase the number of subsidies is very limited if it has to pay these once-off in cash, since there are many other needs to be met.

On the other hand, as has already been mentioned, the rental markets for middle and low sectors are very imperfect, and therefore operate at really high prices.

These factors make it extremely difficult for people in these social segments to find the subsidy and sufficient advance saving to acquire a home with a complementary loan, at one and the same time.

It is estimated that for an average family, thinking of those which might have some possibility of doing it, this process means a waiting period of 5 to 10 years.

By contrast, the mechanism of deferred subsidy, linked to a ROP contract, allows an average family to bring forward the access to the home that will eventually be theirs, by several years, due to the different fiscal spending profile which the new mechanism will generate, and the improved guarantees for the financial institution.

It is estimated that the rental rate in a contract of this nature could be, as a long-term average, about 8% per year. It is known, however, that at present rent costs are equal to, or more than, 12% per year. (See Appendix N^o 10.1)

In consequence, every year that the implementation of the new system is delayed means a cost for the future owner of at least 4% of the value of the home. If one considers the normal period already mentioned, the non-existence of the new system with deferred subsidies is producing an higher accumulated cost for future owners of 20 to 40 percent of the value of the home, if they are obliged to act only through the present system of purchase backed by a mortgage.

- c) People who will never, or only with great difficulty, be able to buy with a mortgage, due to particular rental conditions.**

This group of people is very large and includes independent workers and owners of small firms, as also members of middle-class sectors who are

trapped in rental conditions which do not allow them to build up advance savings, and/or are not creditworthy, due to the nature of their source of income.

It is estimated that between 20 and 30% of the population is included in this segment, a group which at present has no option but to spend more on housing than the rest of the population, thereby limiting its possibilities of progress.

If these people could have access to a ROP contract with deferred subsidy, they could become owners of a property even better than the one they can afford today, with the amount they are paying in rent.

5.3. Incentives for progress and social stability.

- a) Having property companies handling property portfolios, these companies will develop the "property maintenance" function and will take care of their surroundings in order to maintain the value of the guarantees. This will produce positive effects on towns, which may be very little at the beginning, but over the years will permeate to the whole population and generate a new attitude tending towards better care of houses in general.
- b) The development of the secondary contract market will give liquidity to lower-priced properties, valuing them as assets. This will encourage and protect the main source of accumulating capital open to the poorer sectors, thus reinforcing social stability.
- c) There is also an incentive to broaden the economic culture of the population, facilitating and preparing the ground for the future introduction of more sophisticated financial products into the country, which will be available to the population in general. This will serve to strengthen social progress and equity.

6. FORECASTS.

The leasing law stipulates that the law governing the budgets of the public sector will establish the number of subsidies which can be awarded annually. However, the subject has been studied and debated exhaustively to estimate a possible scenario, so that the different agents participating as operators may plan their action.

In this way, it has been estimated that it would be financially possible to award up to 40,000 subsidies per year for 15 years, with deferred payment (in instalments) and this would make it possible to build, in that same period, 600,000 more social-welfare housing units than are built normally. Chile would thus be in a position to put an end to the housing deficit within a relatively short period.

The assumptions considered are as follows:

- a) Growth in fiscal spending of 4% per year. Analysts of all sectors forecast that the GDP will have a future average growth rate equal to, or greater than 5% per year.
- b) For the next few years, the spending of the MINVU will maintain the same share of total fiscal spending as in 1993.
- c) The average single subsidy will be 120 UF, equivalent at the moment to US\$ 2,940. The house is paid off over 20 years in equal quarterly instalments, and the discount rate to determine the value of the instalment is 9% per year.
- d) It is considered that, to sustain the natural increase in present investment programmes and the running costs of the MINVU, the resources dedicated to these ends will rise 2% per year.

If the awarding of subsidies at the rate of 40,000 per year -fully functional level- were to begin in 1994, by the end of 15 years -in the year 2,009- the programme of 600,000 new homes would have been completed. That is to say, in that year the MINVU would be making deposits in 600,000 individual accounts, since by awarding deferred subsidies over 20 years, those awarded in 1994 would still be valid, and those awarded up to the year 2,008 would have entered the payment flow.

The forecast for the scenario in year 15 of payments, in other words, the "peak" year, is as follows:

Impact of expenditure on 600 thousand subsidies, in the year 2,009.

- Proportion of total government expenditure: 0.92%
- Proportion of MINVU expenditure: 18.89%

- Total expenditure on subsidies: US\$ 186 million, which compared favorably with resources available over the natural increase in spending, which would be equivalent to US\$ 263 million.

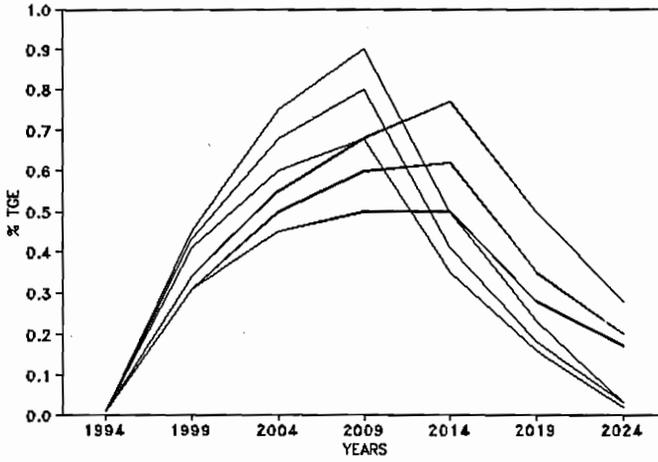
To sum up, in the scenarios forecast for the country, there would be sufficient resources to cover the commitments of the programme, even though the relative participation of the housing sector in government expenditure were not to increase, and in fact, if the public contribution to housing were to drop, relative to the size of the GDP. In Appendix N^o 10.2 are given details of the calculations for this and other alternative programmes. The results of the simulation are shown in Graph N^o 10.1.

As the programme should award a small quantity of subsidies at the beginning, increasing gradually up to fully functional level, the impact of the expenditure would be less in practice than the estimate given in this chapter.

In addition, the new system could cover a significant proportion of the financing for the potential demand from home-owners with middle-to-low value property who want to move to better-quality housing. This demand, as has been mentioned, is at present unsatisfied.

The size which this market might attain is unpredictable, but a reasonable estimate would be to situate the total number of additional transactions per year at 5% of housing stock. Supposing that the average amount to be financed is 200 UF -US\$ 4,900- per operation, this would imply additional placements, at today's rates, of approximately 30 million UF per year (US\$ 735 million).

Graph N° 10.1
Impact of the programme of 600,000 deferred subsidies
on total government expenditure (TGE)



----- 30,000 subsidies / year ----- 40,000 subsidies / year

APPENDIX Nº 10.1

Comparative analysis of the cost of the mortgage dividend with initial single-payment subsidy, versus rental with option to purchase and deferred subsidy, for people who have the possibility of choosing immediately between the two options. Cases of homes worth 500 UF, 1,000 UF, 1,500 UF (1 UF = US\$ 24.5).

To make a logical comparison it should be supposed that:

- a) They have the same advance saving.
- b) They have the same subsidy (in net present value NPV).
- c) The period for paying the complementary mortgage loan or for accumulating the agreed sale-price, respectively, shall be the same.

With these suppositions, the comparison is reduced to verifying the difference which exists between the amount of the "dividend" of the mortgage and the amount of the "contribution" in the ROP contract (the latter is defined in the law, and corresponds to the compulsory systematic savings quota).

For these purposes the following parameters come into play, their values being estimated in the long term (the next 20 to 30 years):

- Cost of the funds = yield of low-risk fixed-income instruments: 6% per year.
- Spread of operators in mortgage loans and ROP contracts: 2% per year.
- Mortgage loan: 8% interest per year* (cost of funds plus spread)
- Rental rate in ROP contracts: 8% per year (cost of funds plus spread; N.B. property is generally refinanced with securitized bonds)
- Yield of Housing Funds: it seems probable that the Fund portfolio will be composed (as it and the capital market mature) of 2/3 fixed-income instruments and 1/3 equities. As has been said, the performance of long-term fixed-income instruments is estimated at 6%

* All rates are based on UF, i.e. in real terms.

per year. Experts consulted in the Stock Exchange consider an average long-term annual yield of 15% for equities to be consistent with the above.

In this way, the average long-term annual yield of Housing Funds (which are invested according to the same regulations as the pension funds), i.e. the capitalization rate of the individual accounts of the lessees would be of the order of 9% per year.*

The calculations of dividends for buying with a 20 year mortgage give the results shown in Table N° 10.1.

Price of the house	Subsidy	Advance savings	Loan	Dividend
500	130	50	320 (64%)	2.62
1,000	110	140	750 (75%)	6.14
1,500	90	285	1,125 (75%)	9.22

Now observe what happens with the lessee, if he starts with the same advance savings and the same subsidy (in net present value). This is shown in Table N°10.2.

House price	Subsidy NPV	Advance savings	Rental rate	Savings subsidies	Capitalization excess (*) capitalized at year 20	Lowest monthly	Contribution rent equiv. (*)
500	130	50	3.33	50	509	0.80	2.53
1,000	110	140	6.67	140	401	0.63	6.04
1,500	90	285	10.00	285	602	0.94	9.06

As may be seen when observing Tables N° 10.1 and 10.2, the amounts for "dividend" and "contribution" are very similar.

* It is worth noting for information that the historic average yield of the Pension Funds between 1981 and 1993 has been 13% per year, though structural adjustment factors contributed to this which will not be repeated in the future.

This is completely logical, and to be expected if the person confronts both options from the same starting-point, since the costs of both systems (the cost of funds and the operational spread) would have to be similar, since they have relatively equivalent functions and risks. In fact, the costs of funds for operators of ROP contracts might even be lower, since the operator is better guaranteed (the property is better than the mortgage, and in the Law, the system for collection in case of non-compliance has been improved).

APPENDIX Nº 10.2

Simulation of the impact on government expenditure of a programme of 600,000 deferred subsidies, which would be awarded over the next 15 to 20 years and would eliminate the housing deficit.

1. Assumptions considered in the simulation.

- a) Base Year: 1993. Total Government Expenditure and that of the MINVU taken from the law for budgets in the public sector (law 19,182).

Budget in US\$ transformed into pesos \$ at the dollar rate observed on 22.06.93: \$/US\$ 402.6

- b) An annual growth in the GDP of 5 to 7% is considered, with the growth in government expenditure being somewhat less. The simulation considers three alternative growth-rates for government expenditure:

Alternative 1: 4% per year

Alternative 2: 5% per year

Alternative 3: 6% per year.

- c) It is assumed that the expenditure of the MINVU will remain at the share of total government expenditure that it had in 1993.

- d) Average Subsidy Unit:

- Present Value : 120UF

- Discount Rate: 9% per year

- It is paid over 20 years in equal quarterly instalments

- In consequence, the average unit value of the quarterly instalment is 3.181 UF (\$ 31,241 at 30.06.93).

- e) Awarding of subsidies

Two alternatives are analysed:

Alternative 1: To award the 600,000 subsidies over a 20 year period, at a rate of 30,000 per year.

Alternative 2: To award the 600,000 subsidies over a 15 year period, at a rate of 40,000 per year.

f) Implementation

- It is assumed that the awarding of subsidies will begin in 1994.
- It is considered that subsidies awarded in any given year imply beginning expenditure in January of the following year.
- There could be some partial expenditure a few months earlier, but in the calculations this is amply compensated for, since it has been assumed, to simplify the analysis, that annual subsidies (30,000 or 40,000) are awarded as from the start of the Programme (in 1994). In practice, the government expenditure forecast for each year would probably be less (the subsidies actually valid would also be fewer), since the system would take some time to become widespread. In other words, it is most likely that in the years 1994 and 1995 a smaller number of subsidies will be awarded.

2. Results.

In Tables N^o 10.1 and N^o 10.2 are shown the results of the 30 year forecast for the combinations of alternatives defined above, i.e. for:

- A growth in government spending of 4.5 to 6% per year

Combined with:

- 30,000 and 40,000 deferred subsidies per year over 20 and 15 years respectively

The indicators used are:

- a) Impact of the Programme on total government expenditure (Table N^o 10.1 of Results)
- b) Impact of the Programme on the expenditure of the MINVU (Table N^o 10.2 of Results).

Table N° 10.1: results**Impact on total government expenditure (TGE)
of the programme of 600,000 deferred subsidies**

Year of the programme of expenditure	TGE Grows at 4% 30,000 subs/year	TGE Grows at 5% 30,000 subs/year	TGE Grows at 6% 30,000 subs/year	TGE Grows at 4% 40,000 subs/year	TGE Grows at 5% 40,000 subs/year	TGE Grows at 6% 40,000 subs/year
Year 1: 1995	% TGE					
Year 5 (1999)	0.34	0.32	0.31	0.45	0.42	0.40
Year 10 (2004)	0.56	0.50	0.45	0.74	0.66	0.59
Year 15 (2009)	0.69	0.59	0.50	0.92	0.79	0.68
Year 20 (2014)	0.76	0.61	0.50	0.50	0.40	0.34
Year 25 (2019)	0.47	0.35	0.29	0.21	0.16	0.13
Year 30 (2024)	0.26	0.19	0.14	0.03	0.03	0.02

Table N° 10.2: results**Impact on the programme of 600,000
deferred subsidies on the MINVU expenditure (ME)**

Year of the programme of expenditure	TGE Grows at 4% 30,000 subs/year	TGE Grows at 5% 30,000 subs/year	TGE Grows at 6% 30,000 subs/year	TGE Grows at 4% 40,000 subs/year	TGE Grows at 5% 40,000 subs/year	TGE Grows at 6% 40,000 subs/year
Year 1: 1995	% ME					
Year 5 (1999)	6.99	6.61	6.24	9.32	8.81	8.31
Year 10 (2004)	11.65	10.35	9.32	15.32	13.79	12.43
Year 15 (2009)	14.31	12.15	10.45	18.89	16.22	13.94
Year 20 (2014)	15.64	12.70	10.42	10.35	8.47	6.94
Year 25 (2019)	9.64	7.46	5.83	4.26	3.31	2.59
Year 30 (2024)	5.32	3.91	2.91	0.71	0.51	0.39

3. COMMENTS (FIGURES IN \$ AS ON 30 JUNE 1993).

- a) Of all the alternatives suggested, the greatest impact occurs under the assumptions of lowest growth in government spending (4% per year) and highest number of subsidies (40,000 per year).

The peak corresponds to year 15, in other words when all the 600,000 subsidies awarded are being paid at the same time. This would occur in the year 2009. The forecast results are:

Impact on Total Government Expenditure = 0.92%

Impact on MINVU Expenditure = 18.89%

These seem to be completely reasonable figures from the macroeconomic and government management points of view.

However, to give them adequate weighting, it is necessary to bear in mind that under the suggested assumptions, the country would have practically solved its housing problem, with the social benefits that this implies.

- b) In a scenario with a growth in government expenditure of 4%, and keeping the MINVU share constant, the budget of the Ministry would increase by \$184,952 million in the year 2009, by comparison with 1993.

If one considers that about 2% per year rise in the MINVU's budget would be necessary to sustain the natural increase of the present investment programmes and running expenses of the Ministry, the new programme will require an increased spending of \$78,980 million in the year 2009.

In consequence, there would be a assignable balance of \$ 105,972 million, which compares very favorably with the \$ 74,978 million needed to make the payment of the 600,000 deferred subsidies in the year 2009. In other words, in the most demanding alternative of the Programme, there would be enough funding to cover the commitments, even without increasing the relative share of the housing sector in government expenditure, and in fact reducing the public contribution on housing in relation to the GDP.

CHAPTER XI
INSURANCE AND GUARANTEES IN THE HOUSING SECTOR

Alberto Chacón
Ignacio Montes

1. THE INSURANCE MARKET.

1.1. Introduction.

Modern cities, in addition to offering their inhabitants innumerable attractions and comforts, also bring them face to face with a series of risks and unforeseen circumstances which can affect their future, health, patrimony and even their lives.

In view of these possibilities, insurers, who are permanently engaged in offering security and peace of mind, have developed new forms of protection in order to guarantee people's welfare both as individuals and as families.

In the context of housing, having access to a home which is suited to the needs of those expecting to live in it is the desire of every family in whatever part of the world. In fact, in society today home-ownership is included as one of the basic needs of every human being, since it allows him and his family group to enjoy the security and privacy which they need to facilitate their personal development.

The definition of guidelines for the design of financial mechanisms which encourage the user to attain such access by means of house purchase is part of the social development task of modern governments, and the creation and administration of efficient plans to facilitate purchase and long-term maintenance, all within an established legal framework, are activities which should preferably be tackled by the private sector in modern society.

In this context the role to be played by insurance may be visualized more clearly as an indispensable complement and support in the decision-making of mortgagors and mortgagees.

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As far as mortgagors are concerned, life-assurance, specifically that of disencumbrance, which covers outstanding debts in the case of their death or serious disability, turns them from the investors' point of view into financially risk-free debtors in case of death, and at the same time frees their families from having to take on the payment of a large debt in addition to the impact of the loss, at a time when it is logical to suppose that there will be a reduction in family income.

This scheme is complemented by insurance policies directed at the conservation of the home over a period of time, protecting the value of the investment from risks of fire, earthquake or other natural disasters.

With regard to the mortgagee, as has already been seen, it allows him to exclude from his feasibility study of a property investment project the risk of the death of the purchasers or the reduction of the value of the guarantee by circumstances which affect the property, whether produced by man or nature.

1.2. The development of the insurance market in Chile.

The modernization process which began in Chile in the second half of the seventies, brought with it a series of changes in economic and social structures, from which the insurance market was not excluded.

Thus, from 1980 onwards, the Chilean insurance market entered a phase of deep changes, whose purpose was to transfer to this market the benefits of free competition and openness to external markets.

In order to visualize the extent of these transformations more clearly, we will explain the characteristics of insurance which were true before 1980 and those which began to operate after that date.

1.2.1. The Chilean insurance market prior to 1980.

Before 1980, life-assurance policies in Chile were expressed in nominal pesos, without any relation to internal inflation.

Under this scheme, which also prevailed in most other Latin American countries, the development of insurance was predictably very limited, especially long-term insurance, because of the loss of buying power on the capital insured, with the passage of time.

The essential relationship which has to be established between insurance and inflation is born of this situation, as a way of guaranteeing the future benefit of the policies which are underwritten.

The legal characteristics in force before 1980 made the insurance market into a non-competitive, rigid, uniform system, in which the most important aspects of its operations were controlled by the authorities, who in practice co-managed the Companies.

Thus it was the responsibility of the administrative authority, exercised by the Superintendency of the area, to fix premium-rates, to approve and ensure the fulfilment of agreements regarding reinsurance, agents, brokers and commissions; to accept the investments of the Companies using its discretion with regard to class and quantity, and to authorize and establish the number of branches of insurance firms, among other things.

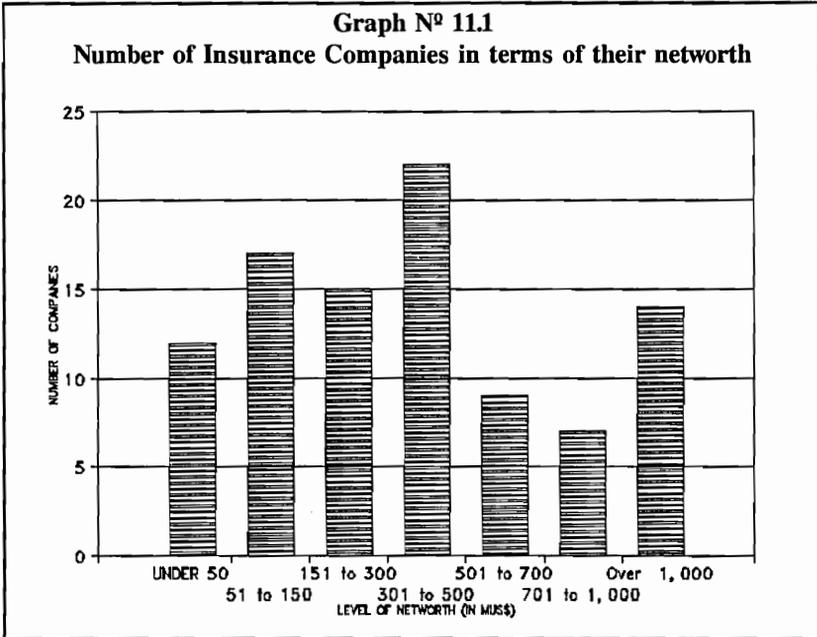
As regards the origin of the capital of the Companies, the law laid down that insurance activity could be carried out only by Chilean companies (plc), at least two-thirds of whose capital was in the hands of Chilean shareholders.

Reinsurance was handled under monopoly conditions by the Caja Reaseguradora de Chile, an institution organized according to a system called "mixed economy", its shareholders being the State, the Insurance Companies and a few individuals, with control in the hands of the authorities.

This collection of legal dispositions brought with it a real stagnation of the industry, which came about due to inefficiency resulting from lack of competition and the ineffective and untimely supervision of the Superintendency.

Despite the large number of Companies existing in the market, 96 in 1978, very few had invested in technology and the modernization of their structures.

This characteristic, which corresponded to the fact that many of the Companies had been set up to manage the insurance of proprietary companies, meant that most of them had insufficient capital to develop their objective. In fact 85% of insurance companies had a net worth of less than US\$ 1 million.



1.2.2. The Chilean insurance market since 1980.

In 1980 there was a fundamental change in the laws governing the insurance market, and the principles of an economy of free competition and openness to foreign investment were applied to it.

In this context, freedom to fix prices was introduced, the monopolies existing in the field of reinsurance were eliminated, as also the obligation to buy state insurance policies. The minimum capital requirements were raised and the Superintendency's powers of control were substantially modified. With the aim of deregulating the business, supervision was concentrated on the solvency of the insuring institutions.

That year also saw the passing of Decree-Law N° 3,500, which modified the pensions system on the basis of individual savings accounts. The same legislation gave the Insurance Companies power to cover the risks of disability and death in the new social security system, and to buy the life-annuity policies through which pension payments are made in the cases of the retirement, disability and death of the affiliates.

As was to be expected, this new scenario obliged many Insurance Companies to merge, go into liquidation or sell out to foreign investors.

Within the new framework of conditions, which included the compulsory readjustability of insurance policies, the Companies concentrated their efforts on perfecting the system, and adequate tariffs, competition, service and modern techniques, accompanied by more effective reinsurance, began to take first place in these Companies' lists of priorities.

Some of the most relevant characteristics of this new stage in the development of the Insurance Companies are as follows:

1.2.2.a. Types of Insurance Companies and their capital.

Insurance Companies are divided into two groups: the first formed by those operating in the field of general insurance and the second those involved with life-assurance.

According to the terms of DFL Nº 251, Companies in the first group are those which insure against risks of loss or damage to things and capital, while Companies in the second group are those which cover risks to people and guarantee them a capital sum, a settled policy or an income for the insured or his beneficiaries, within, or at the end of, a certain period of time.

It is prohibited for a Company to operate in both areas at the same time. Nonetheless, personal accident and health risk may be covered by Companies in either of the two groups.

Among the Companies for general insurance there is a sub-group formed by the Companies for Loan Insurance, whose exclusive aim consists in covering this type of risk, plus those of guarantee and fidelity.

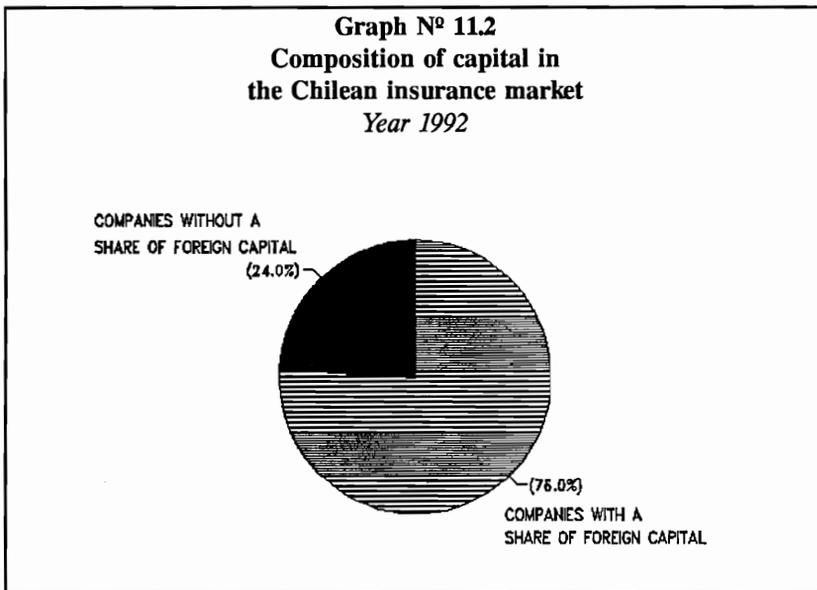
With the publishing of Decree-Law Nº 3,057, Companies were required to have a capital of at least 60,000 "Unidades de Fomento", equivalent to approximately US\$1,470,000, and this resulted in a substantial reduction in the number of companies operating at that time, both in general insurance and life. Later, Law Nº 18,666, published in 1987, reduced this to 45,000 UFs, equivalent to US\$ 1,102,500, as the minimum capital requirement for Insurance Companies, and to 60,000 UFs, equivalent to US\$ 1,470,000, as that for Reinsurance Companies.

1.2.2.b. New treatment of foreign investment in the insurance business.

The insurance business was opened up to the investment of foreign capital which could be used to acquire shares or create new Companies, subscribing all or part of their capital.

According to the new legislation, foreign capital can also organize or acquire reinsurance companies.

This openness to and from the foreign insurance and reinsurance markets prompted the arrival of great international insurance consortiums and banking systems, which have invested large amounts of capital in Chile, thus demonstrating their confidence in the economic model and the development of the insurance industry.



This has happened to such a degree that in 1992 76% of the insurance firms operating in the country included foreign capital.

1.2.2.c. The powers of the Superintendency.

As was mentioned above, the changes introduced in the economy and the insurance sector also produced changes in the nature of the

powers exercised by the Superintendency to regulate the insurance market.

In this context, the present requirements are directed basically towards maintaining a minimum net worth, and ensuring that there is a relation between this and the level of commitments, measured both in terms of the volume of premiums and retentions and of the company's level of debt.

At present the maximum level of total debt of the Companies in the first group may not be more than five times their net worth, nor fifteen times in the case of Companies in the second group. Likewise, the new Law for the Stock Markets incorporates the notion of a solvency margin for Insurance Companies.

Alongside this, emphasis has been placed on the issuing of transparent, uniform, adequate and timely information, which is a fundamental aspect of an open market.

The achievement of the above has been assisted by the bringing into force of a system of risk rating for Insurance Companies, which has to be carried out quarterly by two risk-classifying firms, duly authorized by the Superintendency of Securities and Insurance to exercise this function.

By this process, the companies are rated according to the probability of their fulfilling their commitments to the insured over a period of time.

1.2.2.d. Technical reserves.

In order to keep an eye on the correct functioning of the new scheme of liberalized tariffs, the law has established regulations intended to safeguard the solvency of the Companies.

For this reason, systems have been set up to decide on reserves, which will allow the risk of the obligations to be adequately provided for, and these seek to compatibilize freedom in tariffs, which even goes as far as permitting prices to be set below costs, with a minimum but sufficient level of guarantees.

Thus for example in the case of the life-annuity policy, which is a product with a term of twenty years or more, the reserve, which like other insurance lines must be reported quarterly to the Superintendency, corresponds to the present value of the future pensions, with a discount at an interest rate which is directly related, in duration with the

characteristics of the investment portfolio of the Companies (Matching System).

In broader terms, the reserves may be classified as short and long-term. The short-term ones correspond to policies with a duration of up to one year, usually general policies and certain life policies. The long-term ones on the other hand, which are also called "mathematical reserves", are those originating in contracts with a duration of more than a year.

1.2.3. The new pensions system.

Almost at the same time as the liberalization of the insurance sector, one of the deepest and most far-reaching transformations that the country has ever experienced in the field of social security began to function in Chile, and that was the private pensions system.

The new social security regime put a stop to the pay-as-you-go system, managed by government organizations, and replaced it with one of individual capitalization, or savings, managed by private institutions.

Among the main characteristics of the new social security legislation it is worth mentioning the following:

1.2.3.a. The capitalization of social security savings.

In this system, the pension depends on the individual result of the worker's saving throughout his working life, and since he has a personal account, he can find out at any time precisely the amount that he has saved.

1.2.3.b. Pension modes.

In the cases of pensions for disability, survivorship or retirement, one can choose from the following alternatives:

- a) Programmed withdrawal via a Pension Fund Manager.
- b) Life-annuity bought from an Insurance Company.
- c) Programmed withdrawal with deferred life-annuity.

1.2.3.c. Premature retirement.

The usual age for retirement is 65 in the case of men and 60 in the case of women. However, affiliates may retire earlier provided they reach a minimum pension level.

On the strength of the new pensions system the Life-Assurance Companies assumed a very important role in the social security field, providing the affiliates of the system with coverage against the risks of disability and survivorship. These policies are bought directly by the Pension Fund Managers (AFPs). In the same way, the Companies can offer the social security life-annuity policies established by law to those affiliates who fulfil the requirements for retirement for reasons of old age or disability, as also to the beneficiaries of survivorship pensions.

1.3. Role of insurance in the housing sector and the development of the country.

1.3.1. Identification of risks.

Subject to such limitations as are contained in the laws and customs of the market, anything is capable of being insured, whether material like goods, or non-material like rights, always provided that the person who wishes to do so has an insurable interest in them, i.e. is motivated to conserve the goods or maintain the rights in such a way that he benefits from their continued existence and is harmed by their loss or destruction.

This concept, when applied to the sphere of the property market, allows clearer identification of those risks which, although they are proper to the nature of this business, may constitute the object of insurance and be transferred to an Insurance Company.

In this context, the risks may be classified according to the way in which they affect the mortgagors' ability to pay; among these it is easy to distinguish risks of death, which are covered by a disencumbrance policy; those of physical disability, restricting the mortgagors' earning capacity, which are covered by policies supplementing those of the current health system; and those of insolvency, brought about by unemployment.

On this last point, various studies carried out in the country conclude that the participation of the Insurance Companies should be confined to situations of normal risk, and there should be a possibility of reinsurance against the event of catastrophic unemployment rates.

In these cases it could be the state which assumes the reinsurance, using mechanisms similar to those used to guarantee minimum pensions and the deposits held in the financial market.

A second risk group, which could limit the accessibility of housing, is related with the unfavourable events which can affect mortgage guarantees, both at the construction stage and when the homes are in use.

Among the insurance policies providing coverage against risks in this group, some of the most outstanding are those which respond for quality of construction and lack of income-flow in the case of the homes not being used, and policies against eventualities such as fires, earthquakes and damage caused by natural disasters.

On the other hand, risks involved in the interaction between property companies, builders and owners are safeguarded both by the policies mentioned in the two previous groups and by those designed to cover more specific contingencies, such as the different kinds of guarantee policies, and policies covering personal accident, machinery, transport etc..

Finally, referring to the financial market, certain eventualities can be identified which are considered at present to be normal in this market, and are therefore granted certain coverage by mechanisms developed by the market itself. However from a longer-term perspective, it is certainly worth evaluating the possibility of transferring these to insurance companies specialized in identifying, quantifying, affixing tariffs to and administering the risks arising from unexpected or very sudden fluctuations in the interest rate. This also applies to risks attached to operations in the futures markets and in general to all those risks related to those decompensations, usually temporary, which can affect certain economic variables or indicators.

1.3.2. Insurance and the development of Chile.

The role played by the insurance market in the overall development of Chile may be clearly seen in various economic and social indicators, whose results show the decided support of this sector in the country's modernization and growth process and the increase in the standard of living of its inhabitants.

In the broad sense, it is worth mentioning the importance of the Insurance Companies as institutions specialized in underwriting and

dispersing the risks to which persons, companies, institutions and different existing material goods are exposed.

In the specific case of the Chilean experience, there is an additional role performed by the insurance market, which has supported the systematic, orderly saving of individuals with its different products, thus forming the basis for solid, permanent economic development.

The active participation of the Insurance Companies in the new pensions system, covering affiliates against the risks of disability and death, has contributed to its growth and consolidation.

They have also had influence in the development of the capital market, thanks to their characteristics as institutional investors and have favoured not only security but also diversification and the yield of investments in the long term.

At the same time, the Insurance Companies are fundamental elements in the housing market, participating in different areas from the beginning of the building operation to the sales process, and then remaining in touch as time goes on.

1.3.3. Role of insurance in risk management.

As was mentioned briefly in the introduction, people, as members of society, are exposed to risks which they cannot always cope with alone.

The basic role of insurance is born from that principle, which consists in identifying the risks to which people and their goods are exposed, accepting these, limiting the responsibility of the persons insured to a small proportion of the risk, represented by the premium charged, and dispersing the risks by reinsuring with other insurance companies in different parts of the world.

This process contrives to produce stability and security in people with regard to themselves and their goods and to increase coverage, either by increasing insured capital or by incorporating a greater number of eventualities or goods to the protection of the insurance.

1.3.4. The role of insurance in relation to the property market.

In the permanent search for welfare, security, development and progress, it has been said that from the material point of view the home has always been one of man's most important objectives.

It has also been pointed out that the insurance sector, which is not unaware of this principle, has perfected a series of mechanisms designed to support people and institutions related with the building, financing and maintenance of homes, by adequately safeguarding their interests and offering various alternatives to facilitate people's access to a home of their own.

Thus there may be direct insurance participation during the building process, through guarantee insurances, such as that of civil responsibility, which exist to answer for the timeliness, quality or other stipulations of the respective contracts, or offering protection against risk of natural disaster, the most concrete cases being earthquake and fire.

Indirect coverage may also be present, against those risks inherent to the job, through a collective life-insurance policy, covering disasters such as natural or accidental death or health-care costs arising from accidents.

Complementing this scheme of indirect participation is the coverage which may be bought for vehicles and machinery as a safeguard against possible financial loss arising from accidents or robberies.

Insurance also plays a direct part during the process of selling the properties, through mortgage disencumbrance insurance directed towards home-purchasers. This is particularly necessary in the case of long-term financing, which constitutes 40% of home-sale operations in Chile.

Finally, in order to guarantee the conservation of the homes once completed in the event of natural or accidental catastrophe, policies against robbery involving breaking and entering are available, in addition to the types of insurance mentioned already, plus other policies designed to give protection against certain specific natural disasters.

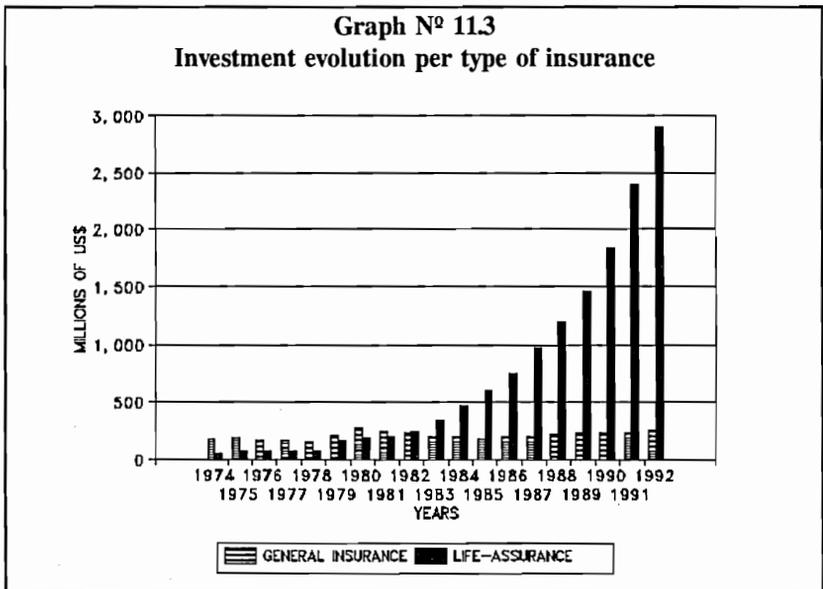
1.3.5. The role of insurance in the capital market and in economic development.

The deregulation of the insurance market, the indexing of insured capital and the new pensions system have contributed in Chile to waken the insuring conscience which is latent in all the populations of the world,

and this has been converted into a sustained growth in insurance premiums and amounts of insured capital, placing the country on the same path as has been followed by all the countries with consolidated insurance markets.

In the face of this response from the market, the Insurance Companies have developed plans which at the same time provide an incentive for systematic saving, a well-known tool for the propulsion of economic development in countries and individuals.

As the third-biggest institutional investor in the country, the Insurance Companies have made a notable contribution to the development of the capital market, generating a permanent demand for instruments with maturities in accordance with the nature of the life-assurance business, and this has helped to support the realization of various activities and initiatives which necessarily require long-term financing.



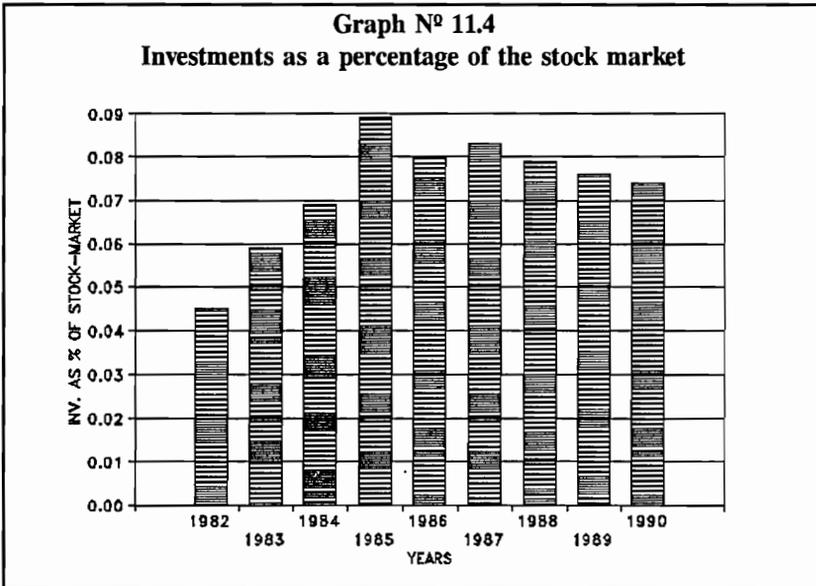
In this way, the management of investments representing the Companies' technical reserves has to take into account not only the yield and diversification of the instruments but also the degree of correlation which exists between the flows of return expected over a period of time and the calendar of obligations with those insured.

In this context the Superintendency of Securities and Insurance has issued various regulations related with this variable, and these determine the book earnings and debt/capital ratio of the Life-Assurance Companies, which, as was stated above, may not exceed 15 times.

Until 1989, the Companies were obliged to constitute reserves, by deducting the flows of life-annuities (pensions) at an interest rate of only 3% per year, with the result that the reserve was considerably greater than the amount received as single premium, and this produced negative effects on profits and the debt ratio.

Faced with this reality which could restrict the growth of the long-term social security insurance market, the authorities laid down new regulations according to which the Companies will be able to determine the present value of the flows of life-annuities (which may have a term of twenty years or more) at an interest-rate which is more closely connected with that of the market, on condition that these be backed by financial instruments having flows with similar terms.

These "matching" regulations have accentuated the importance of the Life-Assurance Companies as demanders of long-term instruments.



At present the Chilean financial market offers a wide range of this type of instrument, a high proportion of which correspond to property-type investments, as for example mortgage-backed certificates, endorsable mortgage documents, property itself and property investment trusts. The Insurance Companies may also invest in instruments such as promissory notes from the Banco Central, recognition bonds, company bonds, both state and private, shares and others.

Regarding property instruments, it is important to underline that these are particularly suited to objectives of yield and matching, and therefore the demand for these instruments from the Insurance Companies helps to give impetus to the development of the property business and, as a result of the multiplying effect of building, to the economic growth of the country.

1.4. Investment of Insurance Companies in property investment instruments.

Property investment instruments are those which permit the purchasing of homes and other property to be paid for.

The main investment instruments in the Chilean property market, with their most interesting characteristics, are listed below:

1.4.1. Mortgage-Backed Certificates.

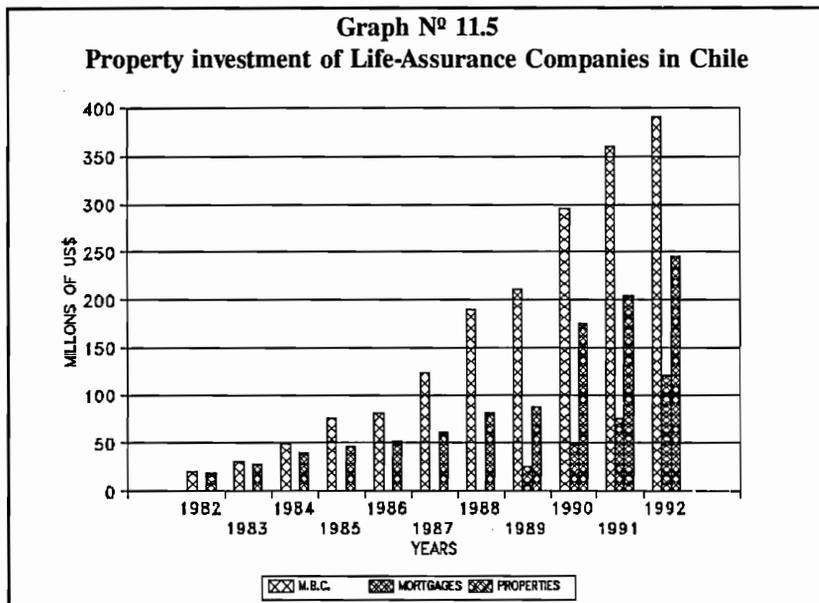
These are documents issued and positioned in the market by banks and financial institutions, with the aim of financing mortgage loans for the purchase and construction of property. These securities are issued by amounts, terms and readjustability systems, exactly like the mortgage loans which they are financing.

1.4.2. Property Investment Trusts.

These are funds authorized to invest in urban property, in endorsable mortgages and in the shares of open property companies (plc). They may also invest in chattel securities.

1.4.3. Mortgage Documents.

Through the intermediation of a managing agent, Insurance Companies may purchase endorsable mortgage documents, which are granted only to natural persons (i.e. not companies) in order to buy, build, extend or repair urban dwellings.



There are two other groups of instruments to complete the range of property investment instruments destined for house-purchase. Although they are not directed towards the financing of homes, they do contribute to the property market.

These instruments are:

1.4.4. Property company shares.

Property companies are those whose only activity is the business property and of mortgage documents with a "bearer" clause. They are excluded from the purchase or sale, renting or leasing of agricultural land, wasteland and housing, except where these form part of a property whose use is primarily commercial.

1.4.5. Property leasing.

Originally this was directed at financing the rental with option to purchase of non-residential property, mainly shops, offices, etc.

At present, Congress has approved the Law to extend this form of financing to homes, and by so doing, has opened up a new investment option for the Insurance Companies in the property sector.

Property leasing allows 100% of the rent quota to be charged against costs, or in the leaseback mode, allows funds locked in fixed assets to be made liquid.

1.5. Insurance policies related with housing.

1.5.1. Introduction.

As was mentioned in the section referring to the role of insurance, this sector has participated very actively in the development of the property market via various types of insurance coverage, some complemented by savings systems, whose aim has been to provide capital at the end of an insurance period or "secure" the potential purchaser of a home, by assuming the responsibility to the owner or financier of the debt in the case of the death or disability of the client.

As a complement to this service there is coverage for the risks inherent in maintaining and conserving a property over a period of time, such as those of fire, earthquake, flood, etc.

1.5.2. Life-Assurance.

Human beings are exposed to numerous risks of personal losses due to incapacitation or premature death.

Insurance, in its different modes, aims to give protection from such misfortunes by using the contributions of many individuals exposed to the same risk to finance claims brought by only a few.

1.5.2.a. Individual life-assurance.

The aim of life-assurance is to protect people against risks, reducing to a minimum the damage which they may suffer in their daily lives. The modes of this type of insurance are as follows:

- Whole life

The aim of this plan is to pay the capital insured to the beneficiaries, immediately after the death of the person insured.

This policy comes in two forms: life-time payment, or payment for a determined number of years, after which the person continues to be insured without having to pay any more premiums.

- Endowment

This plan has double coverage, since it allows for the whole of the insured capital to be recovered when the policy expires, or it can be paid to the beneficiaries in the case of the insured person dying before this happens. This policy is contracted for a predetermined period, and premiums are paid during the agreed period or until the death of the insured if this should occur first.

- Temporary

This plan is designed for persons looking for protection by means of large insured amounts, since its low cost permits more capital to be contracted. With this policy premiums are paid during the agreed period or until the death of the insured.

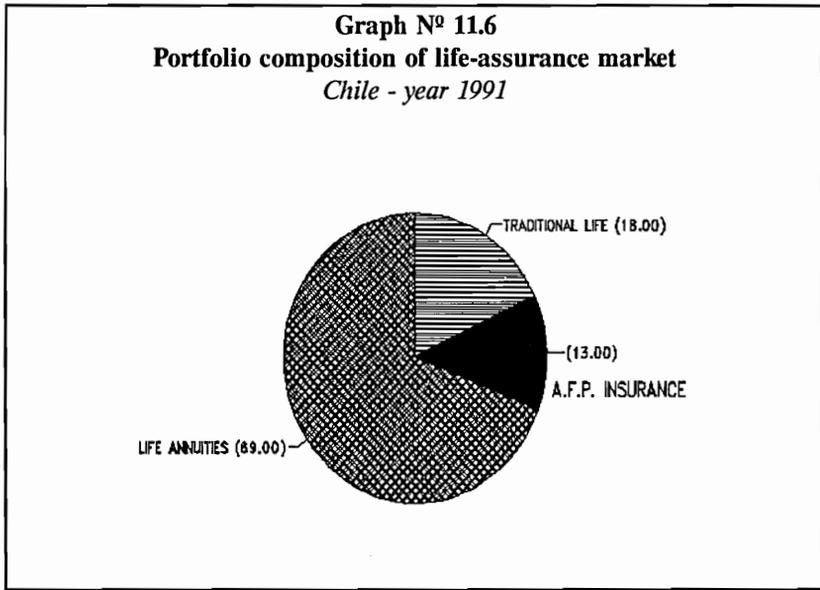
1.5.2.b. Personal accident insurance.

These policies cover the death of those insured when the disaster has occurred traumatically and accidentally. They may be contracted individually or collectively.

1.5.2.c. Collective life-assurance.

Collective policies are designed for those groups of people who meet for purposes other than the contracting of the policy, such as companies, institutions or societies. A policy of this nature requires a minimum

number of people and the capital insured is usually the same for everyone within the group.



1.5.2.d. Disencumbrance insurance.

Under this insurance plan, the Company with whom the contract is acquired promises, on the death of the insured debtor, to pay the outstanding balance of the debt contracted by him to the beneficiary creditor, assuming a recognized form of amortization and regular servicing of the debt.

The premium, whether this be a single payment or monthly, will depend fundamentally on terms, interest-rates, amortization, size of loans and ages of the insured.

The payment of the premium ceases with the expiry of the policy or the death of the insured debtor, if this occurs first.

The disencumbrance policy is one of decreasing capital, since this diminishes as the debt being served by the insured is reduced.

Among the main types of product which give rise to disencumbrance insurance are the following:

- Mortgage loans (loans for obtaining property)
- Consumer Loans (loans for free use)
- Credit cards
- Bank overdraft facilities
- Mortgages

Within the range of insurance products designed for persons, this coverage has been, by definition, the one destined to provide insurance support to the construction sector, and specifically housing.

This mode of insurance, directed towards the housing sector and with coverage of a capital which decreases together with the debt of the insured, arose in response to the development of the financial market. This was reacting to more favourable economic conditions and the demand for longer-term instruments on the part of the institutional investors, by beginning to issue papers with longer and longer terms for the financing of house-purchases. At the present time there are cases of terms of up to 30 years, and financing over 20 years is usual.

One of the additional advantages of the disencumbrance policy from the debtor's point of view is that the premium he pays for the coverage received is directly related with the amount, term and interest-rate of his debt, and also, since the concept of "standardized premium" is applied, the amount of this remains constant while the debt remains in force.

Insurance applied to long-term mortgage debts, financed by banks and financial institutions by means of mortgage-backed certificates and mortgage documents is also, by extension, beneficial for the whole of society, since under this scheme, the state is not obliged to divert funds from resources designated for housing, to finance outstanding debt produced by the disablement or death of mortgagors within the financial system.

1.5.2.e. Unemployment insurance for mortgagers.

The Ministry of Housing and Town-Planning, via its Housing Finance Commission, studied some time ago the feasibility of introducing an insurance to cover the payment of dividends on housing loans in the case of the debtor becoming unemployed, in order to minimize the risk to institutional investors.

The Commission concluded that such an insurance involved catastrophic-type risks, since in the event of an economic crisis, the number of claims would increase dramatically. As a result, it is difficult to grant long-term

coverage, because of the high probability of great economic changes over the period.

The Commission determined that such coverage could only be granted by combining an insurance policy offered by private Companies with reinsurance provided by the State.

1.5.3. General insurance and its relation with housing.

General insurance products are those which cover risks to things and wealth.

Among the risks affecting the safety of things, whether goods or property, may be found catastrophic risks, which are those seriously and simultaneously affect a large number of people or things, as is the case, among others, of earthquakes, hurricanes and floods.

In these cases, while general insurance takes care of damage caused to property, life-assurance, which also covers catastrophic events, looks after damage affecting the physical well-being of persons.

A second group of risks covered by general insurance is that corresponding to the capital assets of companies or individuals. Its fundamental purpose is to cover eventualities which may cause individuals or companies to lose or suffer a decline in their financial assets or their ability to generate income.

The following classification is frequently used for general insurance:

1.5.3.a. Fire insurance.

The Company insures covered goods or objects against the risk of fire, promising to pay compensation for material losses or damages caused by the direct or indirect action of the fire. Those caused by heat, smoke or steam, the means used to extinguish or contain the fire, the removal of furniture or necessary demolition are included under the latter heading.

Among the most common extras are:

- Damage caused by the fall of aeroplanes.
- Fire resulting from forest-fire.
- Damage caused by broken pipes or overflow of water-tanks.
- Malicious acts.

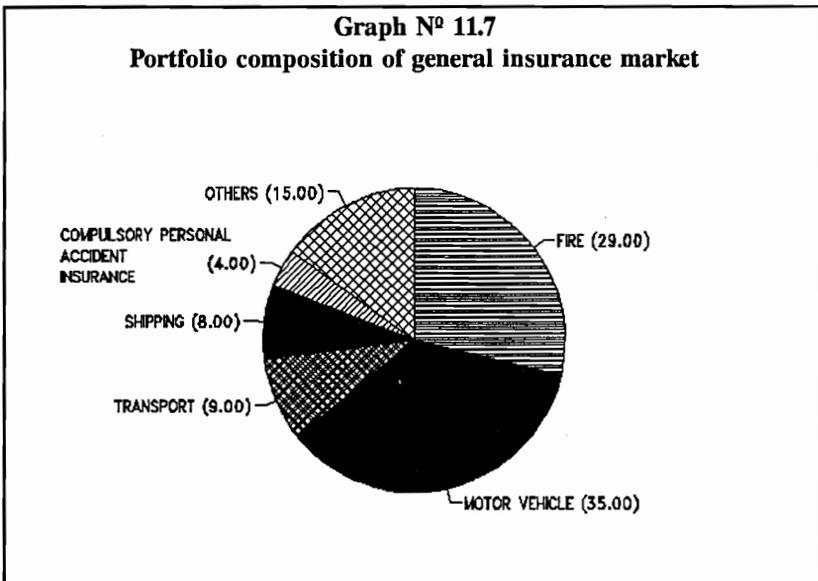
- Acts of terrorism.
- Strikes and riots.
- Damage due to natural disasters.
- Damage due to explosions.
- Damage due to spontaneous combustion.
- Damage due to loss of profits or earnings.

1.5.3.b. Earthquake insurance.

This covers material damages or deterioration caused by the direct or immediate action of the earthquake and/or earth tremor.

By its nature, this risk has as a characteristic the coverage of a growing number of individual policies, whose accumulated values give rise to the formation of large insurable masses, thanks to the improvement of the scientific bases and techniques of the insurance.

In this field, clear definition of coverage and a tariff appropriate to the risk are vital.



1.5.3.c. Insurance against hurricane-force winds and volcanic eruptions.

Normally this coverage is included as an extra under a main heading such as fire-insurance, or is protected together with other dangers such as robbery and water-damage.

Essentially this insurance is designed to cover the damage which may be caused to buildings and their contents by hurricane-force winds.

The insurance against volcanic eruption covers the loss or destruction of material goods produced by, or resulting from, a volcanic eruption.

1.5.3.d. Motor vehicle insurance.

This insurance indemnifies damages or losses caused to motor vehicles, either private or commercial, and their occupants, depending on the case.

Motor-vehicle policies have two basic coverage sections;

- Own damage: this covers damages suffered by the insured vehicle, as a result of collision, overturning or fire.
- Theft: this covers the theft or robbery of the insured vehicle and includes the theft of pieces, parts and accessories from it.

The most common extras to this insurance are: personal accidents to the occupants of the vehicle, damage to third parties, actual damage during journeys abroad, natural disasters, malicious damage and theft of accessories.

1.5.3.e. Insurance of air, land and sea transport.

These insurance policies cover losses or damages to insured objects due to fortuitious accidents during their transport by land, river, canal or air, including the sections by land which are necessary in order to get to the airport or to the final destination, plus those occurring as a result of accidents at sea, i.e. those events or disasters which happen at sea, fortuitiously or by act of God.

1.5.3.f. Insurance against robbery with break-in.

This policy covers the risk of loss of objects removed as a result of robbery with damage to property from a specific building, apartment or commercial premises, as also the destruction or deterioration of the objects, provided this was caused by the execution of the robbery.

1.5.4. Conclusions regarding insurance and its relation to housing.

As may be imagined, the development of the housing sector, as a consequence of greater residential construction, brings with it the exposure of goods and people to certain risks produced both by circumstances and by the forces of nature; these latter especially where the demand for homes and their location brings these goods, to some extent, closer to the source of risks.

In these circumstances, the insurers have been concerned to offer users coverage options which do not leave them unprotected in the event that they lose their homes as a result of one of the accidents described, either at the stage when they are paying for it, or after it has become their own property.

Insurance coverage has brought with it not only peace of mind regarding the availability of sufficient financial resources to rebuild or repair a property damaged by accidents, but also, very importantly, a greater emphasis in taking measures to prevent these accidents happening.

The use of non-flammable or flame-retardant materials to prevent fire spreading in the case of a fire, or the applying of new, improved materials and designs to give buildings more solidity in the event of seismic movements, are requirements which are already totally accepted in many parts of the world, especially in geographical areas with higher risk.

In this way the objectives which have permitted the development of insurance products may be realized more fully, i.e. the security of knowing that one is protected against eventualities, lower costs to achieve this protection and the confidence that what is lost or damaged in the event of a disaster can be made good.

1.5.5. Guarantee insurance.

1.5.5.a. Introduction.

A guarantee insurance is designed to provide security to the wide variety of professionals, unions, individuals and companies, in relation to the jobs which they have to perform in their different activities. Each one of these is of interest to the parties involved; the principal does not want his capital assets to be adversely affected by the contractor's failure to meet his obligations, and the contractor, in order to get the work, has to give sufficient assurances that he will fulfil the clauses of the contract.

1.5.5.b. Types of guarantee insurance.

a) Policies for faithful fulfilment of contract.

These are policies which aim to ensure the fulfilment of the obligations contained in the contract or resolution and in other documents which may form part of the contract.

These policies are applicable not only to contracts pertaining to the execution of material works, but also to the execution of pieces of intellectual or professional work, such as contracts for projects, consultancies etc.

b) Policies for correct investment of advances.

It is not only in building contracts that the principal makes available to the contractor sums of money as cash advances on account of the work; it is also common that in contracts for distribution of goods or services, part of the value of the contract is paid in advance, so that the contractor may finance the purchase of materials, pieces and parts to be built up into an industry, or supplies to be used in construction.

By means of this policy, these funds are 100% protected, and if the contractor abandons the construction or piece of work before it is completed, the funds not yet invested up to that moment are covered.

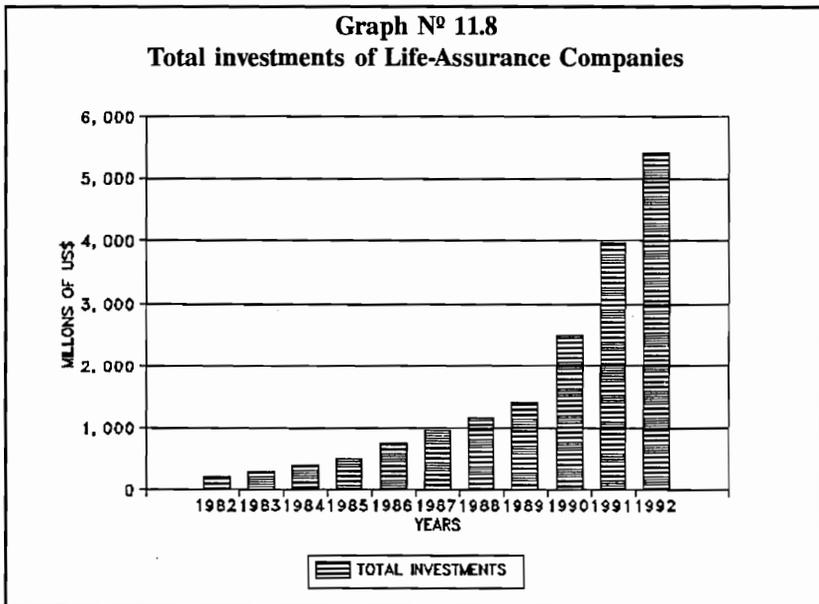
There are other guarantee policies, such as that of retention matching, which allow a contractor to recover money which would otherwise be held by the principal until the construction is finally received.

It is also usual to have an employee loyalty insurance, which is used to indemnify the contracting party for consequences arising from lack of honesty on the part of one of his employees.

1.6. Analysis of demand and its relation with property investment in the Chilean insurance market.

One of the most concrete ways of visualizing what appears in the chapter on the Chilean insurance market, in relation to the changes it has undergone since 1980, has to do with the analysis of the behaviour of the premium, and therefore of the total investments of the insurance sector.

As may be seen in diagram Nº 11.8, insurance company investments grew at an annual rate of 10.8% in the six years prior to the liberalization, in contrast with the figure of 19.8% observed in later years.



It is worth noting in this respect that important changes also came about within the market. Thus in 1979, 75.8% of investments corresponded to General Insurance Companies and only 24.2% to Life-Assurance Companies.

By the end of 1992, after more than 10 years' participation in private social security insurance, the investment structure of the insurance market showed that Life Policies accounted for 94.1% of the total and General Insurance the remaining 5.9%.

These high growth-rates in life-assurance have occurred basically because of their participation in the social security policies developed together with the new system of pensions.

Between the years 1981 and 1982, growth in life-assurance reached 300%, as a result of the premium derived from disability and survivorship insurances.

After those first two years, there was a stabilization of the market which was brought about by increasingly significant reductions in the premium rates charged to the Pension Fund Managers, who are responsible in law for administering the private social security system.

The contribution made by the premium rates of this segment of the market caused the accumulated growth of the life-assurance sector to reach 83.2% between 1983 and 1988.

When the modifications to the social security system came into force, generalizing life-annuities for disabled pensioners and beneficiaries of survivorship pensions, and the requirements were relaxed for persons retiring before reaching the age stipulated by law, this produced a new rise in life-assurance premiums.

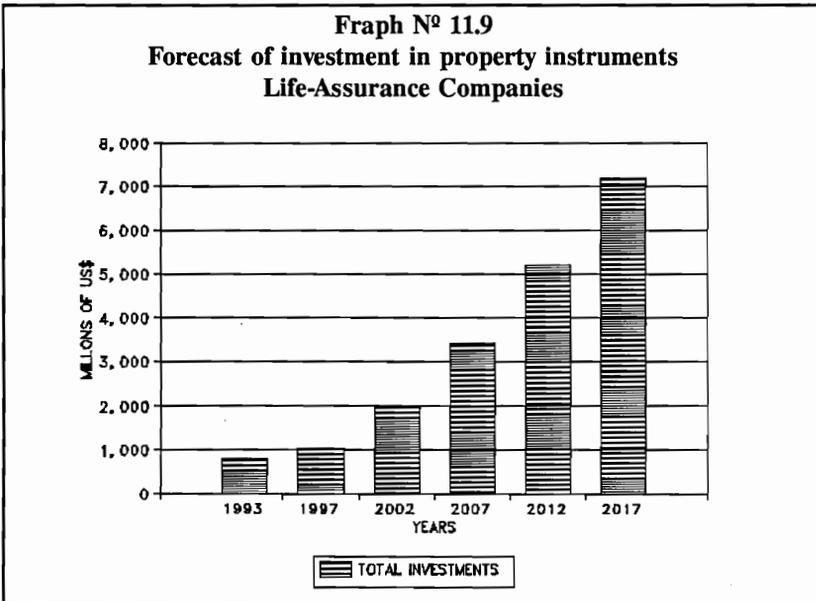
Thus between the years 1989 and 1992, the growth-rate of the premium reached 150%.

Relating the investments of Life-Assurance Companies with the property business, especially with housing, if one supposes that twenty percent of the investment of the life-assurance sector will be dedicated to mortgages and mortgage-backed securities, considering the number of new homes in the building stage, approved and begun, and an average investment in each one of the instruments mentioned of the order of US\$25,000, it may be concluded that during 1983 the Life-Assurance Companies had contributed the financing for 7.6% of the homes begun that year in Chile, a total of 37,724 units*.

* These figures do not include "economical homes".
Source: Bulletins from the Cámara Chilena de la Construcción.

Applying the same exercise to 1992, it would suggest that of the 105,669 homes begun that year, 23.0% of the total would have been financed by funds contributed by life-assurance.

In the future, if the average investment remains at US\$25,000 and an annual growth-rate of 8.0% is maintained on the overall investments of the Life Assurance Companies for the next 25 years, counting from 1992, the homes which could be financed with these resources would amount, according to the assumptions outlined above, to almost 160,000 units.

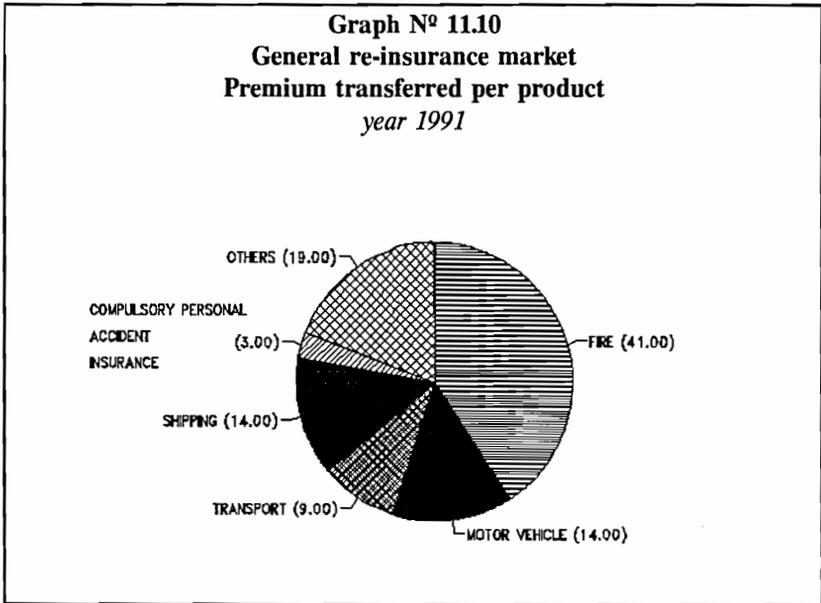


As may be deduced from the above, there is still a lot to be done, both for the Life-Assurance Companies in giving support to the financing of housing, and for the General Insurance Companies in the areas of construction and maintenance.

1.7. Reinsurance.

Reinsurance works on the basis of the principle of absolute good faith, in other words, each of the parties believes firmly that the contract must achieve its purpose in the sense of dispersing and stabilizing risks. If this principle is fulfilled, the reinsurer will share the profits on the deal with the insurer, in what has been called "community of fortune".

Due to its international character and ill-defined legal provisions, there is no clear body of regulations regarding reinsurance, and it is accepted as an act by which an insurer, called the reinsurer, accepts part, or even all of the risk of loss which may be suffered by another insurer, called the "assigner".



The ways in which reinsurance can be carried out are various. There are, for example, policies which are underwritten by a single reinsurer. There are also reinsurance situations where two or more reinsurance companies unite in a co-insurance, a pool or a network to reinsure a specific policy or risk in one or more different geographical locations.

1.7.1. Functions of Reinsurance.

As a way of dispersing risk, reinsurance permits the assigning Company to offer its agents and the general public an additional guarantee with regard to its ability to answer for its obligations. Through reinsurance, the insurer can augment his capacity for accepting higher risks and stabilize the profits on a deal over a period of time.

In order to augment the insurer's capacity to run greater risks than would be acceptable, the assigning Company can reinsure part of a risk, determined by the probability that individual or collective claims might

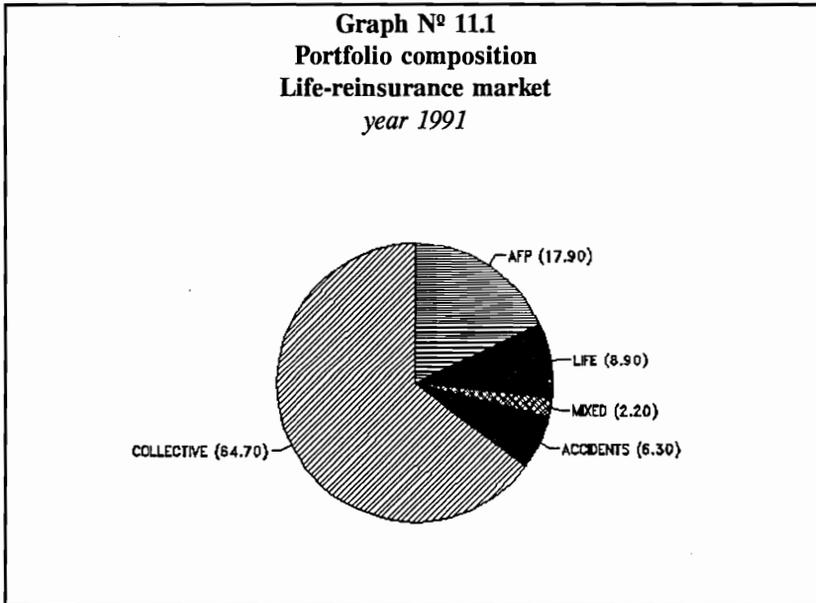
surpass its most conservative expectations. The company may also assign automatically a part of any risk of a particular type of insurance. Lastly, by reinsuring, the primary insurer increases his capacity to accept an accumulation of risk in a specific geographical location.

Reinsurance can help to keep the claim indices of the insurer relatively stable, by permitting him to distribute large losses over various years.

1.7.2. Types of Reinsurance.

In general terms, reinsurance products may be classified as: optional or automatic.

In the first category are those reinsurance policies in which the Insurance Company is not obliged to assign, nor the reinsurer to accept, the responsibility for a specific risk. Both parties may act as seems most appropriate to their interests, without having to abide by a prior contract.



Automatic reinsurance policies are those in which the Insurance Company is obliged to assign, and the reinsurers to accept, all the deals of a particular portfolio, within previously established limits and agreements.

There is a third group of reinsurance products, made up of those which consist of a combination of the above.

This form of reinsurance is generally used in very high-risk operations for those levels of responsibility which exceed the capacity of other existing reinsurance contracts.

Life-annuity reinsurance is excluded from the above, because this product has different risk characteristics from the rest, since when it is reinsured it is usually done with a financial objective rather than because of a disaster.

1.7.3. Reinsurance methods.

Whatever may be the system chosen to assign responsibilities, the reinsurance policy may be differentiated, according to the reinsurer's method of applying responsibility, into proportional reinsurance and non-proportional reinsurance.

1.7.3.a. Proportional reinsurance.

This is the transfer mechanism for insurance which is based on the assignation- acceptance of amounts exposed to risks and their potential responsibilities (expected claims).

In this reinsurance procedure, the parties to the reinsurance relationship are linked in the same ratio or proportion, both in premiums and in claims.

a) Partial quota contract

This is an automatic, proportional reinsurance contract, in which both reinsurers and primary insurer share any risk underwritten by the latter in a particular area at a fixed percentage, limiting the responsibility to a prearranged proportion of the cost of the risk.

b) Surpluses

This is a proportional reinsurance contract in which the Insurance Company decides the fraction of the original insurance that it wants to administer by direct retention and how much to assign to the reinsurer, case by case, according to the nature of the risk and the experience and financial capacity of the Company.

1.7.3.b. Non-proportional reinsurance.

This type of reinsurance establishes a responsibility relationship with the reinsurer which commits him to pay that part of an indemnifiable claim which exceeds an agreed amount, known as a "priority", in which the excess is transferred entirely to the reinsurer.

a) Excess loss

Under this type of coverage, the reinsurer will have no responsibility unless a loss occurs which exceed the priority or retention of the Insurance Company.

The priority may be defined for a single risk and/or policies, or for any risk or policies which are involved in a single event.

b) Excess claim or "stop loss"

This is a form of protection which covers an abnormal situation in the claims behaviour of the portfolio held by the Insurance Company limiting its claims rate to a defined percentage within one calendar year.

As its name suggests, this coverage limits the claims rate to a defined percentage within one calendar year. The reinsurer for excess claim has the obligation to pay the difference between the real losses and those which define the claims agreement.

2. THE GUARANTEE MARKET: THE LEGAL ANGLE.

2.1. A few legal reflections on the existence and conditions of the so-called "Guarantee Market".

The concept of "market" refers to the existence of an economic space in which certain goods and services are traded, at a price determined by the relation existing between supply and demand.

Thus when speaking of a "guarantee market" it is assumed that these are supplied, demanded and traded like any other goods or services, at a price determined by the economic agents in the market.

As guarantees are not physical goods or services which are independently tradeable, but rather, from a legal point of view (art. 46 of the Civil Code), obligations contracted to make other obligations safer, whether

one's own or another's, the term "guarantee market" does not seem appropriate.

As was stated by an eminent Chilean jurist, obligations represent a person's decision to "limit the powers originally conferred to him over certain goods, in exchange for another person's accepting to limit his rights over his goods" and, once adopted, they generate between these persons "a legal relationship, which enables one party to require that the other give, do or not do something". In fact, there is a "voluntary decision protected by the legal code" underlying every obligation^{*}.

Having made these points clear, it is important to note that, from a legal point of view, a guarantee is an "accessory" obligation.

In practice, as we have seen, Chilean law defines pledges or guarantees as obligations contracted to ensure the fulfillment of one or more other obligations, whether one's own or another's. Thus, guarantees have a special legal nature: they are accessory obligations, related to, and thus dependent on, a principal obligation to which they are connected. Thus, while principal obligations subsist in their own right, with no relation to any other, guarantees, as accessory obligations, do not have an independent life, but are related to and depend on a principal obligation to which they are accessory and for which they provide security. Because of this, all the characteristics of the principal obligation and the changes that may affect it, affect the accessory obligation or pledge, following the ancient and well known logical principal, that "the accessory shares the fate of the principal".

Because of their object, guarantee contracts seek to ensure the fulfilment of a principal obligation, "in such a way that they cannot subsist without it", as the Chilean Civil Code states in article 1442. Examples of accessory contracts which originate obligations of the same legal type are bail, mortgage, different forms of pledge, with or without displacement of the affected object, antichresis, etc. Article 2335 of the Chilean Civil Code itself defines bail as an accessory contract; art. 2385 does the same with pledge contracts, and art. 2434 with respect to mortgages, when it states that "mortgages are extinguished together with the principal obligation".

One could argue that a "guarantee market" does exist to a certain extent, but that it is mixed up with the true obligations market (the mortgage,

* Gonzalo Figueroa Yañez, "El Patrimonio" (Santiago de Chile : Editorial Jurídica, 1991), Page 34.

pledge and other obligations markets). That is to say, the guarantee market does not work because it cannot do so, since its object does not function autonomously, independently of the principal obligations which it secures. In other words, pledges are in some ways "tradeable" on the market, according to the degree of acceptance they find among the credit agents operating there, but that acceptance depends not only on the degree of safety, reliability and efficacy with which these accessory obligations are viewed by those operating in the market, but also of the value assigned by these same agents to the principal obligations being secured.

In short, there are certain relevant legal obstacles to pledges becoming goods which, in the abstract, are negotiable independently of the principal obligations they guarantee, i.e. tradeable on the market in their own right. Thus, at least from a legal point of view, it does not seem particularly correct to refer to a "guarantee market" but rather to speak of an "obligations market".

2.2. Classification of guarantees and general analysis of some of their shortcomings.

In legal science, guarantees can be classified basically in two categories: Personal Guaranties and "Real Guaranties".

2.2.1. Personal Guaranties.

These are those which permit the creditor of a principal obligation to add to his general pledge right over the present and future assets of the principal debtor, the capital of one or more third parties, acting as guarantors of the principal obligation, who will answer in the same way as the principal debtor for the fulfilment of the secured obligation with all their attachable assets, except such limitations as may be agreed upon.

The "general pledge right" referred to above is founded on two modern legal concepts: (i) obligations as economic relationships, meaning that their fulfilment is backed not by the person of the obligor or debtor but by his capital; and (ii) the concept of capital as a whole, one universality, something different from the individual goods which comprises it'. These

* Manuel Somarriva, "Tratado de las Cauciones" (Santiago de Chile: Editorial Nascimento, 1943), páginas 7-8.

modern concepts relative to obligations have been codified in the Chilean Civil Code, in describing the general pledge right in the following terms: "All personal obligations give the creditor the right to pursue the execution of all the debtor's property and chattels, be these present or future, save only those defined in art.1618 as non-attachable" (art. 2465 Chilean Civil Code), and those declared non-attachable by certain special laws.

The general pledge right gives the creditor somewhat greater economic certainty as to the fulfilment of his credit, but legally, constitutes only a precarious guarantee. In practice, the general pledge right cannot avoid the debtor's capital being reduced, whether this be due to his negligence, fraudulent actions or misfortunes in business*. Hence the importance of establishing other guarantees, apart from the general pledge right, with the aim of making up for the aforementioned shortcomings.

Guarantees and pledges seek to ensure the fulfilment of the principal obligations, and are necessary to make it more sure and certain that debtors will fulfil their obligations. This was not necessarily so in the past, since faithful fulfilment of obligations was prevalent in the Chilean culture, being stronger and more efficient than a mortgage, pledge or bail. As a well-known and distinguished lawyer has said: Today's defaulting debtor "usually resists payment until the last legal appeal has been exhausted"

Among classic personal guaranties, bail, conventional passive solidarity, the guarantor and the penal clause given by a third party are what are known as personal guaranties or pledges. Commercial and banking legislation have added to these the bank guarantee certificate, the stand-by letter of credit, and the credit insurance policy, among others.

All these personal guaranties improve the probabilities that the creditor will obtain satisfaction of the amount owed to him, should the debtor not fulfil his obligation; some, such as the bank guarantee certificate and stand-by credit letter, practically ensure the fulfilment of the obligation; others may be more or less effective, depending on the patrimonial situation of those obliged by the personal guaranty, which can be

* Ibid. Page 8

** Sergio Baeza Pinto, "Reflexiones de un Hombre de Derecho" (Santiago de Chile: Ediciones Universidad Católica de Chile, 1992), the quotation refers to page 184; see also page 217.

severely deteriorated by the vagaries of economic life'. In practice, the network of the third party can be so seriously reduced, that the guarantee it represented becomes, in fact, partially or totally ineffective.

2.2.2. "Real" guaranties (from latin res=thing).

Those by which the principal direct debtor, or a third party, oblige certain specific assets to the fulfilling of an obligation, giving the creditor the power or right to pursue that asset, whoever's hands it may be in, and to pay himself preferentially with the proceeds of the auction, should this be carried out. Thus, should the constituent of the pledge sell the affected asset, the amount due remains secured, inasmuch as the creditor may pursue that asset, whoever's hands it may be in. In addition, should the guarantor of the debtor go bankrupt, the creditor can still be paid with certain preference with the product of the execution of the guarantee.

Real guaranties have certain advantages vis-à-vis personal guaranties, being backed by a specific asset that is subject to a right of pursuit, and which confers a right to preferential payment. The possibility of executing this real guaranty is directly related to the validity, force and liquidity of the principal obligation, following the aforementioned ancient legal adage that "the accessory shares the fate of the principal". Thus, the legal foreclosure of the guarantee will finally depend on the resolutions adopted by the Law Courts with regard to the exceptions presented by the principal debtor, concerning that obligation, which the judge has ordered to be fulfilled.

In general, real guaranties present problems which frequently prevent the holder from obtaining a quick recovery of the credits which have been granted. Without attempting to give an exhaustive list of these problems, it is worth mentioning, by way of example, that the preferential payments originated by mortgages and pledges, are seriously limited from a legal point of view, by the existence of preferential credits, like those known as first class credits, e.g. those deriving from workers' wages, social security contributions, worker compensation and certain fiscal credits, which must be paid first. Though there are certain exceptions, this

* On this subject see the work by Jorge Rodríguez A., titled <<Problemática de las Garantías>>, published in the book "Tópicos de la legislación bancaria" (Santiago de Chile: Asociación de Bancos e Instituciones Financieras de Chile A.G. s/f), pages 85-87 and 90-91.

generally limits the chances of mortgage and pledge creditors recovering the credits secured by these guarantees, either totally or in part.

From another point of view, real guaranties or pledges are affected by economic limitations. In practice, there exists a risk of depreciation and change in the market value, or at least in the liquidation value of the guaranteeing asset. The legal procedures envisaged to make the guarantees effective themselves contribute to this.

3. CREDITS FROM THE POINT OF VIEW OF THE GUARANTEES WHICH ACCOMPANY SUCH OPERATIONS. THE BANKING POINT OF VIEW.

The Chilean General Bank Law (LGB) defines banks as those institutions, which, under the form of a plc, are basically dedicated to performing passive or active credit operations, i.e. to receiving money in the form of deposits and granting it in loans, either in the shape of a mortgage, a document discount or some other form (art.62 LGB). The aforementioned law entitles banks to grant these loans with or without guarantees. Thus, it is common for banks to grant loans subject to real or personal guaranties, in order to cover the risk of default in the fulfilment of the obligation, be this due to inexperience, bad business or some other reason. In this way, banks, which mainly work using third-party funds, ensure the fulfilment of their obligations with respect to those who have entrusted them with their funds in the form of a deposit or mortgage (passive operations). In fact, one of the main activities of the banks is to analyse and weigh up the guarantees which the client can offer for the correct fulfilment of his obligations, with regard to every loan operation.

Banks use all the guaranties considered in Chilean legislation, both real and personal, to ensure their rights as creditors.

From a technical and legal point of view, and considering the guarantees which accompany banking operations, loans can basically be classified as: loans without guarantee, loans with personal guaranties, pledge-backed loans and mortgage-backed loans'. Next we will examine briefly the main features of each of these forms of bank-loan.

* This classification follows, with a few variations, the guidelines on the subject set forth by Sergio Rodriguez A. in his book "Contratos Bancarios" (Bogotá, Colombia: Biblioteca Felaban, cuarta edición, 1990) pages 308-314.

3.1. Loans without guarantee.

As previously stated, banks are allowed to extend loans without guarantees. These are usually not required when the future reimbursement of the extended credit is certain or highly probable, considering the good reputation of the debtor and his personal moral solvency and proven economic or material solvency. This sort of credit is usually granted to large companies, well-established in their respective markets.

3.2. Credits with personal guaranties.

These are bank-loans guaranteed by the responsibility of co-debtors or guarantors, solidary or otherwise, which enables the bank to add to its General Pledge Right over the networth of the principal debtor at the moment of the operation, the networth of one or more third parties guaranteeing the obligation, who answer with the assets which they own, in the same way as the principal debtor at the moment of foreclosure.

It is interesting to note, in this respect, that in German and Italian law there exists a special contract called "Credit Mandate", associated with the guarantee known as bail, which consists in one person entrusting someone else to give a third party credit, answering as a guarantor for the fulfilment of the third-party's obligation. In the aforementioned legislation this mandate is similar to bail, and what is more, the principal is named as the true guarantor.

3.3. Mortgage-backed loans.

As is well-known, mortgages are taken out on real estate and exceptionally on chattels, as in the case of ships of a certain tonnage, naval vessels classified as large, and aeroplanes. In the banking market mortgage-backed housing loans have acquired certain importance, the funds loaned being used by the debtor to buy real estate, which in turn is used to guarantee the loan. The mortgagor is not deprived of the use and possession of the mortgaged property, at least as long as he keeps up the payments on the loan guaranteed by it, which is usually divided in instalments to be paid back over a relatively long period, longer at least than the amortization period of the asset.

Due to the importance of this kind of loan, we will treat the main features and weaknesses of mortgage guarantees, mortgage loans with MBCs and endorsable mortgages separately and in greater detail.

3.4. Pledge-backed loans.

These are given with specific chattels as guarantee. In classic pledges, the pledged asset, which may be tangible or intangible, passes physically from the power of the debtor to that of the bank which is the creditor of the obligation guaranteed. Of these, the so-called "credit" pledges are of special analytical interest, i.e. those in which the pledged asset is a personal or credit right.

All these classic pledges are real contracts, since they are consummated by handing over the pledged asset, and, in the case of credit pledges, with the handing over of the respective security.

The standard commercial pledge also has the feature that the creditor and debtor may agree, by mutual consent, for the pledged asset not to remain in the hands of the pledge creditor, but in those of a third party nominated by both.

Notwithstanding the brief nature of these observations about pledges, it is worth noting that nowadays other pledges exist beside the "classics". These are the so-called non-displaceable pledges, established in different Chilean laws since the 1920's. Of course, there also exists the "agrarian pledge", a solemn pledge contract which is formalized, not by the physical handing over of the pledged asset, but by the fulfilment of certain formalities, such as a public document or a private contract registered with an official notary in a special book or Register of Agrarian Pledges. An "industrial pledge" also exists, by which the pledged asset remains in the power of the pledge debtor; being applicable to certain assets which the law identifies, guaranteeing obligations contracted in industrial activities. There also exists a common non-displaceable pledge, established by Chilean law in 1982, which is solemn due to the fact that it must be constituted by notarial document and an extract must be published in the Official Gazette. These pledges are applicable to tangible chattels, not to intangible assets, such as credits, and expressly admit the constitution of a general guarantee clause. Finally, another pledge commonly used by the banks is that on stocks and shares in favour of banking institutions. This is a pledge on credits payable to order, on bearer bonds and other bearer securities which are payable to the bearer and on nominative shares of plc's and limited co-partnerships. The most widely-used form of this pledge is that which applies to nominative shares of plc's. With this sort of pledge it is worthwhile noting the quick, easy procedure for disposing of it, since it requires only a simple judicial notice and the passing of seven days from the date of that notice. Lastly, it is worth mentioning one of the pledges

frequently used by banks, mainly the so-called warrant, which is a pledge on merchandise or products deposited in General Deposit Warehouses.

4. MORTGAGE GUARANTEES.

The mortgage guarantee is often considered as one of the most effective pledges for recovering credits.

However, due to an exaggerated nineteenth-century emphasis on real estate at the expense of other assets in Chilean law (a circumstance which prompted an old professor of civil law to remark that the sale of one square metre at the Cristo Redentor was ten times as difficult in Chile as that of the sale of one million dollars-worth of first class shares), this sort of guarantee is complicated both as regards its constitution, and also its realization.

In practice, during the constitution stage, the creditor to whom the guarantee is offered must analyse and ensure that the present owner of the property being offered for mortgage accumulates a registered ownership of at least ten years, including that of his predecessors. This is necessary so that the possessor of the property offered for mortgage can prove ownership, claiming extraordinary acquisitive prescription. This sort of analysis requires the study of the property's title deeds, which must necessarily include all the successive transfers during the aforementioned period.

The difficulties implied in the process of constituting a mortgage guarantee could be minimized by drastically reducing the time limit for legal action by extraordinary prescription (which proves the present holder's ownership of the property) from 10 years to 5. It would also be useful to establish a sort of "title deed insurance", so that the study of the title deeds could be made by the insurance company after the credit has been assigned and not before. What is more, experience shows that definitive rejection of property titles, this is, cases in which the legal objections cannot be corrected, occur only very infrequently.

On the other hand, in many cases the properties offered for mortgage belong or have belonged to partnerships, whose legal records, when carefully examined, often suffer from constitutive faults. It would

* The reflections of this part of the chapter have been greatly enhanced by the contributions of Mr. Miguel Angel Moreno Nuñez, lawyer, Regional Lawyer of the Banco del Estado de Chile in the IV Region of the country.

therefore be appropriate to introduce regulations into the corresponding legislation, indicating a period for the reparation of societies by the passage of time, which could be four years, as is the case for plcs under current legislation (Clause 4, Art 6 of Law 18.046 concerning plcs).

Finally, but still in this constitution stage of mortgage guarantees, it would be a very good idea to speed up the registration of the mortgages in the corresponding registers of the Conservador de Bienes Raíces, (Properties Registrar), by creating new "conservadores" (one per commune or municipality), so as to settle the formalities quickly, a process that today can take over 30 days, damaging the economic position of both parties.

With respect to the realization of mortgage guarantees, the slowness or delay in the foreclosure of the mortgaged asset conspires against a quick recovery of the unpaid credit guaranteed by the mortgage. It is worthwhile mentioning that difficulties at this stage are hard to solve, since the object of the foreclosure regulations established for the tribunal is that the judge should collect as much information about the case as possible, so as to ensure that the definitive verdict shows the security and equity which corresponds to true justice.

Considering all this, and as it has already been stated, one of the interesting aspects of the mortgage guarantee is that the mortgage creditor can pursue the property given in guarantee in whoever's hands it may be. However, in practice, the rules of the Civil Procedure Code require that the third party owning the mortgaged property be notified beforehand, prior to eviction, which makes the guarantee far less effective when it comes to be realized (Arts.758-762 of the Chilean Civil Procedure Code). What is more, the required modification has already been applied insofar as mortgage-backed certificates are concerned, where a special execution procedure has been established, making the realization of the mortgage guarantee in this sort of credit operation quicker, whether this implies pursuing the property in hands of the personal debtor or the third party owners of the property, without the need to comply with the aforementioned prior notification formalities (Art 102 LGB).

5. MORTGAGE-BACKED CERTIFICATES AND ENDORSABLE MORTGAGES.

In the housing market, the most common financial instruments are currently "MBCs" and "endorsable mortgages".

5.1. General points regarding mortgages.

a) Mortgage-backed Certificates.

It has already been said that the mortgage-credit is an agreement or loan in which the debtor secures his obligation with a mortgage. This is an accessory real right applying to a property, which entitles the creditor to pursue its fulfilment in whoever's hands the property may be, in such a way as to be paid preferentially with the proceeds of its sale.

To solve the financing problems inherent in housing obligations, and transfer the credit to various people wanting to invest their money with the advantages of a mortgage guarantee, but without the disadvantages of the immovability of real estate, the "credit instruments and mortgage-backed certificates (MBC)" system was invented, enabling a link to be formed between the real guarantee and various anonymous capitalists.

The system rests on the existence of an intermediary -a bank or financial institution- which, standing between the owners and the capitalists, can provide the former with the money of the latter by issuing obligations called "credit instruments", which it transfers, using mortgages constituted in its favour.

In brief, the steps of the operation are:

1. The bank takes a mortgage for a given amount and term.
2. The bank issues obligations or certificates for the same amount and term to be placed before the investors
3. The bank, with a mandate, gives the borrower or giver of the mortgage the certificates issued or the product of their placement on the financial market.

In these operations, the notarial document of the mortgage, which is the bank's property, counts as a credit among its assets, while the obligation, credit letter or MBC belonging to a third-party investor, a creditor of the bank, forms part of its liabilities.

In other words, the bank does not lend money, but rather papers known as credit letters or MBCs. The product of placement of these on the financial markets is received by the debtor, whether he place them personally or the bank does so in his name, acting as his agent.

On the one hand, the bank or financial institution is a creditor charging and receiving from the borrower or debtor the amortization and interest of the loan extended, while on the other, as the issuer of obligations, credit letters or MBCs, it is the debtor of the amortizations and interest on the securities issued.

As a result, the system forms a double relation between the mortgage debtor, on one part, and the investor on the other, through the intermediary or issuer of the certificates, which is a bank or financial institution.

At first sight, it would seem that the bank or financial institution acting as an intermediary, should first have to collect the money from the public, by means of interest, using an obligation or issued security, the proceeds of which, once placed and sold, would be lent to the debtor.

Nevertheless, due to the need to link the certificates to the mortgage, the order of the operations is reversed. First, one takes out the mortgage, by means of a mortgage contract, and, once this is registered in the Mortgages and Obligations Register of the Conservador de Bienes Raíces corresponding to the Department in which the building is situated, one proceeds to issue the obligations or certificates, which are handed to the debtor who will then sell them on the financial market either directly, through the issuing bank itself or some third party.

The situation is no different if the issuer assumes the role of investor, acquiring his own certificates.

The legal guidelines regulating the issuing of loans by means of credit certificates require, as stated, that the banks and financial institutions have the power to issue them by means of the respective MBC issue.

The aforementioned companies can only issue MBCs up to the amount of the respective mortgage-backed obligations in their favour.

Loans offered by financial institutions under the MBC form cannot exceed 75% of the rateable value of the property offered as in guarantee.

In the case of purchase or sale of property, the loans may not exceed the aforementioned amount, or 75% of the sale price of the property, should this price be lower than the rateable value.

The mortgage in favour of the financial institution which guarantees these loans must be a first mortgage, and only for the securing of a

specific obligation. However, the possibility of a second-degree mortgage exists, if and only if the obligation secured by the first mortgage, added to the amount of the second mortgage does not exceed 75% of the rateable value or 75% of the property's sale value, whichever is applicable.

b) Endorsable mortgages.

Certain institutions, which will be listed below, are entitled to extend credits with the backing of a mortgage guarantee. These are formalized as public documents with a bearer clause, in a single copy which is given to the creditor.

Endorsable mortgages are only granted to individuals, for purposes of purchasing, building, extending or repairing urban properties, for a sum which may not exceed 80% of the rateable value of the property, being secured necessarily by a first mortgage.

The credit is transferable by endorsement on the margin, at the end or on the back of the document, with indication of the name of the transferee. For information purposes only, the transfer must be registered in the margin of the mortgage register. The assignor is only answerable for the existence of the credit.

Commercial Banks (Art 83 N^o4 bis LGB) and Insurance Companies (Art 21 bis DFL N^o251 on Insurance Companies) are entitled by law to issue, administer and charge these endorsable mortgages, although the latter must always act through an administrator.

A fundamental characteristic of these financial instruments is that they are mortgage-backed securities, which are simple and agile to assign or trade. Their management is entrusted to institutions which are subject to specific supervision and which require authorization to exist.

In practice, endorsable mortgages are mainly used by insurance companies of the second group (Life), to back their risk capital and part of their technical reserves.

However, linking this subject with that of "securitization" to which we will refer later, it is important to note that endorsable mortgages, secured, as has already been said, by a mortgage guarantee, will in the near future be the loan securities which will form part of the dedicated capital against which bonds will be issued for Pension Funds investment.

In fact, securitizing companies will be able to purchase endorsable mortgages in order to be able to form separate and dedicated capitals, which will be used to back the issue of debt certificates.

Although the existence of securitizing companies is, at the moment of writing, the subject of a bill designed to modify Law Nº18.045 regarding the stock markets, Decree Law Nº3.500 already entitles Property plc's to purchase endorsable mortgages. On the other hand, Pension Funds can invest in these plc shares, provided they comply with certain requirements, one of which is the approval of the Risk Classifying Commission.

As a result, by the indirect route of Property Companies, Pension Funds can, at present, participate in investments in endorsable mortgages.

5.2. Collection procedures for Mortgages with MBCs.

Finally it is worth mentioning that Section XII of the LGB establishes a very quick and simple collection mechanism for mortgages with MBCs.

In practice, this procedure establishes that, once the debtor has been judicially requested to pay, and a period of 10 days has elapsed without the debt having been paid, the judge must order, at the bank's request, the auction of the mortgaged property or its surrender in "judicial lien" (explained below).

The debtor can present an objection to the auction or "judicial lien" order within a period of five days. The objection is treated legally as an incident and is only admissible under one of the following exceptions: (i) payment of the debt, (ii) prescription, (iii) inapplicability of the foreclosure to the person concerned.

Appealing against the decisions pronounced against the defendant is conceded only where this does not suspend execution of judgment. If no objection is presented, or if that which is presented is disallowed, the property is auctioned or given in "judicial lien" to the bank as creditor, whichever is applicable.

Giving the property in "judicial lien" consists in the bank receiving the rents, income or product of the property, in whoever's hands it may be, and once the rates, administration costs and other obligations with preference over its own have been paid, applying the funds to make the payments which are owing, keeping full accounts so as to return the excess to the debtor, should any exist.

Once the auction has been ordered, it must be announced on four different days in a newspaper corresponding to the department in which the suit is taking place, and should none exist, in one corresponding to the capital of the province. At least twenty days must pass between the first publication and the auction.

At the auction, the property is sold to the highest bidder. The bank's credit is paid with the price of the auction.

As is obvious, this judicial collection procedure is very special, being extremely fast and effective. The debtors have very few possibilities of unduly delaying the course of justice.

The collection procedure for endorsable mortgages follows normal regulations and guidelines. There is no special procedure as in the case of the collection of mortgages with MBCs, issued under Title XII of the LGB.

5.3. State Mortgages.

We have considered in this section loans issued directly by SERVIU and those which, while being extended by banking institutions, are administered and guaranteed by SERVIU.

The principal loans issued by the SERVIU are:

- a) Loans granted to pay part of the sale price of properties destined to solve marginal housing situations. These loans are regulated in art. 21 DS N°62 (V. y U.) 1984.

These are mortgage loans, extended in U.F. or in Average Value Index (IVP), or in pesos, national currency, to be readjusted according to the Wages Index, to be paid over a period of not more than 20 years, in equal successive monthly dividends, paid in advance, which must include amortization, interest and fire and disencumbrance insurance premiums. The term of the loan is determined in such a way that the dividend does not exceed 20% of the applicant's monthly income, including that of the applicant's spouse, at the date of allocation. The minimum dividend amounts to 0.6 U.F. The interest accruing from these credits is determined by resolutions of the MINVU. The servicing of the debt becomes compulsory in the same month in which the property is physically handed over to the beneficiary.

- b) Loans granted to pay part of the sale price of the second stage of Progressive Homes. These loans are covered under letter c) of art.16 of DS N°140 (V. y U.) of 1990.

These are mortgages of up to 47 U.F., to be paid over a period of not more than 20 years, in equal successive monthly dividends, paid in advance, which must include amortization, interest, and fire and disencumbrance insurance premiums. The term of the loan is determined in such a way that the dividend does not exceed 20% of the applicant's monthly income, including that of the applicant's spouse, at the date of allocation. The minimum dividend amounts to 0.3 U.F. The interest accruing from these credits is determined by resolutions of the MINVU.

- c) Loans granted to complete the price of the building of the surroundings which complement the so-called "sanitary block" housing solutions. These are covered under art. 20 of DS N°235 (MINVU) 1985.

These loans are expressed in U.F. and their maximum value is 30 U.F. -with a maximum real interest rate of not more than 8% per annum- to be paid over a period not to exceed 8 years, in equal successive monthly dividends, paid in advance, which must include amortization, interest, and fire and disencumbrance insurance premiums. The term of the loan is determined in such a way that the dividend does not exceed 20% of the applicant's monthly income, including that of the applicant's spouse, at the date of allocation. The minimum dividend amounts to 0.3 U.F. The interest accruing from these credits is determined by resolutions of the MINVU. The servicing of these mortgages becomes compulsory the month after the surrounding building-work is completed.

- d) Short-term loans given by SERVIU. DS N°135 (MINVU) 1986.

SERVIU extends short-term loans for the following purposes:

1. Building and repair of Economical Housing, Social-Welfare Housing and urban or rural sanitary infrastructure.
2. Urban road works, be these building, maintenance, repair, replacement or enlargement of paving, urbanization works, complementary engineering works or defences for all these, to be executed on its own property, on national property for public use, or on fiscal or municipal properties, providing they complement road building, conservation,

maintenance or preservation work, or that their object be directly related to the building, conservation, repair, replacement or enlargement of paving for which SERVIU is responsible.

3. To execute urbanization and sanitation work in poor housing areas.
4. Building, enlargement or completion of community infrastructure.

These loans are extended to beneficiaries of the General Housing Subsidy System, the Rural Sector Housing Subsidy, the Housing Subsidy for the Home-Saving and Financing System or the special programmes covered under DS N°235 (MINVU) 1985, for the erection of Low-cost Housing on sites belonging to the beneficiaries; or to co-operatives through which the aforementioned beneficiaries may have applied, to build low-cost housing on the sites belonging to the applicants or the co-operative.

These loans are also extended to building and property companies which build or finance economical housing, subject to the benefits of the SERVIU housing systems.

These loans are granted for a maximum period of up to two years, and they yield the yearly interest-rate current for the period in which they are granted. This rate is determined on a monthly basis by the MINVU.

Finally, there are loans which, while being granted by banking institutions, are administered, underwritten and guaranteed by the SERVIU.

These loans are granted in view of agreements between certain banks and the SERVIU. As an example, we can mention those between the SERVIU and the Banco del Estado de Chile, to finance part of the sale price of property acquired with the state housing subsidy established under DS N° 44 (MINVU) 1988 and those acquired in view of the Special Programmes covered under DS N°235 (MINVU) 1985.

These are mortgages with MBCs extended by the corresponding banking institution. However, the SERVIU must receive the loan requests, evaluate the economic capacity of the applicants and determine the value of the loan; analyse the title deeds and request the valuations that may be relevant, prepare the notarial documents and register them.

In these agreements it is stated that, should the property mortgaged to guarantee the credit be auctioned by the bank, due to non-compliance in the servicing of the debt, or in a case brought by some third party, and

the proceeds of the auction be insufficient to repay the remaining part of the loan, the corresponding SERVIU will pay the bank a certain percentage of the unpaid difference.

As may be seen, the credit originator is the bank, but in the end, the responsible agent is largely the SERVIU.

6. EFFECTIVENESS PROBLEMS OF GUARANTEES FOR HOUSING MORTGAGE-LOANS.

As stated, guarantees are established to give a certain degree of certainty, security and predictability to the recovery of the loans extended, all of which becomes especially important in the case of housing loans, since these are extended over very long periods.

In these operations economic, socio-economic, socio-cultural and even political and institutional considerations exist, which, together with strictly legal problems, endanger the effectiveness of the guarantees.

From an economic point of view, a key factor in the effectiveness of guarantees is that there should be a equivalence relationship between the size of the loan, its evolution in time and its estimated liquidation value (in other words, between the financing obtained by the loan and the value of the property subject to the guarantee).

In the Chilean case, mortgages with MBCs and endorsable mortgages cannot exceed 75% and 80% of the rateable value respectively. The idea is that the margin maintains an equivalence between the debt and the guarantee, which should ensure a real chance of recovering the credit in the case of non-compliance.

However, the debt-guarantee ratio is intimately tied to the evolution of macroeconomic variables, in such a way that, with a constantly growing economy, with adequate investment in the building sector and controlled inflation, the debt-guarantee ratio tends to be stable and satisfactory. However, under a scenario of low economic growth, low investment in the aforementioned sector, and uncontrolled or rapidly growing rates of inflation, this ratio would tend to be disrupted, due to increase in the debt, and house-prices being frozen or even falling.

The impact of the state of the economy on the debt-guarantee ratio is particularly significant in countries with indexed economies, since this determines immediate and automatic readjustability of obligations in money. Thus, in the Chilean case, all loans granted by the financial and

banking system for the purchase of property are expressed in so-called "readjustability indexes", mainly the Unidad de Fomento (U.F.) and the Índice de Valor Promedio (IVP).

In short, from an economic perspective, the equivalence or relative proportion between debt and guarantee is subject to certain distortions due to variations in the aforementioned macroeconomic variables.

On the other hand, maintaining the value of the guarantee is also determined by a socio-cultural factor: the adequate maintenance and upkeep of the fabric of the property, since the physical deterioration of the property affects its value, having a real impact on the possibilities of recovering the loan guaranteed with the property.

The depreciation of the guarantees of housing loans is also associated with the non-fulfilment of debtors' obligations, and the subsequent execution of the guarantee by the creditor. Often defaulting debtors abandon the property, fail to look after it or maintain it, and even, in many cases, proceed to informal sales, or lets and sub-lets, all of which cause even further deterioration.

On the other hand, legal procedures to recover credits via execution of the guarantees, sometimes present severe difficulties. The ideal is that the recovery mechanism be regulated by a previously designed, rapid mechanism, known and accepted by the parties. In this way, non-fulfilment of obligations would entitle the creditor to quick liquidity and a rapid, low-cost execution of the guarantee.

However, as mentioned previously, because loans are so wide-spread, it is not at all unusual for contemporary debtors with problems to oppose execution by presenting delaying appeals which hinder the legal execution procedure.

It also happens in some cases that debtors form pressure groups, and even, under certain circumstances, real debtor corporations, with a view to collectively defending their interests. This usually consists basically in obliging the authorities, both political and financial, to grant total or partial debt condonations, normally justified for reasons of social welfare; or to suspend legal proceedings; or even involves opposition to the execution of the guarantee by force or violence, thus preventing the auction ordered by the judge.

It is obvious, therefore, that the ideal would be to expect debtors to accept as legitimate the possibility of the guarantees being executed, in

such a way that they would only object using juridically sustainable pleas and defence, but this is definitely a pious hope.

Due to the delicate nature of the subject, one cannot fail to mention what might be called the "incorrect incentives of the system". An important condition for the effectiveness of guarantees is that the financing system should contemplate correct incentives, by rewarding those who fulfil their obligations and punishing those who fail in this respect, giving the corresponding signals clearly and promptly.

One of the more or less permanent deficiencies of the housing financial system is that the incentives created are not correct, especially in the case of the low and middle social sectors. In fact, historically these sectors have high rates of default in the housing credit sector and, at the same time, a great degree of difficulty in execution of the guarantees. In face of such difficulties, the financing system, both public or private, has reacted by granting a series of benefits consisting in "reprogramming", "partial condonations", or limitations to the amount of dividends, according to the payment capacity, or a reduction in the sum of the debt according to the rated value of the guarantee, among others. These reactions are not always effective solutions to the defaulting of debtors, since many of those who benefit from the schemes default again or stop fulfilling their obligations which have already been reprogrammed, reduced, or limited. The housing and state banking authorities have moved in the right direction, since, once having adopted the palliative measures derived from the crises, they have been giving attention to reliable debtors and discouraging corporative representations of defaulting debtors, realizing quite correctly that to encourage irresponsibility with respect to servicing loans gives those debtors the idea that the benefits or incentives assigned are not for the normalizing of the loan and the fulfilment of those obligations, but rather, to provide immediate evidence for the obtaining of still greater benefits.

7. IDEAS TO IMPROVE THE EXISTENCE AND OPERATION OF A "GUARANTEES MARKET": AUTONOMOUS GUARANTEE CONTRACTS; "SECURITIZATION"; AND RESIDENTIAL "LEASING".

There can be no doubt that it is possible to keep using and introduce improvements to enhance the so-called classic pledges. Nevertheless, it is also worthwhile considering alternative pledges, different from the classics, so that financial operations may continue to be an important factor in the economic and social development of countries.

The final reflections that follow contain some ideas tending to introduce other guarantees or pledges which, together with the classics, could serve to promote the existence and operation of a so-called "guarantees market" which would be attractive to those participating in credit operations.

7.1. Autonomous guarantee contracts.

From a legal point of view, as some analysts have recognized, the problems with classic guarantees arise basically from the legal nature of the obligations arising from these pledges. In fact, as has been stated, pledges are accessory obligations, dependent on, connected to or joined with a principal obligation, whose characteristics, vicissitudes and subsistence they depend on. This comes from French Law, which inspired Chilean legislation and much of that of the rest of Latin America.

New tendencies in the realms of International Commercial Law are exploring the alternative of a guarantee contract which creates an autonomous principal obligation. The guarantee contract itself would be agreed independently of any other contract and the parties would contract totally autonomous obligations, which would be independent, subsistent in their own right, not depending on a relation either with the underlying contract or with the business being guaranteed.

An example of this sort of contract which includes a guarantee with a greater degree of autonomy from the principal secured obligation is, precisely, the so-called "stand by" credit letter, amply recognized and used both in Chile and abroad. It is accepted by the International Chamber of Commerce, and regulated by the dictates of that institution, (the "Uniform Rules and Usages regarding Credit Documents"). It is widely used in international trade activities involving credit operations, which are guaranteed by these "Stand-by letters of credit", the terms of which permit a direct, simple collection, at sight, which is unconditional and irrevocable. The written request of the creditor, generally an authenticated telex, stating that the debtor has not fulfilled his obligation, and demanding immediate payment, without further hindrance, conditions or formalities, is quite sufficient.

In Chilean banking law the so-called Boletas Bancarias de Garantía have similar characteristics. They consist of a cash deposit made by a depositor (or taker) at a bank (issuing bank), in favour of a beneficiary, guaranteeing the fulfilment of an obligation of the former party with the beneficiary. In view of the Boleta the bank acquires the obligation to pay

the sum indicated on the Boleta on the date indicated thereon, whenever the beneficiary should require it, adhering only to the conditions which the Boleta may require, such as giving so many days' notice or the agreed expiry date. However, one must consider that these Boletas are nominative, non-endorsable documents that cannot be used except for those purposes for which they were taken (generally obligations to do something), which, obviously, limits the autonomous nature of the obligation they constitute.

7.2. Securitization.

In economies like the Chilean, and others, the so-called "institutional investors", such as Pension Fund Managers, Insurance Companies, and Public Investment Companies have occupied an increasingly important place in the economic scenario. The volume of resources they administer has revealed, in turn, a serious shortage of instruments and securities to ensure efficient and diversified investments.

In this context a law reforming the capital markets has been approved, including the creation of securitizing companies which will extend the supply of securities for investors and also have as one of their aims, the deepening of the property market.

In simple terms, securitization can be defined as an operation by which homogenous non-liquid physical assets are turned into liquid financial instruments. Thus, documents involving nominative credits (negotiable or transferrable only with the express consent of the debtor, and other requirements which hamper or complicate their negotiability), are turned into public offer securities. Nominative credits are converted into negotiable instruments, such as bonds, debentures or shares, which are characterized by their free, rapid transferability.

For example, "Syndicated Loan Agreements", which consist of a loan made by various banks to one person in one single instrument, have a nominative credit document. Nevertheless, each bank participating in the credit, can sell or assign it to a third party simply by endorsing the document in which it is registered. This is possible because the respective contract contains clauses relative to assignment, which state that no consent on part of the debtor or borrower is required in order to effect them, in this way facilitating the negotiability and transferability of the credit itself. The participation of a bank in the syndicated credit can be assimilated to a public offer instrument, tradeable on the capital market, in the same way as bonds.

Another case of securitization is that of purchase contracts with endorsable mortgages, in which the creditor is allowed to transfer the credit held against the debtor in a simple manner, in such a way that the nominative document which is formalized as a notarial document acquires the value of a public instrument, enabling the lending society to transform a non-liquid asset into liquid resources.

Thus, for the securitization process to actually work, legal modifications to the guidelines regulating the assignment of nominative credits are needed, to permit their transfer and negotiability. These should be studied and approved in Congress.

On the other hand, securitization seeks to separate the investor from the administration of the credit securities which serve as backing and at the same time generate interesting volumes of credits.

The securitization process will be examined below, with respect to the mechanism for generating investment securities and new forms of guarantees by means of the creation of separate and dedicated capitals.

It is worth mentioning that in the United States of America securitization has achieved an important degree of development, with special emphasis on the transformation of securities representing mortgages.

In the aforementioned Capital Markets Law, securitizers are conceived as companies whose sole objective is to form separate capitals by means of credit acquisition, which the project defines as "endorsable mortgages and other securities determined by the Superintendency of Securities and Insurance (SVS), and the issue of debt securities with the backing of the purchased assets".

For every debt security issue, a separate capital is formed, independent of the common capital of the securitizing institution.

Thus, once the contract for the debt security issue has been signed, a separate capital is formed, and the assets and liabilities, credits and debts which the contract defines form an integral part of this by right. Sale or encumbrance of the assets which comprise the capital is prohibited. This means that a separate capital is formed, which is dedicated solely and exclusively to the issue of debt securities.

From this essential legal base, the law proceeds to regulate a set of situations which, briefly, are the following: The separate capital is formed on the day of the signing of the contract for the debt securities issue; the

obligation to complete the assets of the separate capital is certified by a representative of holders of the debt securities; the securitizing company is responsible for the collection and payment for the debt securities, and, failing this, it corresponds to the representatives of the holders of the debt securities; only the payment of the obligations pertaining to the debt securities can be paid via the assets corresponding to the separate capital; the creditors of the separate capital are restricted to the following: the holders of the debt titles, the custodian of the capital's securities, the representative of the holders of debt securities, the capital assets administrator for those wages that might be owing, and the State; the holders' general pledge right is restricted exclusively to the separate capital, except if the notarial document corresponding to the instrument issue entitles the charging of credits against the common capital of the securitizing institution; the creditors of the securitizing society cannot pursue or appropriate by any means the assets of the separate capitals. The securitizing society may administer the separate capitals directly, or perhaps delegate the administration to banks or institutions expressly authorised to do so; administration costs, custody and possible taxes are chargeable to the separate capital; the bankruptcy of the securitizing society affects only the common capital, producing the liquidation but not the bankruptcy of the separate capitals; the concurrence of a grounds for bankruptcy determines the liquidation of the separate capital, but never its bankruptcy. This liquidation is effected by the representative of the holders of the debt securities, or by someone nominated by them; the purchase of a separate capital, as a unit, determines by the simple act of purchase, the constitution of a separate capital within the purchasing society.

This concept of a capital unit, including assets or property, which is dedicated solely and exclusively to the payment and service of debt securities, enables it to be analyzed from the point of view of its functions as a guarantee.

In practice, one of the central objectives of the securitizing process is to generate guarantees and assure the purchaser of the debt securities that these will be promptly and correctly paid, in other words, the debt securities will be liquid and will have an adequate payment guarantee.

As noted, the main legal figure protecting the debt securities is the creation of separate and dedicated capitals. These separate capitals correspond to the objective or final doctrine on capital, which defines

them as "the group of assets patrimonially dedicated to one end and encumbered by the same correlative responsibilities".

The legal interest protected by securitization is correct, prompt payment to the holders of debt securities, while the means of security is the creation of separate or dedicated capitals, whose only purpose is to serve the aforementioned interest.

The novelty of securitization comes not so much from its objective -the payment of obligations, which is, and has been a fundamental interest of the law-, but rather from the creation of a means of guaranteeing that obligations will be paid.

It is worth noting, that in securitization the idea of creating legal preferences or the constitution of traditional guarantees has been discarded. In a modern manner, applying notions corresponding to the objective or final theory of capital, the decision was taken to guarantee the payment of debt securities by creating separate or dedicated capitals, and mechanisms allowing direct participation of the holders of these securities both in the certification of the balance of the capital assets and in their possible liquidation.

The economic effectiveness of this new form of guarantee will depend in practice, on the knowledge and vision of the purchasers of the debt securities with regard to the securitized assets, their liquidity and the securitizing company's management of the separate capital, among other factors. But, from a legal point of view, there is no doubt that the main safeguards arise from the exclusive and excluding definition of the crediting agents, their rights, prerogatives, methods of participation, directly or via representatives, and, also, from the definition of the assets, their restrictions and the ways in which they back the amounts owed.

7.3. Residential "leasing".

Finally, it is worth mentioning residential "leasing", not as a system for financing housing - which has been covered in other chapters of this book -but specifically as another legal guarantee mechanism which may help the development and growth of the so-called "guarantees market".

* Godofredo Stutzin, "Algunas consideraciones sobre la noción jurídica del Patrimonio". Degree thesis to obtain the degree of Licenciado de la Facultad de Ciencias Jurídicas y Sociales de la Universidad de Chile (Santiago de Chile: Imprenta Relámpago, 1945), cited in Gonzalo Figueroa Y., "El Patrimonio", op cit pages 40-49.

The main intention of residential "leasing" is to enable the pool of non-liquid assets accumulated by the property companies to form a guarantee for the issuing of debt securities or bonds. These securities would have important takers among the institutional investors and particularly the Pension Funds, once they have been declared eligible financial instruments, in accordance with Pension Fund regulations.

The possibility of institutional investors agreeing on the residential leasing system is of crucial importance for its development, and the conditions under which it is introduced, both as regards the system itself and its possible use as a guarantee, are vital if this is to take place.

In the case of the law mentioned above, the property companies would have two formulae for issuing debt bonds. The first, in accordance with the general regulations for issuing debt instruments, contained in the laws governing the stock market and plcs (Law Nº 18,045 (1981) and Law Nº 18,046 of the same year, respectively). The amortization period of these bond issues is fixed in relation to terms and flows of income, according to the purchase/sale contracts with promise to sell, which are signed by the property companies. This formula does not introduce anything new compared with the general system, nor any special guarantee.

The second way, or formula, for issuing bonds seems more innovative. It does in fact incorporate two specific guarantee mechanisms: (i) Pledge guarantee, which is constituted on the basis of the rent-income agreed in ROP contracts; (ii) Mortgage guarantee, constituted on the basis of the homes belonging to the property company. This real guarantee may coincide with the pledge guarantee, which devolves upon the personal rights of the property company as lessor and pledged vendor.

With respect to this formula for issuing bonds with specific guarantee, the law quite rightly proposes the creation of separate capitals which have single, exclusive dedication. This separate capital is constituted with regard to the assets guaranteeing the respective bond issue, in other words, the specific property and the personal rights of the property company as lessor and promised vendor. The dedication of this separate capital is exclusively for the payment of debt-bonds issued. It is also laid down that the assets of this separate capital can not be attached by third parties.

In the same way, as has already been mentioned in the context of securitization, a fundamental element to ensure the payment of the holders of the debt-bonds which have been issued, is to recognize that these have certain rights in the management, and liquidation if this

should occur, of the separate or dedicated capital . Thus, the substitution of the guarantee may only be carried out with the consent of the bond-holders' representative. Also, in the case where the property company goes into bankruptcy, the assets of the separate capital are not included in the assets of the bankruptcy, and must be administered separately by the bond-holders' representative, who proceeds to liquidate such capital and distribute the proceeds of the liquidation between the holders, in direct proportion to the amount due to each one.

It is definitely the creation of a separate, dedicated capital which produces those conditions of certainty and security of payment which investors need in order to participate in property projects, and at the same time it produces a secondary market of debt instruments, thus extending a capital market orientated towards housing.

To sum up, proposals which tend to create separate and dedicated capitals may help to solve some of the more acute problems of "classic" guarantees, i.e. those concerned with pursuit, realization and concurrence. This is so, because the assets of separate capitals may be applied only to the payment of certain obligations, and it is not possible to make use of them for other purposes; the realization decided upon by the bond-holders themselves is by definition the most effective; and, finally, because there is no danger of concurrence regarding the goods guaranteed, since third parties are excluded from having any special right or prerogative.

CHAPTER XII**ORGANIZATION OF HOUSING DEMAND: THE ROLE OF THE HOUSING CORPORATION OF THE CAMARA CHILENA DE LA CONSTRUCCION AND OF OPEN HOUSING COOPERATIVES**

*Teófilo de La Cerda
Ramón Undurraga*

1. THE ROLE OF THE STATE IN HOUSING AFFAIRS.

The modern State has made itself responsible for a number of activities related with the attempt to ensure a minimum standard or quality of life, compatible with human dignity, for all the inhabitants of the country. For this reason, going beyond external security (protection of frontiers and maintenance of territorial integrity) and internal order, both concepts closely associated with the effective exercise of political power, states nowadays develop social policies, dedicating human and financial resources to achieving these aims.

Thus priority is given to policies which safeguard food, health and education, especially those directed towards children. Also, since the beginning of the century, there have been efforts designed to improve the housing conditions of workers, especially those with lower incomes. Later, the social security system was linked with housing solutions for those contributing, while at the same time, many attempts at public housing policies were tried, with a profusion of laws, institutions and specific tax resources.

The sudden change of scene which occurred in Latin America at the end of the seventies, as a foretaste of the crisis of the eighties, produced a very different approach to the problem, due in some degree to the utter failure of the various housing policies which had been implemented, because of their almost total dependence on state funding to finance housing for the populace. It is also worth mentioning that this occurred in a context of inward-looking economic policy with enormous limitations.

In part because of this failure, but also because of the need to harmonize housing policy with the new directions of the economy, new ideas began to emerge in which public and private sectors ceased to be

antagonists; in which private enterprise played an important role and people began to take part in finding their own housing solutions rather than being simply applicants for state aid, with more or less influence.

The State began therefore to produce policies to maximize the use of its own limited resources, and at the same time to encourage individuals and the private sector to dedicate efforts and resources to the housing sector.

This process began in Chile in 1978, and is still on the way to reaching its definitive form. Today, the State contributes 25% of the investment made in the housing area. As a demonstration of the large part of construction carried out by the private sector, it is worth pointing out that the State dedicates only 6% of its budget in this sector to current expenses, 14% to payment of overseas borrowing, and invests 80%.

In this way it has made an important contribution towards making the housing market more dynamic, especially with its Subsidies policy, enabling and stimulating competition. This has resulted in record production figures, a reduction in deficits, improvement in relative quality and a fall in the prices of housing.

A maturing of these tendencies is expected in the near future and, in consequence, an improvement in the role of the state as encourager and regulator of the markets, and guarantor that the rules of equity are obeyed, thus avoiding monopolies and reducing the authorities' areas of discretion.

At the same time, systems of accessibility to benefits must be improved, in order to ensure the social legitimacy of the housing policy.

In short, the State should act in its subsidiary role, retaining those functions which it cannot delegate, and allowing the private sector to take the initiative in the remaining areas of activity.

2. THE ROLE OF THE PRIVATE SECTOR.

With the State assuming the role of encourager, regulator and guardian of the equity of the rules, the private sector may develop all its creative and innovative potential, and dedicate itself whole-heartedly to the challenges of this modern economy. This is expressed in producing more and better products at a more reasonable price.

At the beginning this was not easy, since the businessman was used to a different scenario, with restricted competition. With the State adopting a subsidiary role, a much larger area of competition naturally emerges, with fewer barriers. This makes the change difficult and adapting to it obliges businessmen to show daring and creativity, not without risk.

As a result, the private sector has at present taken over all the roles corresponding to the construction of housing, which may be listed as follows:

- a) **Project feasibility** : Commercial
Technical
- b) **Financing** : Construction
Purchase
- c) **Marketing** : Purchaser assistance
Help with obtaining financing
Organization of property projects
- d) **Construction** : Urbanization
Building of houses

3. THE CAMARA CHILENA DE LA CONSTRUCCION.

This institution is well-known in Chile, not only for being a trade institution uniting businessmen and professionals from the construction sector, but also for being the creator of the most important private social network in the country.

This network is made up of leading companies in their field, among which are CONSALUD, the main Private Health Institute; the main company attending Accidents at Work; HABITAT, the second Pension Fund Manager in the market; the main Caja de Compensación; the most important Sport and Recreation Corporation, and also the Corporation for Research, Study and Development of Social Security (CIEDESS).

Diagram N° 12.1 allows one to form an idea of the scope of the social network headed by the CChC.

As may be seen, within this social network may be found the Housing Corporation of the CChC, a successful, unique experience in organizing housing demand, with important presence in the local market despite its relatively small organization.

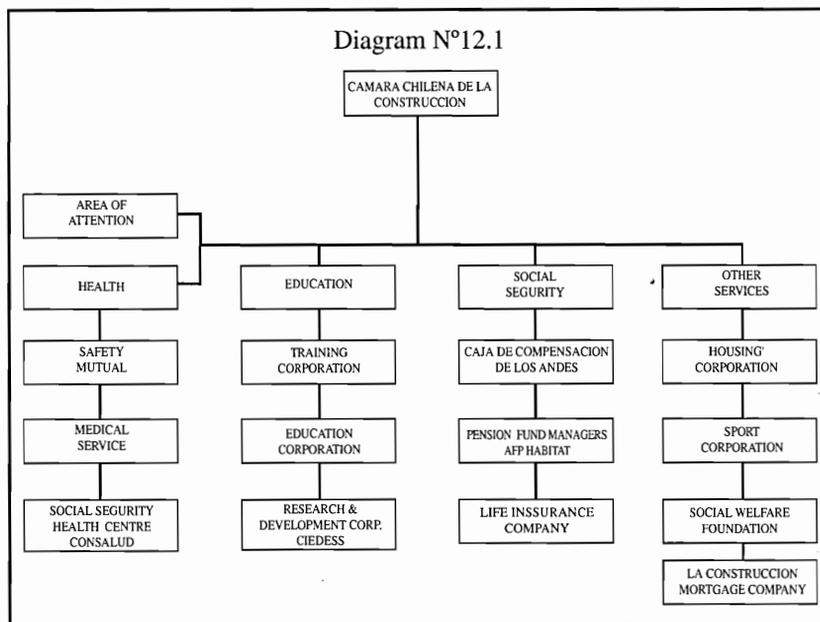


Table N° 12.1
Housing Corporation's share in the homes approved and begun in the country during the period 1990 - 1992
(Housing Units)

	Year 1990	Year 1991	Year 1992	Period 1990 - 1992
Homes begun in the country	78,904	88,481	105,018	272,403
Homes begun by the Corporation	7,308	7,001	7,546	21,585
Corporation's share of total home building in the country	8.0%	7.9%	7.2%	7.9%
Corporation's share of total number of homes available to the private sector	12.2%	11.5%	10.6%	11.4%
Corporation's share of the homes in the systems with which it is involved	20.1%	19.6	21.0%	20.2%

Notes: Of the total number of homes begun and approved in the period 1990 - 1992, 69.6% corresponded to those programmes available to the private sector.

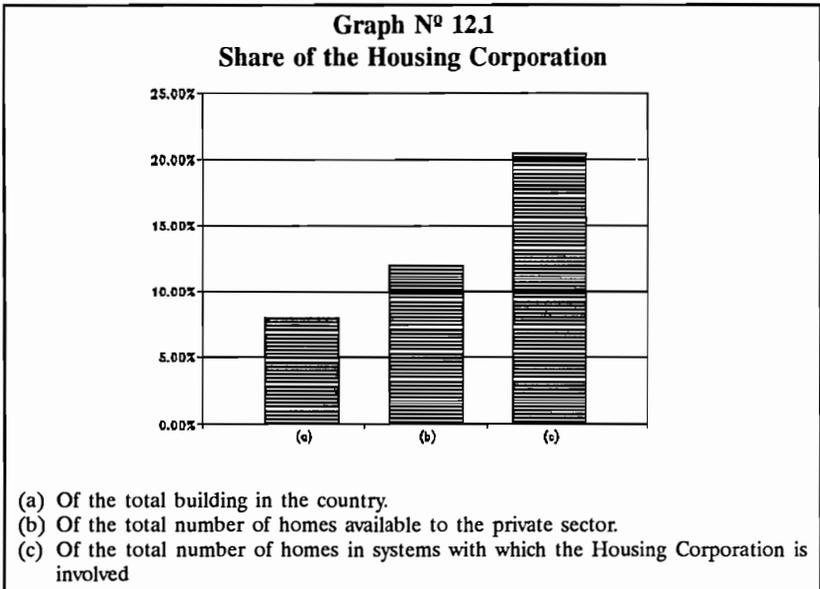
The systems in which the Housing Corporation has participated during the period 1990 - 1992 represent 39.2% of the housing in Chile. Its main task is to co-ordinate all the processes involved in achieving home-ownership, in the manner described below.

In fact, with a workforce, of which the overwhelming majority are professionals and technical workers, it is responsible for building an average of 7,500 houses per year, which represents 7.9% of the total units built in the country, and 11.4% of the houses available to the private sector, with 20.2% share in the systems in which the Corporation has decided to intervene.

Its main task is to link together all the processes which are involved in achieving home-ownership, in the way described further on.

Using the process described in the scheme presented at the end of this chapter, the Housing Corporation advises the associate in such a way that there is no prior agreement between this institution and the participants, thus obtaining the best conditions for the future owner in the different stages of the house-purchase process, and optimizing the use of resources in order to produce a better, quicker, housing solution.

This consultancy method, developed over the past 18 years, together with the free choice to which the associate advised by the corporation is entitled, contribute towards the reinforcement of the system, inasmuch as they ensure his access to a clear, effective and efficient housing solution.



4. COMPETITIVENESS: CHARACTERISTICS AND CONDITIONS.

In a system like the Chilean one, in which the private sector plays a key role, an adequate functioning of the market is vital; in other words, there should be a balance between suppliers and demanders, as is appropriate in an open, competitive economy.

In the housing sector, the organizers of demand have been very important in regulating that balance, since they put technical knowledge at the service of demanders, which these are not in a position to show suppliers for themselves. The above is true, due to the fact that, unlike the case of most commonly used and consumed products, house-purchase is an activity which does not normally occur more than twice in a life-time.

The most outstanding characteristics of the institutions making up the Social Network of the CChC are as follows:

- Permanent administration, highly professional in social, administrative and financial aspects, which improve productivity over a period of time by continuity and increasing knowledge of the complex process involved in planning and developing housing programmes;
- The large number of participants, which makes it possible to produce important economies of scale, and to balance supply and demand in housing by organizing that demand, to reduce the costs of coverage for risks and loss of profits, which are an inevitable part of construction on a large scale, to propose housing programmes with shared services, recreation areas etc., and to create the necessary co-ordination between the public and private services which housing requires;
- The opportunity to provide adequate participation in forming organized groups, to allow efficient business and neighbourhood action in the future development of communities, and
- The promotion and support of the savings habit, especially in low-income sectors, channelling the proceeds towards the achievement of home-ownership.

The success of these characteristics is by no means a foregone conclusion, if market activity is not carried out in a way which adequately combines efficiency with the confidence of the people. For this to occur, it is necessary to:

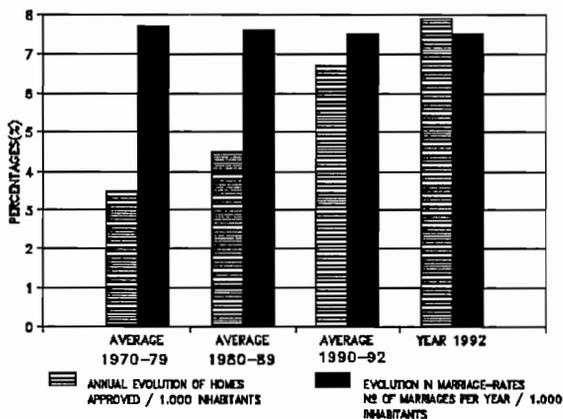
- a) work to the same rigorous standards as a private company competing for a segment of the market. This means keeping costs down, with austerity, and incorporating all modern techniques, both in its management and in the execution of its programmes;
- b) to work with sufficient flexibility to allow for adaptation to the inevitable ups and downs or cyclical changes in the house-building trade, which depend on many factors. In this sense a healthy policy involves diversifying the type of programmes and sources of funding. When one speaks of diversifying programmes, this means having programmes for different socio-economic levels, covering different regions, and being of benefit in different activities;
- c) to work in a transparent way, so as to produce confidence. For people in lower income-ranges, the home is often the biggest investment they make in their whole lives, yet they are often deceived by false promises. A formal, serious approach, backed by effective action, produces confidence.

5. ATTENTION TO HOUSING NEEDS.

To tackle this subject, it is first necessary to carry out a general, long-term analysis of the main characteristics of housing financing, an evaluation of the needs and the possibility of meeting them.

In accordance with this, and setting up certain indicators which illustrate the evolution of housing attention over a long period, one obtains the average amount of building approved annually in the various decades, in relation to the respective average population during the period being analysed. When these are compared with the average levels of marriage indices for the same periods, the aforementioned indicators allow one to appreciate important gaps between housing needs and attention, a situation illustrated by the present housing shortage. Since the beginning of the 1990s, there has been a certain tendency towards equilibrium, which may be clearly seen in the diagram showing the evolution of these indicators between 1970 and 1992 (see Graph N° 12.2).

Graph N° 12.2
Evolution in marriage-rates and
number of homes approved per year
(every thousand inhabitants)

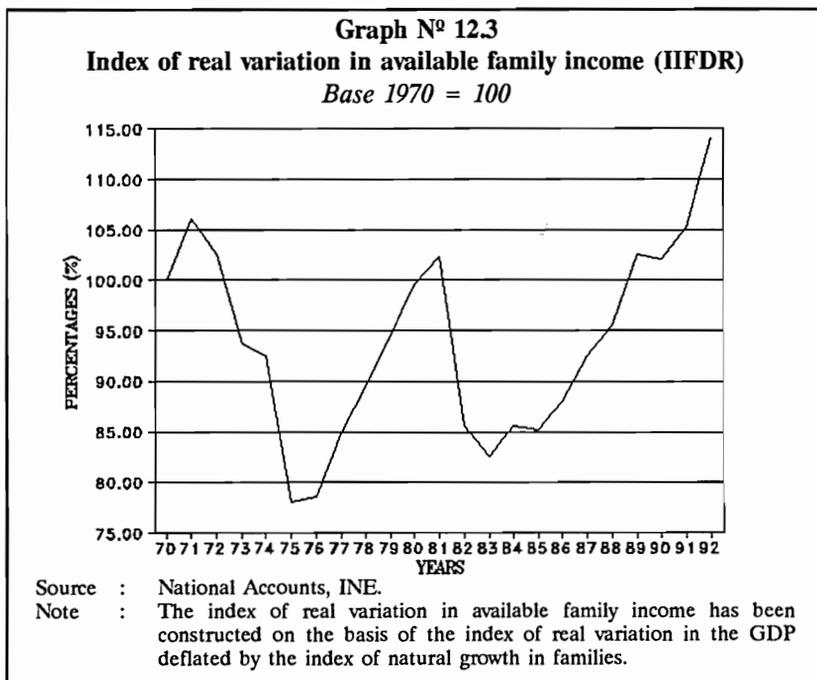


Source: INE.

6. HOUSING ACCESSIBILITY.

Access to housing has had a positive, decisive evolution through the instruments developed in the 1980s.

This variation may be illustrated for the period under discussion by comparing available family income with the income required to obtain a housing solution, where this factor is determined by the conditions of the market. For this, it is important to emphasize the variation in available family income in the period 1970 - 1992 (see Graph N° 12.3), as also the evolution of the housing market indicators, via the price of housing production in real terms (see Graph N° 12.4) and the variation in mortgage terms which determine the variation in dividend, (see Graph N° 12.5).



Considering the above variables and applying the subsidy values on a property worth 400 UF, the variation in accessibility to housing by means of the housing subsidy (IACC) may be seen for the period 1970 - 1992 (Graph N° 12.6).

It should be emphasized that in the seventies, only the 30% of the population with highest income could aspire to housing in the Private Sector, while the State had to take responsibility for housing access in all other socio-economic sectors.

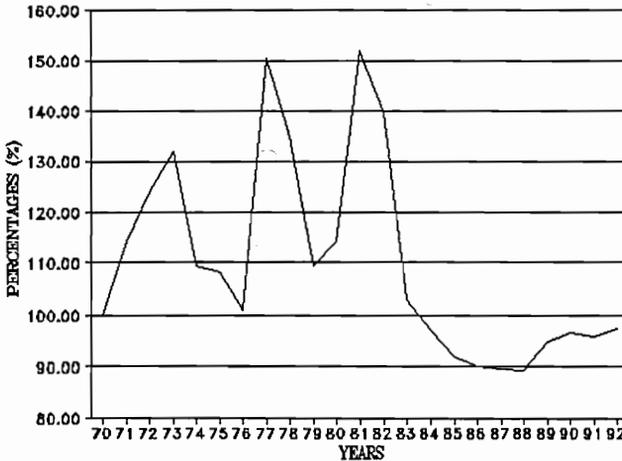
By contrast, at the present time the private sector is present in access to housing for almost all the deciles of the population.

7. HOUSING INVESTMENT.

In the 1970s, around 70% of housing investment was carried out by the State. This situation altered as from the next decade, with the changes introduced into the System for Financing Housing, when Private Sector investment reached 70%, substantially transforming the relative incidence

of each sector in the housing business. This produced a very dynamic effect on housing construction.

Graph Nº 12.4
Index of real variation in housing production price (IPVR)
Base 1970 = 100

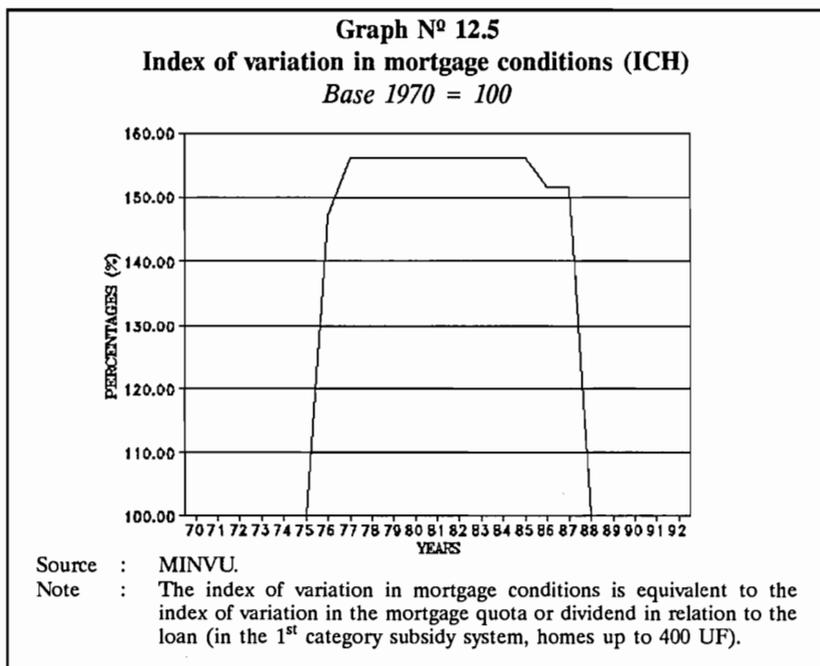


Source : Cámara Chilena de la Construcción.
 Banco Central de Chile.

Note : The construction price of the home is calculated on the basis of the real variation in the cost of building and short-term financial cost.
 Deflator used: implicit deflator of the GDP.

8. NON-CYCLICAL HOUSING ACTIVITY: A BASIS FOR SPECIALIZATION OF THE PROCESS.

The incorporation of instruments which are valid at this present moment for financing housing: the Housing Subsidy, the System of Home-Savings, stable social security funds and insurance companies, monetary correction, long-term loans, the secondary market, and regulations and guidelines which are modified only in special circumstances, have all contributed to lessen the cycles which were historically part of housing construction, thus permitting the development of a trade which is stable, constant, growing and non-cyclical.



These elements have encouraged the different institutions involved in the complex process of housing finance to specialize.

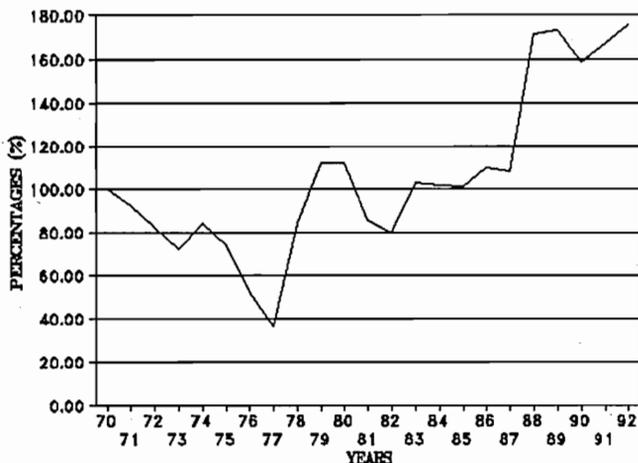
The need to "organize demand", functioning mainly in low-income socio-economic sectors, came into being in this way, since it was difficult for these people to follow the complicated route to a housing solution on their own. Also, a large proportion of the housing shortage was concentrated in those sectors.

9. TYPES OF HOUSING ATTENTION.

The institutions belonging to COVIP S.A. have made a noteworthy contribution in the organization of demand. These are: "COOPERATIVAS ABIERTAS DE VIVIENDA CONAVICOOP, HABITACOOOP, PROVICOOP, and two non-profit organizations: the CORPORACION HABITACIONAL DE LA CAMARA CHILENA DE LA CONSTRUCCION and FUNDACION INVICA".

Two different types of attention are channelled through these Institutions:

Graph Nº 12.6
Index of variation in accessibility to housing
by means of the housing subsidy (IACC)
Base 1970 = 100



Source : Cámara Chilena de la Construcción.
 Banco Central.
 INE
 COPIP
 MINVU

Note : This index is established by the relationship between the real variation index in available income and the indices of variation in the real production price of the home, variation in mortgage conditions and the housing subsidy values have been calculated for a home of 400 UF.

a) Funding and development of projects.

This type is developed at present by the above-mentioned Housing Co-operatives and the Fundación INVICA.

It consists of an integral aid service for the member affiliated to a Co-operative in order to obtain his own house, and involves the following stages:

1. to organize the group into a Project Assembly with its own governing body;
2. to educate and train the members;
3. to encourage them to save;
4. to manage their capital contributions account;

5. to apply for the housing subsidy, certifying the capital contribution in order to gain points for waiting-time and amount;
6. to acquire the necessary land;
7. to develop the project;
8. to invite bids for, and contract, the urbanization and construction of the property;
9. to finance the building and inspect it;
10. to obtain the mortgage loan;
11. to collect the subsidy;
12. to hand over the property to the member.

b) Housing services.

This type is being developed at present by the Housing Corporation of the CChC, and consists in:

1. organizing the group;
2. obtaining a place in the Subsidy distribution in the SERVIU (PET);
3. choosing the Building Company;
4. choosing the development of the project and carrying out the inspection of the work;
5. obtaining the mortgage loan which is required;
6. charging the subsidy;
7. handing over the property to the purchaser.

9.1. Legal Framework to allow the organization of the demand to be performed efficiently.

Working on the basis of the two types of housing attention expressed above, it is important to emphasize the legal aspects which permit the efficient development of the processes covering these different modes.

a) Legal instruments permitting the Open Housing Co-operatives to develop their housing activity (DL N° 1,320 - 1975).

a.1. Certificate of Capital Contribution (Decree N° 187, 04.06.84, from the MINVU).

The legal regulation contained in the above Decree permits associates of the Open Housing Co-operatives to vouch for the savings required by

means of certificates of Capital Contribution issued by the Co-operatives in Unidades de Fomento (UF).

a.2. Application for housing subsidy (DS N° 44, 09.04.88, and its subsequent modifications).

The Co-operatives may apply on behalf of their associates via the General Unified System of Housing Subsidy, according to Decreto Supremo N° 44 (1988), in the following ways:

- Application for housing subsidy under Section I of DS N°44, in which the associates of Open Co-operatives may apply individually or collectively, without a project; or alternatively, apply for the same under Section II of DS N° 44, which allows only the application of organized groups with their corresponding building project.
- a.3. Explicit housing subsidy;** according to the guidelines in DS N° 44, three categories are defined for applying this. The Co-operatives prefer using the 1st category, with homes worth up to 400 UF*, with a benefit of up to 140 UF per operation.
- a.4. Implicit housing subsidy;** according to the guidelines in DS N° 44, this is awarded with an upper limit of 80 UF per operation. It allows the interest-rates of the mortgage loan to be disconnected from the oscillations of the market.
- a.5. Mortgage loan** according to an agreement between the MINVU and the Banco del Estado.
- b) Legal instruments used by the Housing Corporation of the Chilean Chamber of Construction (General Law Guidelines).**

b.1. Savings of its affiliates.

Affiliates' savings may be deposited in a Home-Savings Account in the Banco del Estado or in any commercial bank.

b.2. Awarding the housing subsidy to affiliates.

The Corporation uses the housing subsidy mainly in the mode set out in Decree N° 235 (1985) and its later modifications.

This mechanism finds its form in an Agreement signed between the organizing institution and the SERVIU, the institution which assigns the subsidy places by means of lists of beneficiaries produced by that Service, without the need to apply for the benefit.

Because of this last factor, the amount of explicit subsidy is considerably lower (80 UF) than that contemplated in the modes corresponding to the General Unified Subsidy.

Implicit subsidy. With this instrument too, the State ensures the permanence of the purchaser's interest-rate in the face of the vagaries of the market, so that it does not exceed 8% per year in real terms.

Mortgage loan. Loans extended under this mode are contemplated in the MINVU - Banco del Estado Agreement, in the same way as the mortgage loans extended under the General Unified Subsidy System.

10. THE MOST RELEVANT EFFECTS ACHIEVED BY ORGANIZING THE DEMAND.

- a) The private sector has replaced the State in those of its tasks which have to do with housing attention in low-income sectors.
- b) The institutions organizing the demand are better placed to rationalize the complex process of housing financing, both in supply and demand, reducing administrative costs substantially by the permanence and specialization of their technical and administrative infrastructure.
- c) The vast size of the demand allows housing projects to be developed under very advantageous price conditions, due to economies of scale which can be introduced.
- d) The organized grouping of affiliates allows these to be trained and educated in such fundamental aspects as:
 - Development of the family
 - Better use of the home
 - Participation in future neighbourhood development via group action
 - Development which is supportive of others.
- e) The integrated action of the institutions organizing the demand allow the process of housing financing to be tackled more efficiently.

- f) Advance knowledge of projects to be developed improves and orders the housing supply market.
- g) Affiliates of these institutions receive permanent support in the area of consistent saving.
- h) The organized integration of affiliates by their organizing structures, allows an openly participative scheme to be set up, which strengthens both individual values and those of groups and institutions.

11. ACTIVITIES CARRIED OUT BY THE INSTITUTIONS ORGANIZING DEMAND OVER THE PAST 10 YEARS.

The institutions grouped in COVIP S.A. have succeeded over the past 10 years in building more than 60,000 homes for affiliates, on the basis of the abovementioned types of attention.

There are more than 50,000 people at present affiliated in savings and capitalization plans, and their deposited savings amount to a figure around 26 million dollars, with covenanted savings of approximately 52 million dollars.

Annual housing activity of COVIP S.A. members adds up at present to around 12,000 homes per year, a figure associated with the 34% of the subsidies in category I of the Unified Subsidy plus the PET Subsidies.

This is another indicator which allows one to see the incidence of the members of the COVIP S.A. Group in housing attention for low-income sectors.

COVIP S.A. has contributed systematically to the improvement of the Housing Subsidy System, and since 1984 has managed to obtain MINVU recognition of capital contributions made by affiliates to the Open Housing Co-operatives, under the same conditions as savings deposited in banks, and also giving these institutions the right to certify these contributions in bids for housing subsidy.

In 1985, COVIP S.A. handled a large amount of aid from the United States Agency for International Development (AID), after the earthquake which affected the central zone, making it necessary to repair about 4000 housing solutions in 120 days.

In 1988, it obtained a loan guarantee for five million dollars from AID, which functioned by means of a credit line given via CITIBANK to

finance the building of social-welfare housing designed for sectors below the national average in terms of income.

It is worth noting the exceptional fact that this guarantee was given without the counter-guarantee of the Chilean Government.

Due to the success of this operation, this guarantee was increased in 1991 to ten million dollars.

These two operations caused COVIP to formalize its legal position as a plc.

In 1989 it contributed to housing financing with a study funded by AID containing various proposals which are at present under way.

In 1992, COVIP promoted the forming of the Federation of Open Housing Co-operatives (FAVICOOP).

Via its associates, COVIP S.A. carries out multiple activities at international level: including technical consultancies in different countries; active participation in UNIAPRAVI and the Latin American and Caribbean Network for Housing and the Creation of Urban Environment.

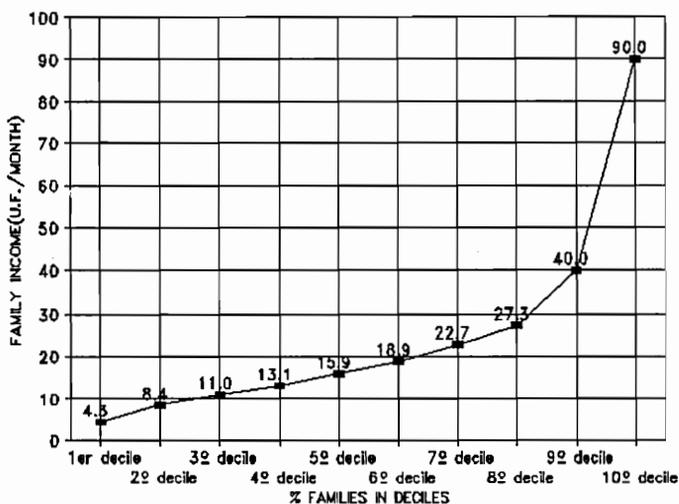
It is connected with the Housing Committee of the International Co-operative Alliance; with Co-operative Housing Foundation (CHF); with US Overseas Cooperative Development Committee; and with the National Association of Realtors U.S.A.

By means of documents and accumulated experiences, COVIP S.A. has made the abovementioned international bodies aware of Anticyclical Housing Policies which allow the process of housing financing to count on those conditions of permanence, stability, growth, and participation which are compatible with housing needs; all this based on accumulated Chilean experience in this field, and the vocation of the group to promote the integral development of the family, as the pillar of any society.

Table Nº 12.2
Indicators in housing accesibility

Years	IIFDR	IPVR	ICH	IACC/SH
1970	100.00	100.00	100.00	100.00
1971	106.20	113.58	100.00	93.50
1972	102.24	124.07	100.00	82.41
1973	94.11	132.12	100.00	71.23
1974	92.62	109.24	100.00	84.78
1975	78.62	107.17	100.00	73.36
1976	79.32	101.82	147.00	53.00
1977	84.93	150.51	155.84	36.21
1978	89.58	134.81	155.84	85.28
1979	94.54	108.29	155.84	112.84
1980	99.32	113.97	155.84	111.84
1981	102.16	152.63	155.84	85.90
1982	85.54	138.57	155.84	79.23
1983	82.78	103.10	155.84	103.04
1984	85.81	97.86	155.84	102.30
1985	85.68	92.32	155.84	101.27
1986	88.23	90.21	151.00	110.16
1987	90.93	89.86	151.00	107.22
1988	95.14	89.39	100.00	170.30
1989	102.00	95.56	100.00	170.78
1990	101.54	98.23	100.00	159.04
1991	104.91	97.06	100.00	166.29
1992	113.50	99.97	100.00	174.72

Graph N° 12.7
Distribution of family income in urban population 1993
(COVIP May 1993)



S.S. Attended MINVU	Sector attended mainly by COVIP
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Indigent sectors	Poor but not indigent sectors
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1/2 average FI: 12,88
UF/mes

Low-income sectors
(according to CEPAL)

Average FI: 25,76
UF/mes

Source : CEPAL income structure as from CASEN 1990.
 Updated 1993: National accounts, INE, COVIP.
 Indigent sectors (SI) and poor, but not indigent sectors (SPNI),
 according to CASEN 1990.

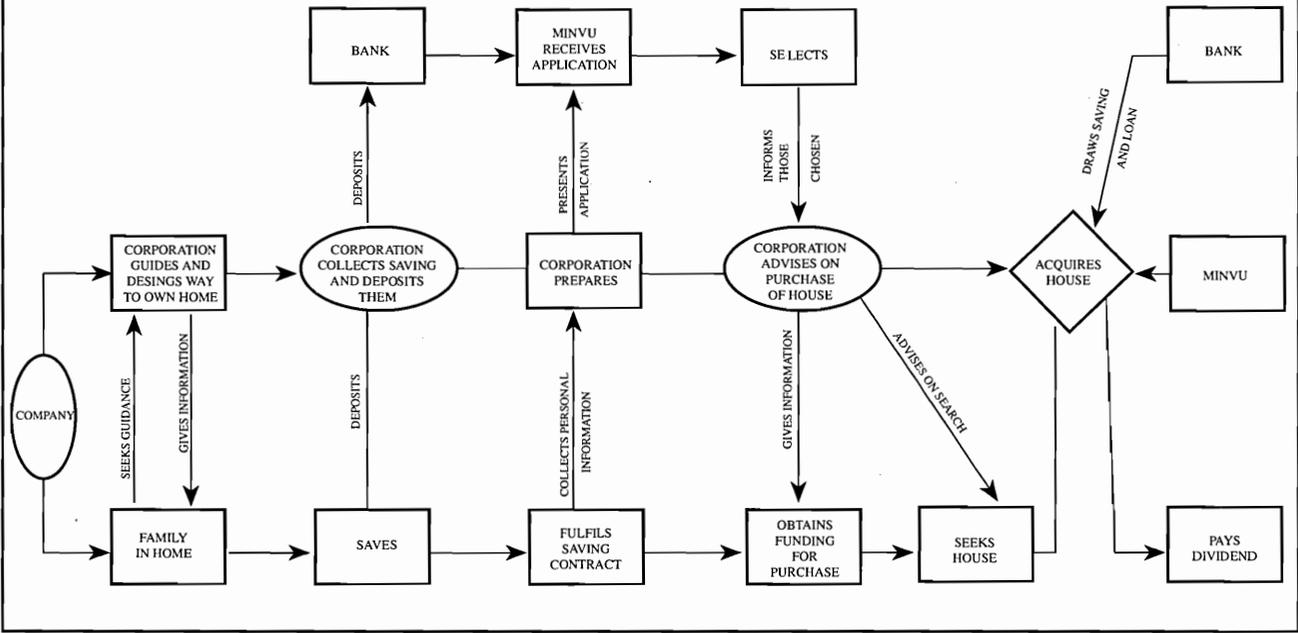
Note : Family income corresponds to adjusted monetary income plus
 attributable rents.

The upper part of the graph shows the scale of % families, for
 greater clarity.

The exchange unit is 1 UF = US\$ 24, approx.

S.S.: Special subsidy.

Diagram N° 12.2
 The role of the Housing Corporation of the Cámara Chilena de la Construcción



CHAPTER XIII
INFORMATION TECHNOLOGY IN THE MANAGEMENT
OF THE HOUSING SECTOR

Nicolás Starck

PRESENTATION.

The way the national housing system works, with its heavy social and economic emphasis, is without any doubt relevant for setting up a development model for the sector, is based on the subsidiary role of the State and the participation of other economic agents working according to market norms. This is true both because of the impact of the funds handled by the sector, and consequently the incentives for those participants related to it, and because of the effectiveness achieved in the different levels of those institutions concerned with managing the system.

To explain how the system works, we will first analyze the institutions which take part in the general process and the role which corresponds to each one; following that, the relationships which are established between them via the flows of information; then, the systems originated by these relationships according to the roles defined; and finally, the main observations and the aspects which, from the operational systems point of view, could be improved.

1. THE HOUSING MARKET AS A SYSTEM.

Various institutions and agencies participate in the Chilean housing system, interacting according to the current regulations for a market economy.

In the first place, it has to be said that the State plays two fundamental roles in managing and developing it: on the one hand, it guides all activity linked with housing by defining policies which encourage the purchase of homes by the joint efforts of individuals and society, while acting itself in a subsidiary role; on the other hand, it regulates current norms and concerns itself with improving those aspects related to housing demand and the existence of financial markets, savings systems and building regulations.

Specifically, the functioning of the system which has been designed is based on:

- Creating long-term savings instruments to finance housing, indexed according to inflation, with interest paid above that index and backed by real guarantees;
- Creating and operating a market with savings and insurance institutions which demand and invest in long-term instruments;
- Creating a wide mechanism of incentives, based on savings and state subsidies, to make access to housing easier for those sectors with fewer resources;
- Assigning large amounts of government money to financing the operation of the subsidy system in the housing sector.

A system has been structured on that basis, containing the following four sub-systems:

- a) **Sub-system of guidance and regulation**, made up of a group of institutions responsible for drawing up the regulations and guidelines so that the system works. They have to give clear guidance to the market, so that this functions with appropriate incentives. In this sub-system, the institutions taking part are:
 - **The State**, which legislates the fundamental bases of the system, through the respective organisms; it maintains and updates the present system of access for low-income sectors (via the Ministry of Housing and Town-Planning - MINVU); it regulates the correct operation of the markets for long-term savings instruments, via the respective supervisory bodies (the Superintendencies of Securities and Insurance, of Banks and Financial Institutions, and of Pension Fund Managers); it regulates the physical housing supply market (via the Local Authorities (municipalities), which define urban areas and urban densification); and evaluates applicants according to parameters established for selecting these (Local Authorities and the relevant department of the MINVU).
- b) **Sub-system of demand**, made up of those people needing a housing solution and the institutions which organize them. In this sub-system, the institutions taking part are:
 - **The State**, via the MINVU and the Local Authorities, which are responsible for providing the necessary information, so that the

public (the demanders) may get to know the characteristics of the current system and carry out the actions required to obtain a housing solution. It also evaluates the families which apply, according to their income levels and family situation.

- **The institutions which organize demand** (Open Housing Co-operatives and specialized non-profit foundations), which direct their attention preferentially to low-income sectors, providing administrative and information services to help applicants during the period before they obtain their home.

As has already been mentioned, these institutions finance and develop construction projects or offer housing services. They mainly provide specialized knowledge during the development of the housing solution process, basing this on general law provisions, in the case of the foundations, and on special, specific regulations, in the case of the open housing co-operatives.

- c) **Sub-system of supply**, made up of institutions which build and sell housing solutions, and the organizations concerned with these. This sub-system consists basically of:
 - **The State**, via the Housing and Town-planning Service, dependent on the MINVU, which develops and executes building projects for indigent sectors which comply with the requirements for access to housing.
 - **Private builders**, which operate in the country according to the rules for the general running of the economy, and execute projects to be marketed either directly or by mandate, depending on whether these are developed by property companies or by institutions organizing demand.
- d) **Sub-system of intermediation**, made up of those institutions which facilitate the interaction of the market, i.e. financial institutions and demand organizers. In this sub-system the main institutions are:
 - **The financial institutions which collect home-savings**, offering the services of opening and holding accounts, to collect long-term savings for housing, according to the specific legislation passed on this subject. Their activities are regulated by the Superintendency of Banks and Financial Institutions.

- **The institutions which issue Mortgage-Backed Certificates (MBC)**, which offer documents representing long-term debt on the market, principally to institutional investors (Pension Funds and Insurance Companies).
- **The institutional investors** already referred to, which acquire long-term instruments offered by the issuers, to meet the commitments which they will also have to fulfil in the long term. These investors require a market in which to operate, and instruments with characteristics which permit them to fulfil their long-term obligations (i.e. long-term interest-rates, monetary correction, adequate guarantees, and markets to liquidate and value instruments).
- **The institutions which grant long-term loans** belonging to the financial sector, and also, in the case of Chile, to State representatives, which look after the demand from low-income sectors.
- **The institutions involved in intermediation of instruments** (Stock Exchanges), which allow the interaction of long-term savers with the respective investors requiring long-term funding, by means of the buying and selling of financial papers.

2. THE INSTITUTIONS IN THE SYSTEM AND THEIR RELATIONSHIP WITH OTHER SECTORS OF THE ECONOMY.

2.1. The sub-system of guidance and regulation.

The modernizations applied to the economy in general, and the social security system in particular, centred the responsibility for acquiring home-ownership on the individual and his family group, handing over to the private sector the task of building homes to satisfy the demand, and to the State, a subsidiary role, directed primarily towards helping people who show interest in owning a home, but have insufficient resources.

Starting from this broad definition, the State makes this help effective by Housing Subsidy programmes, which are defined and regulated by the relevant Ministry.

a) The Ministry of Housing and Town-Planning.

This is the branch of the government with responsibility for proposing and deciding national policies in this sector, for fixing the programmes for building and subsidy on house purchase to be implemented directly by the State, for providing funding and establishing the conditions to be required of applicants in the process of assigning benefits, and co-ordinating the actions of those bodies responsible for carrying out the sector's programmes.

The Ministry prepares a dynamic budget for each year's subsidies programme, via its Housing Division. It fixes the distribution by consulting the various organizers of demand regarding expected application levels for the period. The relevant organizers in these consultations are: on the one hand, the organization of Housing Co-operatives (COVIP), and on the other, the Housing Corporation of the CChC, institutions which report on expected levels based on their application registers at the date of the consultation.

The Department of Housing Policy is the section of the relevant ministry responsible for estimating housing demand, and the housing requirements of the provinces. It carries out this task on the basis of information received from the census and its own management reports. In certain areas, housing solutions are not built directly by the State and the building of the corresponding houses is delegated to the private sector.

b) The Service of Housing and Town-Planning (SERVIU).

This is the executive body of the Ministry responsible for developing the housing programme which the Ministry decides. At the level of basic proposals, the law gives it the power to invite for bids to assign the homes, and in practice it organizes the potential demand at this level. In the programme of Progressive Homes, its participation has not been very fruitful.

In each region the Ministry is represented by a Regional Secretariat, with a regional delegate of the SERVIU functionally dependent upon it, who operates the Basic Homes and Progressive Homes Programmes.

Operationally, it is the responsibility of the subsidy management institution, the SERVIU, to receive the applications for the different programmes, process and select those to be awarded subsidies, while checking that the requirements for each system are met. It is also the

task of the Service to programme and define solutions for marginal sectors by granting loans.

c) The Local Authorities (Municipalities).

These are the bodies entrusted with the task of evaluating the demand in marginal sectors by means of statistical data-forms, and of participating, via the Works Department, in planning towns, supervising and controlling constructions and giving planning permission and final reception for buildings.

d) Other regulating institutions related to the system.

There are institutions in the financial sector which regulate the functioning of that market, and these regulations have an impact on the housing sector. Among these are the relevant Superintendencies (of Securities and Insurance, of Banks and Financial Institutions and of Pension Fund Managers), which regulate the issuing of new financial instruments, including long-term instruments, and those with mortgage guarantee, as likewise the actions of issuers and institutional investors.

2.2. The sub-system of supply.

This sub-system is made up of the firms which build housing solutions. These offer homes directly to demanders, who can in turn pay for them, either directly or by using the funding mechanisms established in the system. In other cases, the firms build for third parties, normally institutions which organize demand, (Housing Co-operatives or Corporations) or for institutional demanders (Property Companies or the State itself), which channel the homes in the direction required. The supply may also be channelled via intermediaries, generally estate agents, which offer demanders various alternative solutions for their needs.

2.3. The sub-system of demand.

The results obtained in applying the housing policy have been achieved thanks to the active contribution of the private sector in this process, especially those institutions which participate in organizing demand, those which provide services in forming demand groups and in managing housing solutions, all of them subject to the norms and regulations mentioned above.

The organizing institutions are channelling ever-increasing volumes of housing demand, due to their specialization and efficiency in this sense, which have made it possible for beneficiaries to improve their savings plans and applications for aid programmes, thus obtaining a greater likelihood of success.

The following groups of institutions are operating in the country at this point in time:

a) Private housing corporations.

These are private, non-profit institutions, whose objectives are to unite, organize and co-ordinate the actions taken by companies, organized groups and workers, with the aim of solving their housing problems. In order to achieve these objectives, they guide housing demand by giving individual and collective advice, especially in the context of using the subsidies managed by the Ministry of the sector. These corporations prefer to develop a complete line of services to those who request them, including the management of the building project, the loans and the delivery of the homes.

b) Housing co-operatives.

These are mutual aid institutions, which offer their associates or affiliates complete services to assist them in obtaining a housing solution, by organizing groups, managing savings accounts, applying to subsidy programmes, planning and developing projects for building and loan management and carrying out collection.

2.4. The sub-system of intermediation.

a) Financial institutions for savings and loans.

Capital financial institutions extend loans by issuing mortgage-backed certificates, in order to complete the financing for a home acquired by the beneficiary of a subsidy. They also collect savings from potential beneficiaries of housing subsidies using home-savings books, which work in accordance with the regulations laid down.

3. THE FLOW OF INFORMATION.

3.1. The sub-system of guidance and regulation.

3.1.1. Functions of the Sub-system.

The sub-system of guidance and regulation fulfils the following functions:

a) Diagnostic function in the sector.

This function, which is permanent, is the first in the housing system, and is composed of all the processes carried out with the aim of discovering the country's housing needs, and deciding the number of solutions required, as also the distribution of housing demand, by geographical regions.

The main data is found in housing surveys contained in the national census (commented upon below). This is processed to produce the indicators and result reports which serve as a basis for preparing the corresponding diagnostic studies. The executive bodies in the processes related with this function are: the National Institute of Statistics; the Ministry of National Planning; and the MINVU.

b) Regulatory function.

This second function of the system is developed by establishing general regulations for the sector, both as regards the design of mechanisms and the respective legislation and the occasional operation of these mechanisms by means of the corresponding laws.

While the output is represented by the bodies of law, regulations and circulars issued to regulate the sector, the input of the sub-system is represented by quantitative studies derived from national population and housing census; qualitative studies and experiences contributed by national and foreign experts on the subject; and the definitions of government policy in this field.

The direct output of the regulatory function consists of:

- **Regulations for the allocation of the housing subsidy** (which includes that corresponding to the general unified subsidy, the rural subsidy,

the system of application for housing, the progressive homes system, the system of support for colonization, and the system of support for special programmes).

- **Regulations for the allocation and sale of buildings constructed for the housing sector**
- **Regulations on financial aspects related with housing subsidy mechanisms** (mortgage loans granted to beneficiaries, short-term loans granted by the SERVIU, financial regulations for house-purchase loans granted by means of the issue of credit instruments and home-savings accounts).
- **Laws and regulations connected with town-planning and construction**

c) Propagation function.

In the third place, the propagation function of the housing sector should be mentioned. This corresponds to all the actions carried out with the aim of promoting, and providing information about, the way in which the mechanisms for obtaining housing work. Within the housing system, this function corresponds to the Ministry and the executive bodies related with the portfolio, with special emphasis among such tasks on the invitations to apply for housing subsidies. Such invitations constitute an effective complement to the system's work in propagation, together with the campaigns carried out by the operators engaged in organizing demand and in the intermediation of savings and loans for housing.

d) Evaluation function.

In the fourth place, one of the most important actions carried out within this sub-system is that of evaluating the order of priority of the applicants for the subsidies offered by the State, and then allocating the corresponding benefits. This function, which is fundamentally operational, but basic to the management of the present system, is carried out three times each year by the MINVU.

In the regulating sub-system, this function is structured at individual level and its results are highly relevant in achieving the objective of the housing policy.

3.1.2. Main input of the sub-system.

To define long-term policies and programmes for the sector, as also to apply and evaluate the housing-subsidy mechanism system, the Ministry prefers to use information obtained from the following instruments:

a) **Surveys contained in the National Population and Housing Census carried out by the National Institute of Statistics.**

The most important information gained by using this instrument is that related with those human settlements which have the highest proportion of poor families, and their characteristics.

The parameters for measurement used in the census show people's quality of life and thus their capacity for producing goods and services to meet their basic needs. The information required covers the type of housing (characteristics of the housing group, materials used, structure, classification as an individual or collective dwelling); the sewage disposal system (main drainage, septic tank, cess-pit or other); and levels of overcrowding (people living in the home with the number of rooms, excluding bathroom and kitchen).

Using the combination of both these indicators, plus another which measures the infrastructure in the home, 32 sub-groups are formed to classify the rural and urban population in each region of the country, associating them with a certain level of poverty according to the percentage of people belonging to homes without infrastructure in each category.

As a result of the above, it has been possible to characterize the extremely poor population as follows:

- a) Those whose houses are overcrowded, in the sense that there are four or more people on average per room;
- b) Those who live in tenements, single-room cabins, emergency accommodation, makeshift shacks, huts, indigenous dwellings (rucas or chozas), mobile homes (tents, caravans and other), in rural or urban zones, without overcrowding, with or without infrastructure, and with a bad system of sewage disposal;
- c) Those whose homes are houses or apartments in urban areas, without overcrowding, but with no infrastructure and a bad system of sewage disposal;

- d) Those who live in makeshift shacks, huts, indigenous dwellings or mobile homes, without overcrowding and with a good system of sewage disposal.

According to the map drawn up on the basis of the results of the 1982 census, 14.7% of the population of the country lived in conditions of extreme poverty, of which 11% was urban, and somewhat less than 4% rural. In the past decade, these percentages have been considerably reduced; the final figures will be obtained once the census carried out in the middle of 1992 has been processed.

With the data obtained, the Finance Ministry assigns funding to the different regions of the country, to finance various social-welfare programmes and, in particular, the housing-subsidy programme, the figures for which have been given in previous chapters.

b) The Social Action Committee Record Card.

This instrument, called the CAS, is also known as a social stratification record card, and consists of a questionnaire showing the socio-economic conditions of families in extreme poverty, the results of which are used to concentrate social assistance benefits to the most needy members of the population.

In its early stages, this record card was suggested as the answer to a series of objectives which ranged from making communal social diagnoses to distributing different types of subsidies. These objectives grew wider over the course of time, until in 1989, according to current regulations and instructions, it began to be used as an instrument to focus the Single Family Subsidy (SUF) the Social Pension (PASIS) and the Marginality Subsidy on the poorest sectors. Many local authorities have also used the CAS to allot free health-care cards, access to nursery schools, lunches and breakfasts for school-children and other social benefits which are distributed at that level. In the period 1990-1991, the use of the CAS record card was also extended to the subsidy for running water and the selection of beneficiaries for the collective housing programme. The wide-spread use of this card is due to the fact that it is the only means of obtaining information and assigning resources which is based on quantitative methods.

At present, the CAS record card is regulated by DS N°414, dated September 1991, which establishes the participation in the different bodies which use it (Ministry of Planning, Regional Subsecretariat and Local Authorities). The questionnaire is made up of 50 questions,

arranged in two groups, and is valid for two years from completion. The questions include information identifying the family and residents, protection of the environment, overcrowding and comfort, occupation and income, subsidies received, education and capital. Each possible reply receives points, and by a calculation algorithm, a final total is given to each family, which fluctuates between 314 and 780 points. This last figure corresponds to the people with least relative poverty.

From the point of view of the general system, it may be said that the two instruments described represent its main sources of input. While the information obtained from the census represents the basis for diagnosing and quantifying specific needs and proposing solutions to them, the details collected via the CAS record cards, which contain data sufficient to define the poverty level of the population taking part in the survey, represent the basic support to allow the State to fulfil its subsidiary role in an effective fashion.

There are also indexing mechanisms for inflation, both of savings and debts in housing loans, which contribute to the existence of a market for the sector and its guidance and regulation. These instruments constitute a basic element for the operation of the system as a whole.

3.1.3. Main output of the sub-system.

From the systems point of view, the legislation applied to the housing sector represents, without a doubt, the most relevant output, since it constitutes the logical design of the system, while the operative support is represented by the existing institutions. However, from the point of view of the efficacy of the sub-system, its main output is represented by the corresponding "**Subsidy Application Results Lists**" which are issued following each invitation, since they determine those who are to benefit under the mechanism which has been implemented.

3.2. The sub-system of housing supply.

The sub-system of housing supply involves the following functions:

a) The planning function.

The planning of supply is formed by the sum of the actions carried out by institutions - State or private - and firms which will actually build or sell houses. It is above all a strategic activity, and therefore unstructured.

The input to the function is represented by the regulations and controls for buildings, plans for regulation and urbanization, and information showing the portfolio of the housing sector with regard to the funds and subsidies which will be assigned to each zone or region in the country.

On the other hand, output is represented by the decisions to build adopted by those entities interested in the process of future construction.

b) The construction function.

This technical, civil engineering function, includes the sum of actions concerned with the aim of physically designing and building the properties. It therefore deals with a real process, where the input consists of supplies, materials and human effort, and the output, homes constructed.

c) The house-sale function.

This third function corresponds to the transfer of ownership of the property, according to the conditions established in current regulations, which are special in the case of dwellings which were formerly the property of the SERVIU. This function generates a flow of physical goods (the houses for sale), a financial flow (the securities which are traded), and a flow of information (via the papers which back the sale). Likewise, this function is the counterpart of the purchase function which is analyzed in the next sub-system.

3.3. The sub-system of housing demand.

The sub-system of housing demand is made up of the following functions, which are carried out by those interested in obtaining a home:

a) The organization function.

This first function of the sub-system which is the target of the sector's policy, includes the sum of processes carried out by those who want housing, in order to choose the best way in which to approach the aid systems established by the State. They can do this individually, but for reasons of specialization, it is almost always better for them to join one of the institutions which organize the demand, since these offer more and better details as to what the process involves.

In this case, the input to the function consists in all the actions carried out by each of the interested parties, especially in the housing-subsidy mechanism, and the output is made up of the registers of information which are produced by the institutions which organize demand. Information systems are used in this process to manage the activities of the sector, since it involves offering services to so many people that, due to its volume and the need to handle information on time, it is indispensable to use electronic means to give information support at an individual level.

b) The application function.

This second function of the sub-system includes all the processes carried out in order to opt for the benefits established in the subsidies system (once the minimum application requirements have been fulfilled). The input to the function consists of the registers and details which applicants present during the process, and the main output is found in the lists of successful applicants.

c) The purchase function.

This function includes all the processes related with acquiring the home, especially those in which payment is made using combined funding (advance saving, State subsidy and a loan from a financial institution). This function is the counterpart to the sale of houses.

3.4. The sub-system of financial intermediation for housing.

The sub-system of intermediation includes the following functions:

a) The advance saving function.

This important part of the sub-system includes all those processes carried out during the phase of collecting the required amount for a personal contribution towards the purchase price of the home, which has to be operated using special accounts, opened in duly authorized financial institutions. This creates a financial flow from the worker who is saving to the institution managing the account, as also a flow of information, reflecting the registers produced by each deposit and withdrawal transaction carried out by the worker.

The input to the function consists of the registers produced by the savings made, and the output consists of the registers of balances held.

b) The financing and intermediation of mortgage instruments function.

This function is one of the vital points of the system. It is highly complex, because of the operational mechanics which have been established, and has a distant horizon, due to the terms involved in the operations. It is made up of all the processes associated with the issuing of a new, long-term financial instrument, the purchase and maintenance or sale of the instrument by the investor - usually an institutional one - and the amortization of the capital owed.

This system is composed of various electronic systems developed to support the management of the corresponding investment instruments, since it is concerned with handling a large number of registers, which are subject to differing valuation calculations (with complex calculation algorithms).

c) The loan and collection function.

This function is also composed of a series of electronic systems, which are vitally important in maintaining the mechanism, since the maintenance of funding- levels associated with the system will depend on the effectiveness of their support in the actions of registration and collection.

The processes which make up the function correspond to the stages of evaluating, processing, extending and collecting the loan, and the volume of these makes it essential to use computational technology in operating them. However, it is vitally important to adopt strategies for managing the loan portfolios, based on constant vigilance of debtors' accounts, paying special attention to those showing non-payment situations. The timeliness with which collection actions are exercised, the size of the collection force, the mechanisms for updating details of debtors, and the maintenance of strict procedures in applying sanctions, are the factors indicating ways for maintaining acceptable loan-recovery levels.

4. EFFICIENCY INDICATORS IN THE SECTOR.

The information systems should, obviously, support the operational management of the sector, considering the "set-up" established to ensure

that it functions efficiently. But it should also allow for an overall evaluation of its functioning, based on the information available and the possibilities of relating the concepts being handled.

In this sense, it would seem advisable to suggest preparing various indicators to measure specific aspects of the sector, which will permit an improvement in the decisions adopted:

4.1. Indicators for measuring the effectiveness of housing policy.

- Ratio of homes built in the period to total homes required: the series prepared allows future deficit-levels in the sector to be forecast, and an estimate made of funds to be allocated.
- The ratio between homes built per geographical region (in a given period) and the total of homes required in that same region: this indicator allows special plans to be drawn up, to be applied in zones which are of priority interest for the country.
- The relation between the amount of all the subsidies awarded in the period (explicit plus implicit), and the number of beneficiaries: this indicator makes it possible to find out the real average amount of the housing subsidy granted by the State.

4.2. Measuring the effectiveness of the subsidies awarded.

- The relation between the number of subsidies used (per period) and the total number of subsidies allocated, in number and amount: this indicator allows one to measure the degree of effective use of the instrument which has been designed. Analysis by income-segments or regions may serve as support for adjusting the programme.
- Measurement of the average times elapsing between the period of assigning the subsidy and applying it. This indicator helps in adopting measures to readjust programmes, as also in putting into effect programmes for building particular types of properties.

4.3. Measuring effectiveness in the collection of associated loans.

- Relates the value of the portfolio in default with that of the total portfolio of current loans (number and amount), the operations granted by private and public financial institutions, or directly by the State (via the corresponding Ministry). This indicator gives support to

the adoption of measures to improve recovery levels or readjust the incentives scheme.

5. FINAL COMMENTS.

The complexity of the operational system corresponding to the housing sector, as also the volume of funds which are assigned to it, and the chain of financial relationships established between the different participating institutions, make it advisable to use efficient management systems, backed by computerized systems for processing information.

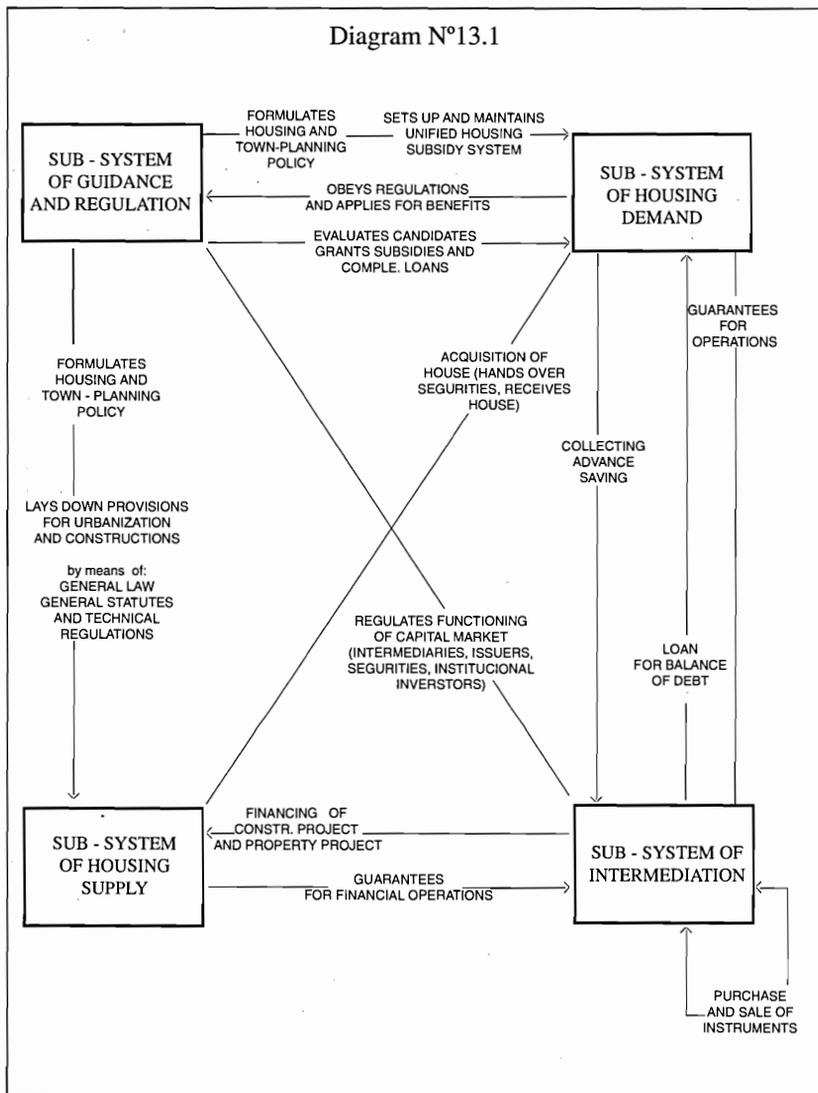
However, in certain functions and in the light of the results obtained from some actions, it would seem advisable to improve the design of the systems used, in order to achieve the objectives set out in the policy for the housing sector.

The following are some of the areas in most obvious need of improvement:

- a) The mechanisms for selecting applicants need to be improved, both the processes for compiling data, which the applicants have to supply (the CAS record cards) and the processes for calculating points and checking fulfilment of eligibility conditions (there is no record of the universe of home-owners in the country - whether or not these homes have been obtained via the subsidy system - nor is there a record available of the historical universe of successful applicants - which may mean more than one house being allocated to the same person).
- b) Mechanisms for collecting loans granted by the State must be improved, if possible transferring these portfolios to private institutions with specialized knowledge in loan-management, thus avoiding the occurrence of political pressure and giving clear signals to the market as to how the sector is run.
- c) The existence of a register should be encouraged, if possible, to give information about the second-hand property market, supporting the transfer and liquidity of an increasingly large volume of housing, which should become available as a consequence of the increase in personal income caused by the development of the country.
- d) New mechanisms should be incorporated to pass information from demand-organizing institutions to their clients and from the financial institutions which manage home-savings accounts to their associates,

so that these have a better knowledge of the stages through which they have to pass, and the timing for each action in order to achieve the desired benefits in as short a time as possible.

Diagram N°13.1



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CIEDESS Publications

- *12 years of Modernizing Social Security in Chile*, CIEDESS, October 1992.
- *Economic and Financial Aspects of Social Security in Latin America and the Caribbean: Trends, Problems and Alternatives for the year 2000*, Carmelo Mesa-Lago, CIEDESS, August 1993.
- *The First International Seminar on Chilean Experience in Financing Housing*, CIEDESS, September 1993.
- *Strategies for Developing an Integrated Social Security Model*, CIEDESS, October 1993.
- *Social Security Reform in Latin America and the Caribbean: Towards a Reduction in the Social Cost of Structural Adjustment*, Carmelo Mesa-Lago, CIEDESS, October 1994.
- *Modernizing Social Security in Chile*, CIEDESS, October 1994.
- *Social Security Reform: A Managerial Challenge*, CIEDESS, March 1995.
- *Social Security Saving: its Impact on the Capital and Housing Markets*, CIEDESS, April 1995.



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