THE VENEZUELAN HOUSING POLICY OF 1979-1983 AND ITS EFFECT ON THE FORMAL PRIVATE SUPPLY OF HOUSING

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ABSTRACT

This thesis evaluates the efficiency of the program of incentives to private developers contained within the Venezuelan housing policy of 1979-1983, which aimed at promoting the construction of low-cost housing units for moderate income families.

This thesis argues the program of incentives was not effective because; a) the program was too broad in scope, it intended to cover a very wide range of households and did not consider limitations in resources, b) it intended to encourage construction of units which were not profitable real estate investments, given the market costs and inflation, without implementing complementary measures that either reduced costs or increased subsidies, c) the features of the program which could orient production favored the construction of the most expensive units within the program, and d) the outcomes of the producer approach tend to respond more to producers' interests and expected profits than to the needs of the potential consumers. As a result, units produced were not affordable by the target households.

The conclusions and recommendations are targeted to improving the producer oriented approach and to search for alternative, more effective producers. The changes proposed are; a) to reduce the range of target households, and to include variables controlling quality of production, b) to implement strategies for cost reductions and to evaluate complementary subsidies, c) to eliminate tax exemptions from the program, and d) to implement measures to increase the confidence in the marketability of the low cost units. A mixed approach which combines the modified formal private sector approach with an additional program for smaller scale developers is likely to be more effective in producing housing units for moderate income groups.

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INTRODUCTION

The intervention of the Venezuelan government in the housing market is 55 years old. The creation of the Labour Bank (Banco Obrero) in 1928 signaled the beginning of the official programs to orient the production of housing in Venezuela. However, until 1958, the government intervention was concentrated mainly on the direct construction of housing units for the working class. Those actions focused on the main cities of the country which were urbanizing rapidly. That constructivist approach was exacerbated during the dictatorship period, when the problem of increasing marginality was intended to be solved by building large scale high-rise developments. In that period, the policy called "war against the shacks" proved to be a big failure in the solution of the housing needs for the rapidly urbanizing Venezuela.

The true beginning of the Venezuelan housing policies started after the dictatorship was overthrown in 1958, when wholistic and integrated nation wide approaches were developed. Those policies considered the different affordability levels of the demand and tried to match them with the different mechanisms available to supply housing. Thus, for 26 years the different housing policies have included incentives and regulations to stimulate the formal private sector to produce socially targeted housing units called "social

interest housing". Progressively, the government has switched from the direct production of units for the lower-middle class to the direct and indirect provision of solutions for the lowest income groups, but using the private sector to produce the former. Those had been, at least, the stated goals. Consequently, the policies have increasingly broadened the range of targeted income groups and raised the sale prices of the units considered to be of "social interest." Similarly, the policies have increased the amount of direct and indirect subsidies to the private sector and have incursioned in the field of financing strategies. There are no doubts, the policies of the two more recent governments expressed clearly these trends. However, regardless of the amount of resources invested by the government to stimulate private production, the producer oriented approach has failed. The majority of the units produced had been too expensive to be bought by the groups the policy intended to serve. Even though most of the units had been channelled into the market, we can argue about the extra costs paid finally by the consumer or by the government, and about the efficiency of the approach. In addition, the characteristics of the units produced responded more to a profit maximization orientation than to the consumer needs, raising questions about the adequacy of the production.

Several reasons have been responsible for the critical role assigned to the production of low-cost housing units by

the private sector. One of them is the belief the private sector could play an important role in alleviating the housing shortage in the country if the government kept away most of the restrictions for private investment in low cost housing. These arguments have been backed up by the statistics showing the traditional and relevant share the construction sector in general, and the residential sector in particular, had in the GNP, and the importance of this sector as a source of nation wide employment. An additional argument has been the speed in production that could be built in, given the private sector has the expertise and the access to the necessary resources; namely land, labor, capital, and entrepreneurship. Also, it is argued the private sector is already part of the system and possesses the necessary connections to put housing units up. Lastly, we can not forget the importance placed on private production also responds to the strong political and economic ties the industrial sector, counted construction, have with the political power.

In addition, the advocates for the potential role of the private sector in low cost housing production point out the inefficiencies in production by the public sector in terms of output, production speed, and efficiency of resources invested. A complementary assumption is that although the private sector could produce units at most for the lower-middle income groups, the effects of filtering down would

extend the benefits to the lower income groups by liberating previously occupied housing units. These units will then be taken by less wealthy families. Thus, the belief is that in the long run, the benefits will spread to the overall spectrum of the housing needs.

This thesis focuses on the evaluation of the program of stimulus to the private sector contained within the housing policy for the presidential period 1979-1983. It examines the adequacy of the units produced to the affordability level of the target groups, the feasibility of construction of the units targeted by the program given market costs and inflation, and the adequacy of the producer approach to the country's political and economic situation. It is argued the program was not efficient because the distribution of prices of the units produced did not correspond to the policy target goals. Private production concentrated on the most expensive units within the program. Those units were not affordable by a high proportion of the target households regardless of the late implementation of a subsidy program for the buyer. The program, overall, was not realistic because it intended to encourage construction by the private sector of low-cost units that were very difficult to build given the private market construction costs, regulations, and procedures. The construction of the cheaper units was very unlikely without the government implementing complementary measures oriented toward reducing costs and restric-

tions or increasing the level of subsidies to the producers. Because of the lack of an integrated approach, which had taken into consideration all variables affecting private production, the program could not modify the way the market works and the outcomes reflected that. Production concentrated on the most expensive units, the ones which offerred the potential to obtain the standard returns in residential construction in Venezuela. That outcome was exacerbated by the features of the program, which made it less risky and more profitable to build the expensive units, and did not modify drastically the perceived marketability risks for the cheaper units. The producer approach also contributed to that outcome because it is very likely to expect the units produced would respond more to producer interests and expected profits than to the needs of the potential consumers.

As a consequeqnce of the characteristics of the production, inventory accumulated, construction of ongoing projects stopped, and a "crisis" in the housing market of the country was voiced by the mass media. The market distortion was exacerbated by the country's financial and political situation. However, we will argue that regardless of the increase in the interest rates, the currency devaluation, and the lack of liquidity, the problem would have been present, although maybe in a less dramatic fashion. This would have occurred because the true root of the problem is in the level of prices of the units produced which are not afford-

able by the demand side. The upcoming elections undoubtedly worsened the problem because they created a lot of expectations from the suppliers and the buyers, both sides waiting for the new government to solve the problems in the way most convenient to them.

This thesis argues that in order to effectively encourage the production of low-cost housing units by private developers, more drastic measures and a more integrated and coordinated program has to be undertaken. That program must consider the different elements that intervene and affect private production of housing, otherwise the outcome will not be adequate. First of all, if the government wants the formal private developers to produce low cost units, the benefits from producing more expensive units within the program or outside it have to be drastically smaller. This argument supports the recommendation of reducing the target group intended to be covered by the program, concentrating the design of the program of incentives and regulations for the first three housing categories. Similarly, the financial conditions for the non-regulated market must differ substantially from those favoring the regulated market. Secondly, the government will have to look for ways of reducing the different kinds of costs incurred in the production of housing units. Some of these costs relate to construction costs, others are embedded in the mechanisms for housing production in Venezuela. The government must re-exa-

mine all the ordinances, norms, and standards affecting housing production in order to adjust and adapt them to the production of low-cost housing. Unnecessary and stringent conditions need to be eliminated. More realistic and appropriate norms and standards would contribute to making the production of low-cost housing more feasible. Likewise, the government could reorient the design and technical characteristics of the building systems commonly in use, in order to allow, together with the modification of the norms, the development of low-rise cluster housing solutions with a high proportion of built-up area, and which are likely to produce great savings in costs. That reorientation in design and technology must include evaluation of the materials used in construction, seeking the reduction in imported inputs, similarly, the trade-offs between labor versus capital intensive technologies must be evaluated. It is also paramount that an evaluation of the efficiency of the mechanisms and procedures necessary to obtain building and occupancy permits, which imply time and money losses be undertaken. In relation to construction costs, additional subsidies will have to be considered if we want private developers to produce the cheaper units within the program. Those subsidies could be in the form of construction financing and land availability which seem to have been effective in the period analyzed, or supplying materials and equipment at below market prices. An evaluation of the amount of subsidies required by a developer to build the cheaper units must be

carefully done. Thirdly, the features contained in the program would have to be examined, strengthening the effective ones, and graduating them in order to orient different concentrations of the production at different price levels, and eliminating those which have proved to be ineffective. An important recommendation is to evaluate alternative producers for moderate income housing. In this sense, it is proposed to reorient the program of incentives for the private sector by channelling the program to other scales of producers and non-profit oriented developers like cooperatives and civil societies. With this approach, the government could reduce the amount of subsidies because some of the costs incurred in the development of housing units by formal private developers would be avoided. Also, the likelihood the units produced respond better to consumer needs is higher. In addition, this alternative will encourage the development of small to medium sized contractors and will promote a better distribution of wealth. The author recognizes this change in orientation is likely to generate a lot of political controversy.

The search for alternatives becomes very important when the resources of the country have been reduced so drastically, the country faces a period of austerity, and there is a need to look for more efficient utilization of resources. An evaluation of the policy outcomes becomes critical when we recall the oversupply is happening in a period when

squatter settlements are proliferating in the main cities of the country. It also becomes critical when we consider what could have been some alternative outcomes if the country had employed the resources in another way. It is certain the residential construction sector in Venezuela has dynamism, and the potential to increase the production of units. It is also certain that it has access to the resources needed for housing production, but that is not a guarantee of success. Only in light of past experiences can housing policies be more effective in obtaining the kind of units we believe the country needs the most.

While an in depth evaluation of the overall housing policy for the country will provide us with a wider knowledge to assess the problem, it is out of the scope of this paper. This analysis will concentrate on the evaluation of the policies affecting the production of units by the formal private sector, namely private constructors and developers, even though the broader context will be provided. Our analysis will not include the proportionately greater contribution to housing production by the informal sector, similarly it will not include the evaluation of housing production by governmental agencies. Likewise, the analysis will concentrate on the policy program of incentives for the private sector during the last presidential period (1979-1983). Although a framework for historical reference would be necessary to compare the outcomes with those of the most recent

governments, we are unable to carry out that comparative analysis. The information about outcomes is not available in the country. The oldest statistics recording private sector production are from 1978, and they only account for a few central cities. That circumstance, together with the lack of a control group, doesn't allow us to be certain about causal relationships. However, backed up by the statistics available for the period considered, field observations, and interviews, we will be able to infer relations with which to support the arguments.

This thesis is developed over six chapters. Chapter 1 starts by providing a general background of the situation in the housing market in 1983 and an historical framework for the most important political and economic events affecting the housing market. Here we will see the interactions between the government regulations, the production sector, and the economic situation. Also, we will explore in general terms the effects of the economic changes in the demand side of the market. The role of events like the liberation of the interest rates, the currency devaluation, the lack of investment and liquidity, the decrease in the level of savings, and the upcoming elections will be highlighted. We will characterize this period as one of high economic instability, a lot of regulatory changes, growing inflation, and bad business expectations.

Chapter 2 analyzes the housing policy for the period considered. The argument made is that even though the policy, from its very conception, stated the resources were to concentrate on the provision of housing for lower income groups, the planned distribution of resources did not guarantee that concentration. We will demonstrate the resources targeted to the lowest groups, the ones to be attended by direct government intervention and community participation, were comparable to those channelled through the private sector for the provision of units for middle income groups. We will argue that the design of the policy was not realistic, given the limited resources of the country, and did not respond to the well known concentration of the deficit on the lowest income groups. Moreover, the policy did not propose any drastic modification of the traditional channels for housing production because the resources planned for the consumer-oriented approach were very small. The policy was very ambitious for it pretended to cover 95% of the Venezuelan households, and as a consequence of the policy design, there was the potentiality of diluting the efforts through a broad range of households or of concentrating the resources on the production for those households who represented a more profitable market.

In this chapter, we will identify the policy goals and its premises, the different programs and how the government planned to approach them, and the amount of resources chan-

nelled to each program. The main institutions acting in the market will also be identified. For the analysis, we will use the VI General Plan for the Nation (Cordiplan), and the National Housing Program (MINDUR).

Chapter 3 provides a more detailed analysis of the Program 4, the one affecting the supply of housing by private developers. We will argue first that the range of households the program intended to benefit was very broad and that the so-called "social interest housing" included houses affordable only by the high middle class. The range of prices the policy stimulated was not affordable by the income groups targeted by the policy, even considering no changes in the financial (conditions of the) market. In order to be able to afford the units, the lower group of targeted households would have to spend a very high expense/income ratio or receive heavy subsidies. We will discuss the feature intending to improve the affordability level of the target groups; a consumer subsidy program; was implemented in the middle of the period when the prices of the units offerred were already too high. An additional critique relates to the lack of quality control measures within the policy because the additional criteria stated to qualify the units was the number of bedrooms. As a consequence, it was likely to expect the producers could reduce areas and locate the units in inappropriate places in order to get the most out of the program protection. Those weaknesses in design

could cause marketability problems later on. We will argue the features of the program were likely to favor the production of the most expensive units because the benefits were higher while the perceived marketing risks were lower. Those design features also reduced the marginal benefits of producing the lowest cost units compared to the benefits offerred by the regulations of the former presidential period. The benefits built up within the program were also likely to stimulate the entry of new producers in the housing market, but only of those with access to resources like land, capital, and political connections. Therefore, it did not really encourage any innovative way of producing low cost housing. A complementary argument is that the conditions for housing production outside the regulated market were still attractive to produce expensive units given the marginal benefits, thus it was likely to expect the production of expensive units would be maintained. We will question whether given the limitations of financial resources in the country and the stated goals of the policy, this potential outcome was appropriate.

Finally, since the policy did not consider potential changes in the financing conditions nor potential limitations in government resources, and given the possibility the units produced were the most expensive, it was likely the government resources will be exhausted and adjustments to the policy would be imperative.

In the development of this chapter, we will analyze the program structure in terms of the graduated benefits to the developers, financing institutions, and buyers, according to the sales price of the units produced; and the necessary institutional arrangements to implement the program. We will also compare the changes in the potential benefits related to those offerred in the former presidential period. We will explore the benefits that the non-regulated market offerred to the developers. For the analysis of the Program 4, the Decree Number 214 and the complementary resolutions of the Ministry of Financing and Urban Development, and of the Venezuelan Central Bank (BCV), will serve as the source of information. The affordability analysis will be carried out using income statistics by the Central Office of Statistics and Information (OCEI). Those statistics are based on nation wide surveys carried out systematically every 6 months and they are the most reliable source of information for incomes given the deformed results of the 1980 census.

Chapter 4 evaluates the private sector production, its relations to the policy goals, and the behavior of that segment of the housing market. The evaluation focuses mainly on the price adequacy of the units produced to the target households and to the policy goals. An analysis of the way units got financed, built, and purchased will also be included. It will be demonstrated that production concentrated on the most expensive units within the policy. We will

argue that even though it can not be demonstrated, the concentration of the production on the most expensive units was influenced by some features of the Program 4. In addition, we will explore how the other conditions and traditional practices in that segment of the housing market contributed to making the investment in the higher priced units more attractive, regardless of real higher risks of marketability because of the reduced potential demand for those units. We will follow the concentration of the production on medium sized units, and we will speculate about inconvenient project locations that contributed later to the problems of marketability. We will evaluate the steady production of high cost units built outside of the policy protection and we will argue the supply for those non-regulated units remained unaltered regardless of the policy. We will speculate in light of this fact about the probability, the supply for the most expensive units covered by Program 4 could have a similar behavior. We will realize the subsidy program financed in its majority the most expensive units, thus benefiting the households with the highest incomes. We will also argue the restrictions to obtain formal financing faced by the lower income groups within the scope of the program were not really reduced, as a consequence, financing to build and purchase the units was minimal regardless of the portfolio restrictions imposed by the policy. In contrast, huge amounts of construction financing were provided to produce the most expensive units and in many

cases, intentionally or not, feasibility studies were not thoroughly carried out by the banks. Consequently, many projects without appropriate market studies were put up. These characteristics, together with the difficult economic situation generated inventory accumulation that provoked the so-called "housing crisis". We will highlight how the figures of financier and developer joined in many projects, even though that participation is prohibited by law. That level of investment banking undoubtedly gave to some developers greater control of the market and facilitated manipulation of resources.

In sum, during this period, the deformation of the production of housing by the private sector was exacerbated. Production concentrated on the high cost units, too expensive to be bought by the policy targeted groups. Those empty buildings stand as a symbol of the market deformities exacerbated by the wrongly conceived policy and by the overall socio-political-economic structure where the policy was introduced.

The quantitative evaluation will be developed based mainly on statistical figures from Fundaconstrucción, and some indeces from the Venezuelan Central Bank. The qualitative analysis will be based on field observations, newspaper

and journal articles, and on interviews given by some developers in February of 1984. Project cases will serve to highlight some of the arguments.

Chapter 5 analyzes the feasibility of the construction of the units promoted by Program 4 being undertaken by the private developers, given the market costs and price restrictions contained in the program. This chapter will illustrate that the set of costs and regulations affecting residential construction in Venezuela, made very unlikely that production of low-cost units could be carried out and still leave profits for the developers. That happens because of a combination of factors that involve not only direct construction costs, such as land, materials, and labor; but also costs incurred as a consequence of the building technology employed, the current standards and regulations, and the procedures and mechanisms necessary to obtain construction and occupancy permits.

This chapter will illustrate the cost restrictions involved in the production of low-cost housing units by developing three hypothetical building cases corresponding to apartment units with 2, 3, and 4 bedrooms. In order to develop the cases, some assumptions regarding areas and costs were made. The first reflects the building and urbanization standards, the second refers to cost indicators. From the cases, we will observe how, in order to sell the cheaper

units at the regulated prices, reductions in costs of up to 50% would be necessary and lower returns than the common ones would be earned. Even though less extreme, some cost reductions would also be necessary for the higher cost units to be as profitable as other real estate investments.

Also explored in this chapter will be the fact that units of similar characteristics to those promoted by Program 4, but with lower sales prices, are produced in Venezuela. Those units are developed, some by government institutions, and the majority by the informal sector. We will discuss the informal sector's ability to achieve great cost reductions by avoiding many restrictions and regulations faced by the formal sector.

We will conclude by saying the program was unrealistic because it intended the private develoeprs undertake real estate investments that were not as profitable for them without including complementary measures to reduce construction costs or increase the level of subsidies. Finally, we recommend the search for alternative developers that could reduce the amount of necessary subsidies and increase the potential for more adequate units produced for the consumer needs.

Chapter 6 summarizes the conclusions from the analysis carried out in the preceding chapter and provides recommendations for a more effective way of influencing the supply of housing for low-middle income groups. The conclusions refer to the changes necessary to increase the efficiency of a program of incentives to the private developers. The changes proposed are divided into three categories; those which refer to the modification of the variables to qualify the units produced, being the reduction of the program target group, and the inclusion of the variable area; those oriented toward increasing the investment feasibility of low-cost housing construction, namely strategies for cost reduction and the evaluation of complementary subsidies; and last, those changes to the features contained within the program, aiming at strengthening the measures which seem to have been effective in orienting production, like land availability and construction costs, and eliminating those measures which were not, such as tax exemptions.

Three non-exclusive alternatives are explored, identifying for each one the advantages and disadvantages, and their likelihood for success. The first alternative evaluated is maintaining the producer oriented approach, but implementing more drastic changes in the design of the policy in order to obtain units more suitable to the target group. This approach relies on production by traditionally well developed medium to large sized firms. It will be argued that the

likelihood of success with this approach, even if drastic modificatons are introduced, is uncertain because some of the changes proposed would require structural modification in the way the system works. The second approach considers the government as a direct producer, a straightforward critique is whether the government could allocate the huge amount of resources needed if direct construction is going to be undertaken, and whether we can guarantee an efficient production in time and quantity, given the known inefficiency of large bureaucracies in Venezuela. The third approach is consumer oriented. It requires the participation of both public and private sectors, the difference lies in the kind of producers targeted by the policy. The challenge consists of producing lower cost units for the low-middle class by small to medium scale producers with the promotion done by cooperatives and civil societies, and support from the public sector. That support could be technical, financial, or organizational, and can be oriented toward facilitating the access to land, capital, materials, equipment, and entrepreneurship.

The recommendations are based on past observed behavior and current trends. Among the criteria used in the evaluation are quantity produced, time for production, amount of government directed resources or equity required, potential for adequacy of the units produced, degree of utilization of existing resources and market mechanisms, political clout of

each approach, degree of government control of the program, and short and long term consequences on the supply of housing units and on the distribution of wealth. The need for further studies to specify better the recommendations is also highlighted.

A mix of the first and third alternative will be recommended as the most appropriate because it makes use of the existing resources and expertise in building housing units and because it allows the development of an alternative way of producing housing which seems to have a high potential for success. Recommendations about the necessary changes to be introduced in the design of a program to orient the private sector production are included. Similarly, criteria for planning a program of incentives for medium scale producers promoted by cooperatives and associations are explored. It is argued with this mixed approach the amount of units produced will be reduced less drastically, the likelihood that the units are more appropriate to the target consumers is higher, and the extra cost for the government and for the overall country will be lower. It is likely with this approach, deformities in the way the market works, like the one observed in the five past years would not occur because production would be more consumer oriented and would respond less to uniquely business interests. Moreover, a learning experience would be built in the process and the profits would be distributed among different producers and

not among a few big developers. Surely, this approach would face political opposition, mainly because of the political influence the formal production sector has through Fedecamaras and La Camara de la Construccion. However, this alternative is viable if we think some of the existing resources could be channelled to alternative construction activities instead of to expensive high rise units that do not sell. After all, what the government should look for is that the resources invested by the country produce the planned outcome and be employed in the most efficient way.

CHAPTER 1

THE CONTEXT

The year 1983 was a hard year for Venezuelans. For the first time since the electoral democracy started 26 years ago, Venezuelans felt their possibilities for rapid upward mobility were seriously threatened. Venezuela's economy, dependent on oil for 70% of its revenue and for 96% of the hard currency, was suffering from the effects of the sharp decline in oil prices[1], a world wide economic recession, and the closing of the international financial markets. After a period of artificial bonanza, Venezuela's financial situation came to a critical point.

For the first time in the Venezuelan democracy, the federal government imposed controls on the currency exchange, imports, and domestic prices. However, these controls arrived too late. By February 1983, when the government announced the fiscal and monetary measures, foreign and domestic investors had withdrawn $15 billion in a 15 month period, shrinking the once abundant foreign currency reserves and causing a serious liquidity problem.

1. The value of the oil exports was reduced by 12.6% between 1982 and 1983. That reduction exacerbated the decrease in oil revenues experienced between 1981 and 1982.

The control of the currency expressed the official recognition of a state of economic emergency in Venezuela and the nation of almost 16 million people experienced the fear of going the way of economic catastrophe. The internal and external government debt which had been skyrocketing in the last few years seemed impossible to repay[1]. In addition, the political campaign preceding that year's elections brought out cases of rampant administrative corruption. Those scandals together with the monetary crisis, growing unemployment[2], and fear of inflation[3] originated a nationwide moral crisis called by an american journalist, "The Venezuelan Crisis of Confidence"[4].

The negative impact of the international economic situation on the country's income for the concept of oil exports and the control of the currency undertaken to control it, generated a reduction in the Gross National Product, estimated as 2.4% for nominal GNP and 4.5% for real GNP[5],

1. Venezuela's foreign debt was estimated at $35 billion in 1983.

2. Some estimations assume that the unemployment rate rose 20% in 1983.

3. Even though inflation between 1982 and 1983 was estimated at 7%, it was a consequence of strict control of the government; controls that could not be sustained much longer.

4. The Boston Globe Magazine, October 16, 1983.

5. BCV Boletin Trimestral. Ano 2, No. 4, Octubre-Diciembre 1983. Producto Territorial Bruto (Gross National Product), page 13.

compared to the year 1982. That reduction was a consequence of a decrease in capital formation and the level of savings, the decrease in activities of construction, manufacturing, and agricultural sectors, and a general reduction in the level of investment and personal consumption.

1983 was also a year when many sectors of the economy showed a dramatic lack of equilibrium. One of them was the construction sector, and in particular, one of its greatest components, the residential sector. The formal private supply of housing, which had been oriented mainly toward the high middle class seemed to have exceeded the demand with the logical consequence of inventory accumulation. That circumstance, together with the overall economic situation of the country and the coming national elections stirred up an array of concerns and protests, mainly from the production sector of the housing industry, the constructors and developers. They blamed the government and the financial sector for the situation. They accused the government of changing the monetary regulations and of modifying the subsidy program. They complained about the banking institutions arguing against the extraordinary increase in the interest rates. Statistics illustrating the situation in

the housing industry were discussed in newspaper articles, television programs, and conventions organized for that purpose in the main cities of the country[1].

Statistics accounting up to September 1983[2] expressed that Venezuela had accumulated 55,219 finished units, of those, 41,677 or 75%, were ready for sale. Of the units on sale, 33% were built in 1983, 35% in 1982, and 18% had been on the market since 1981. Thus, developers were having financial losses due to the interest payments on construction loans. Sales had reduced dramatically, and inventory was increasing, even though the activity in residential construction had also reduced. 21,729 units were paralyzed due

1. A national convention was organized by the Chamber of Construction on July 9, 1983, to discuss and analyze the crisis in the construction sector. The crisis was voiced indicating that more than 40,000 apartments were frozen in the country and more than 20,000were paralyzed because of a lack of construction financing. Similarly, in Zulia state, the regional branch of that organization publicly announced a convention to look for solutions to the paralyzation of the industry (August 11, 1983). In that conference, it was revealed that 3,852 housing units were in stock in Maracaibo City, of which 34% or 1,310 units had been on sale for more than a year (considered frozen units); 89% of the stock or 3,426 units had sale prices of over Bs 200,000. Even under the program of graduated payment mortgages subsidized by the federal government, only families with incomes higher than 5,000 Bs/month could afford an apartment of that price. According to the statistics of CONZUPLAN (Consejo Zuliano de Planificacion) only 20% of the urban families in the whole state had incomes over Bs 5,000/month in 1980. Panorama. August 1983.

2. Fundaconstruccion. Oferta Actual y a Corto Plazo al 30/9/83.

to diverse financial reasons. As a consequence of the reduction in construction activity, unemployment in the construction sector had risen.

The crisis in the housing market was exacerbated by the economic and regulatory changes but we will argue that it was also increased due to the characteristics of the units produced. The economic measure that affected mostly the housing market, was the liberation of the interest rates. The 25th of August, 1981, el Banco Central de Venezuela (BCV) decided to substitute the mechanism of discretional control of the interest rates, in use since the beginning of 1979, by a system of floating interest rates that would be determined by the market. According to the BCV[2], the main reasons for that decision were to make the system more flexible to the international financial markets in order to avoid the flight of Venezuelan money to foreign markets which were paying much higher interest rates, and to guarantee an adequate level of international reserves to meet the external payments. The arguments to support the decision were, first, that the financial market in Venezuela had reached a development stage which made inoperative the control on the interest rates; second, the stimulus that

2. See Informe Economico Banco Central de Venezuela, 1981, pp. 79-80.

would be placed on savings and on banking competence; and third, the elimination of the administrative and technical complications involved in the determination of the interest rates. Overall, the political pressures on the Central Bank would be eliminated. The decision was made in a time when the differential between internal and external rates was high. As a consequence, interest rates went up dramatically and so did the price of credit. Once the differentials were eliminated, the flow of Venezuelan money to the international market diminished.

The interest rate for housing acquisition increased from 12% in August 1981 to 17% in the rest of the year. Construction financing went from 17.5% to 19.5% at the end of 1981. The increases continued in the following years, as of April 1983 the interest rates for home construction and purchasing had reached the incredible level of 21.5% without considering extra commmissions and additional charges[1].

The decision makers expected the internal interest rates would rise in the beginning, but they also expected the interest rates would fall with the change in conditions in the financial market. However, the interest rates have maintained a high level, showing resistance to dropping. As

1. See Boletin Trimestral BCV, Julio-Septiembre 1983, p. 9.

it was expressed by Dr. Bruzual, the president of the BCV[2], "We could ask why the interest rates are still high if there is currently an oversupply of resources in the financing sector. There are many reasons. The ability to attract resources from savers is one of them. In the second place, it is obvious that the weakening of the economic system has introduced financing difficulties in companies that otherwise would not have them; the financing institutions are protecting themselves by overcharging on new credit due to the fear of no recovery. Thirdly, we cannot discard the possibility that the financing institutions are speculating given the higher level of earnings in the sale and purchase of dollars in the free market. That business now has a lower level of risk compared to the legitimate functions of the financing institutions."

A complementary explanation for the declaration of Dr. Bruzual (one many times expressed by the developers in the interviews) is that during the last governmental period, credit facilities were enourmous. Many small entrepreneurs, and individuals with appropriate connections to the financing sector, used the credit facilities to open new banks. These small banks or financing societies worked

2. See Boletin Trimestral BCV, October-December 1983, Declaracion de fin de ano, p. 20.

almost without reserves, despite governmental regulations. When many companies, given the economic situation, started defaulting on loans, the banks competed frantically to attract savers by raising the interest rates trying to overcome the lack of equilibrium in their portfolios.

In the housing market, the increase in interest rates, but also the economic situation, caused a decrease in the level of sales. In addition, the government implemented three changes in the housing policies concerning the private sector, two related to the subsidy program, the other related to the refinancing program. They were intended to diminish the losses the government was also facing because of the great differences between the market rates and the subsidized interest rates.

In the first modification of December 6, 1983, FONDUR gave preference for the subsidy to those units which, besides complying with the housing program regulations and being built before December 31, 1982, had obtained long term mortgages from the banks at 12% interest rates or lower. The second modification to the subsidy, published December 21, 1983, reduced the subsidized interest rates for housing categories "C", "D", and "E", the most expensive ones within the program. Related to the refinancing program, enacted on June 1, 1983, FONDUR reduced the amount of the refinancing

for construction or acquisition of the units within categories "A", "B", and "C". These modifications did not change categories "D" or "E".

Undoubtedly, the changes in the interest rates and in the housing policies affected the demand for the housing units, However, it would be narrow minded to consider those as the only factors affecting the level of sales. 25,767 housing units, or 62% out of the 41,677 units on sale belonged to categories "D" and "E". According to the features of the subsidy program enacted on July 16, 1981, monthly incomes higher than 5,000 Bs were required to purchase units "C" and higher than 7,000 Bs to purchase units "E". Only 14,623 families, or 25% of the national households had incomes higher than 5,000 Bs in 1983, and 327,825 families, or 13% of the total households in the country had higher than 7,000 Bs[1]. In addition, in order to be able to afford the payments to the bank and to the government, the families will have to expect an increase in yearly income of at least 7.75% (see Chart 13), or to increase the expense/income ratio over 40%, the ratio established by the subsidy program, and which, by the way, was considered high.

1. OCEI, Encuesta de Hogares por Muestreo. 1er Semestre 1983.

5,917 units, or 14% of the stock belonged to category "E", in this case more than 3,000 Bs of monthly income was required, and the expected increase in yearly income would have to be 13% (see Chart 12). Of the 2,360 units, or 6% of the stock within categories "A" and "B", 1198 units were in Ciudad Guayana, a planned industrial city where residental construction had a late boom. A large amount of emigration to Ciudad Guayana was expected as a consequence of a huge planned industrial expansion. However, the project did not take place, and units for middle income families remain vacant[1]. The expected annual increase in income for a family wanting to buy a unit "A", according to the features of the subsidy program, would have to be 16.5% (see Chart 11). The remaining 7,513 units or 18% of the stock, were housing units whose prices were higher than 350,000 Bs, thus they were out of the regulated market. In summary, the crisis in the housing market, we could argue, was also caused by the prices of the units produced in addition to the increase of the interest rates, and the overall economic situation.

Unemployment was growing in Venezuela and Venezuelans were losing confidence in the economic and political stability of the country. We can assume many decisions to buy were postponed given the unwillingness of the people to ac-

1. Sidor, Plan IV.

quire such a strong financial compromise. In the real estate market, specifically, people had lost confidence in developers. Many cases of administrative corruption were denounced. It was known of projects where potential buyers had lost their equity downpayment. Some of those projects had been backed up by the government and the whole country was scandalized[2].

The upcoming election also developed a lot of expectations from the population. In general, the feeling was that a new government could only improve the situation. Venezuelan governments have been very paternalistic and people sought a panacea.

The Attitude of the Government:

During the year of 1983, the attitude of the leaving government was to step back from the problem and wait until the new government took office on February 2, 1984. The new government, representative of one of the two strongest political parties in Venezuela (the other one was represented by

2. One of those was la Chamarreta in Maracaibo City where more than 2,500 low income families were misled with a project in which they put down 19 million Bs from their savings as a pre-purchasing fee and the developer flew the coop. In addition, more than 800 million Bs were obtained from public and private institutions to finance the construction of the project. The project was a joint partnership between a private developer, FONDUR and INAVI (The National Institute of Housing). El Diario de Caracas, Febrero 26, 1984.

the leaving government) which had been alternating the presidency in the 26 years of democracy, adopted the first official measures affecting the housing market, on February 25, 1984.

The new measures were related to new controls on the interest rates. A mixed approach was adopted in which interest rates on savings accounts would fluctuate with the market while the interest rates for investments were fixed by the BCV. The minimum interest rates for savings accounts was 6% for the Savings and Loans, and 8% for other financing institutions. The interest rate for housing construction was fixed at 14% for the social interest housing and at 16% for the construction of non-regulated housing units. For home purchasing, the interest rates were fixed at 12% for social interest housing, and at 14% for the purchase of non-regulated housing units[1].

On March 3, 1984, the new Ministry of Urban Development in charge of MINDUR announced the government had decided to keep the program of incentives for the sector, or Decree 214, and the subsidy program of Decree 1134 under the same conditions as in the previous period, however, he announced the frozen units would be subject to a special program that soon would be announced[2]. On March 29, 1984, the mass media

1. El Universal, Martes 28 de Febrero de 1984.
2. El Nacional, Sabado 3 de Marzo de 1984.

announced the Decree 69 named "Regimen of Stimulus for the Fluidity of the Housing Market"[3]. That Decree affected the units that had been on the market before March 31 of 1983, those finished units without condominium documents, and those units whose construction had been paralyzed because of a lack of financing, or because of the previous stages hadn't been sold.

Basically, this Decree authorized higher subsidies to the frozen units in terms of lower initial interest rates and a longer subsidy term than for those units under the subsidy protection, but not considered frozen units. For all the units under this Decree, the minimum allowed long term financing is 20 years (5 years longer than for the other units wihtin the subsidy) and the same as in the original subsidy program, the rate of annual increase in the initial interest rate will be 1%. The conditions of the Decree are outlined in the chart below.

Housing Category	Maximum Price of Primary Sale (Bs)	Minimum No. of Bedrooms	Terms of Subsidy (years)	Initial Interest Rate
A	160,000	2	10	5%
B	250,000	3	8	6%
C	350,000	4	6	7%

3. El Universal, Jueves 28 de Marzo de 1984.

Consequently, we observed the government implemented the measures to channel the housing units through the market. That approach was undertaken to alleviate the paralyzation of the industry and thus, to decrease the level of unemployment, to alleviate the delicate financial situation of many credit institutions which were holding unpaid mortgages for more than 12,000 million Bs in apartments unsold[1], and overall, to alleviate the pervasive political climate. In short, given the income level of the population, the government would help the buyers to purchase the units by absorbing part of the losses. Therefore, the excessive prices will be paid not by the financial sector, which has speculated with the interest rates; nor by the developers, who will earn the pre-established profits anyhow; but by the buyers, who will pay for an inflated product, and by the new government, who will have to play the conciliator.

1. El Universal, Jueves 29 de Marzo de 1984.
This estimate includes construction loans issued by the Venezuelan Workers Bank (BTV), the Savings and Loans, and the Mortgage Banks.

CHAPTER 2

THE VENEZUELAN HOUSING POLICY FOR THE PERIOD 1979-1983

"Homeownership for all," was the political slogan used by the leaving government to identify its housing policy for the period 1979-1983. The expressed general goal of the policy was to give to the Venezuelan population a "better access to appropriate housing solutions" in which the concept of appropriate housing solutions included not only finished units, but core houses, sites and services projects, and home improvement loans for the lowest income groups. In addition to the shelter for the individual families, the policy included in the definition of housing the related infrastructural services and communal facilities. The overall housing policy was not officially formulated until 1980 with the publications of the VI General Plan for the Nation and the National Housing Program[1], even though the first regulations and decrees were dictated in 1979.

The VI Plan outlined by Cordiplan contains the socio-economic development plan for the Nation. These general plans are formulated every five years and provide the gene-

1. VI Plan de la Nacion. Period 1981-1985. Capitulo VI, Desarrollo Urbano, Vivienda y Servicios Conexos. Cordiplan 1980, and Programa Nacional de Vivienda. 1980-1984. MINDUR, 1980.

ral framework for the more specific policies of the country. The Housing Program is developed by the Ministry of Urban Development and provides the specific targets, strategies and programs for housing and urban development.

The VI plan assigned to the housing policy one of the highest priorities due to the multiplier effect housing construction was expected to play in the economic growth, and due to the critical role that appropriate housing would play in the well-being of the population. The policy estimated that as of 1979, 800,000 families lacked adequate housing and their related services and that the deficit was strongly concentrated in the lower income groups. It was estimated that an additional demand of 500,000 housing units would be generated in the following five years caused by both population growth and migration. Given the spatial distribution of the Venezuelan population, it was estimated that 81% of the total demand for housing and services would concentrate in the bigger cities. The policy statement expressed the view that due to the magnitude of the deficit the housing problem in Venezuela could not be solved in the short time; however, it estimated that with the continuous implementation of appropriate policies an acceptable level could be reached within 20 years. That clarification was contradictory with the slogan of the policy which advertized every family would have a housing solution of its own. The target was to produce 668,923 housing units in five years.

391,423 units or 58% of the total would be produced by the public sector; the difference of 277,500 or 42% of the units were expected to be supplied by the private sector through different incentives and regulations. This distribution of tasks, the policy document states, would allow the government to concentrate on the direct production for the most needy groups while the private sector would supply the units for the middle income families.

The broader goal of "appropriate housing for all" was planned to be achieved by the implementation of two main strategies. One, to maximize the production of units by the complementary construction of the public and the private sector. The other, to broaden the range of income groups benefiting from the policy by generating more affordable solutions and by implementing government supported financing mechanisms which facilitated production and acquisition.

The income groups to benefit from the policy ranged from the population living in the informal areas to the middle income families. In this sense the policy was very ambitious, given the limited resources of the nation. In 1979, the year when the first housing regulations were dictated, Venezuelan households totaled 2,259,962; around 90% of the households or approximately 2 million families fell within the policy protection. Chart #1 from OCEI[1] depicts the distribution of households according to income. Even though we

know not all of the 2 million households were in need of housing the amount serves to illustrate the wide scope of the policy. According to the housing program direct government production would concentrate on households with monthly incomes up to 3,000 bolivares. The OCEI survey indicated that 1,527,937 families or 68% of the Venezuelan households in 1979 belonged to this category. Of those, 1,114,142 or 73% had incomes below the subsistence level, estimated at 2,000 bolivares per month for a family of five[2]. These amounts indicate the government direct intervention would attend a sector for whom formal housing was not one of the first priorities and whose payment capacity was very low.

The housing program estimated that private production would attend the rest of the households, those earning more than 3,000 bolivares monthly, but with one important difference. The private sector would receive incentives to produce housing units affordable by households whose incomes were between 3,000 and 7,000 bolivares per month. The supply of units for the rest of the households, those with monthly incomes higher than 7,000 bolivares per month, would be left to market forces. Even though there are not statistics available which quantify the size of the two household

1. Oficina Central de Estadistica e Informatica (OCEI). Encuesta de Hogares por Muestreo. Primer Semestre 1979.

2. Estimated by Cordiplan. Presidencia de la Republica. Coordinacion de Planificacion Nacional.

groups separately, we get an indication by noting that the household group earning more than 5,000 bolivares per month represented only 13% of the households of the country in 1979, or 301,173 families. It can be estimated that families with incomes higher than 7,000 bolivares per month could represent not more than 5% of the total households.

The policy was to be implemented without introducing any drastic institutional changes. The existing public and private institutions would continue working as usual, but

CHART No 1

DISTRIBUTION OF VENEZUELAN HOUSEHOLDS
ACCORDING TO INCOME LEVEL
First Semester 1979

MONTHLY INCOME LEVEL Bs/month	NUMBER OF HOUSEHOLDS No	%
Until 300	36,324	1.6
301 - 450	51,823	2.3
451 - 700	139,289	6.2
701 - 1,000	227,289	10.1
1,001 - 1,500	325,793	14.4
1,501 - 2,000	330,740	14.6
2,001 - 3,000	413,795	18.3
SUB TOTAL	1,524,937	67.5
3,001 - 4,000	266,620	11.8
4,001 - 5,000	160,104	7.0
5,001 - and more	301,173	13.2
SUB TOTAL	727,897	32.0
Not declared	4,128	0.5
TOTAL	2,259,962	100

Source: OCEI. Oficina Central de Estadistica e Informatica. Encuesta de Hogares. Primer Semestre 1979. Total Nacional.

the government planned to strengthen and regulate the system by assigning financial resources to it. The underlying philosophy considered that the formal private sector under the right incentives and regulations would produce traditional units but at lower prices; thus allowing the public sector to concentrate on the lowest income level without overlooking the supply of housing for the middle income groups. We could argue that given the political context of Venezuela, where the middle class has a lot of political leverage, the government would not design a housing policy which did not favor also the middle groups. As a consequence, resources were planned to be spread over a broad range of households. As we will see in the development of this chapter, even though the policy expressed that the concentration should be in the lower income groups, the resources targeted to the middle income groups were comparable to those oriented to the lower sector of the population.

The Features Identified as Critical in the Housing Problem

Policies are formulated to contribute in the solution of a problem and their formulation intends to correct those elements identified as critical in the solution. Hence, our understanding of public policy can not be complete until we comprehend what element influenced the focus of the housing policy.

The key features identified in the official documents as critical in the solution of the Venezuelan housing problem covered demand and supply side characteristics as well as the institutional setting. From the demand side, the accelerated population growth, the excessive concentration in urban centers and the low level of affordability were highlighted as the most critical. From the supply side the magnitude of the deficit, the limitations of the financing and materials resources, inflation and its effects on construction and financing costs, and the lack of experimental research in the production of low cost housing were mentioned as important. It was also mentioned the lack of interinstitutional coordination among public agencies and the lack of complementarity between public and private production. These last drawbacks were not described precisely in the policy. However, it is understood, by "lack of coordination," the doubled efforts over the same project undertaken by two different institutions, the lack of timing in the supply of infrastructural services with the construction of housing units and in general contradictory plans over the same problem between institutions. The term "lack of complementarity" refers to the fact that private developers are encouraged to supply housing units which could eventually compete with those supplied by INAVI and sold at below market prices.

The annual rate of growth of the Venezuelan population is recorded at 3.5%. This very high rate of growth complemented with high concentration in the main urban centers cause an explosive demand for housing and public facilities. To illustrate this point, in 1979, a few urban centers concentrated 75% of the Venezuelan population compared to the 1936 figures that showed only 35% of urban population. According to the same 1979 figures, only 25% of the population lived in towns with less than 5,000 inhabitants. The rapid concentration of population and the lag in the supply of housing and services has caused the explosive development of squatter settlements around the main cities.

The distribution of incomes is very unequal. As it was mentioned before, in 1979, 49% of the Venezuelan households or 904,671 families were below the subsistence level, drawn at an income of 2,000 bolivares per month. For the same year, 68% of the households or 1,527,937 families had incomes lower than 3,000 bolivares per month, consequently they could not afford the units produced and financed by the formal private sector whose average price was above 265,800 Bs[2]. The Chart #2 illustrates the proportion of income a family earning 3,000 Bs/month in 1979 would have to allocate

2. BCV Anuario de Series Estadisticas, Construccion Privada. Precio Premedio de Apartamentos Financiados segun fuente por Regiones Administrativas. Cuadro No. VI - 91, page 369.

to housing consumption given different prices of housing units. It can be observed that to purchase the average unit would require 83% of the 3,000 Bs family income for housing. To purchase a unit costing 100,000 Bs would require spending 33% of the income, which was not considered an exaggerated proportion for a low-middle income family[1]. However, the main problem was that those cheaper units were rarely produced by the private market. A complementary limitation to homeownership was that families with low levels of income can not comply in most cases with the documents required to obtain formal financing. The families with monthly incomes below 3,000 Bs were also out of the market for the finished public housing produced by INAVI, because to be eligible for the single family or multifamily units, a family should demonstrate incomes higher than 3,000 Bs/month.

The policy also identified as critical the limitations of the supply of funds for housing finance, given the competition housing must face in the financial markets with

1. According to Mindur (Direccion de Vivienda), 25% of income spent on housing is an appropriate index to estimate affordability, because it leaves money available for other prior expenses. The 25% expense/income ratio is a rule of thumb applied more or less universally. However, recently, world wide organizations such as AID and The World Bank, have recognized it is a parameter applicable to middle-income but not to low-income families in informal areas which usually spend less than 20% on housing consumption.

CHART No 2

MONTHLY PAYMENTS REQUIRED IN 1979 TO ACQUIRE UNITS FROM THE PRIVATE MARKET

(by a family earning Bs 3,000 of monthly income)

PRICE OF THE UNIT (Bs)	1* LOAN TO VALUE RATIO	2* INTEREST RATE	3* TERM years	MONTHLY PAYMENT	4* PROPORTION OF INCOME REQUIRED	5* MONTHLY INCOME REQUIRED (Bs/month)	6* MONTHLY INCOME REQUIRED , (Bs/month)
100,000	90%	12%	20	990	33%	3,960	2,475
150,000	90%	12%	20	1,487	50%	5,948	3,718
200,000	85%	12%	20	1,871	62%	7,848	4,677
250,000	80%	12%	20	2,202	73%	8,808	5,505
300,000	75%	13%	20	2,477	83%	9,908	6,193
350,000	75%	13%	20	3,114	100%	12,456	7,785

NOTES: 1* According to the housing policy 1974-1979

2* Real interest rate charged for home acquisition in 1979. It includes the so called commissions on balances. "El factor financiamiento en la produccion de la mercancia vivienda en Venezuela". A. Cilento Sardi, page 20.

3* 15 year term was the minimun term allowed in 1979.

4* It considers a monthly income of Bs 3,000.

5* It considers 25% of income for housing consumption.

6* It considers 40% of income for housing consumption.

other uses of funds, and the reduction on the level of savings experienced in the last years caused by higher interest rates offerred in the external financing markets. For these reasons, the policy stated the need to secure an adequate supply of funds to housing by channelling increasing government resources to the housing financing markets.

Other features identified as critical in the housing problem were the excessive increases in land prices, construction, and financing costs. The statement also mentioned the earning of excessive profits due to the control exerted by private groups on land, construction equipment and materials, and construction and long term financing. The lack of interinstitutional coordination among the different public agencies was also highlighted as critical. Consequently, the policy stated the level of cooperation expected between the public sector and the developers should be clearly specified. Similarly, the incentives and regulations to the private sector should be stated clearly to achieve an effective and reasonable participation, compatible with the policy goals.

The Official Institutional Framework

In Venezuela the task of designing, implementing, and administering the housing program is assigned by the executive power to the Ministry of Urban Development (Ministerio

de Desarrollo Urbano, MINDUR). This institution formulates the program which includes the strategy to be followed by the public sector and the set of goals; in addition, it includes the set of norms, incentives, and regulations to be applied to the private sector to orient the production of housing to a more efficient outcome. MINDUR is also in charge of the overall urban development policy for the country, the supply of public buildings and communal facilities, and the programs for community development. The housing program designed by MINDUR must be in accordance with the overall economic development policy formulated in the General Plan under the competence of the Ministry of Planning (CORDIPLAN).

In the field of housing, MINDUR works together with a set of complementary supporting agencies, each of which concentrates on a specific set of problems. The National Institute of Housing (Instituto Nacional de la Vivienda, INAVI) is in charge of the construction and administration of public housing developments for homeownership. These developments are to serve low and low-middle income groups. The housing developments are mostly contracted to private designers and developers under the guidelines and supervision of INAVI. After completion, the units are turned back to INAVI who sells and administers them. INAVI also

administers a program of popular credit to complement its sites and services programs and to assist in home improvement programs developed in informal areas.

The National Fund for Urban Development (Fondo Nacional de Desarrollo Urbano, FONDUR), acts as the official supplier of land and financial resources for the housing market. Its critical function is to guarantee an adequate level of circulation of two important resources, land and mortgage capital. FONDUR's main activities include the purchase and development of land for low cost housing, the refinancing of the mortgage credit institutions, the administration of subsidy programs for buyers of low-cost housing, and the creation of the public-private partnerships to develop low and middle cost housing. The functions of FONDUR are in sum, to act as developer of land for low and middle cost housing and to secure and support financing for the purchase of low and middle cost units.

The Foundation for Community Development (Fundacion para el Desarrollo de la Comunidad, FUNDACOMUN) is concerned with the design and implementation of integral development plans for the squatter settlement areas. Its plans include actions oriented toward social organization of the communities, economic development programs, and home and community upgrading. FUNDACOMUN is also a nationwide institution with

regional branches in the main cities of the country. This institution is in charge of the needs of the lowest urban income group of the Venezuelan population.

The Ministry of Health (MSAS) and its Division of Rural Housing is responsible for the construction of single family units for rural areas. Although its actions are limited spatially[1], its labor has been very effective in producing the lowest cost single family units in the country (without including the land price). Part of its success has been due to the mechanisms adopted for the construction of the units, which is based on small scale contractors and payments by weekly valuations. Unfortunately, the resources assigned to it have been traditionally small due to institutional competition with INAVI.

This set of institutions work together with the private suppliers of housing such as the financing institutions, private constructors and developers, and the suppliers of equipment and materials.

1. The Housing Program for the period 1979-1983 limited the actions of Vivienda Rural to those centers with less than 15,000 inhabitants and located in areas where agricultural development is planned. Even though in exceptional cases, they have been allowed to build in the outskirts of some important cities like Ciudad Guayana and Maracaibo.

The Housing Financial Sector

The main financing institutions intervening in the housing market in Venezuela are the National System of Savings and Loans (Sistema National de Ahorro y Prestano, SNAP), The Mortgage Banks (Banca Hipotecaria), The Financing Societies (Sociedades Financieras) and the Venezuelan Workers Bank (Banco de los Trabajadores de Venezuela, BTV). The National System of Savings and Loans (SNAP) includes public and private institutions and has its own regulations. The system is integrated by the National Saving and Loan (Banco Nacional de Ahorro y Prestamo, BANAP), official bank which has its own patrimony and acts as the central bank of the system, the private savings and loans institutions (EAP) and the Superintendence of Savings and Loans (Superintendencia de Entidades de Ahorro y Prestamo). The BANAP is the central bank in the SNAP assigned to the Ministry of Financing. Its main functions are to give financial assistance to the EAP's and to guarantee the mortgages issued by those institutions. Similarly, BANAP guarantees the savings accounts to companies of individual savers and serves as an overall intermediary for the system.

The EAP are private financing institutions, structured as mutualist societies whose main objective is to promote savings from people and institutions. The superintendence

of Savings and Loans exerts the overall control over the operation of the system.

The Mortgage Banks and Financing Societies are under the regulation of the General Law for Banks and other Credit Institutions. The SNAP and the mortgage banks are the two main components of the housing financing system in Venezuela. In 1979, the SNAP and the Mortgage Banks financed the acquisition of 25,490 units. The SNAP financed 14,492 of the units sold, or 57% at an average price of 263,600 Bs/unit and the average loan to value ratio was of 68%. The same year, the Mortgage Banks financed 10,999 units, or 43% at an average price of 204,500 Bs/unit and an average loan to value ratio of 61%. The same year, 4.6 million Bs in construction mortgages were financed by these two institutions. Out of this total, 2.7 million, or 59%, were financed by the Mortgage banks, the rest, or 1.9 million (41%), were financed by the SNAP.

The financing system in Venezuela leaves out of the formal market a considerable amount of households who simply can not afford the units produced due to the high sales prices and to the financing terms and requirements.

The Housing Policy Approach

The design of the housing policy was approched by classifying the demand in three broad categories, according to the household monthly income level: The first group was identified as those families having monthly incomes lower than 3,000 Bs. The policy stated the housing solutions for this level would be provided by direct government construction in urban and rural areas. The units to be supplied included a variety of solutions from sites and services, core housing, single family housing, multifamily housing, rural housing, and home improvement loans. In order to facilitate the purchase of the solutions, the government would implement special financing programs at below market interest rates and with longer terms. It was also planned to promote the development of community groups who could act as intermediaries to channel the programs of popular credits. The official institutions planned to participate in this group were INAVI, FUNDACOMUN, and MSAS.

The second group included households with income levels between 3,000 and 7,000 Bs/month. For this group, two production approaches would be taken; direct construction by the government, and incentives to stimulate the production by the private sector. Public-Private partnerships would also be encouraged. In addition, regulations would be dictated to secure short and long term financing, and to pro-

vide favorable purchasing conditions. Related to the developers, the incentives will include financing facilities and tax exemptions. Moreover, the government will guarantee the sales of the lowest cost units produced by the public-private partnerships. Related to the financing sector, the government will provide mortgage funds to the system and will guarantee and insure a certain proportion of the long term mortgages. In order to channel the use of funds, the government will also regulate the portfolio composition of the mortgage financing institutions. Incentives to cooperatives, societies, and foundations would also be encouraged to stimulate their participation in the supply of housing units.

The institutions to participate in the housing solutions for the second group were INAVI, through direct intervention and the participation in public-private projects; the SNAP, the Mortgage Banks, and the BTV, through their special financing programs; FONDUR, through the refinancing to the credit institutions' participation in public-private partnerships, and the administration of the subsidy program for the buyers, and last, the private cooperatives and societies. Even though the statistics available for the year 1979 did not classify the income groups under the same categories, it is known that 426,724 families or 19% of the overall population had incomes between 3,000 and 5,000 Bs/month. It can

be assumed that the proportion of households falling within the second target group would have been around 27% of the families in the country.

The analysis of the classification of the demand by the policy suggest important conclusions. First, the conceptualization of the demand by income groups was too simplistic. In analysis of home affordability, more important than the household net earnings is the proportion of resources a family could allocate to housing consumption. This is especially critical for the lower income groups. The proportion of income assigned for housing consumption varies greatly with the level of income, and in the policy this sensitivity analysis was left out. However, in practice, private mortgage institutions apply their own affordability estimation procedures to overcome this weakness of the governmental policy. Hence, the classification of target groups by the policy did not correspond with realistic affordability procedures. Second, the income categories were too broad and they don't include considerations related to future income expectations or upward economic mobility. For instance, the first category could include people employed in the informal sector as well as administrative personnel employed in formal offices. Obviously, from the point of view of affordability and access to resources, both households differ dramatically. Also, in the second group, the classification

could include from typical worker class households to starting professionals. Here again, differences can be dramatic. An additional conclusion is that the classification did not include considerations about family size. This element represents an important consideration in terms of home purchasing capability, unit size and price.

The Policy Programs

The housing policy would be implemented through four big programs; land acquisition and development, housing construction, squatter settlement upgrading, and support to the private sector.

Program 1 - Land acquisition and development. As was mentioned, one of the elements considered a key in the diagnosis of the housing problem was the availability of urban land. Consequently, the policy proposed an ambitious plan of land acquisition and development to provide this resource; not only for the housing developments in the period, but also for future developments. The land was to be acquired with government funds by both INAVI and FONDUR. The first to develop its own housing programs and the public-private programs; the second to secure current and future supplies of urban land to control land speculation. FONDUR would also develop a proportion of the land acquired

to promote the production of units for middle income groups in conjunction with private developers.

The program estimated that in the period 1981-1985, FONDUR would acquire 9,205 Hectares with a total investment of 5,192 million bolivares at an average of 56.4 Bs/square meter. In addition, FONDUR would develop 6,000 Hectares of that land at a cost of 1,551 million Bolivares. INAVI would acquire 8,000 Hectares of land at an average price of 11.5 Bs/square meter and for a total investment of 989 million bolivares. Therefore, INAVI would acquire 1,000 Hectares less than FONDUR and the land would be five times cheaper. The total amount of resources to be invested in the five years by both FONDUR and INAVI would total 7,732 million bolivares[3]. We could consider that most of the resources to be invested by FONDUR in land purchasing and development would benefit middle income families, given the comparative price of the land and the fact that according to the policy design FONDUR housing developments were mainly targeted to middle income groups. Therefore, 87% of the total resources to be invested in land would mostly benefit middle income groups.

3. Componentes Fundamentales de la Politica Habitacional de Venezuela, MINDUR, Noviembre 1982, pages 3.3 and 3.5.

CHART No 3

ESTIMATED INVESTMENT IN LAND ACQUISITION AND DEVELOPMENT

INSTITUTION	HECTARES	INVESTMENT millions of Bs	Bs/Square Meter
FONDUR		6,743	
-Land acquisition	9,205	5,192	56.4
-Land development	6,000	1,551	-
INAVI	8,655	989	11.5
Total investment in land acquisition and development Bs 7,732			

Source: "Componentes de la politica habitacional de Venezuela. MINDUR 1982, pages 3.3 and 3.4.

Program 2 - Housing Construction. With this program, the government tried to maximize the number of solutions produced by INAVI and the Ministry of Health though the Division of Rural Housing. THe program contemplated the construction of various solutions such as single family housing, multifamily housing, rural housing, core units, sites and services, and home improvement loans. The units offerred by these institutions were strongly subsidized with interest rates which varied from 1 to 7% anually and with low expectations of recovery.

The total planned investment by INAVI for the period 1981-1985 was of 16,553 million bolivares for a total of 269,990 housing solutions which included the related services and communal facilities. Of that total, 49,585 housing solutions and 5,152 million or 31% of the resources were to be invested directly into the construction of single and multifamily units affordable only by middle income groups.

MSAS would invest 1,820 million bolivares throughout the period and its production was planned in 74,000 rural units. These units would be built in towns with less than 15,000 inhabitants and were targeted to lower income groups. In addition to the institutions mentioned, two special programs were included in the policy; the construction of the Simon Bolívar Center and the housing for the Corporacion Venezuelana de Guayana or CVG. The Simón Bolívar Centre would build 2,464 multifamily housing units while the CVG would built 5,259 units, of which 4,459 were to be single family and multifamily dwellings. The rest were 800 "housing solutions" of which 600 were serviced lots and 200 home improvement loans[4].

It is interesting to note from Chart #4 that out of the total of units planned for the period, 14% or 56,508 units

4. VI Plan de la Nacion, Cordiplan 1981, pages 118 - 120.

were to be single family units or multifamily units in urban areas. The average price for these types of units built by INAVI were respectively 75,000 Bolivares and 100,000 bolivares and they were not sold to families with incomes lower than 3,000 Bolivares per month. Similarly, 11,576 million bolivares or 43% of the investment in housing solutions would be channeled to these types of units not targeted to low income groups. Therefore, we concluded that a high proportion of the resources was targeted to the second group of the demand, which is contrary to the stated focus of the policy, expressed as stronger emphasis on the supply for lower income groups. We will see later in the analysis of the program 4, how part of the government incentives were channelled into producing housing at similar purchase prices to the single and multifamily units produced by INAVI, but with the difference that the units offered by the public sector enjoyed higher direct subsidies and facilities for credit.

Program 3 - Squatter Settlement Upgrading. This program would be carried out by FUNDACOMUN. The resources assigned for the period 1981-1985 were 1,709 million bolivares which represented 6.5% of the direct resources channelled through the public sector. The low level of concentration of resources in this program is contradictory with the policy's stated goal of concentrating in housing solutions for the

CHART No 4

PROGRAMMED HOUSING SOLUTIONS AND GROSS INVESTMENT:
NATIONAL HOUSING PROGRAM 1981-1985

SECTOR, AGENCY, PROGRAM	NUMBER OF SOLUTIONS	GROSS INVESTMENT million of Bs.
PUBLIC SECTOR	391,423 (58%)	26,506
INAVI	269,990	16,553
- Home improvement loans	49,499	963
- Site and Services projects	92,154	3,812
- Core units	78,752	4,885
- Single Family Housing	41,446	3,894
- Multifamily Housing	8,119	1,258
- Communal Facilities	-	1,741
M.S.A.S. - Rural Housing	74,000	1,820
FUNDACOMUN	39,710	1,709
- Relocation loans	5,321	161
- Home improvement loans	24,299	300
- Home construction loans	10,090	242
- Infrastructure and communal facilities	-	278
- Other programs	-	728
CENTRO SIMON BOLIVAR	2,464	
C.V.G.	5,259	6,424
- Home improvement loans	200	-
- Site and Services	600	-
- Single Family Housing	1,628	-
- Multifamily Housing	2,831	-
PRIVATE SECTOR	272,500 (42%)	-
TOTAL PUBLIC/PRIVATE SECTOR	668,923	-

Source: VI Plan de la Nacion. Cordiplan 1981. Page 117.

lower income groups. In addition, it is contradictory with the concentration of the deficit in urban housing[1].

Program 4 - Support to the Private Sector. This program reflected the concern of the government for the solution of the housing needs of the middle income groups. The content of the policy stated that given the inflationary conditions of the economy, middle income groups were facing serious limitations to purchase housing, consequently, government assistance was imperative.

Government action would be channelled through three subprograms, government assistance and refinancing to the housing sector, stimuli and incentives for constructors and developers, and the subsidy program for the buyers. The policy estimated with the incentives, 277,500[2] units would be produced by the private sector in the five year period or approximately 55,500 units per year. That amount represented 42% of the total expected production. The assistance to

1. According to the survey of squatter settlements carried out by FUNDACOMUN in 1977 (Inventario de Barrios) 4.5 million families, or approximately 50% of the Venezuelan population lived in shacks. This inventory was carried out nation wide in cities with more than 20,000 inhabitants. Also, Alberto Lovera, in his article, "Who Can Have Housing in Venezuela? (Quien puede tener una vivienda en Venezuela)," estimated 55 to 60% of the Venezuelan population was living in squatter settlements in 1979. Revista I.S.C., Septiembre-Octubre 1979.

2. VI Plan de la Nacion Cordiplan, 1981, page 117.

the financing sector included an allocation to FONDUR of 2,400 million bolivares[1] to serve as a refinancing fund for mortgages supplied by the mortgage banks and financing societies. Similarly, 750 million bolivares would be allocated to BANAP to increase the refinancing fund for the mortgages supplied by the savings and loan institutions. The total new injection of funds for refinancing of conventional housing summed 3,150 million bolivares. In additdion, FONDUR would reinsure up to 75% of the loan amount if the mortgage had been already insured.

The incentives to the developers included variable tax exemptions until a maximum of 100% and the availability of 100% construction financing. We could obtain a rough estimate of the foregone tax payments by making some general assumptions. Let's assume an average project with 150 housing units at an average price of 200,000 Bs, the gross earnings would be 30 million bolivares. Assuming net earnings were 25%[2] of gross sales, we would obtain 7.5 million bolivares in net earnings. The tax rate for this amount of earnings is around 40%[3]; consequently, we obtain the tax deduction

1. Programa Nacional de Vivienda, Period 1980-1984, MINDUR, 1980, pages 14 and 16.

2. 25% of net earnings on sale is a conservative return in middle class housing investments in Venezuela.

3. Ley de Impuesto Sobre la Renta. Gaceta Oficial No. 2.277, Extraordinaria del 23 de Junio de 1978, pages 38-42.

would be around 3 million bolivares per project. If the 227,500 units planned to be built by the private sector were constructed and if we roughly consider that they were developed in projects of 150 units each then we would obtain 1,817 projects which multiplied by the 3 million on tax payments per project would total 5,410 million bolivares in tax payments. Assuming only 70% of the projects were tax exempt we would get 3,815 million bolivares in foregone taxes for the country. To give an idea of the magnitude of that amount, a standard lot in an INAVI sites and services project costs 12,000 Bs. and a rural housing unit costs 24,000 Bs. with the foregone taxes the government could build around 300,000 sites and services lots or 150,000 rural houses.

Similarly the subsidy program would establish subsidized interest rates for the buyer. In order to make a rough estimate of the amount of funds the government could expect to channel to the subsidy program, we will assume the purchase of an average unit costing 200,000 Bs. financed by a standard fixed rate mortgage of 179,000 Bs. with a 20 year term and at 17% interest rate. Let's assume the interest rate in charge of the buyer were 7% during an 8 year period in which the government paid to the bank the difference. The monthly amount the government would have to pay would be around 1,200 Bs., the difference between the market monthly pay-

ments, or 2,500 Bs., and the payment assigned to the buyer, or 1,300 Bs. Thus the present value of the stream of payments made by the government would be around 69,000 Bs. per loan. Assuming the government would recover 20%[1] of that subsidized loan from the buyer, the average expense per unit would amount to 55,200 Bs. If we assume the 272,500 units targeted to the private sector were produced, and of those 70% or 179,750 units received and average subsidy, the amount of government funds needed for subsidy payments would amount to 12,400 million bolivares, of that, only 2,500 million bolivares are likely to be recovered.

In sum, the implementation of the main components of Program 4 would require around 19,365 million bolivares of government resources; including in the estimation, 3,150 million for the refinancing program, 3,815 million in foregone tax payments, and 12,400 to support the subsidy program. Of that amount, around 13,715 million or 70% would not be recovered. If we recall gross investment by the public sector in direct government production, oriented toward the lower income groups, was estimated around 26,506 million; we conclude the proportion of public resources oriented toward the production of middle income housing was indeed considerable, even with conservative estimates. This

1. The 20% recovery assumes the buyers would only repay to the government the principal or the principal plus a very low interest charge.

fact is in obvious contradiction with one of the main goals of the policy which was to concentrate resources in the supply of housing for the lower income groups due to the distribution of the deficit.

CHAPTER 3

THE PROGRAM 4 - THE INCENTIVES TO THE PRIVATE SECTOR

We have seen in Chapter 2, the emphasis that the design of the general housing policy placed on the supply of housing for the middle income groups. Here we will analyze in detail the content of the Program 4, which affected directly the supply of units by the private sector. It will be argued first that the range of income groups the Program 4 intended to benefit was too broad given real limitations in resources. Second, that the affordability level of the targeted income groups was overestimated, as a consequence, the prices of the target units were since the beginning too high for the groups they intended to benefit. For this reason, continuous adjustments needed to be introduced in the program. Third, the design features of the program tended to concentrate the production on the higher cost units because the expected benefits of producing the higher cost units were higher and the perceived risks lower. In addition, the policy did not include a complementary feature from the beginning to produce better distributional effects. That feature, a program designed to remove some of the financial restrictions faced by the lower income buyers, appeared as a subsidy program later, in the middle of the period. Fourth, the policy did not consider potential changes in the financing conditions nor potential limitations in government resources. Last, the program did not introduce

any drastic changes in the channels for housing production and it did not really encourage any innovative way of producing lower cost housing by the formal private sector; however, it expected the suppliers to produce great amounts of lower cost housing. For all these reasons, it was likely that a good proportion of the units produced would concentrate on the units the suppliers were comfortable producing, for a market they believed would handle well. It was also likely to expect government resources would not be sufficient to back up the planned production and some adjustments to the regulations would need to be made.

The Initial Regulations

The initial regulations that affected the private production of housing in the period considered were the decree Number 214, of July 27, 1979; the related resolutions of the Ministry of Finance, Number 2744, and Urban Development, Number 48, dated July 30, 1980; and the resolutions of the Venezuelan Central Bank (BCV) of July 31, 1979, November 13, 1979, and May 6, 1980. This set of norms intended to stimulate the formal private sector to provide housing and serviced land for the lower-middle income group of the country. They provided incentives and regulations for the financing, production, and purchasing of the housing units promoted by the decree Number 214. On July 16, 1981, the Program 4 was

complemented with the Decree 1134 which established a subsidy program for homebuyers. Although this subsidy had been announced together with the decree Number 214, it was not formulated until 2 years later. The subsidy program's primary goals were to increase the level of affordability to the homebuyer, to stimulate continuous production of the units promoted, and to implement an innovative mechanism for low-cost housing finance. Later, on March 24, 1982, the subsidy program was modified by the decree 1452, which expanded the coverage of the subsidy to those units financed by any credit institution. In addition, two subsequent modifications were introduced to account for changing conditions in the financial market. FONDUR was designated the institution which would qualify the units eligible for the program.

Chart #5 provides a summary of the main features of the initial regulations, classifying them according to the intended benefits to the developer, homebuyer, and the financing institutions. According to the goals of the housing policy, the emphasis should be in the production of the lower cost units but the range of beneficiaries would cover households earning from 3,000 to 7,000 bolivares in monthly income. Consequently, in the formulation of the incentives, the degree of benefits was planned to increase with the decrease in the sale price of the units produced and purchased. However, some of the benefits were equally assigned for all

CHART No. 5

INITIAL GOVERNMENT REGULATIONS AFFECTING THE PRIVATE HOUSING MARKET IN VENEZUELA. PERIOD 1979-1983

HOUSING UNITS CHARACTERISTICS 1°			INCENTIVES TO THE DEVELOPER				BENEFITS TO THE BUYERS			INCENTIVES TO FINANCING INSTITUTIONS				REGULATION FOR PORTFOLIO COMPOSITION
Category	Price of Primary Sale 2°	No Min. of Bdrms	Income tax exemptions 3°		% Minimum of Construction Financing	% of Maximum Mortgage Credit	% of Minimum long term Financing	% of Maximum Mortgage Credit	Term of Financing	Refinancing by FONDUR 5°	Tax Exemptions		Mortgage Insurance and Reinsurance	Resolution of the BCV July 27, 1979 Funds 6°
			Sales	Rent							Land development and Land purchase	Adquisition of served lots		
A	Until Bs. 100,000 also until Bs. 85,000 single fam. units when	2 or 1 growing to 2	100%	100% for 10 years counted from the issuance of the occupation permit	100% of land development and construction cost. It excludes land purchasing. Except in the case of public-private programs or land development programs	95% of Bank valuations	90% of the sale price	95% of the Bank valuation	Between 15 and 25 years unless otherwise declared by the buyer	100% of the credits for purchase of housing	100% tax exemption over the interest earnings for concept of financing of land purchase and land development of site and services projects carried out by FONDUR and INAVI Condition: Minimum financing 65% of security value Selling serviced land to FONDUR and INAVI the developers will also get the 100% tax exemption	100% tax exemption over the interest earnings for concept of financing the acquisition of lots sold by FONDUR or INAVI Condition: the minimum financing must be 65% of the security value with a three year term	When maximum financing is granted FONDUR will reinsure the amount financed by the mortgage institution over 75% of the sale price if the mortgage has been already insured	At least 30% of the mortgages issued by the financing institutions must be oriented toward the financing of this kind of units.
B	Until Bs. 150,000 and until Bs. 200,000 in Caracas Metropolitan area	2	75%. or 100% if 3 Bdrm			95% of Bank valuations	90% of the sale price	95% of the Bank valuation						
C	Bs 151,000 to Bs 200,000 and Bs 250,000 in Caracas Metropolitan area.	3	60%			90% of Bank valuations	85% of the sale price	90% of the Bank valuation		75% of the credits for purchase of housing				
D	Bs. 201,000 to Bs. 250,000	3	50%			85% of Bank valuations	80% of the sale price	85% of the Bank valuation		50% of the credits for purchase of housing				The difference between the proportion of mortgages financing units under Bs. 200,000 and units under Bs. 350,000 must sum up 60 % of the institution share of mortgages
E	Bs. 251,000 to Bs. 350,000	4	20%			75% of Bank valuation.	75% of the sale price	75% of the Bank valuation						

It includes:
- Decree No 214 of July 27, 1979
- Joint Resolution of the Ministry of Financing and Urban Development of July 30, 1980
- Resolution of the Venezuelan Central Bank of July 31, 1979; November 13, 1979 and May 6, 1980.

1° The qualification of the units and the supervision of the projects done by FONDUR.

2° Primary sale is understood as that which takes place for the first time, after the issuance of the occupation permit. The elaboration of the sales document shall take place after the official date of the decree No 214 to be able to qualify.

3° Subject to the developer getting for the buyer a loan at least for the amount required in the decree and for a term between 15 and 25 years.

4° In the case the developer is a partnership every partner will enjoy the benefits of 100% tax exemption for concept of sales.

5° FONDUR will acquire from the banking institutions securities with mortgage guarantee.

6° This financing includes land development and unit construction and purchasing and was required from mortgage banks and financing societies.

sales prices. As we recall from Chapter 2, the inclusion in the Program 4 of that range of households had only left out the highest 5% of the households in the country, leaving 95% of the population to be beneficiaries. We can argue that any policy that pretends to be so universal in scope is running the risk of either diluting too much its effects, or failing to benefit some of the groups, given the magnitude of the needs and the limited resources for housing. Thus, the importance of setting priorities or targeting realistically the programs.

We can observe from Chart #5, that the Program 4 classified the benefits of the regulations according to two variables; the price of the primary sale and the number of bedrooms. These two variables combined pretended to orient the production toward those units with the lowest cost but taking into account the unit size; thus they intended the units produced matched the concentration of the demand and the characteristic household size. However, while a relation with the number of bedrooms is necessary, without a restriction of room size, it is likely a reduction in room dimensions would take place in order to locate the units within the scope of the policy, and thus to benefit from it.

Related to the target price level we observe the range of prices went from less than 100,000 bolivares to 350,000 bolivares. This broad range was a consequence of the con-

cern of the housing policy to secure an appropriate housing supply for the middle income groups. As we recall from Chart #2, to afford a unit whose price was 100,000 Bs, an income of 3,960 Bs/month was required. The equivalent income for a unit costing 350,000 Bs was 12,456 Bs/month. In a few words, since its conception the program had the potential of not producing units affordable by the lower income groups within the scope of the program and of producing units for income groups higher than those targeted by Program 4. This holds true considering the financial conditions did not change, which by the way, was very unlikely. However, this conclusion is valid if we use for the estimation of affordability the expense income ratio of 25%, considered by Mindur as appropriate. In the policy document, it is not stated what expense income ratio was considered in the design of the programs; but later on, when the subsidy program was implemented, it was stated the subsidy would be calculated using a 40% expense income ratio. Chart No. 2 also illustrates that using 40% as the ratio, the target household group could theoretically afford the units. Nevertheless, we know the ratio of 40% would be to high a financial compromise for many families.

The location factor within the city boundaries was a variable not considered in the design of the policy. The only locational consideration refers to an allowance for a

price increase in the units produced in the Caracas Metropolitan Area. This allowance tried to consider higher land prices in the capital city. We could argue the ignorance of locational factors could have a big impact on the location of units for speculative reasons. It could cause that given the perceived protection by the policy, market considerations were unterestimated and generation of higher priced units in inconvenient or inappropriate areas would take place.

The Incentives to the Developer

Two variables were used, the income tax exemptions and the availability of short term and long term financing. The feature the policy stressed was the role of the tax exemption because this variable was the one graded according to the price of the unit produced. The income tax exemption over net earnings from the sale ranged from 100% exemption for category "A" to 20% for "E", therefore the variation in tax exemption varied dramatically. On the other hand, 100% construction financing was planned to be available for all types of units. Land financing was excluded from the regulated construction financing, and construction loans would not be given to projects developed on land with any kind of lien associated with it. The policy did not change the interest rates for short and long term financing. By 1979, the interest rates were regulated at 16% for construction

financing, 12% for the purchase of units with sales prices below 250,000 Bs, 13% for units between 250,000 Bs and 350,000 Bs, 14% for units between 350,000 Bs and 500,000 Bs, and 16% for those units with sales prices above 500,000 Bs. In the non-regulated market, tax exemptions were not available to the developer. Even though in the tax law, the tax rates vary according to the amount of declared net earnings, we could assume an average tax rate of 35%[1]. Similarly, the maximum short and long term financing obtainable from the SNAP, mortgage banks, or financing societies was 75% of the bank valuation, and the maximum mortgage term was 25 years[2].

We can assume that given the incentives, building within the regulated market was very attractive because 100% construction financing was available, tax payments were reduced, and the loan to value ratios for long term financing were higher. Building outside the regulated market, we could infer, would continue being attractive for developers with

1. Ley del Impuesto sobre la Renta, Gaceta Oficial No. 2277, extraordinaria del 23 de Junio de 1978. Page 38. It considers an average building with 24 apartments at a sales price of 500,000 Bs per unit and a return of 25% on sales.

2. Normas de Operacion del Sistema de Ahorro y Prestamo, Gaceta Oficial No. 2755 Extraordinario, 17 de Marzo de 1981, and Ley General de Bancos y Otros Institutos de credito, Gaceta Oficial No. 1742 Extraordinario, del 22 de Mayo de 1975.

capital assets and in those cases where the expected profits would compensate for the tax payments. For this kind of investments to be attractive, another condition would be necessary; high confidence in the marketability of the units because of a riskier and smaller market.

Within the program; it is very likely the combination of these variables would influence the production by increasing the construction of the higher cost units (opposite outcome from that planned in the policy) because of three reasons. First; even though the policy also graded, the availability of long term financing and loan to value ratio, according to the sales price, the developers know of the restrictions the formal financing system places on the granting of credits for low or lower-middle income groups. Therefore, given the perceived higher uncertainty on sales, the developers would tend to concentrate on those buyers for whom the obtention of long term financing were more secure. Anyhow, the availability of long term financing for the more expensive units was also contemplated in the policy. Second; public housing programs also produced housing units at similar prices to categories "A" and "B" of Program 4 and those public units enjoyed much more competitive selling conditions[1]. Thus, the developers could fear their projects could not have such

1. The interest rates for the acquisition of public housing varied from 1 to 7 percent, with a mortgage term of 30 years.

high demand given the expectations offerred by public housing. Third, the taxable income is calculated by subtracting from gross income or sales revenues the expenses or costs incurred; the more expensive the units produced, the more likely fictitious accounting expenses can be added. Therefore, the higher potential for decreasing artificially the taxable income. In addition, the potential for higher returns is greater in the more expensive units because in that level, buyers are willing to pay on the margin more for perceived better amenities whose costs can be inflated easily; for instance, imported finishings. In summary, even if the tax exemption rate was greater the cheaper the units and the regulated proportion of long term financing was higher, the production of more expensive units could more than compensate for the tax rates. These three reasons together with the important fact that construction financing was available 100% for all kinds of units, which reduced equity requirements to the owning of land, and knowing the critical role financing plays in construction, it was likely to expect a concentration of production on the higher cost units. An additional consideration is that the restrictions to issue mortgages to finance land acquisition would place an advantage on those big developers in control of the land. This likely consequence was in contradiction with a goal stated very generally of encouraging housing production by small developers and of reducing the monopoly of construction resources by few developers.

The Benefits to the Buyer

The initial benefits to the buyer consisted of increasing the minimum loan to value ratio according to the units' sale price and requiring a minimum loan term of 15 years. The idea was to reduce at maximum the required downpayment and the monthly payments. Both measures intended to regulate the mortgage conditions to make the units produced more affordable to the target groups. Initially, the benefits to the buyer did not include considerations related to the interest rate and did not consider mortgages instruments other than the standard fixed rate mortgage.

The Chart No. 6 expresses the monthly payments required to purchase the units with the initial regulations of Program 4, and the monthly incomes required from the household assuming the proportion of incomes assigned to housing consumption were 25% and 40%. From the chart we observe that the range of monthly incomes required with 25% expense/income ratio did not match with the targeted income groups of the program. Monthly incomes higher than 4,000 Bs were necessary to purchase the cheapest units in contrast with the 3,000 Bs/month expressed by the policy. Similarly, the last two housing categories were not affordable by households with less than 12,000 Bs/month in contrast with the highest income group the program intended to benefit, whose income

CHART No 6

LEVELS OF INCOME REQUIRED TO AFFORD TARGETED HOUSING UNITS
(financing conditions according to decree No 214)

HOUSING CATEGORY	PRICE OF PRIMARY SALE (000's Bs)	MINIMUN LOAN TO VALUE RATIO	LOAN AMOUNT (Bs)	DOWN PAYMENT (Bs)	MINIMUN LONG TERM FINANCING	1* INTEREST RATE	MONTHLY PAYMENTS (Bs)	2* MONTHLY INCOME REQUIRED	3* MONTHLY INCOME REQUIRED
A	Until 100	90%	90,000	10,000	15 yrs.	12%	1,080	4,320	2,700
B	101 to 150	90%	135,000	15,000	15 yrs.	12%	1,620	6,481	4,050
C	151 to 200	85%	170,000	30,000	15 yrs.	12%	1,620	6,481	4,050
D	201 to 250	80%	200,000	50,000	15 yrs.	12%	3,150	12,602	7,875
E	251 to 350	75%	262,5000	87,000	15 yrs.	13%	3,321	13,285	8,303

NOTES: 1* Effective Market Interest Rate by December 1979.

2* 25 percent was considered in Venezuela to be the maximun proportion of income a family should expend in housing consumption.

3* It considers 40% of expense/income ratio.

should not exceed 7,000 Bs/month. Using 40% for expense/income ratio, we observed families with 3,000 Bs of monthly income could afford the cheapest units "A", however even with this high ratio, the last category "E" was out of reach for families earning 7,000 Bs/month. For all these reasons, it is not surprising that later the government implemented a subsidiy program to make the units produced affordable by the planned groups.

The Incentives to the Financing Institutions

In order to assure there would be enough supply of construction and long term credit for the target units, incentives and controls for the mortgage financing institutions were included in the program. The regulations which intended to have distributional effects on the kind of units produced were the proportion of mortgages refinanced, and the restriction on portfolio composition. The refinancing program established that FONDUR would acquire from the banking institutiosn securities from those loans issued with a mortgage guarantee. A higher proportion of mortgages would be refinanced, the lower the purchase price of the unit financed. The loans to finance the acquisition of units "A" and "B" would be refinanced by FONDUR in 100%, the loans to finance the purchase of units "C" would be refinanced 75%, while only 50% of the loans to purchase units "D" would be refinanced.

The restrictions on portfolio composition tried to secure that at least 30% of the mortgage loans would finance units whose purchase prices was 205,000 Bs or lower and that at least 60% of the loans issued by the mortgage institutions would finance the program target units. Given the design of this regulation without specific loan proportions per housing category, and knowing the restrictions the buyers of the cheaper units faced in the formal financing markets; it was likely to expect the credits would concentrate on those loan applications with lower probability of default and on those buyers able to meet the credit requirements.

In order to implement this portfolio regulation periodic check ups were scheduled. In case the institutions had not complied, an amount equal to the difference should be deposited in the Venezuelan Central Bank (BCV) until the right proportion of credits were issued, then the deposit would be refunded. The additional incentive, the tax exemptions, were only granted for the financing of land purchasing, development, and acquisition for sites and services projects; not for the construction or purchasing of finished units.

The design of the refinancing program and portfolio restrictions were based on a set of assumptions. FONDUR will have enough funds to refinance the mortgages issued;

the financing conditions would allow the financing institutions to issue that kind of mortgage; the financing institution would be willing to issue mortgages for the cheaper units; and the target units would be produced by the developers. Until what extent these assumptions were valid is something we will explore in Chapter 4.

The New Regulations and the Regulations for the 1974-1978 Period

The policy for the 1974-1978 period is summarized in Chart No 7. Comparing the benefits to the developers with those offerred in the 1979-1983 period, we find the following similarities and differences. The range of sales prices covered by the 1974-1978 policy was smaller. That policy only considered four categories, from units costing less than 75,000 Bs to units costing 250,000 Bs. Prices for the 1979-1983 period were raised compared to those of 1974-1979 to account for inflation, and a fifth category was included. Tax exemptions in the old regulation were also graded according to the sales price. The production of the first two categories entitled the developer to 100% tax exemption, the last category was entitled to a 50% tax exemption. Thus, the tax exemption scheme was similar for both periods. Construction financing was the same, all categories were entitled to 100% construction financing, but opposite to the 1979-1983 period, 80% land financing was

CHART No 7

GOVERNMENT REGULATIONS AFFECTING THE PRIVATE HOUSING MARKET IN VENEZUELA. PERIOD 1974-1979.

HOUSING UNITS CHARACTERISTICS			INCENTIVES TO THE DEVELOPER			INCENTIVES TO THE BUYER			INCENTIVES TO FINANCING INSTITUTIONS	REGULATION FOR PORTFOLIO COMPOSITION
PRICE OF PRIMARY SALE	No MINIMUN OF BEDROOMS	MINIMUN AREAS 1°	INCOME TAX EXEMPTIONS		% OF MINIMUN CONSTRUCTION FINANCING	INTEREST RATES	% OF DOWNPAYMENT BORROWED FROM THE GOVT. WITH 2nd MORTGAGE	% MINIMUN LONG TERM FINANCING	TAX EXEMPTIONS OVER INTEREST EARNINGS 3°	
			SALES	RENT						
Until 75,000	2 or more	60 sq m	100%	-	80% of land purchase. 100% of land development and construction financing.	8.25%	20% of the downpayment	75% of sales price	100%	At least 25% of the mortgages issued by the financing institutions must be oriented toward the financing of this kind of units.
Until 115,000	3 or more	70 sq m	100%	-	80% of land purchase and land development. 100% construction financing.	8.25%	20% of the downpayment		100%	
Until 150,000	2 or more	60 sq m	75%	100%	60% land development. 100% construction financing.	9%	20% of the downpayment		75% 4°	
Until 250,000	3 or more	70 sq m	50%	100%	Not specific.	9.25%			50% 5°	25% of the mortgages issued.
Until 500,000										In addition to the previous percentages 25% of mortgages should finance units with a price lower than Bs 500,000

It includes: - Instruccion Presidencial No 12.
- Decree 1540 and complementary resolutions.
- Law that modifies the SNAP and other Banks.

The housing units should receive financing for purchase for at least 15 year. (Between 15 and 25 years).

Additional Regulations: The financing for the units not qualified by the decree could not obtain financing higher than 2,000 Bs/sq m. or 70% of the bank valuation. In addition only projects within the decree could get mortgages to purchase land or to built on land with liens.

The decree 2228 dictated in 1977 established two mechanisms to control the sales price of the units produced:

- The sales prices can not be higher than 30% of the valuation price fixed by the bank which provided the construction financing.
- In resale operations the price can not be higher than the original price plus 15% of annual increase.

1° - Minimun areas for social interest housing. It includes only the areas fixed for multifamily units for comparison purposes.

2° - On August 4, 1978 the interest rates were raised to 9.75%, 10% and 10.25% respectively. Qualification and supervision of projects to be done by FONDUR. These rates do not include commissions on balances which by 1979 were at 2%.

3° - Tax exemptions over the interest earnings for concept of land adquisition, land development and construccion financing provided the mortgages are issued at the preferential rates fixed by the regulations.

4° - It does not include tax exemptions for financing of land purchase.

5° - It does not include tax exemptions for financing of land purchase and land development.

available for the first two categories. Another variation was that while in the 1979-1983 governmental period, land development was 100% for all categories, the 1974-1978 policy graded it in 100%, 80%, 60%, and market rate from the cheapest to the most expensive category. Therefore, equity requirements on land were lower in the 1974-1978 policy, and land and land development financing were graded according to the sales price.

The long term financing was set at 75% of sales price for all categories, while in the 1979-1983 policy, long term financing ranged from 95% of the sales price for the cheapest unit to 75% of the sale price for the most expensive one. However, a refinancing program was not included in the 1974-1979 program, thus, we could assume the uncertainty of lower-income buyers obtaining financing was higher in the 1974-1978 period even though portfolio regulations and tax exemptions for the financing institutions did exist. Tax exemptions different from the 1979-1983 policy were allowed for the financing institutions over the interest earnings for home acquisition loans, while in the 1979-1983 period, the tax exemptions for the financing institutions tried to encourage the loans for land acquisition and land development for sites and services projects. The portfolio regulations in both periods lumped the lowest categories together. An additional important difference was that the program for the 1974-1978 period established that FONDUR

would acquire the regulated units not sold within a two year term. The purchase price would be 95% of the sales price and the purchase would occur with the condition that the units would have no identifiable marketability weaknesses, such as inappropriate location, reduced size, etc. This incentive could have influenced the perceived risks for marketing the units. It was also included that in case the buyer failed to pay for a term longer than 6 months, FONDUR or INAVI would return to the financing institution 85% of the principal mortgage balance.

The Subsidy Program

The subsidy program, or decree Number 1134, dictated on July 16, 1981, consisted of a government loan without interest for an amount large enough to cover the difference between the market monthly payments on the loan and the maximum monthly payments established by the subsidy. The Fondo Nacional de Desarrollo Urbano (FONDUR) was designated the administrator of the program and would also be the holder of the secondary mortgage. The private financing institution would hold the primary mortgage. According to the program, once the term of the subsidy is over, the beneficiary should pay the full market monthly payments and in addition, would return to FONDUR the subsidy in monthly installments, but

without interest charges. The subsidy program assumed continuous future increases in income by the buyer which would enable him to fully afford the growing payments on the loan, and the subsidy repayments.

Even though the implementation of the subsidy program was planned since 1979 to complement the program 4, it appeared only one month before the liberation of the interest rates. The changes in the control of the interest rates undoubtedly worsened the financing conditions for housing acquisition. After the 25th of August of 1981, when the mechanism of discretional control was substituted by a system of floating interest rates, the rates for home acquisition increased to 17%. Construction financing went from 17.5% at the beginning of 1981 to 19.5% at the end of 1981. We could speculate about the time coincidence of the two regulations by saying the subsidy tried to avoid even more stringent conditions for the purchase of the housing units and intended to facilitate the sale of the units already produced. Chart No. 8 illustrates the monthly payments and income level required to purchase the target units considering 25% and 40% of expense/income ratio, if the subsidy program hadn't been implemented. We can see how the purchase of the units would have become impossible by an even larger proportion of the Venezuelan households. According

CHART No 8

LEVELS OF INCOME REQUIRED TO PURCHASE TARGETED HOUSING UNITS
(financing conditions without subsidy in 1981)

HOUSING CATEGORY	PRICE OF PRIMARY SALE (000'sBs)	MINIMUN LOAN TO VALUE RATIO	LOAN AMOUNT (Bs)	DOWN PAYMENT (Bs)	MINIMUN LONG TERM FINANCING (years)	INTEREST RATES	MONTHLY PAYMENTS (Bs)	1* MONTHLY INCOME REQUIRED	2* MONTHLY INCOME REQUIRED
A	Until 100	90%	90,000	10,000	15	17%	1,385	5,540	3,462
B	101 to 150	90%	135,000	15,000	15	17%	2,078	8,311	5,195
C	151 to 200	85%	170,000	30,000	15	17%	2,616	10,465	6,540
D	201 to 250	80%	200,000	50,000	15	17%	3,078	12,312	7,695
E	251 to 350	75%	262,500	87,500	15	17%	4,040	16,160	10,100

NOTE: 1* It assumes 25% of income channeled to housing consumption.
2* It assumes 40% of income channeled to housing consumption.

to the statistics of the OCEI[1] in the first semester of 1981 only 554,330, or 23%, of the total households in the country had incomes higher than 5,000 Bs/month. Thus, the families could theoretically afford those units without subsidies, or without increasing the proportion of the expense/ income ratio.

The subsidy established that the conditions would be more favorable for the cheaper units. The repayment of the subsidy will be calculated in growing amounts by FONDUR in on a case by case basis. The basic variables which would regulate the subsidy were:

- The inital interest rate in charge of the buyer which will be valid only for the first year of the mortgage loan.
- At least 1% yearly increment in the initial interest rate to reach the market rate. This increment would be decided by FONDUR.
- The term of the subsidy, which would vary with the unit's primary sale price.
- The term for repayment of the subsidy. This term should not exceed the term for the repayment of the first mortgage and it would start the year following the end of the subsidy.

1. Oficina Central de Estadistica Informatica (OCEI). Encuesta de Hogares por Muestreo. Primer Semestre, 1981.

- The minimum term the private financing institutions should concede for the repayment of the first mortgage, set at 15 years.

The subsidy also established among the requirements to qualify for the program the following:

- Lack of adequate housing.

- To have a stable monthly income of at least 2 1/2 times the amount of the monthly payments during the first year of the subsidy.

- To be Venezuelan or to have lived in Venezuela for more than 5 years with one's family.

- Availability of the downpayment and incedental expenses[1] to complete the documents without the need to incur additional financial compromises.

- To have signed the documents where the mortgage bank has agreed on the credit terms.

In a complementary resolution between the Ministry of Financing and the Ministry of Urban Development, the variables to regulate the subsidy were established as indicated in Chart No. 9.

1. These incidental expenses include fire and life insurance, as well as legal and adminstrative fees.

CHART No 9

VARIABLES TO REGULATE THE SUBSIDY PROGRAM

HOUSING CATEGORY	INITIAL INTEREST RATE	TERM OF THE SUBSIDY	MINIMUN TERM OF PRIMARY MORTGAGE
A	5%	10 years	20 years
B	6%	9 years	20 years
C	7%	8 years	20 years
D	9%	7 years	15 years
E	11%	6 years	15 years

Again, as the overall goals of the policy expressed the benefits of the subsidy were planned to be greater the lower the price of the unit purchased, in terms of subsidized in terest rates, duration of the subsidy, and term for repayment of the first mortgage. Similarly, those benefits intended to facilitate the purchase of the units by reducing the monthly payments in charge of the buyer and by spreading the repayment of the loan over the years.

Chart No. 10 depicts the monthly income required to purchase the units targeted by the decree #214 with the financing conditions established by the subsidy. We observe how the subsidy changed potentially the range of households

CHART No 10

LEVEL OF INCOME REQUIRED TO PURCHASE TARGET UNITS
(According to features of Subsidy program, year 1981)

HOUSING CATEGORY	PRICE OF PRIMARY SALE (000's Bs)	MINIMUM LOAN TO VALUE RATIO	MINIMUM LONG TERM FINANCING (years)	MARKET RATE 1*	INITIAL INTEREST RATE 2*	SUBSIDIZED INTEREST RATE (First year)	TERM OF SUBSIDY (years)	LOAN AMOUNT (Bolivares)	TOTAL MONTHLY PAYMENTS (Bs)	FIRST YEAR PAYMENTS DONE BY GOVT.	FIRST YEAR PAYMENTS DONE BY BUYER	MINIMUM MONTHLY 3* INCOME REQUIRED (Bs/month)	MINIMUM 4* MONTHLY INCOME
A	Until 100	90%	20	17%	5%	12%	10	90,000	1,320	726	594	1,485	2,376
B	101 to 150	90%	20	17%	6%	11%	9	135,000	1,980	1,013	967	2,418	3,868
C	151 to 200	85%	20	17%	7%	10%	8	170,000	2,494	1,176	1,318	3,295	5,272
D	201 to 250	80%	15	17%	9%	8%	7	200,000	3,078	1,050	2,028	5,070	8,112
E	251 to 350	75%	15	17%	10%	7%	6	262,500	4,040	1,219	2,821	7,053	11,284

NOTES:

1* Market interest rate for home purchase in 1981.

2* It was estimated to increase at least 1 percent yearly and it will be determined by FONDUR.

3* The subsidy established the monthly income should be higher than 2 1/2 times the monthly payment made by the buyer in the first year, or in other words it allows the payment to be 40% of the income.

4* It estimates 25% of monthly income for housing consumption.

who could afford the units. From Chart No. 8, we observed that only families with incomes higher than 5,500 Bs could afford the units without a subsidy to cover an expense/income ratio of 25%. With an expense/income ratio of 40%, the minimum theoretical level of affordability included families with more than 3,400 Bs in monthly income. In principle, the subsidy reduced the income requirements to 1,500 Bs/month; but it allowed to increase the proportion of declared incomes channelled to housing to 40%. That proportion represents a serious burden in any family budget and becomes even more critical the lower the monthly income. Therefore, we can assume that many families regardless of the highly subsidized interest rate would not be willing to undertake such a financial compromise. However, estimating the household monthly income using 25% of income for housing consumption with the subsidy program, we observe the minimum monthly income would be 2,400 Bs, thus lower than the 3,000 Bs target income group. In summary, the subsidy tried to match the real range of income groups benefited from the program with the originally targeted income groups.

Charts No. 11 - 13 develop the schedule of payments in charge of the buyer and government for housing categories "A", "C" and "E". We see how the monthly payments would increase during the life of the subsidy an average of 16.5% annual for units "A", 13% for units "C", and 7.7% for units "E". The question to ask becomes whether the households

with those incomes could really expect such a continuous high increase in their monthly earnings, knowing there is no evidence in the Venezuelan history of such a sustained growth in income. Even more, the average increases in income would need to be higher for the households with lower earnings, which in general is very unlikely. Therefore, even with the heavy subsidies, the units were too high in price for the affordability level of the households. Consequently, two outcomes were likely. One that the government would need huge amounts of resources to target the units produced and second that even if the right kind of units got produced and financed, many of the targeted households would not be willing to acquire the financial compromise.

The first modification to the subsidy was the decree 1452 dictated on March 29, 1982, and published in the government journal on March 30, 1982. This decree established the subsidy could be extended to those units which had more than 2 bedrooms and whose prices of primary sale were within the limits established by the decree 214 even though the construction of those units had not been financed by the SNAP, Mortgage Banks, or Financing Societies, the institutions targeted by the Decree 214. Thus, the extension included commercial banks and any other credit institution. The modification was valid only for the units built

CHART No 11

REPRESENTATIVE SCHEDULE OF PAYMENTS WITH THE SUBSIDY
FOR UNITS A

YEAR	LOAN BALANCE	AMORTIZATION			PAYMENT BY GOVT	PAYMENTS BY BUYER TO			BUYER MONTHLY PAYMENT (total)	INTEREST RATES
		INTEREST	PRINCIPAL	TOTAL		BANK	GVT	TOTAL		
1	90,000	15,256	584	15,840	8,712	7,128	0	7,128	594	5%
2	89,416	15,148	694	15,840	7,942	7,898	0	7,898	658	6%
3	88,724	15,021	819	15,840	7,090	8,750	0	8,790	733	7%
4	87,906	14,871	969	15,840	6,202	9,638	0	9,638	803	8%
5	86,936	14,693	1,148	15,840	5,569	10,271	0	10,271	855	9%
6	85,788	14,482	1,359	15,840	4,630	11,210	0	11,210	934	10%
7	84,430	14,232	1,608	15,840	3,644	12,196	0	12,196	1,016	11%
8	82,822	13,936	1,904	15,840	2,610	13,230	0	13,230	1,103	13%
9	80,918	13,586	2,254	15,840	1,267	14,573	0	14,573	1,215	15%
10	78,664	13,171	2,669	15,840	602	15,238	0	15,238	1,269	16%
11	75,995	12,680	3,160	15,840	0	15,840	0	15,840	1.320	17%
12	72,835	12,099	3,741	15,840	0	15,840	5,361	21,203	1,767	17%
13	69,095	11,412	4,480	15,840	0	15,840	5,361	21,203	1,767	17%
14	64,666	10,597	5,242	15,840	0	15,840	5,361	21,203	1,767	17%
15	59,423	9,633	6,207	15,840	0	15,840	5,361	21,203	1,767	17%
16	53,217	8,492	7,348	15,840	0	15,840	5,361	21,203	1,767	17%
17	45,868	7,141	8,700	15,840	0	15,840	5,361	21,203	1,767	17%
18	37,169	5,541	10,299	15,840	0	15,840	5,361	21,203	1,767	17%
19	26,870	3,647	12,193	15,840	0	15,840	5,361	21,203	1,767	17%
20	14,676	1,404	14,435	15,840	0	15,840	5,361	21,203	1,767	17%

- Price of Primary Sale: Bs 100,000
- Loan amount: Bs 90,000
- Market Interest Rate: 17%
- Initial Subsidize Rate: 5%
- Total increase in monthly payments in the first twelve years 197 %. Average annual increase 16.5 %.

Thesubsidy established the repayment would be made in increasing amounts begining one year after the end of the subsidy. FONDUR would determine the rate of increase and the initial repayment amount on a case by case basis.

Here, the repayment was distributed evenly during the remaining term of the first mortgage.

CHART No 12

REPRESENTATIVE SCHEDULE OF PAYMENTS WITH THE SUBSIDY

FOR UNITS C

YEAR	LOAN BALANCE	AMORTIZATION			PAYMENT BY GOVT	PAYMENTS BY BUYER TO			BUYER MONTHLY PAYMENT (total)	INTEREST RATES
		INTEREST	PRINCIPAL	TOTAL		BANK	GOVT.	TOTAL		
1	170,000	28,816	1,112	29,928	14,112	15,816	0	15,816	1,318	7%
2	168,888	28,612	1,316	29,928	12,610	17,317	0	17,317	1,443	8%
3	167,572	28,369	1,559	29,928	11,097	18,831	0	18,831	1,569	9%
4	166,013	18,083	1,845	29,928	9,584	20,344	0	20,344	1,695	10%
5	164,168	27,744	2,185	29,928	8,081	21,847	0	21,847	1,821	11%
6	161,983	27,342	2,586	29,928	6,599	23,329	0	23,329	1,944	12%
7	159,397	27,866	3,062	29,928	5,153	24,775	0	24,775	2,064	13%
8	156,335	26,303	3,625	29,928	2,533	27,395	0	27,395	2,283	15%
9	152,710	25,637	4,291	29,928	0	29,928	0	29,928	2,494	17%
10	148,419	24,847	5,081	29,928	0	29,928	6,976	36,905	3,075	17%
11	143,338	23,913	6,015	29,928	0	29,928	6,976	36,905	3,075	17%
12	137,323	22,807	7,121	29,928	0	29.928	6,976	36,905	3,075	17%
13	130,203	21,498	8,430	29,928	0	29,928	6,976	36,905	3,075	17%
14	121,772	19,947	9,981	29,928	0	29,928	6,976	36,905	3,075	17%
15	111,791	18,112	11,816	29,928	0	29,928	6,976	36,905	3,075	17%
16	99,975	15,939	13,989	29,928	0	29,928	6,976	36,905	3,075	17%
17	85,986	13,367	16,561	29,928	0	29,928	6,976	36,905	3,075	17%
18	69,425	10,321	19,607	29,928	0	29,928	6,976	36,905	3,075	17%
19	48,818	6,716	23,213	29,928	0	29,928	6,976	36,905	3,075	17%
20	26,605	2,447	27,481	29,928	0	29,928	6,976	36,905	3,075	17%

NOTES:

- Price of Primary Sale: Bs 170,000
- Loan Amount: Bs 170,000
- Market Interest Rate: 17%
- Initial Subsidized Rate: 7%
- Total increase in monthly payments in the first ten years 133%. Average annual increase 13%

The subsidy established the repayment would be made in increasing amounts begining one year after the end of the subsidy. FONDUR would dtermine the rate of increase and the initial repayment amount on a case by case basis.

Here, the repayment was distributed evenly during the remaining term of the first mortgage.

CHART No 13

REPRESENTATIVE SCHEDULE OF PAYMENTS WITH THE SUBSIDY

FOR UNITS E

YEAR	LOAN BALANCE	AMORTIZATION			PAYMENT BY GOVT.	PAYMENTS BY BUYER TO			BUYER MONTHLY PAYMENT (total)	INTEREST RATES
		INTEREST	PRINCIPAL	TOTAL		BANK	GOVT.	TOTAL		
1	262,500	44,310	4,170	48,480	14,630	33,850	0	33,850	2,821	10%
2	258,330	43,547	4,937	48,480	12,240	36,240	0	36,240	3,020	11%
3	253,393	42,635	5,845	48,480	9,903	38,577	0	38,577	3,215	12%
4	247,548	41,561	6,920	48,480	7,646	40,834	0	40,834	3,403	13%
5	240,629	40,288	8,192	48,480	5,494	42,986	0	42,986	3,582	14%
6	232,437	38,782	9,698	48,480	1,894	46,586	0	46,586	3,882	15%
7	222,739	36,998	11,482	48,480	0	48,480	0	48,480	4,040	17%
8	211,257	34,887	13,593	48,480	0	48,480	6,476	54,956	4,580	17%
9	197,664	32,387	16,093	48,480	0	48,480	6,476	54,956	4,580	17%
10	181,571	29,428	19,052	48,480	0	48,480	6,476	54,956	4,580	17%
11	162,519	25,924	22,556	48,480	0	48,480	6,476	54,956	4,580	17%
12	139,963	21,776	26,704	48,480	0	48,480	6,476	54,956	4,580	17%
13	113,259	16,865	31,614	48,480	0	48,480	6,476	54,956	4,580	17%
14	81,645	11,052	37,428	48,480	0	48,480	6,476	54,956	4,580	17%
15	44,217	4,170	44,310	48,480	0	48,480	6,476	54,956	4,580	17%

NOTES:

- Price of Primary Sale: Bs 350,000
- Loan Amount: Bs 262,500
- Market Interest Rate: 17%
- Initial Subsidized Rate: 10%
- Total increase in monthly payments in the first eight years 62%. Average annual increase 7.75%.

The subsidy established the repayment would be made in increasing amounts begining one year after the end of the subsidy. FONDUR would determine the rate of increase and the initial repayment amount on a case by case basis.

Here, the repayment was distributed evenly during the remaining term of the first mortgage.

or in construction by July 16, 1982. It intended to encourage the sale of the housing units built during the period and whose characteristics agreed with those established in the Decree #214 independent of the source for construction financing.

The second modification was the joint resolution by the Ministry of Finance #1989 and Ministry of Urban Development #231 established and published on December 6, 1983. This modification allowed the concession of preferential rates to purchase the units whose occupation permits had been issued before the 31st of December, 1982, and whose characteristics matched with the ones established by the decree 214 if the long term interest rate was 12% or lower and the maximum commission charges were 1% of the loan amount. This resolution tried to reduce the differential subsidized rate paid by FONDUR, due to the fact that in 1983 the interest rates for home acquisition charged by the mortgage banks and financing societies was 21.5%[1]. We can assume the subsidy program given the conditions in the financial market was becoming unbearable by the Government which had to implement modifications to the original program.

1. Boletin Trimestral, Banco Central de Venezuela, Julio-Septiembre 1983. In mid 1983, the interest rates for home acquisition were around 21.5% for mortgage banks and financing institutions and around 17% for the savings and loan institutions, page 9.

The last modification to the subsidy during the period considered was published December 21, 1983. It contained the joint resolution of the Ministry of Finance #2005 and Ministry of Urban Development #234 issued on December 20 of 1983. This modification changed the initial interest rates in charge of the buyer for the housing categories "C", "D", and "E" and kept the initial interest rates for categories "A" and "B", and the other variables constant. The new rates would be applied from January 1984. Chart No. 14 illustrates the proposed changes and their effects on the increases in monthly income required to purchase the units. Even though the modification would not have a strong impact on affordability, it would definitely reduce the economic burden the subsidy program represented to FONDUR.

A modification related to the refinancing program was published June 2, 1983. The joint resolution #1719 of The Ministry of Finance and #187 of the Ministry of Urban Development dictated on June 1 reduced the proportion of mortgages refinanced from the portfolio of mortgages held by the Savings and Loans, Mortgage Banks, and Financing Societies. FONDUR's compromise was reduced to refinance 80% of the mortgages issued to construct or purchase units "A and B" and to refinance 70% of the mortgages for units "C". The

There is no text material missing here.
Pages have been incorrectly numbered.

(p. 104)

CHART No 14

MODIFICATION OF SUBSIDY PROGRAM AND MONTHLY INCOME REQUIRED
(Joint Resolution of December 20, 1983)

HOUSING CATEGORY	INITIAL INTEREST RATE		1* FIRST YEAR MONTHLY PAYMENT		2* MINIMUN MONTHLY INCOME REQUIRED	
	DECREE 1134	MODIFICATION	DECRE 1134	MODIFICATION	DECREE 1134	MODIFICATION
A	5	-	594	594	1,485	1,485
B	6	-	967	967	2,418	2,418
C	7	10	1,318	1,640	3,295	4,101
D	9	11	2,028	2,273	5,070	5,683
E	11	12	2,821	3,150	7,053	7,876

NOTES:

1* It assumes market interest rates of 17%

2* According to the subsidy program the minimun monthly income would be 2.5 times the monthly payment during the first year.

modification did not consider changes in the refinancing of mortgages for units "E", therefore the proportion to be re financed remained at 50%. Again, this modification reflected the need for reducing government expenses channelled to the Program 4 due to the financial crises in Venezuela.

CHAPTER 4

THE RESPONSE OF THE PRIVATE SECTOR: THE PRODUCTION OF HOUSING UNITS, ITS RELATION WITH THE POLICY GOALS, AND THE MARKET BEHAVIOR.

Even though it can not be said the production of housing units in a given period responds uniquely in either a positive or negative way, to the instruments of the related housing policy, we can argue that by analyzing the characteristics of the supply and the market behavior and taking into account other factors involved, we can get quite a good understanding of the policy impact. In our case, causal relations are very difficult to establish from a statistical point of view. First of all, the level of information required is simply not available. Secondly, many subtle and important elements affecting the outcome are not expressed numerically or are not documented. Thirdly, the subsequent changes in the policy and in the economy complicate the picture even further. In sum, a strictly quantitative analysis will leave out many of the variables at the heart of the problem and will not allow us to fully understand the outcome. However, from the data available, we can analyze the evolution of the supply of units and the market characteristics during the period. We can also relate the observed behavior with the policy features and complement the analysis with field observations and direct interviews. This

strategy can give us insights into the problem. That combined approach will be the one followed in the elaboration in this chapter.

Two limitations to the analysis must be mentioned. First, the data used for the evaluation of the supply includes only multifamily units. This is a direct consequence of the availability of the information[1]. However, this limitation is less serious when we consider the share of single-family units and row-houses in the total production was estimated at 16%[2]. Moreover, it is not likely their inclusion would have changed our conclusions given that the price of the single family units offerred by the private suppliers concentrated mostly on the higher prices. The second limitation relates to the lack of a control group and an historical framework.

Given that we want to analyze changes in the supply characteristics and the impact of the program on those changes, our evaluation remains speculative because we are unable to record what happened in the absence of the program. Similarly, we should consider a time frame longer

1. Fundaconstruccion funded in 1978 traced mainly evolution of apartment units.

2, Vivienda. La Gestion del Gobierno. Revista Inmobilaria No. 83-45, p. 19.

than five years and compare the outcome to what was happening in the preceding period with the former regulations. Unfortunately, that information is also unavailable in the country. The statistics to record housing unit production started being collected in 1978 and they included only a few central cities. This circumstance limits this analysis to saying how well the supply characteristics matched with the policy goals, and to make some inferences, drawn upon complementary information. But if it is true that we can analyze the response, we can not really argue whether that behavior responded to the policy being analyzed or it would have been present without it.

This chapter will show how out of the array of units regulated by the Program 4, production concentrated on categories "D" and "E", the most expensive ones. Even though the deflated average price of the units produced dropped, the majority of units remained at levels unaffordable by a large share of the targeted income groups. Hence, even though in one way or another, a great share of the units produced got channelled into the market, the consumer or the government had to pay the excess prices. We will argue that the policy features, but also the traditional practices in the market and in the Venezuelan political and socio-economic environment contributed to this outcome. We will discuss how one of the serious drawbacks of the program design was the range of prices of the regulated units. That range

was too broad if the intended goal was to concentrate on low-cost housing, because the program did not grade appropriately the benefits from building each category of units and as a consequence, production concentrated on the most expensive ones. The developers had the choice among a wide range and they chose to produce the units which they believed could give them the higher potential returns and fewer marketability problems. As a consequence production concentrated on units "D" and "E" until a level of inventory accumulation was reached that caused a publicly declared "crisis in the housing market." We will also observe how the subsidy program subsidized a high proportion of the most expensive units within the policy and we will observe the weak effect of the subsidy on sales. We will question the equitability and the adequacy of the subsidy as a government expenditure. We will conclude by saying that given the market conditions, there seems to be a standard of prices for the units built by the formal private sector and if the government wants to stimulate the production of lower cost units that are affordable to the lower-middle income groups, more strict regulations should be dictated and alternative suppliers should be promoted.

The Characteristics of the Units Produced

Some general characteristics of the overall production will give us a broader framework for the evaluation of the

private sector production. According to MINDUR[1] statistics depicted in Chart No. 14, between 1979 and the first three months of 1983, 412,071 housing units were built in Venezuela. Of these, 189,552 units or 46% were public sector production, 225,519 units, or 54% corrseponded to the private sector. This outcome differs from the 1979 housing policy in the total production and in the distribution of the production. According to the general policy, 668,923 units would be produced and 391,423 units or 58% of the production would be the task of the public sector. Likewise, 272,550 units, or 42% would be in the hands of the private sector. We can observe that even though neither sector reached the target goals, the public sector production was further away. It fell short by about 200,000 units, while the private sector difference was around 47,000 units.

The intensity of production by the public sector showed dramatic variations. Comparably, the production by the private sector was more stable. Both fell dramatically in the first year due to the drastic changes in the country's economic situation. The reduction experienced by the two sectors between 1980 and 1981 could be attributed to the adjustments to the new policy dictated in July of 1979.

1. Informe Prelimirar, Vivienda, La Gestion del Gobierno, op. cit., p. 19.

Chart 15

Variations in Production

Public and Private Sector

Sector	1979-1980	1980-1981	1982-1983	1982-1983
Public	+21%	-8%	+13%	-45%
Private	+16%	+9%	+13%	-28%

Source: Vivienda. La Gestion del Gobierno. Revista Inmobiliaria No. 83-54, p. 19 and Fundaconstruccion; Apartamentos Ofrecidos en el Periodo Cuatro No. 04.

The figures indicated in Chart 16 and Figure 1 illustrate the distribution of the units produced by the private sector according to price. We can observe the dramatic reduction in the proportion of units "A" and "B" and the increase and concentration on the production of units "D" and "E". The proportion of units "C" and "Others" (more than 350,000 Bs.) remained relatively constant. In 1979, when we could say the policy hadn't affected the production, units "A" and "B" represented 26% of the total production, 3% being the shares of units "A". In 1981, units "A" dropped to 0 in the formal private market and the proportion of units "B" reduced to 7%. In 1983 the reduction was even more dramatic; units "A" almost disappeared and units "B" represented only 1% of the total production. On the other hand, while in 1979, units "D" and "E" represented together 37% of the production, in 1983 their comparative share was 68%. That increase was continuous for every year. Related to "C"

CHART No 16

DISTRIBUTION OF UNITS OFFERED ACCORDING TO PRICE

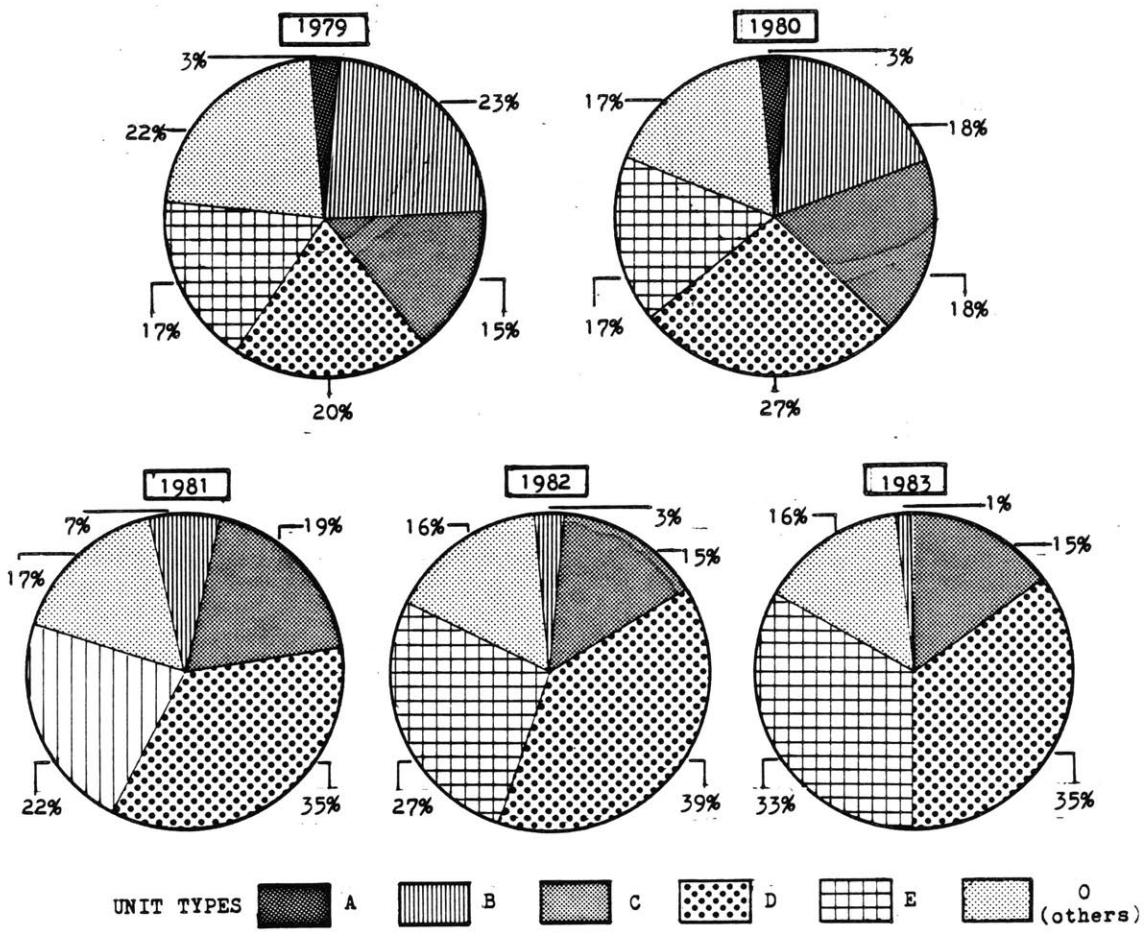
CATEGORY	PRICE OF PRIMARY SALE (Bs)	1979		1980		1981		1982		1983*		PERIOD 1979-1983	
		No	%	No	%	No	%	No	%	No	%	No	%
A	100,000	844	4	1,000	3	160	0	90	0	16	0	2,110	1
B	150,000	5,702	23	5,469	18	2,290	7	1,019	3	158	1	14,638	10
C	200,000	3,877	15	5,576	18	6,422	19	5,845	15	2,983	15	24,703	17
D	250,000	5,169	20	8,144	27	11,617	35	14,798	39	6,726	35	46,454	32
E	350,000	4,380	17	5,134	17	7,306	22	10,434	27	6,387	33	33,641	23
O (Others)	More than 350,000	5,643	22	5,196	17	5,646	17	5,999	16	3,072	16	25,556	17
TOTAL		25,615	100	30,519	100	33,441	100	38,185	100	19,342	100	147,102	100

Source: FUNDACONSTRUCCION. Area Urbana 99. Total Nacional. Cuadro 04. Apartamentos ofrecidos en el periodo clasificado por Area y Precio de Venta.

* Note: Statistics for 1983 include only until September production.

FIGURE No 1

DISTRIBUTION OF UNITS ACCORDING TO PRICE



Source: FUNDACONSTRUCCION. Area Urbana 99. Total Nacional. Cuadro 04. Apartamentos ofrecidos en el periodo clasificado por Area y Precio de Venta.

Note: Statistics for 1983 include only until September production.

and "Others", their proportion was similar during that period. The constant production of units "O", the ones not regulated, gives us an indication of a market independent from the effects of policy regulation.

As we recall the goals of Program 4 were to encourage the production of low-cost housing affordable by households earning between 3,000 and 7,000 Bs in monthly income. However, when we analyze who could afford the average unit produced, we concluded that no households within those classified by the policy as low-middle income groups could afford the units without the subsidy program. Chart No. 17 illustrates the weighted average of the units produced related to the number of households who could afford the units with and without the subsidy program. We observe that the average unit was affordable only by households with more than 8,000 Bs of monthly income. From 1981 on, only the households earning more than 9,000 Bs/month could afford the units produced without subsidies. The subsidy program lowered the requirements to 5,000 Bs/month, but less than 40% of the targeted households had incomes above that level. Moreover, 40% of the expense income ratio is high given the families have more urgent priorities.

We observe how the outcome was inconsistent with the program's goal, which pretended to stimulate production for the lower income groups. Even though we observe the defla-

CHART No 17

AFFORDABILITY OF UNITS PRODUCED

		1979	1980	1981	1982	1983
AVERAGE SALES PRICE (000's Bs) Current Bs		279.52	258.25	282.02	289.93	307.66
REAL Bs		144.53	109.85	103.38	97.0	96.5
NO OF UNITS PRODUCED		25,615	30,519	33,441	38,185	19,342 1*
	MONTHLY INCOME	8,000	8,000	9,000	9,000	9,000
	NO OF HOUSEHOLDS IN THE COUNTRY	203,397	207,641	180,991	185,810	186,169
I	% OF HOUSEHOLDS WITHIN TARGET GROUP	0%	0%	0%	0%	0%
	% OF HOUSEHOLDS OF THE COUNTRY TOTAL	9%	9%	2* 7.6%	7.6%	7.6%
	MONTHLY INCOME	NA	NA	5,000	5,000	5,000
	NO OF HOUSEHOLDS WITHIN TARGET GROUP	NA	NA	260,535	289,366	286,798
II	NO OF HOUSEHOLDS IN THE COUNTRY	NA	NA	554,330	612,479	614,623
	% OF HOUSEHOLDS WITHIN TARGET GROUP	NA	NA	33%	33%	33%
	% OF HOUSEHOLDS OF THE COUNTRY TOTAL	NA	NA	23%	25%	25%

I. Households who could afford units without subsidy. Considers 40% of expense income ratio

II. Households who could afford units without subsidy. Considers 40% of expense income ratio.

1* Production included until September 1983.

2* Estimated from proportion in 1981

ted price of the average unit decreased annually by 6%, the average unit remained in category "E". Likewise, the average price of the units produced, and the average price of the units financed also belonged to category "E". The average loan amount made possible the purchase of units "D".

Chart 18

Average Price of Units Financed (000's Bs)

	1978	1979	1980	1981	1982
Current Average Price	265.8	280.1	265.5	282.8	286.6
Real Average Price*	154.3	144.8	112.9	103.45	95.88
Unit Category	NA	E	E	E	E

Source: BCV Anuario de Series Estadisticas 1982, Cuadro No. VI - 91, p. 369.
* Base year 1968 = 100

Chart 19

Average Loan Amount of Units Produced (000's Bs)

	1978	1979	1980	1981	1982
Current Loan Amount	156.8	168.8	190.9	193.7	221.1
Real Loan Amount*	91.0	87.2	81.2	71.0	73.9
Unit Category	NA	C	D	D	D

Source: BCV Anuario de Series Estadisticas 1982, Cuadro No VI-92, p. 370.
* Base year 1968 = 100

From the evaluation of the units financed using the subsidy program, we observe in Chart No. 20 that 68% of the units benefiting from the subsidy belonged to categories "D" and "E". Likewise, 76% of the amount financed concentrated on those categories. Supposedly, the subsidy was implemented to increase the accessibility level of the lower-middle income households to "appropriate" housing units. However, 68% of the buyers benefited from the subsidy had to prove incomes over the median of the target group. Besides, those units got channelled into the market, but the government could have benefited more households had the units not been the most expensive. In addition, we could also argue that the households, benefited from the subsidy early years but later on, they would have to bear the financial compromise of buying an expensive unit. Therefore we could question

CHART No 20

GRANTED SUBSIDIES CHANNELED THROUGH THE SNAP,
MORTGAGE BANKS AND FINANCING SOCIETIES
(From September 1981 to August 1983)

HOUSING CATEGORY	HOUSING UNITS		AMOUNT FINANCED (000's Bs)	
	No	%	No	%
A	1,507	3	138,869.8	1
B	3,932	9	575,621.1	6
C	8,568	20	1,543,843.3	17
D	17,689	41	3,776,255.8	41
E	11,826	27	3,230,903.6	35
TOTAL	43,522	100	9,265,499.6	100

Source: FONDUR. Taken from "Inmobiliaria", No 83-45.
Vivienda: La gestion del Gobierno.

whether we should look for an alternative way of distributing better, the government resources, in a way more harmonious with the goals.

The Reasons Behind the Supply Response

We will question now why the units produced concentrated on the most expensive categories. There are many complementary arguments to explain that behavior. Some of the reasons can be found in the features of the Program 4, but others respond to traditional practices of the formal supply sector, and to the political and socio-economic conditions of the country.

Related to the features of the program, we could argue the potential benefits from building the alternative categories were not differentiated enough as to orient the production toward the lower cost units. 100% construction financing was available for all kinds of units and even though tax exemptions decreased for the more expensive units, we can argue that given the supply response, that component seemed not to be so critical in determining the investment decision. In other words, the developers expected the potential for higher benefits from selling the more expensive units would compensate for the potential higher tax payments. Here it is opportune to recall that the regulations

to control tax payments are very loose in Venezuela. Investors find many loopholes in it and it is well known there are broad opportunities to evade or diminish the payments. In addition, tax payments are money due in the future, while construction financing is money needed in the present to carry out the project. Moreover, the benefits from obtaining higher construction financing extends over the project itself. A complementary consideration relates to the availability of long term mortgage credit. Even though the percentage of long term mortgage credit was graduated higher, the cheaper the units produced, we can argue that the developers perceived the marketability of the units "A" and "B" as being riskier. This behavior is comprehensible if we recall the availability of formal financing in Venezuela is restricted for those households who can not prove their incomes, don't have stable jobs, or formal documentation. The majority of the Venezuelan households with incomes below 5,000 Bs/month fall within that category. Thus, regardless of the policy protection, many developers believed the obtaining of credit by families willing to buy units "A" and "B" would be more difficult. An illustrative side comment for this argument is that by the end of 1981, the financing institutions hadn't met the requirements of portfolio compo-

There is no text material missing here.
Pages have been incorrectly numbered.

(p. 122)

sition, however, no deposits had been required by the government to be kept in the BCV as established in the regulation[1].

We can also argue that the fact the subsidy program, implemented in July 1981, covered all categories, also contributed to the concentration of production on the more expensive units. With the subsidy, the potential buyers could afford a more expensive unit, so the developers' expectations of secure sales were raised. We also can argue the subsidy created a gap in the real demand for the cheaper units because if we consider every household could theoretically buy a more expensive unit, those who now would aspire to units "A" and "B" would face the restrictions of the requirements for formal financing. The liberation of the interest rates, established one month after the subsidy program, undoubtedly also contributed to the concentration of the production on the most expensive units because the cost of construction financing increased from 16% in 1979 to 21.5% in 1981. That fact would have discouraged many developers from building the cheaper units. An additional consideration related to the subsidy is that even though in the most favorable case, the buyer will pay well below market rates for 10 years, after that, full market payments plus the return of the subsidy would be due. Venezuela was going

1. A. Cilento Sardi. El Factor Financiamiento en la Produccion de la Mercancia Vivienda en Venezuela, p. 18.

into a serious recession and given the high economic instability and growing unemployment, it was likely to expect many buyers, mainly the lower income ones, would prefer to defer their investments.

Another feature of the program which could have contributed to the characteristics of the supply was the lack of restrictions regarding apartment areas. The additional feature to qualify the units produced was the number of bedrooms, not the areas. We could argue that in many cases by adding a small bedroom to an apartment without increasing proportionately the other common areas, a developer could get his unit to qualify for a higher price within the program protection. Thus, the marginal cost of increasing the area would be more than compensated by the marginal revenue from sales. Similarly, it could happen that before planned; larger units were reduced to comply with the number of bedrooms, yet still sold at the same price. Chart No. 21 and Figure 2 illustrate the evaluation of the distribution of units according to areas. From them we observe how the units increasingly concentrated on middle sizes which we can argue illustrate the preceding argument about the optimization of size. That argument is also complemented with Charts 22, 23, and 24, as well as Figures 3, 4, and 5. In Chart 22 and Figure 3, we observe that production of small sized units for categories "A" and "B" decreased, while the share of

CHART No 21

DISTRIBUTION OF UNITS ACCORDING TO AREA
(Period 1979-1983)

	AREA sq. meters	1979		1980		1981		1982		1983	
		No	%	No	%	No	%	No	%	No	%
SMALL	50	657	3	492	1	1,085	3	377	0	110	1
	51-70	853	4	952	3	627	2	1,072	3	586	3
	61-70	2,686	10	3,435	11	2,507	7	4,432	12	976	5
	Sub Total	4,196	17	4,879	15	4,219	13	5,881	15	1,672	9
MEDIUM	71-80	4,222	16	6,064	20	6,902	21	6,714	18	4,077	21
	81-90	4,132	16	6,268	21	8,149	24	11,316	30	5,850	30
	91-100	2,693	11	4,783	16	5,387	16	6,844	18	3,161	16
	101-150	7,746	30	6,953	23	7,285	22	6,147	16	3,821	20
	Sub Total	18,793	73	24,069	80	27,714	83	31,021	82	16,909	87
LARGE	151-200	1,811	7	980	3	1,129	3	684	2	508	3
	200	815	3	591	2	379	1	599	1	253	1
	Sub Total	2,626	10	1,571	5	1,508	4	1,283	3	761	4
TOTAL		25,615	100	30,519	100	33,441	100	38,185	100	19,342	100

Source: FUNDACONSTRUCCION. Total Nacional. Cuadro 4. Apartamentos ofrecidos por Area y Precio de Venta.

* Statistics account until September.

FIGURE No 2

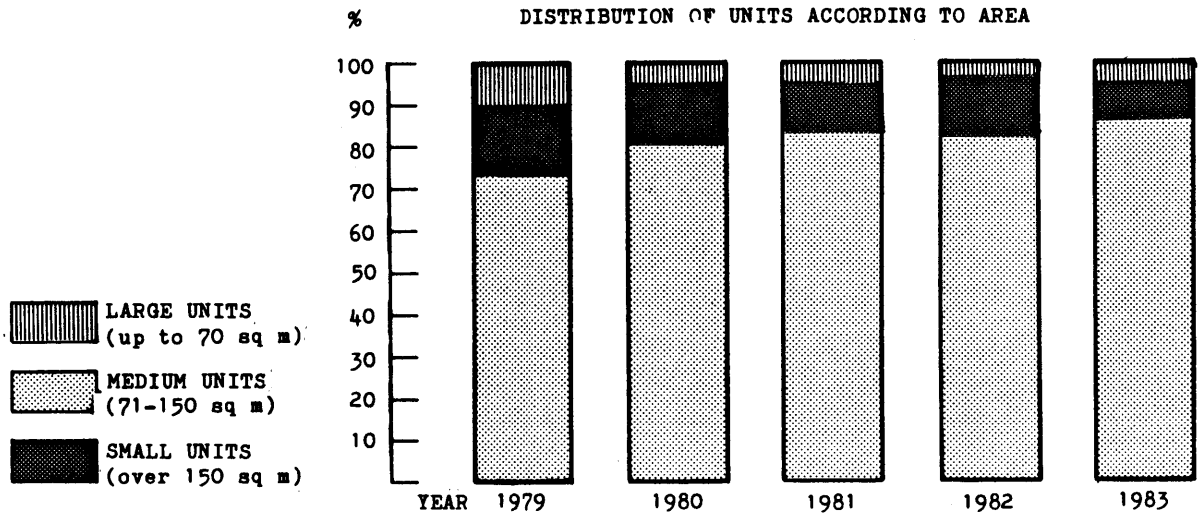


CHART No 22

EVOLUTION OF THE SUPPLY OF SMALL SIZE UNITS
(Area 50 to 70 sq m)
Period 1979-1983

PRICES (Bs)	1979		1980		1981		1982		1983*		PERIOD 1979-1983	
	No	%	No	%	No	%	No	%	No	%	No	%
100	255	6	98	2	64	1	66	1	16	1	499	2
101-150	1,617	39	1,842	38	570	14	863	15	112	7	5,004	24
151-200	1,113	26	1,095	22	1,530	36	2,383	41	824	49	6,945	33
201-250	866	21	646	13	774	19	1,155	20	139	8	3,582	17
251-350	277	7	976	20	852	20	722	12	452	27	3,279	16
350	66	1	222	5	429	10	692	11	129	8	1,538	8
TOTAL SMALL SIZE	4,196	100	4,879	100	4,219	100	5,881	100	1,672	100	20,847	100

Source: FUNDACONSTRUCCION. Total Nacional. Cuadro No 4. Apartamentos ofrecidos en el periodo clasificados por Area y Precio de Venta.

* Statistics account until September 1983.

Within the housing program: It is very unlikely a four bedroom unitcould fit in less than 70 sq. m. Thus we assume that the category 251-350 would not qualify. Hence only the four first category of prices would qualify for the benefits of the housing program. We assume a 2 bedroom and a 3 bedroom unit could be built in less than 70 sq. m.

FIGURE N 3

EVOLUTION OF THE SUPPLY OF SMALL UNITS
(Area 70 sq m)

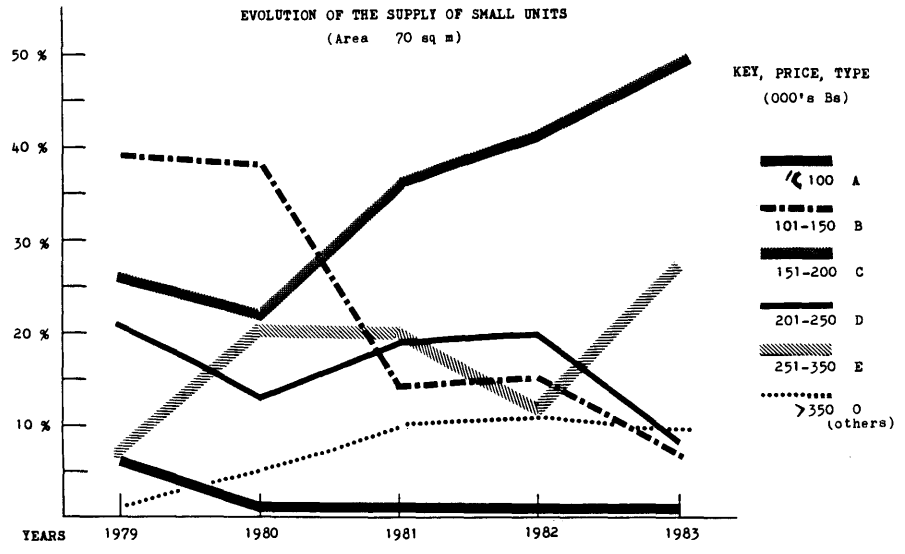


CHART No 23

EVOLUTION OF THE SUPPLY OF MEDIUM SIZE UNITS
(Area 71 to 150 sq m)
Period 1979-1983

PRICES (Bs)	1979		1980		1981		1982		1983 1*		PERIOD 1979-1983	
	No	%	No	%	No	%	No	%	No	%	No	%
100	587	3	872	3	96	0	24	0	0	0	1,579	1
101-150	4,085	22	3,626	15	1,720	6	156	0	45	0	9,632	8
151-200	2,763	15	4,470	19	4,862	18	3,458	11	2,157	13	17,710	15
201-250	4,226	22	7,458	31	10,481	39	13,594	44	6,587	39	42,346	36
251-350	3,809	20	4,009	17	6,210	23	9,579	31	5,877	35	29,484	25
350 2*	3,323	18	3,603	15	3,981	14	4,210	14	2,243	13	17,360	15
TOTAL MIDIUM SIZE	18,793	100	24,069	100	27,714	100	31,021	100	16,909	100	118,506	100

Source: FUNDACONSTRUCCION. Total Nacional. Cuadro No 4. Apartamentos ofrecidos en el periodo clasificados por Area y Precio de Venta.

1* Statistics account until September 1983.

2* Units of this price did not qualify for the housing program benefits.

FIGURE No 4

EVOLUTION OF SUPPLY OF MEDIUM SIZE UNITS
(Area 71 to 150 sq m)

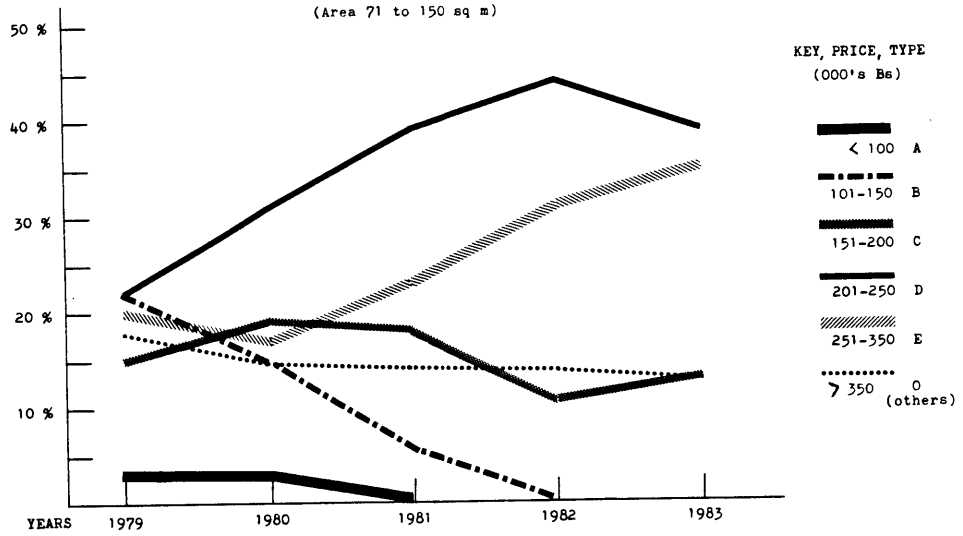


CHART No 24

EVOLUTION OF THE SUPPLY OF LARGE UNITS
(Area 150 sq. m.)
Period 1979-1983

PRICES (Bs)	1979		1980		1981		1982		1983		PERIOD 1979-1983	
	No	%	No	%	No	%	No	%	No	%	No	%
100	2	0	0	0	0	0	0	0	0	0	2	0
101-150	0	0	6	0	0	0	0	0	1	0	7	0
151-200	1	0	9	0	30	2	4	0	2	0	46	1
201-250	75	3	47	4	2	0	51	4	0	0	175	2
251-350	294	11	138	9	244	16	133	10	58	8	867	11
350	2,254	86	1,371	87	1,232	82	1,095	85	700	92	6,652	86
TOTAL LARGE UNITS	2,625	100	1,571	100	1,508	100	1,283	100	761	100	7,749	100

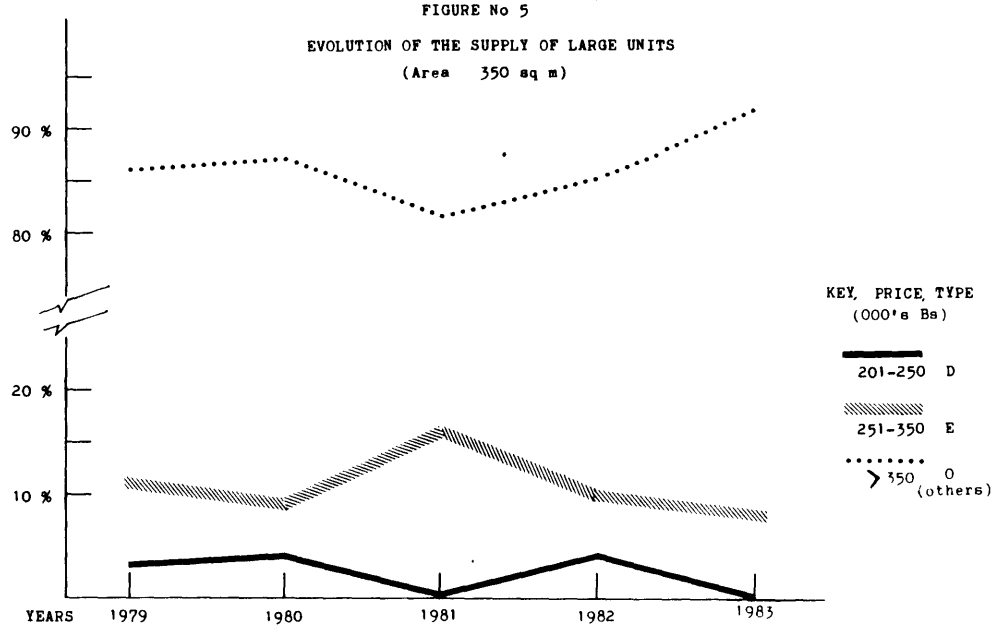
Source: FUNDACONSTRUCCION. Total Nacional. Cuadro No 4. Apartamentos ofrecidos en el periodo clasificados por Area y Precio de Venta.

* Statistics account until September 1983.

Within the housing program: It is very unlikely a four bedroom unit could fit in less than 70 sq. m. Thus we assume that the category 251-350 would not qulify. Thus only the four first category of prices would qualify for the benefits of the housing program. We assume a 2 bedroom and a 3 bedroom unit could be built in less than 70 sq. m.

FIGURE No 5

EVOLUTION OF THE SUPPLY OF LARGE UNITS
(Area 350 sq m)



units "C" grew during the five years. In Chart 23 and Figure 4, which depicts the evolution of the middle size units, we observe production of units "A" and "B" decreased dramatically and it is very obvious the concentration is on units "D" and "E". Lastly, in Chart 24 and Figure 5, we observe how units "A", "B", and "C" are almost nonexistent, which is partly understandable due to construction costs. But we see that even though units "C" and "D" were required to have the same number of bedrooms, large units "C" were almost not produced at all.

The second group of arguments to explain why the lower cost units were not produced in the amounts expected relates to traditional practices in the supply of housing units in Venezuela by the formal private sector. The Program 4 required from the developers the land as equity investment. It is a common and well known practice in Venezuela to inflate the price of the land to facilitate and get a higher percentage of construction financing but also to increase the price of the units to be produced. In the program, financing was 100% of construction costs anyway, for all categories, but inflating the price of the land helps to make more credible the declared construction costs and thus the value of the projected units. This is so, given the price of land is also a component of the unit's price. One could claim mortgage banks have specialized personnel to evaluate

the feasibility of credit proposals, but in Venezuela access to credit depends also on other variables like kinship and connections, therefore projects with inflated land prices do pass through.

Here it is also convenient to mention the links between financiers and developers. The regulations of the SNAP and the general law of banks prohibit the participation of bank presidents, directors, or staff in construction projects for which the financing institution is evaluating or granting a credit[1]. However, there are many covert cases of bank personnel involved in real estate investments[2].

Similarly, developers raise the declared costs of construction. Raising construction costs implies developers would be well protected against any major contingency in the construction process that could require additional equity, but also they could have capital available for other investments. Even though these arguments can not be documented, declarations by the developers themselves confirmed that. Raising construction costs at the end will also raise the

1. Normas de Operacion del Sistema Nacional de Ahorro y Prestamo Titulo III, p. 11. Ley General de Bancos y Otros Institutos de Credito.

2. For an illustration, see the case of the Project, Ciudadela Faria at the end of this chapter.

level of profits even before sales are finished. Moreover, additional capital will reduce the level of risks. In this sense it is easier to inflate construction costs when the units are more expensive because there are more items where costs can be covered and additional ammenities in some cases imported where prices can not be checked easily. Consequently higher cost units have also higher potential for increasing costs and thus profits.

An additional consideration relates to the Venezuelan building codes. In order to obtain construction and occupancy permits, interminable red tape must be carried. It is a lengthy and complicated process where payment of bribes is involved. Those bribes must be paid even if compliance is total. It is just a non-recorded extra cost built into the process, otherwise permits don't get through. Moreover, standards are not graded according to the price of the units produced. In many cases they are too high in relation to the unit's cost. For instance, infrastructure costs to build units "A" are the same as those to built units "E". Consequently, it is more profitable for the developers to build the most expensive units given the level of investment required.

The third group of arguments are related to the perceived marketability risks. We can argue that housing investment decisions in Venezuela are not based on market

studies. First of all, there is not sufficient base information to carry them out in depth. The available information regarding income lumps together many kinds of households. For instance, until 1981 the highest level was designated as those families with monthly incomes of 5,000 Bs or more. This level of aggregation is not enough so as to be used for evaluating the private housing markets. The information corresponds to the surveys made by the OCEI given that the national census of 1980 was a big failure. Secondly, the most recent nation wide housing market study, Mercui 70, is already 14 years old. Thirdly, there is the generalized confidence in Venezuela's economic welfare. Developers believed in the security of a market for the most expensive units and they based their beliefs on the real estate boom of the late 1970's. They were expecting considerable increases in the population's income. For these reasons decisions were carried mostly at intuitive levels and based on political and economic expectations. Therefore, although the developers knew the market for the more expensive units was smaller, they expected as individuals it would be wide enough. Moreover, they did not believe in the credit facilities promulgated by the Decree 214. Regulations are rarely enforced in Venezuela and in this case they involve the control of the financing institutions which undoubtedly held political and economic power. A complementary argument is the potential competition between the units "A" and "B" and those built by INAVI. Even though both

would be competitive in quality, the INAVI units could be obtained more cheaply and without using the formal financing markets. Regardless of INAVI's level of production, which is low, low-middle income households have expectations for getting a house directly subsidized by the government.

In the interview in February 1984, I asked five developers why categories "A" and "B" had not been offerred in the amounts expected. The common answer was that the developers were not interested in building them, because the construction of housing units is a long, expensive, and complicated process in Venezuela. There, the payment of bribes is an accepted part of the common process of building. There are many complications and extra expenses until the units are finally built. They expressed that given the conditions of the system and the regulations; it was almost impossible to build the units at the price without the developers losing money. Some of them stated that those prices could only be possible when the government owned the land and facilitated all bureaucratic procedures. Two of them added that the people for whom those units were targeted, prefer to live in "unsanitary housing," and that they were "not responsible enough to meet monthly payments." In addition, they said it would be very complicated to get formal financing for them. The reasons for this being that they cannot formally prove

their level of income, they don't have stable jobs, and they lack the necessary formal tax declarations and required documents.

The Evolution of the Market

From Charts 25 and 26, and Figures 6 and 7, we observe the comparative evolution of the units produced, sales, and inventory accumulation. The graphs depict the number of finished units increased until 1982 when it shows a reduction that we can attribute to the restrictions on construction financing in 1983. However, even though the total and monthly average of finished units increased until 1982, the monthly average of new starts was decreasing since the beginning of the period. That decrease showed a recovery in 1982 which we could attribute to the implementation of the subsidy program. The starts, however, did not reach the levels of 1979 and 1980. Finally, the starts reduced dramatically in 1983. In general, we can talk about a reduction in private housing investment. This conclusion is backed up by the statistics of the Venezuelan Central Bank that stated an average annual reduction of 15% in the value of private residential construction for sale between 1979 and 1982 in real bolivares[1]. From the figures, we observe how inventory

1. BCV Anuario de Series Estadisticas 1982. Cuatro No. VI-87.

CHART No 25

EVOLUTION OF UNITS PRODUCED
AND SOLD, AND INVENTORY

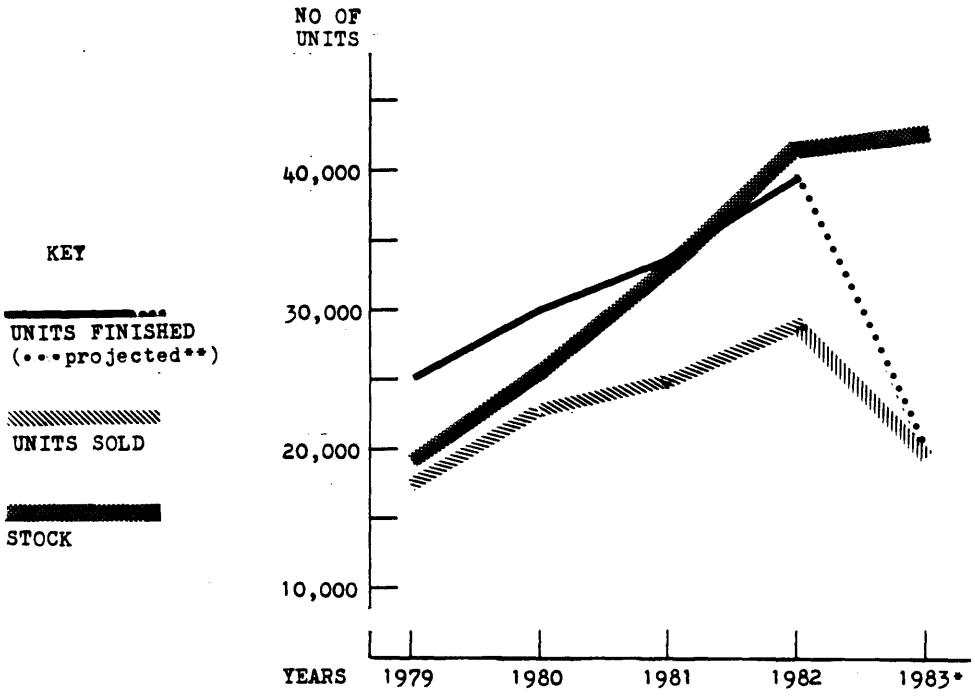
	1979	1980	1981	1982	1983
UNITS FINISHED	25,615	30,519	33,441	38,181	19,342*
UNITS SOLD	17,469	22,904	24,855	28,415	19,620
STOCK	19,078	25,750	33,465	41,173	41,557*

* Until September 1983.

Source:- FUNDACONSTRUCCION. Total Nacional. Area Urbana 99.
Cuadro No 4 : Units Finished.
- FUNDACONSTRUCCION. Total Nacional. Area Urbana 99.
Cuadro No 1 : Sales.
- FUNDACONSTRUCCION. Informe Oferta Actual y a corto plazo
al 30/9/83: Stock.

FIGURE No 6

EVOLUTION OF NEW UNITS, SALES AND STOCK.



* Until September 1983.

** Projected taking the average production until September.

CHART No 26

MONTHLY AVERAGE OF UNITS FINISHED
NEW STARTS AND NEW SOLD

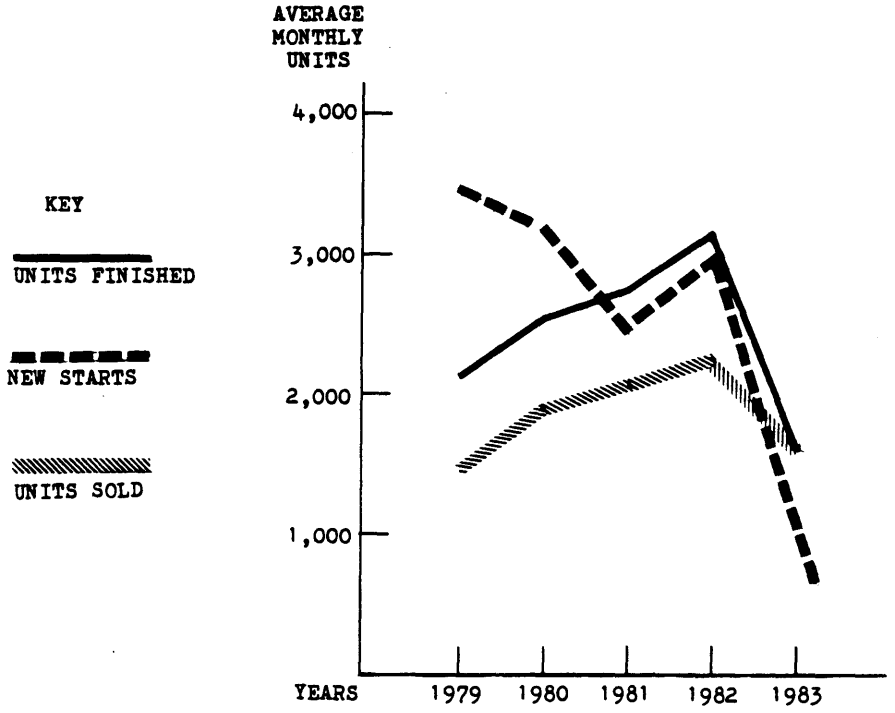
	1979	1980	1981	1982	1983
UNITS FINISHED	2,135	2,543	2,787	3,181	1,612*
NEW STARTS	3,463	3,196	2,488	2,962	1,063
UNITS SOLD	1,456	1,909	2,071	2,368	1,681

* Statistics account until September 1983

Source: FUNDACONSTRUCCION. Total Nacional. Area Urbana 99.
- Cuadro No 01: Units finished.
- Cuadro No 04: Units Sold.
- Informe Oferta Actual y a corto plazo: New Starts.

FIGURE No 7

MONTHLY AVERAGE OF UNITS FINISHED, NEW STARTS AND UNITS SOLD



was building up since the beginning, because although sales were also increasing until 1982, the rate of increase was smaller. At the end of 1983, the stock had reached 41,677 units. These did not include 13,677 already finished units which did not have the condominium document.

Knowing the subsidy program was implemented in July 1981, we can argue the subsidy did not affect notoriously the number of units sold or the average price of the units sold. Figure 8 shows the fluctuations in the level of sales during the period. It will be very difficult to attribute the fluctuations observed after 1981 to the subsidy. The most identifiable trough corresponds to the sharp decreases in sales in the last three months of 1983, which is explained by the crisis in the economy of the country. Figure 9 depicts the monthly evolution of average sales prices. Similarly, it is hard to attribute the variations to the subsidy program because variations in price are similar to those before the subsidy. But one conclusion is certain, the subsidy did not change the average price of the unit sold. Units remained belonging to the highest category "E" so we could perfectly argue against the efficiency of the subsidy. Regardless of the income level of those households who purchased the subsidized units, we note in Chart 28, the prices of the units sold remained at the high levels. We could then question whether with or without subsidy the units sold would have had similar prices.

CHART No 27

MULTIFAMILY UNITS, MONTHLY EVOLUTION OF SALES AND AVERAGE SALES PRICE

		JAN.	FEB.	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT.	OCT.	NOV.	DEC.	TOTAL
1979	NO APTS.	838	1,235	1,837	1,145	1,708	1,650	1,042	1,574	1,555	1,475	1,700	1,710	17,469
	AVERAGE* SALES PRICE	255.69	261.60	273.99	269.92	284.44	300.24	276.81	274.04	280.31	296.61	310.07	292.23	283.41
1980	NO APTS.	1,430	1,646	2,242	1,145	1,452	2,158	1,375	2,342	2,820	2,309	1,903	2,082	22,904
	AVERAGE* SALES PRICE	205.78	269.64	267.28	291.41	277.44	269.75	283.13	256.70	245.92	288.91	302.87	294.16	270.51
1981	NO APTS.	1,940	2,599	2,639	1,477	2,307	2,341	2,097	1,812	1,572	1,553	2,081	2,437	24,855
	AVERAGE* SALES PRICE	248.87	253.76	251.07	281.39	300.19	285.30	289.47	284.24	316.07	316.07	305.19	300.23	281.65
1982	NO APTS.	1,288	1,851	3,143	1,439	2,681	2,967	2,158	2,529	2,746	2,303	2,690	2,620	28,415
	AVERAGE* SALES PRICE	278.74	291.43	288.30	276.19	292.05	287.43	288.17	289.98	292.97	302.79	294.54	307.56	291.81
1983	NO APTS.	1,766	1,130	2,540	1,589	2,206	2,528	2,141	2,188	2,586	264	279	403	19,620
	AVERAGE* SALES PRICE	298.51	333.49	312.17	320.35	320.40	320.30	317.26	328.02	338.43	263.05	317.55	285.81	318.24

Source: FUNDACONSTRUCCION. Total Nacional. Area Urbana 99. Viviendas multifamiliares: Evolucion mensual de las ventas de apartamentos. Cuadro No 1.

* Average sales price in thousands of Bolivares.

FIGURE No 8

MULTIFAMILY UNITS MONTHLY EVOLUTION OF SALES

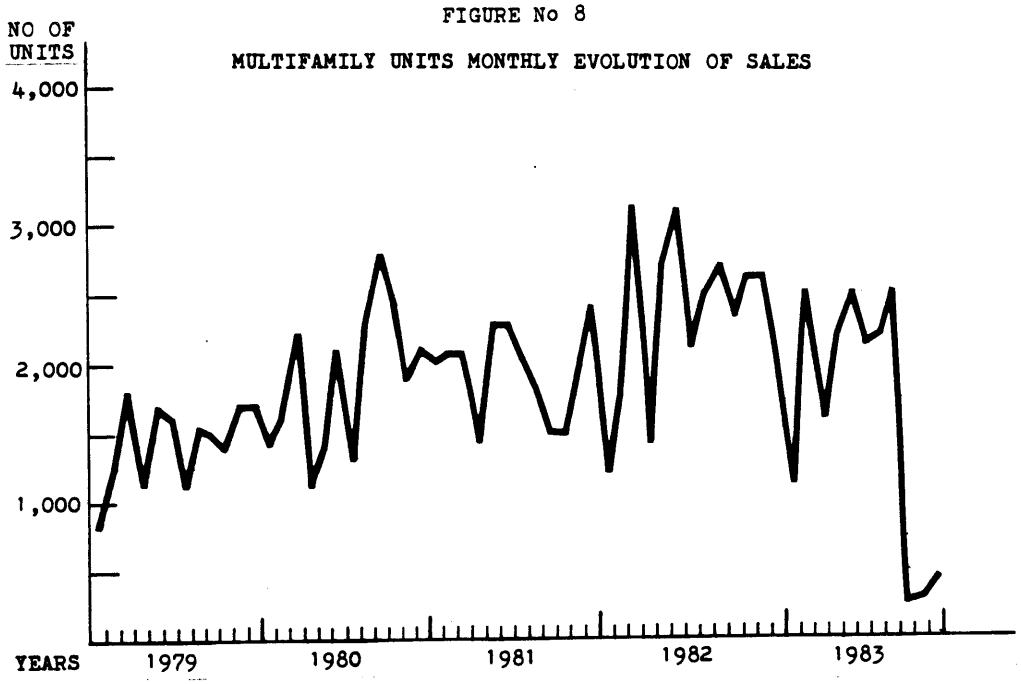


FIGURE No 9

MONTHLY EVOLUTION OF AVERAGE SALES PRICE

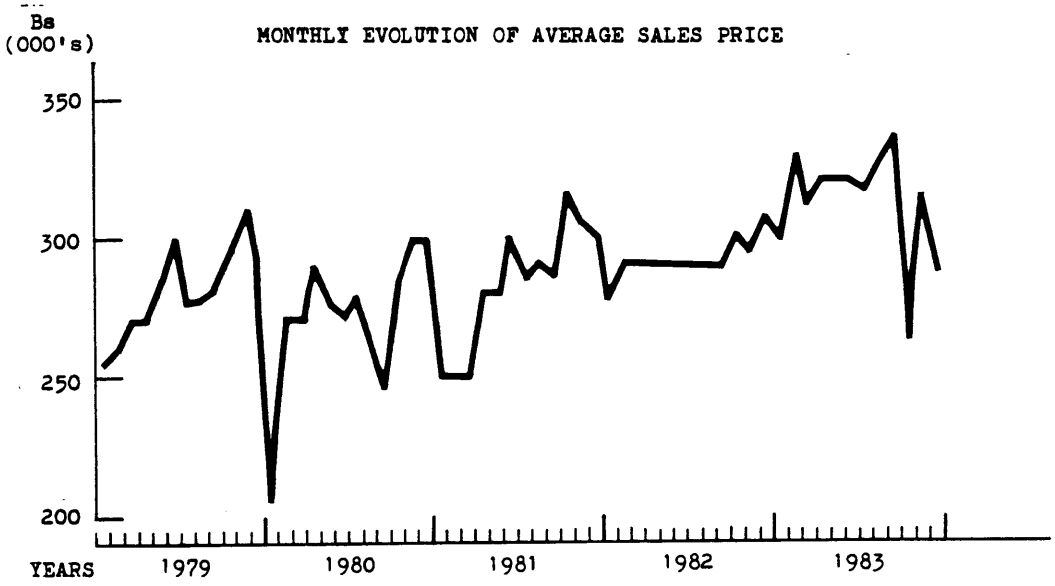


Chart 28

Average Sale Price of Units Sold

Price (in 000's Bs)	1979	1980	1981	1982	1983
Current Bs	279.18	265.13	275.44	289.29	311.16
Real Bs	144.35	112.77	100.97	96.78	97.82

Chart No. 29 confirms the argument, the apartments sold increasingly concentrated on units "D" and "E". The share of units "D" and "E" sold during the period was 53%. Due to the concentration of production on units "D" and "E" the unsold units also concentrated on those categories. Chart No. 29 shows how by September 1983, 62% of the unsold units belonged to those two categories, and curiously enough, 68% of the units unsold had been on the market after 1981, the year of the subsidy program, but also the year of the liberation of the interest rates. By September 1983, the average price of the unsold units was 297,130 Bs in current bolivares, or 93,410 in real Bs. In any case, it fell within category "E".

The Situation of the Housing Market in 1983

By the end of September 1983, Venezuela had accumulated 55,219 finished units, of those, 41,677 or 75% were ready for sale. The rest, or 13,542 units, were already finished, but the developers had been unwilling or unable to formalize the condominium documents required to market the units. Of

CHART No.29

APARTMENTS SOLD CLASSIFIED ACCORDING TO SALES PRICE

CATEGORY	SALES PRICE (000's Bs)	1979		1980		1981		1982		1983*		TOTAL	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A	Until 100	256	1	1,847	8	721	3	36	0	118	1	2,978	3
B	101 to 150	3,373	19	3,755	17	2,135	7	841	3	404	2	10,506	9
C	151 to 200	2,758	16	4,124	18	5,092	21	5,255	19	2,344	13	19,573	18
D	201 to 250	4,173	24	5,075	22	7,452	30	11,656	41	6,128	33	34,484	31
E	251 to 350	3,156	18	3,926	17	5,576	23	6,488	23	5,727	31	24,873	22
OTHER	More than 350	3,753	22	4,177	18	3,848	16	4,123	14	3,691	20	19,592	17
TOTAL		17,469	100	22,904	100	24,855	100	28,399	100	18,410	100	112,006	100

* Statistics account until September 1983

CHART No 30

MULTIFAMILY HOUSING. APARTMENTS UNSOLD CLASSIFIED BY PRICE AND TIME ON THE MARKET

CATEGORY	SALES PRICE (000's Bs)	APRIL-SEPTEMBER 1983		JANUARY-MARCH 1983		1982		1981		BEFORE 1981		TOTAL	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%		
A	Until 100	15	0	0	0	30	0	22	0	365	7	433	1
B	101 to 150	135	1	8	0	315	4	556	8	681	12	1,927	5
C	151 to 200	1,945	17	387	13	1,837	13	897	12	983	17	5,917	14
D	201 to 250	4,039	38	852	28	5,380	37	2,625	35	1,231	21	13,783	33
E	251 to 350	3,164	29	1,211	40	4,145	28	1,992	30	1,466	25	11,984	29
OTHER	More than 350	1,615	15	585	19	2,512	18	1,081	15	1,090	18	7,513	18
TOTAL		10,784	100	3,068	100	14,641	100	7,671	100	7,671	100	5,994	100

Source: FUNDACONSTRUCCION. Total Nacional. Area Urbana 99. Cuadro No 13. Cantidad de Apartamentos por vender clasificados por precio de venta segun año del documento de condominio.

the unsold units, 13,852 or 33% had been finished in 1983, 14,641 units or 35% of the stock had been on the market since 1982, 7,671 units or 18% had been finished since 1981. These statistics illustrate that even though the heavy accumulation started after 1981, inventory built up was a characteristic of the whole period. Even more; 5,944 units or 14% of the stock was recorded to be on the market before 1981. The inventory of units was generating financial losses to the developers due to interest payments on construction loans. In addition to the 55,214 finished units, 32,063 units were in construction and expected to be ready in less than 2 years. The situation worsens when we add the 21,729 units whose construction was paralyzed due to financial problems. In summary, assuming all units were finished and marketed, almost 5 years would be needed to sell the 109,111 units, assuming the average annual sale rate showed during the period, or 22,613 units per year.

Some Illustrative Cases

Given the firms' and projects' individual characteristics, many are the situations and the reactions to the problem. Based on the interviews we could classify the supply side in three categories; those who although at a slower pace are selling the units; those who are not selling the units; and those who have the construction of the projects paralyzed. The project Ciudadela Faria in Maracaibo City

illustrates very well the first case. It represents the case of a long experienced big developer who can assimilate the decrease in sales by compensating delays in earnings with other projects or investments. During the interview, the developer mentioned as the main reasons for the sustained sales, the confidence that the purchasers and the financing institutions have in the firm, the appropriate location, and the characteristics of the project. He expressed the 40 years of experience in the market has provided the firm with a good reputation and given the actual circumstances, prestige has been a winning note. The buyers in this period of crisis hesitated prior to buying from someone to make sure the seller could respond to their claims long after the sale was made. In addition, this project had the long term financing secured before the project was started. It should be mentioned that given the scale of the project and in order to obtain the interim financing, many regional mortgage banks had to be involved. This gives us an idea of the developer's accessibility to the source of financing for the short and long term. In addition, the project site has good accessibility and it is located in an area considered good for middle class residential use. This characteristic, the developer said, has been critical to gain buyers in the current circumstances.

Complementary to the construction of units, this development firm has as subsidiaries other companies involved in

the supply of construction materials like cement, hardware stores, and bricks. This characteristic makes the development firm less vulnerable to scarcity and cost escalations of materials, inconveniences that delay construction and increase contingency expenses. Wages were raised 8-10% in the last 2 years due to claims from the union, but the developer stated the project did not experience any serious interruptions, delays, or serious increases in costs in the construction stage. Therefore, the cash flow of the project did not suffer from serious alterations.

Ciudadela Faria is a project of 5,000 units of which 2,487 units were built in the first stage. The construction of the second phase (2,500 units), contrary to what one would expect, is being planned for the short run. Their confidence in good market conditions is backed up by the fact that they are selling 10% of the total sales in the three major cities of Zulia state. The construction of the project started in 1980 and sales started in 1981. Thus, since the beginning, the sales were benefiting from the subsidy program. The prices of the apartments fell within categories "D" and "E" of the decree 214. The developer expressed that to build units "A" and "B" is a utopia and could only be carried out in locations where the incidence of the cost of land on the prices were very low. Moreover, he said the government is backing up construction but it is not securing sales. He added the important thing was to

build units below the 350,000 Bs mark, or in other words, falling within the benefits of the program, but in the higher categories. The land was assembled in three stages by the firm. The first purchase took place in 1959, the last in 1973. Until 1980, when construction started, the land was held empty regardless of the good location (Northwest of the city, next to the University Campus). Ciudadela Faria represents a case of financial strength in a difficult market condition. They have enough capital and assets to use as collateral for their borrowings, and they have good connections with the financial sector. In addition, they can compensate for delays in sales with earnings from other projects and they don't have to worry about bottlenecks with construction materials. In sum, they have control of the two most critical components of residential construction; financing and materials. With this advantage they have a degree of flexibility to adapt to changing market conditions.

In the second group are those developers who are not selling the units. I could identify two opposite responses to the problem. The majority are waiting for the action the recently elected government is going to take and which they expect are going to be favorable. A minority has started in a very subtle way dropping the prices. The reductions in prices are made in the downpayment (up to 100%). This kind of negotiation is done in private between developers and

buyers. In the two cases that illustrate the first situation, the developers expressed they are having big losses but they do not plan to, nor can they, lower the prices. One of the projects is carried out by another big and experienced development firm in Maracaibo City. They built a project called La Florida, with 28 buildings and 1,049 units in the northwest section of Maracaibo, on a piece of land which used to be occupied by a barrio. Certainly, the area is not identified as appropriate for middle class residents, and we could conclude this has been a determining factor, given the reduction in the general level of sales. Financing, for the short and long run, as in Ciudadela Faria, was secured prior to construction. In this case, sources of financing were multiple too. The land was acquired by the company in 1974 and was "cheap" according to the developer. Construction started in 1978. Between 1979 and half of 1980, the first 405 apartments were sold at 215,000 (category "D"). Between 1980 and 1981, 4114 additional units were sold at 250,000 Bs (top price, category "D"). Lately, the price of the apartments is 330,000 Bs (category "E"). These increases average 11% yearly in five years. I asked the developers whether the project had troubles with cost escalations of materials and labor. The answer was that only labor had risen by around 10% in the past two years, but he expressed they hadn't had any problems with materials because they had in stock 80% of the needs, and in addition, they own supplies of bricks, cement,

and ceramic tiles. In this project, even though the benefits of construction financing did not occur since at the beginning, the late stages of the projects benefited from it. It was precisely in those last stages where the increases of prices took place, attributed to increases in the interest rates. When asked about market studies, the developer expressed there weren't any. We did an "appreciation" of the market, he said. In addition, he stated "D" and "E" were the only feasible units to build within the decree because to get long term financing for the cheaper ones was more difficult. He was confident incomes of the people would rise with inflation. "Housing units used to get sold, besides, we thought the susbidy would help," he expressed. Sales were successful in the first three years of the project (1979-1981), they sold an average of 273 units yearly. After 1981 sales dropped dramatically. Currently, the firm is lowering the downpayment, in some cases up to 100%.

The second case is El Bosque, a project in La Victoria City. It has 528 units; which had also pre-sale contracts before construction for almost 100% of the units. The construction started in June 1981, and ended in November 1982. This project is a public- private program (desarrollo mixto) between a private development firm and INAVI, the Venezuelan National Institute for Housing. The developer is the promoter, seller, and builder of the units. INAVI sold the undeveloped land to the developer in 1979, on the condition of

building according to INAVI's criteria for price, size, services, etc. (categories "B" and "C" of decree 214). The site is perimetral to the city although it has good accessibility. Formal sales started in 1982 and after a while they were no longer successful. By January 1984, 144 apartments remained unsold, 140 units in category "C". Many of the potential buyers have argued they have lost their job or they have referred to the uncertain economic future. Others have simply expressed they have found cheaper units they can better afford. Many of them have retired, even though long term financing was already approved with the subsidy program. In those cases, the buyers have preferred to lose around 1% of the price of the units for bank charges, but not to undertake the financial compromise. This case illustrates very well the contraction of the demand for apartments due to the unfavorable economic expectations.

Both developers expressed they plan to recover partially the losses. They are strongly convinced they can sell the units even at higher prices in the long run. Both of them asserted that a strong inflationary period is expected and as a consequence, prices will rise dramatically. They expressed people will need to invest in assets that appreciate with inflation, and real estate investments are a primary choice. They referred to the proportion of people in Venezuela who did not take their capital out in dollars before the currency devaluation, and who will seek a hedge against

inflation. In addition, they expressed that even if salaries don't keep pace with inflation, the population growth will secure the demand for housing. Given that the production of housing units will be further slowed down, they will be forced to buy the existing inventory. The answer to how they were going to meet the interest payments, was that banks were not interested in taking units they could not sell and that the banks' business was selling credit, not units. Thus, the banks were also waiting. Furthermore, given the current crisis, banks prefer to hold the loans as paper assets and not as frozen built capital. They will not allow the developers, even if they wanted, to lower the prices of the units fearing a portfolio crisis. The developers expressed that the production and the financing sector of the housing industry have big hopes that the new government, elected in December 1983, will take "favorable" economic measures to solve the situation. For all these reasons they thought it made a lot of sense to wait in most cases because in the end they would be better off.

The third group of developers, represented by those who have the construction of projects paralyzed, must be separated into two categories. The first category is represented by those projects subject to legal or fiscal actions due to mismanagement. The second category represents the projects that were financed by the Banco de los Trabajadores de Venezuela (BTV) and Banco Nacional de Descuento (BND) which

stopped receiving the valuations due to the intervention in 1982 of the Venezuelan government in the two banks. It has been estimated that out of the units paralyzed, 11,000 units or approximately 50% were units financed by the BTV.

The project Ciudad El Sol in Maracaibo is representative of the first category. It is an example of administrative corruption and speculation between developers and the director of the traditionally most solid and big savings and loan institution in Zulia state. The ambitious project was granted a loan for 450 million Bolivares to build a project of 4,000 units without a serious financial evaluation of the viability of the project. It is well known the director of the savings and loan was a partner in the project. This was an express violation of Venezuelan banking regulations. The project is stopped because it had cash flow problems even before 12 out of the 87 buildings were finished. Even though part of the land was resold to other companies to compensate for the lack of available funds, they could not fill the gap. The savings and loan discovered the mismanagement and it took legal action against the company and its own director.

In the case of the BND and BTV, many construction loans were granted without critical financial evaluations. Many projects defaulted, as a consequence. These banks held many

paper assets but were unable to take care of their liabilities. With the intervention of the government, the construction projects which depended on these banks for financing stopped receiving the valuations and without working cash, construction of other projects also stopped.

Other construction projects have stopped because the developers are no longer interested in finishing them, given the market conditions. Construction financing was 100%; since less than 1/2 of the construction process accounts for more than 60% of the valuations, developers had already received most of the capital. In many cases, they have used this capital to finance other projects, thus to finish the projects will not give them any return because the earnings for sale belong to the bank. They prefer to quit and use their time in another investment.

Conclusions

From the evaluation of the production of housing units by the private sector it is clear the concentration of the production is on the most expensive categories, "D" and "E", and on middle sized units. That outcome is in obvious contradiction with the stated Program 4 goals that pretended to concentrate the production on low cost housing units affordable to households earning between 3,000 and 7,000 Bs per

month. We saw how the weighted average of the units produced during the period required incomes higher than 8,000 Bs per month before the implementation of the subsidy program, and higher than 5,000 Bs per month after the subsidy was implemented in July 1981. In addition, the concentration of the production on units "D" and "E" increased to reach 68% in 1983 while the share of units "A" and "B" dropped continuously to reach 1% in the same year. We also observed the predominance of the most expensive units in the production did not change, even though inventory accumulation started being obvious since the beginning of the period. That inventory accumulation reached a critical point in 1983 due to the growing unemployment rate, lack of liquidity, and the effects of high interest rates. In 1983 the level of sales dropped by 30% compared to the previous years and the number of units unsold amounted to 41,677 units. As a result of the concentration of production on the most expensive units, the weighted average of the units financed during the period belonged to category "E". Similarly, 68% of the units which benefited from the subsidy belonged to categories "D" and "E". Their financing consumed 76% of the resources spent on the subsidy program.

From the observed behavior, we could speculate about the indication of a private sector "preference" to build the most expensive units. Unfortunately, we lack empirical evi-

dence to demonstrate causal relationships between the Pro gram 4 and the supply characteristics. We lack a control group to analyze what the outcome would have been without the effects of the program. We are also unable to compare the outcomes with the 1974-1978 presidential period simply because statistics are not available. However, we can say, based on the direct observations and on the interviews, that "within the scope" of the program units "D" and "E" were the kind of units the developers preferred to produce given the existing market conditions. In this case we can argue whether the policy exacerbated the number of units produced at those levels given the developers' perceived advantages from building those units. This is not to say that had those perceived advantages not existed, the low cost units would have been produced, because it is likely to expect some developers would have preferred to build units for the non-regulated market, to engage in non-residential construction activity, or to undertake an alternative investment. Nevertheless, we can argue a bias toward production was built into the array of choices. Moreover, the choices were wrongly conceived in the policy because the higher categories of prices were not affordable by the program's target group.

From the interviews and observations, it seems the developers are unable or unwilling to produce in the amounts expected, the lower cost units within the program and they

argued the most important reasons were construction costs, the scarcity and cost of land, the costly and lengthy red tape, and the uncertainty of the marketability of the cheaper units. In summary, the perceived risks compared to the level of returns did not seem attractive enough as real estate investments. Given the conditions of the market, we could talk about an umbrella of prices. Given the prevailing market conditions between 1979 and 1983, developers felt that building the most expensive units was much more profitable, regardless of the real risks of a smaller potential market. However, we said before that, the lack of market studies and reliable statistics to forecast the demand also contributed to make investment decisions based more on intuition than on informed choices.

The reasons for the developers preferring the more expensive units are more extensive than those publicly expressed. First of all, 100% financing was available for all categories of units within the program. Second, ownership of the land facilitated the common practice of inflating the land prices in order to increase the value of the projected units. Third, inflating construction costs for building expensive units has more potential for success than for the cheaper units. Fourth, tax payments as a deterrent to building more expensively, it is not such an effective measure given taxes are future, not present, payments and the opportunities for tax evasion are high in Venezuela. Fifth, the

developers do not believe in the accessibility to formal financing by the lower income households, regardless of the program regulations and controls on the financing institutions. Moreover, they were fearful about the potential competition between the units they would produce in categories "A" and "B" and the similar units INAVI would produce, but with better financing conditions for the buyer. Sixth, the subsidy program also raised expectations in the developers of a more secure market for whatever units they produced within the program.

The former considerations lead us to think many variables will need to be changed drastically in the program if production of lower cost units by the private sector pretends to be achieved. What those necessary changes should be, their expected effects on the degree of efficiency, and other alternatives or complementary approaches to production, are questions that will be explored in Chapter 5.

CHAPTER 5

THE FEASIBILITY OF IMPLEMENTING THE PROGRAM 4: COST-PRICE EVALUATION

We have seen in Chapter 4 that 66% of the units produced within the range of prices of Program 4 concentrated on units "D" and "E" and that the average price of the units produced during the period fell within category "E", the most expensive one. We argued how the policy features could have contributed to the distributional effects. Accordingly, we identified the critical features in the Program and their likely effects on production. We identified those features that contributed to increasing the marginal benefits from building the most expensive units and those features likely to have no major effect on orienting production. In Chapter 5, we will argue production of the cheaper units was so low because the policy was conceptually unrealistic and static. The Program 4 intended to encourage the production of cheaper units without taking into acount the market costs of construction input, the average return from other more competitive real estate investments in Venezuela, and the effects of inflation. This chapter will illustrate why it was not feasible for the developers to build the cheaper units without receiving complementary subsidies. We will observe that it is not surprising the cheaper units almost did not

get produced by the private developers, given the cost of building and the less restrictive conditions and potential higher benefits from building the more expensive units.

Next, we will highlight the cost reduction effects of the building process carried out by the informal sector operating in the squatter settlement areas. We will argue that units with similar characteristics to the cheaper ones encouraged by the Program 4 get produced by informal developers, but at a much lower price. This happens because, by avoiding formal mechanisms, regulations, and expenses, informal developers are able to drastically cut prices. Similarly, we will illustrate how the production of units of similar characteristics is also carried by the government (INAVI and Vivienda Rural) but their construction is heavily subsidized.

In light of the observations, we conclude that if the government wants to effectively encourage the production of low-cost housing by the formal private sector, the policy would have to include heavier subsidies to reduce the costs of production of the cheaper units. In addition, more strict controls on the level of returns gotten from more competitive real estate investments would have to be implemented in order to make investing in the cheaper units more attractive. Also, the policy would have to include regulatory changes concerning urbanization standards, building

codes, and building systems, and it would have to consider some land provision. Moreover, the procedural mechanisms to obtain construction and occupancy permits would have to be reviewed to eliminate the excess costs and delays. Finally, we recommend the government explore alternative developers, other than the big and well developed firms currently operating in the market, as a way to achieve higher reduction in cost and to increase the adequacy of production to the consumer needs.

Financial Evaluation of the Target Units within Program 4

As we have mentioned before, the variables to qualify the units produced within the program were the sales price and the number of bedrooms. Chart No. 31 presents the minimum feasible areas for apartments with 2, 3, and 4 bedrooms. Even though those areas are smaller than the average areas being offerred in the market, they represent the minimum sizes that could be marketable. Chart No. 32 depicts the construction and land areas required by three hypothetical buildings with apartments of 2, 3, and 4 bedrooms respectively. The Charts mentioned above were used to develop three hypothetical residential buildings which will illustrate the financial feasibility of the kind of units promoted by the Program 4.

Chart Number 31

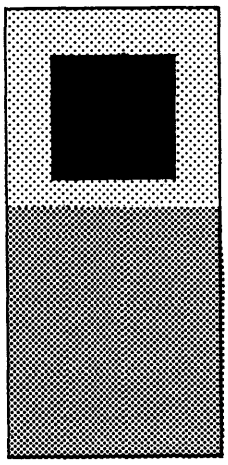
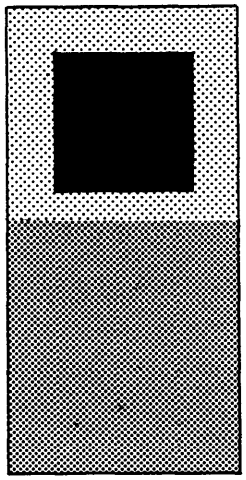
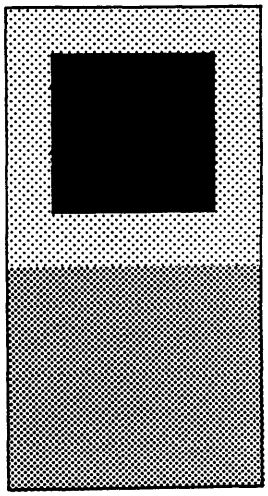
Minimum Feasible Areas (sq. m)

No. of Bedrooms per Unit	Room Areas (Sq. m)		Total Area (Sq. m)
2 (A&B)	2 Bedrooms (1 of 12, and 1 of 10)	22	56
	Kitchen, Dining Room and Living Room	30	
	Bathroom and Service	4	
3 (C&D)	3 Bedrooms (1 of 12, 2 of 11)	34	70
	Kitchen, Dining Room and Living Room	30	
	Bathroom and Service	6	
4 (E)	4 Bedrooms (2 of 12, 2 of 10)	44	95
	Kitchen, Dining Room and Living Room	41	
	Bathroom and Service	10	

The three hypothetical cases assume high rise buildings which are the most common type of residential construction currently carried out by the formal private sector. Single family units, row houses, and duplexes are rarely built by the formal sector, and when they are built, they correspond to luxury houses. On the contrary, the kind of development mentioned above (low-rise buildings), characterizes the informal development taking place in the squatter settlement areas. High rise buildings were undertaken to develop the cases not because they are considered the most cost appropriate solution for low-cost of residential development, but because they are the ones used to estimate the price indicators backing up the cases and because given the scarcity of land and the urbanization regulations, they represent the most feasible solution.

CHART NO 32

HYPOTHETICAL RESIDENTIAL BUILDINGS

APARTMENT TYPE		A&B	C&D	E
NO. OF BEDROOMS PER APARTMENT		2 Bedrooms	3 Bedrooms	4 Bedrooms
APARTMENT AREA		56 sq. m.	70 sq. m.	95 sq. m.
NO OF APARTMENTS PER FLOOR		4	4	4
NO OF FLOORS		12	12	12
FLOOR AREA (4 apts x Apt Area + 15% of circulation area)		4 x 56 = 224 + 15% = 34 Area = 258 sq m	4 x 70 = 280 + 15% = 42 Area= 380 sq m	4 x 95= 380 + 15% = 57 Area= 437 sq m
TOTAL BUILDING AREA		3,096 sq m	3,864 sq m	5,244 sq m
LAND	BUILT UP AREA	258 sq m	380 sq m	437 sq m
	PARKING AREA	960 sq m	960 sq m	960 sq m
	LANDSCAPE AND SET-BACKS	382 sq m	460 sq m	460 sq m
	TOTAL LAND AREA	1,600 sq m	1,800 sq m	1,857 sq m
LAY OUT Building Parking Landscape & Set backs				

In order to develop the cost estimates for the cases, price indicators for construction and land costs were undertaken. These indicators represent below average construction costs in the private sector. They are thought to be suitable for low-cost housing production. The land cost indicator implies a peripheral urban location, although with good accessibility, and construction costs represent plain finishings and simple structures and materials. Given the indicators available refer to the Caracas Metropolitan Area, the cases are representative of that location, however, we should be aware that it is likely in some cities in the interior of Venezuela, costs are somewhat lower. The distribution of costs within a project used to estimate the total construction costs and soft costs is based on a sample of 6 buildings, carried out by a team from the Central University in 1981. This analysis was also done for the Caracas Metropolitan Area. All cases were developed assuming 1980 as the starting year for construction, and a 2 year construction period. In order to simplify the analysis, the estimation of returns is done before income tax payments.

I. Hypothetical Case - Units A and B (2 Bedroom Units)

Cost Estimates

It assumes a high rise of 12 floors, 4 apartments per floor, with 2 bedrooms per apartment and an apartment area up to 56 sq. m.

Land Cost: 1,600 sq. m at 1,500 Bs/sq. m^1 = Bs 2,400,000

Hard Costs: 3,096 sq. m at 1,500 Bs/sq. m^2 = Bs 4,644,000

Bs 4,884,000

Land + Hard Costs = 69% of Total Construction Costs[3]

Total Construction Cost = 7,078,261

Soft Costs[3]:

Interest Financing (21% of TCC)	1,486,435
Promotion and Sales (5% of TCC)	353,913
Insurance and Municipal Taxes (1% of TCC)	70,782
Professional Fees (1.5% of TCC)	106,174
Management and Supervision (2.5% of TCC)	176,957
	2,194,261

Total Cost: Bs 7,078,261

Loan Amount 100% Construction Cost-Land = Bs 4,678,261

1. It assumes the cost of a peripheral piece of land but with good accessibility for the Caracas Metropolitan Area. El Diario de Caracas, Domingo 16 de Marzo de 1980. "Enfriamiento" and "El Costo de los Terrenos aumentó 100% en dos años."

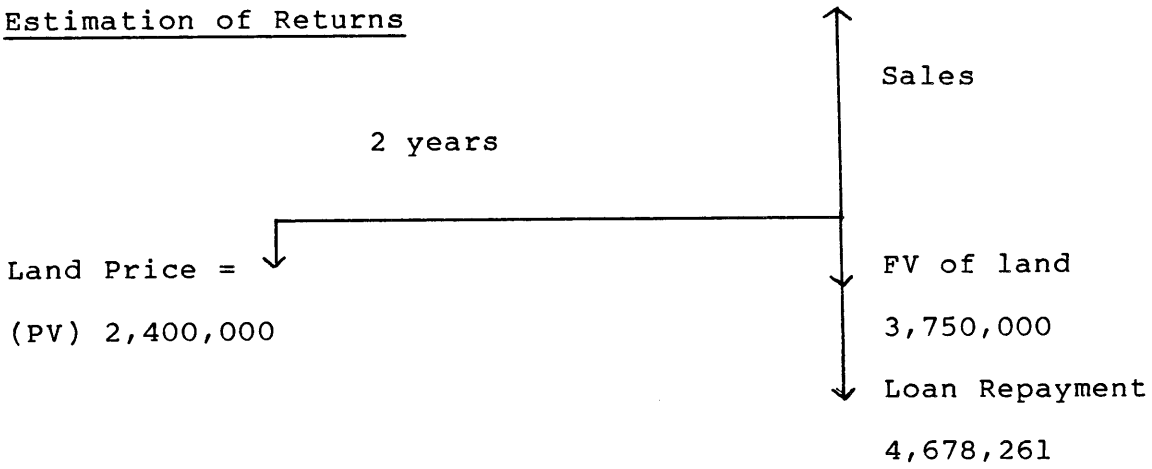
2. Projected cost taken from an average of 1,000 Bs/Sq. m in 1977 assuming an average inflation of 15% annually. Revista ISC, Septiembre-Octubre 1977, "Vivienda, Costos, Precio y Ganancias."

3. Distribution of cost according to "Estructura de Costos en la Produccion de Vivienda." Alberto Aranda Arocha UCV, IDEC, Marzo 1981.

Average Total Construction Cost per Sq. m of Apartment:

7,078,261 ÷ 2,688 = 2,633 Bs per Sq. m

Estimation of Returns



1. FV of land at the end of second year when construction is completed at 25% return on equity before taxes, Bs 3,750,000

Total Sales = FV of land + loan repayment

Total ~~Sales =~~ 3,750,000 + 4,678,261 = 8,428,261

Sales Price per Apartment = Bs 175,589 Category C

Sales Price per Sq. m = 2,702 Bs/Sq. m

Assuming apartments were sold at the regulated price of 100,000 Bs/unit, then sales 4,800,000

FV of Land = 4,800,000 - 4,678,261 = 121,739

which means the developer will have big losses.

2. FV of land at 15% return on equity after 2 years = 3,174,000

Total Sales = 3,174,000 + 4,678,261 = 7,852,261

Sales Price per Apartment = Bs 163,588 Category C

Sales Price per Sq. m = 2,517 Bs/Sq. m

3. Cutting construction and land costs in half and with 25% return on equity.

Land Cost = 1,200,000; FV = 1,875,000

Loan Repayment = 2,339,131

Total Sales = 1,875,000 + 2,339,131 = 4,214,131

Sales Price per Apartment = Bs 87,795 - we reach Category A

Sales Price per Sq. m = 1,320 Bs/Sq. m

4. Cutting construction and land costs 25% and with 15% return on equity.

Land Cost = 1,800,000; FV = 2,380,000

Loan Repayment = 3,508,696

Total Sales = 2,380,000 + 3,508,696 = 5,899,196

Sales Price per Apartment = Bs 122,692 Category B

Sales Price per Sq. m = 1,888 Bs/Sq. m

5. Cutting construction and land cost 50% and with 15% return on equity.

Land Cost = 1,200,000; FV = 1,587,000

Loan Repayment = 2,339,131

Total Sales = 1,587,000 + 2,339,131 = 3,926,131

Sales Price per Apartment = Bs 81,795 - we reach Category A

Sales Price per Sq. m = 1,258 Bs/Sq. m

II. Hypothetical Case - Units C and D (3 Bedroom Units)

Cost Estimates

It assumes a high rise of 12 floors, 4 apartments with 3 bedrooms per floor. Total area of an Apartment is 70 sq. m.

Land Cost: 1,800 sq. m at 1,500 Bs/sq. m = 2,700,000

Hard Costs: 3,864 sq. m at 1,500 Bs/sq. m = 5,796,000

Bs 8,496,000

Land + Hard Costs = 69% of Total Construction Costs

Total Construction Cost = Bs 12,313,044

Soft Costs:

Interest Financing (21% of TCC)	2,585,739
Promotion and Sales (5% of TCC)	615,652
Insurance and Municipal Taxes (1% of TCC)	123,131
Professional Fees (1.5% of TCC)	184,696
Management and Supervision (2.5% of TCC)	307,826
	3,817,044

Total Cost: Bs 12,313,044

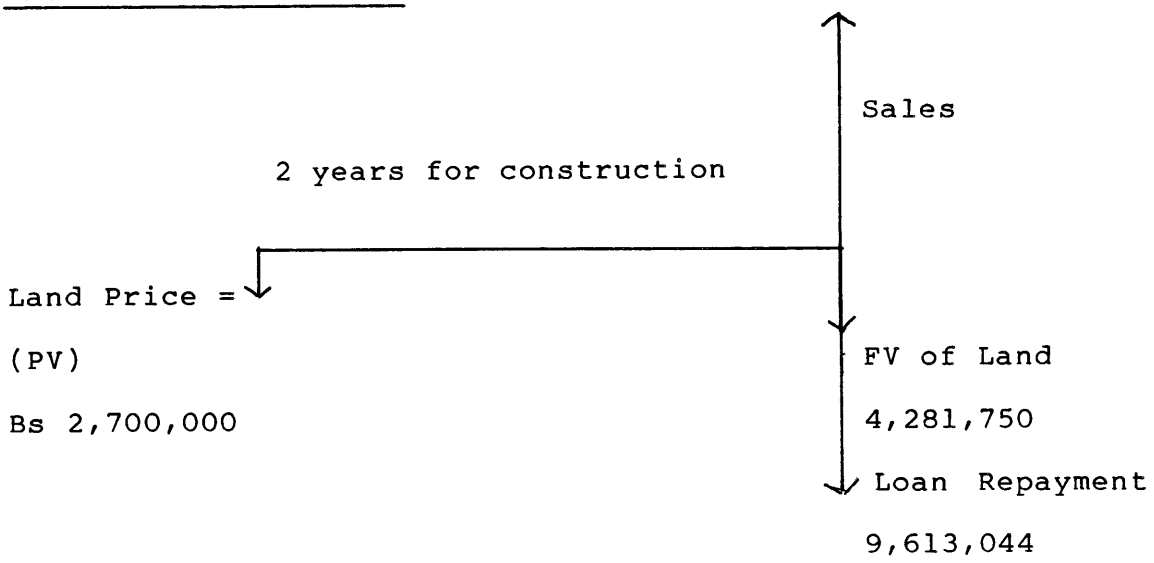
Loan Amount 100% Construction Cost-Land = Bs 9,613,044

Average Total Construction Cost per Sq. m of Apartment:

12,313,044 ÷ 3,360 = 3,665 Bs/sq. m

This cost is approximately equal to the average market sales price for a unit produced by the formal private sector in 1978 in Caracas Metropolitan Area.

Estimation of Returns



1. FV of land at 25% return on equity = Bs 4,218,750

Total Sales = FV of Land + Loan Repayment

Total Sales = 4,218,750 + 9,613,044 = 13.831.794

Sales Price per Apartment = 288,163 Bs - out of Category C

Sales Price per Sq. m = 4,117 Bs/Sq. m - in Category E

2. FV of land at 15% return on equity = 3,570,750

Total Sales - 3,570,750 + 9,613,044 = 13,183,794

Sales Price per Apartment = 274,662 Bs Category E

Sales Price per Sq. m = 3,924 Bs/Sq. m

3. Cutting construction and land costs in half and with 25% return on equity.

Land Cost = 1,350,000 Bs; FV = 1,785,375

Loan Repayment = 4,806,522

Total Sales = 1,785,375 + 4,806,522 = 6,591,897

Sales Price per Apartment = 137,331 Bs Category B

Sales Price per Sq. m = 1,962 Bs/Sq. m

4. Cutting construction and land costs 25% and with a return of 15% on equity.

Land Cost = 2,025,000; FV = 2,678,062

Loan Repayment = 7,209,783

Total Sales = 2,678,062 + 7,209,783 = 9,887,845

Sales Price per Apartment = 205,997 Bs Category C

Sales per Sq. m = 2,943 Bs/Sq. m

III. Hypothetical Case - Units E (4 Bedroom Unit)

Cost Estimates

It assumes a high rise with 12 floors, 4 apartments per floor. Apartments with 4 bedrooms and an apartment area of 95 sq. m. 48 apartments per building. It keeps constant unitarian land costs and construction costs.

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(p. 169)

Land Cost: 2,112 sq. m at 1,500 Bs/sq. m = Bs 3,168,000

Hard Costs: 5,244 sq. m at 1,500 Bs/sq. m = Bs 7,866,000

11,034,000

Land + Hard Costs = 69% of Total Construction Costs

Total Construction Cost = 15,991,304

Soft Costs:

Interest Financing (21% of TCC)	=	3,358,174
Promotion and Sales (5% of TCC)	=	799,565
Insurance and Municipal Taxes (1% of TCC)	=	159,913
Professional Fees (1.5% of TCC)	=	239,870
Management and Supervision (2.5% of TCC)	=	399,783
		4,957,304

Total Cost: Bs 15,991,304

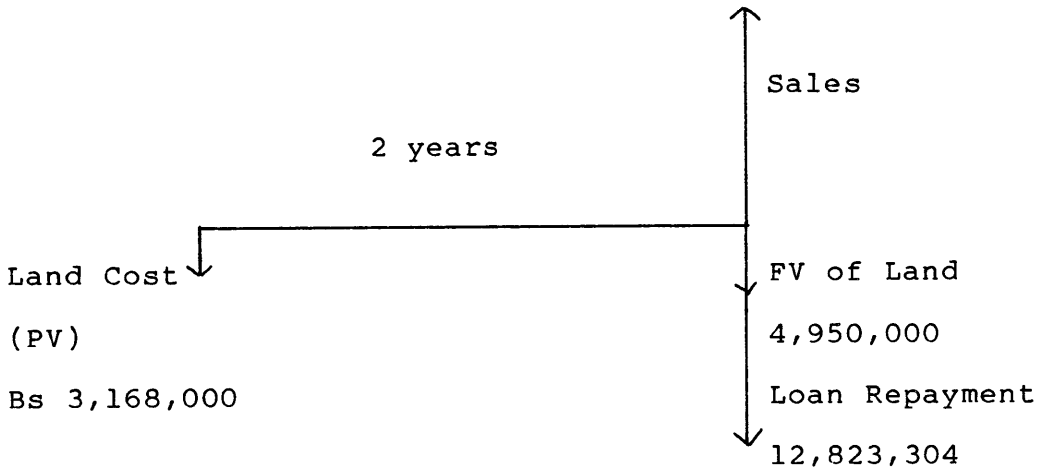
Loan Amount 100% Construction Cost-Land = Bs 12,823,304

Average Total Construction Cost per Sq. m of Apartment:

Bs 15,991,304 ÷ 4,560 Apartments = 3,507 Bs/sq. m.

This cost represents the average sales price per square meter in 1978 in the Caracas Metropolitan Area. We realize the average price per sq. m starts reducing when we increase the size of the apartment.

Estimation of Returns and Apartment Market Sales Price



1. FV of Land at 25% return on equity = Bs 4,950,000

Total Sales = 4,950,000 + 12,823,304 = 17,773,304

Sales Price per Apartment = 370,277 Bs - out of Category E in the Non-Regulated Market

Sales Price per Sq. m = 3,898 Bs/Sq. m

2. FV of land at 15% return on equity = Bs. 4,189,680

Total Sales = 4,189,680 + 12,823,304 = 17,012,984

Sales Price per Apartment = 354,437 Bs - Category E

3. Cutting construction and land costs in half and with 25% of return on equity.

Land Cost = 1,584,000; FV = 2,475,000

Loan Repayment = 6,411,652

Total Sales = 2,475,000 + 6,411,652 = 8,886,652

Sales Price per Apartment = 185,139 Bs Category C

Sales Price per Sq. m = 1,949 Bs/Sq. m

4. Cutting construction and land costs 25% and with 15% return on equity.

Land Cost = 2,376,000; FV = 3,142,260

Loan Repayment = 9,617,478

Total Sales = 3,142,260 + 9,617,478 = 12,759,738

Sales Price per Apartment = 265,827 Bs Category E

Sales Price per Sq. m = 2,799 Bs/Sq. m

Conclusions

From the evaluation of the former cases, we concluded it was very unlikely to expect developers to be able to produce the cheaper units given the restrictions in sales price and number of bedrooms. The market costs were too high to allow the developers to earn attractive returns from those investments. Charts No. 33 and 34 illustrate the maximum price per square meter allowed to qualify for the benefits of Program 4 and the maximum sales price of the hypothetical building cases. From their comparison, we realize that the construction of the units within the program, gave the developers few possibilities to make a profitable investment. Even though the difference between the maximum sales price and the market sales price is significant for all the units, it is especially dramatic for units "A" and "C". This is a logical outcome given units "A" and "C" required the same area as units "B" and "D" respectively, but they had to be sold at a lower price. We realize that high reductions in

Chart No. 33
Maximum Sales Price Allowed
According to Parameters of Program 4
(Bs/Sq. m)

Housing Category	Maximum Sales Price (Bs)	Maximum Feasible Area (Sq. m)	Maximum Sales Price Bs/Sq. m	Difference Between Sales Price and Maximum Price (Sq. m)
A	100,000	56	1,786	916
B	150,000	56	2,678	24
C	200,000	70	2,857	1,620
D	250,000	70	3,571	546
E	350,000	95	3,684	214

Chart No. 34
Maximum Sales Price of
Hypothetical Buildings
(Bs/Sq. m)

Housing Category	Minimum Feasible Areas	Sales Price (1)	Sales Price (2)	Sales Price (3)
A & B	56	2,702	1,320	1,888
C & D	70	4,117	1,962	2,943
E	95	3,898	1,949	2,799

1. Sales Price at Market Construction Costs with 25% Return on Equity (Bs/Sq. m).

2. Sales Price Cutting Construction Costs 50% and with 25% Return on Equity (Bs/Sq. m).

3. Sales Price Cutting Construction Costs 25% and with 15% Return on Equity (Bs/Sq. m).

cost are necessary to reach the level of prices required by Program 4. For a developer to be able to build units A, for example, construction and land costs would have to be reduced 50% and the potential level of return on equity would be 15%. Similarly, for the construction of units B to be possible, construction and land costs would have to be reduced 25%, also assuming a return of 15%. This conclusion becomes even more serious when we consider that land at 1,500 Bs/sq. m was not abundant and construction costs at 1,500 Bs/sq. m were not easy to obtain. It is obvious that if a developer owned a piece of land appropriate for low-cost housing, he would prefer to build the units within the program which could give him higher returns and less construction and marketability risks. Those units were not the cheaper ones. That argument is also valid for investment decisions based on construction costs. Inflation, which averaged 16% annually in the last years of the period also contributed to make construction of the cheaper units more difficult because it increased construction and land costs. The liberation of the interest rates in 1981 is likely to have increased the proportion of construction financing to at least 25% of construction costs[1]. Returns of 15% are also lower compared to the average of 25% decleared earnings in alternative real estate investments. For all these reasons, we

1. El Factor Financiamiento en la Produccion de la Mercancia Vivienda en Venezuela. A. Cilento Sardi, UCV, IDEC, Caracas 1981, p. 26.

could expect the cheaper units would rarely be produced and their production will be further reduced with increases in the general level of prices. This conclusion confirms the findings in Chapter 4 where we realized how the proportion of units "A" and "B" dropped from 25% in 1979, to 1% in 1983, considering only private production within the regulated market. The construction of the more expensive units, even though more feasible, also required some reduction in the level of costs and returns. In order to build units with 3 bedrooms that qualify for category "C", for example, cost reductions of 25% would be necessary using the conservative estimate of 15% returns, similar reductions were necessary to obtain units "E".

However, regardless of the cost restrictions, units of all categories got produced during the period. We can speculate about the reasons for that outcome. First of all, we have to be aware that in the distribution of soft costs, some profits are already built in. These profits become higher when we consider in most of the cases, the developer participates in the earnings throughout the whole construction process. The developer is usually the land owner, he has connections with the construction materials industry, he owns or belongs to an architectural and engineering firm, he manages and supervises the construction, and moreover, he advertizes and sells his own building. Some developers, regardless of regulations, are also connected to the financing

institutions. Therefore, when we talk about 15% of return, the real return is much higher. Second, it is likely the developer had found a way of cutting costs down by reducing the quality of construction or location. This argument could be supported by evaluating the quality of the inventory. The argument that developers built in smaller cities where land costs or construction costs could be lower is not likely given that most of the production and inventory concentrated in the biggest and fastest growing cities of the country. Third, the statistics accounting for private production included units built with public-private partnership schemes and with government subsidies. This is the case of El Bosque in Aragua State, in which INAVI sold the land to the developer at below market price and financed it at 9% interest rate in a time when the interest rates on short term mortgages was at 18% or more. Also, in public-private partnership some changes in urbanization and building standards are allowed. Therefore, construction costs can be reduced. It is also true those projects, given they are backed up by government institutions, can avoid some of the lengthy and expensive processes of approvals and permits. Finally, most of the units built with the public-private approach were likely to concentrate in the middle and lower categories, thus contributing to the share of units "A", "B", and "C" in the production of the regulated market.

There are many factors that contributed to the high construction and land costs in Venezuela. As it has been mentioned, one of the key elements is land availability. In the main urban areas, land is scarce and when available, it is used for the most profitable investments. Even though FONDUR, since 1975, has undertaken the task of assembling urban land for low-cost housing development, the amount of land purchased in every period has been below the policy target goals. Even though the land assembled does not amount to much, we could argue the increases in demand for land by INAVI have contributed to the increase in prices. Financing in 1980 represented 21% of total construction costs and after the liberation in 1981, became even more expensive. The building codes also contributed to higher construction costs because they require unrealistic standards for the prices of the units produced. Urbanization norms make the development of low-rise residental areas using row house or duplex approaches very expensive. Land prices also contribute to making high rise developments the most likely approach, regardless of the fact that the structural and equipment requirements are higher for vertical developments. The technology used in construction is also responsible for the high costs because the concrete frame system requires a lot of steel and cement, materials which have to compete at the international market prices. That technology also requires a greater use of machinery and

specialized labor that affects costs. Reducing the proportion of imported input into construction and increasing the amount of labor, some cost reductions could be achieved.

An interesting question is, what are the mechanisms that have allowed the construction of units with equivalent characteristics to those encouraged by the Program 4, but at cheaper prices in Venezuela; knowing they are indeed produced by the government and by the informal sector. Government production of the cheaper units is carried out by INAVI and Vivienda Rural. The units built by INAVI have an average price between 900 and 1,200 Bs/sq. m, excluding land. For Vivienda Rural, the average price without land is even lower, 600 Bs/sq. m. These costs are attainable because of the level of subsidies in construction. Both institutions subsidized the sale of the units, selling them at below market prices. Vivienda Rural has a very interesting mechanism for construction, based on small local contractors, who are paid by weekly valuations. In addition, Vivienda Rural subsidizes material and its construction is based on single family units using a very traditional, but very easy to build system. Besides being effective, construction is faster. In general, both institutions bear the cost of land development and land price.

On the other hand, the informal sector, even though it does not make use of strong subsidies at the beginning of the process (public facilities come later without the users paying), it can reduce construction costs by practically eliminating all soft costs incurred by formal construction and reducing hard costs. In addition, it eliminates land costs given that units are developed, in most cases, on land without holding legal ownership. The producers in the informal sector do not pay interest on financing, because construction is done incrementally out of savings, family borrowing, or informal financing. Thus, the financing system adapts very well to the family budget constraints. Informal developers do not pay municipal income taxes, or any kind of insurance, they do not make use of management and supervision, or promotion and sales. These expenses are not necessary simply because the building process is carried out on a small scale and in most cases, under the direct supervision of the owner itself. For all these reasons, it is not surprising they can reduce the costs by more than 50% compared to the formal construction.

The government and the informal sector approach illustrate some mechanisms that could be used by the government if it wants to encourage the construction of low-cost housing for moderate income households. Undoubtedly, given the market prices and conditions, if the formal private sector is going to be the targeted developer, higher and different

kinds of subsidies will have to be included within the program. Moreover, the government will have to review building codes and urbanization norms and increase the controls on the returns earned from building outside the regulated housing market.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

From the analysis carried out in Chapters 4 and 5, we concluded that drastic changes are needed in the design of a program of incentives for the formal private sector if the production of low-cost housing is to be achieved. These changes must be oriented toward restricting the comparative benefits from producing the higher cost units within the regulated market and outside it, changes that increase the comparative profitability from building the less costly units. Those changes must be carefully related among themselves and must be consistent with the overall state of the economy if we want to avoid negative side effects. We are well aware of the important connections formal housing production has with the financing sector, the employment level, and the growth of the other related industries. We also know the strong dependence the demand for housing has from the welfare of the country. Thus, different kinds and levels of changes are necessary. Some of them require undertaking some macro-economic measures, others imply the enforcement of the judicial and taxation system. Still other changes are related to the mechanisms available to the government to encourage and regulate the producers' behavior. We will talk mainly about the most detailed level of changes, those concerned with modifying the variables to

qualify the units produced, those related to the implementation of complementary subsidies and cost reductions to make feasible the construction of cheaper units, and those modifications to the incentives to the private sector; even though the connections with the more general level of changes will be discussed.

The Recommended Changes to the Program

The first group of changes refer to the variables that regulate the production of housing units by categories, those being the units' sales price and the number of bedrooms. We have explored along the development of this paper the inadequacy in the definition of the target household group in relation to the proposed sales price categories. We argued in Chapter 2 how the overall housing policy only left out around 5% of the total households of the country in 1979, and we discussed the unrealistic nature of that goal, given the limited resources of the country. We estimated in Chapter 3 the level of monthly income required to purchase categories "D" and "E" without the subsidy was well above the 7,000 Bs level, stated in the Program 4 as the top household group protected. We also analyzed that if a household earning 7,000 Bs/month in income wanted to buy a unit "D" in 1981, an average of 4% interest would have to be paid by the government to the bank during 6 years (see Chart No. 9). The corresponding average subsidized interest rate

would be 6% over 8 years if a household earning 3,000 Bs of monthly income wanted to buy a unit "C". These estimates consider an expense income ratio of 40% which is considered to be high given the priorities of other expenses. We also showed in Chapter 4 that a great majority of the units produced belonged to categories "D" and "E", just at levels unaffordable by 67%[1] of the target households; that 67% represented households with monthly earnings between 3,000 and 5,000 Bs/month in 1983. The number of households with incomes between 3,000 and 5,000 Bs/month was about 886,813 for the same year. We also explored the reasons behind the concentration of the production. From the analysis we concluded it is imperative to reduce the range of households under the policy protection. If, as it was discussed in Chapter 4, categories "D" and "E" are the ones that seem to be attractive to the developers and having argued the subsidy program did not initiate a switch in production, we concluded the cheaper categories will not be produced unless the most expensive categories are taken out of the program of incentives and additional subsidies are allowed for the construction of the cheaper categories. We can expect categories "D" and "E" will still be produced, and very possibly in more appropriate amounts, if they are excluded from the program protection because their production is likely to be profitable without the program incentives.

1. OCEI. Encuesta de Hogares por Muestreo. 1er Semestre 1983.

Consequently, it seems reasonable to think only the construction categories "A", "B" and "C" should be encouraged and subsidized. This proposition also reflects the belief that the target group should cover those families with monthly earnings between 3,000 and 5,000 Bs. In general, households with incomes of 5,000 Bs could afford units up to a price of 200,000 Bs with some unexaggerated level of subsidies. For instance, assuming 40% of income is spent on housing and a standard fixed rate mortgage with a 20 year term and 85% loan to value ratio, the affordable interest rate would be around 13%. Under the same mortgage terms, but using only 25% of income for housing consumption, the affordable interest rate will be around 6%, which undoubtedly will require a higher level of subsidy. More realistic expense income ratios of 30% and 35% will result in interest rates of 9% and 11% respectively. Thus, if the government was again to regulate interest rates at reasonable levels, for example at 14%, the level of direct subsidy required wouldn't be so high as it was in the 1979-1983 period. In addition, innovative mortgage mechanisms[1] should be evaluated by the government to increase the affordability level of the households and to take into account inflation. Provisions must be made in order to avoid tying the government

1. For references see, "The Inflation Proof Mortgage," by Franco Modigliani and "New Mortgage Designs for Stable Housing in an Inflationary Environment," edited by Modigliani and Lessard.

subsidy program to fluctuations in the interest rates, like the ones experienced in the period considered. In sum the reduction in the range of target households, the reduction in construction costs, and the implementation of construction subsidies for the target units, will make the goal of concentrating production for the lower-middle income group more attainable.

In relation to the control of quality of the units built, the variable of areas should accompany that of the number of bedrooms. For the government to include this variable as an additional feature to qualify the units a market study of costs of land, materials, labor, and capital must be carried out in realistic terms with considerations of an acceptable level of profits. Even though that study will involve some level of generalization, the inclusion of the variable area in the program is very important if we want to avoid the shrinkage effects observed in the period analyzed. In this cost estimation study, the establishment of realistic standards and the consideration of inflation effects are also paramount. The standards considered would refer not only to building codes and land occupation, but to standards for infrastructure, public services, and communal

facilities. In this regard the recently introduced "Guide for the Design of Residential Areas" should prove very helpful[1].

Cost Reduction Strategies

In relation to cost reductions we could look at the example given by the informal developers to realize that in fact some cost reductions could be obtained if the government implemented the necessary changes. First, a revision of ordinances and norms pertaining not only to the building itself, but to the requirements of public facilities and communal services is necessary. That revision should include the regulations concerning the ratio of built up area/ land area and the required set backs. The revision should be oriented toward encouraging the production of lower rise developments which offer potential for high density of land occupation and allow cost reductions, because they eliminate the expensive structural supports and the use of complicated construction equipment. Second, an evaluation of the building system and building technology should be carried out to evaluate substitution of the traditionally expensive concrete frame high rise system with low-rise structures from 1 to 4 floors which allow reductions in the proportion of in-

1. See Caminos, Goethert, Caminos, "Guia de Desarrollo Urbano para Nuevos Projectos de Vivienda," Noviembre 30, 1982.

ternationally traded materials such as cement and steel. Reducing the proportion of those inputs into construction and basing the construction on cheaper materials like bricks, we could obtain high reductions in costs. In this sense, production by Vivienda Rural has proved that a relatively simple construction system can indeed allow low construction costs to be obtained and can easily be carried out by non-sophisticated contractors. Here, it is also convenient to mention the need for an evaluation between labor intensive and capital intensive construction. While it is true that capital intensive construction frees the construction process from union claims and increases in wages, capital intensive construction in Venezuela has the problem of requiring high initial capital investments and labor expertise. A more labor intensive approach also generates higher employment levels, so necessary to the country.

Complementary Construction Subsidies

From the financial evaluation carried out in Chapter 5, we concluded complementary construction subsidies are necessary in order for the developers to build the cheaper units. Those subsidies would have to be higher, the lower the sales prices of the unit be produced. The government could implement additional subsidies from the ones already contained within the Program 4. For example, the government could provide construction materials and could lease equipment at

below market prices. The government could also allow reductions of standards for certain projects and facilitate the issuance of permits. These elements combined would undoubtedly contribute to considerable reductions in costs. Moreover, the government could reinforce the subsidies already built into the program, like making land available at below market prices, refinancing construction loans with high loan to value ratio, and reducing the marketability risks for the developers. However, all those subsidies should be carefully outlined, being specific for every housing category in order to control speculation. Control mechanisms would also need to be included.

A subsidy element which seems to have been effective in orienting production toward the lower cost units is the supply of land by the government. This practice included in the overall housing policy and in the Program 4 gave in some cases positive results. Some projects were built and sold successfully even though others were subject to corruption and speculation[1]. The procedures had been that the government sells the land to the developer, usually well below market price. After, the developer builds the units and sells them at market prices. A contract is signed between the developer and the government, usually represented by FONDUR or INAVI, in which the developer compromises to build the units with the characteristics of prices, areas, and

1. See the case of the project La Chamarreta in Chapter 1.

services specified by the institution. Financing is obtai ned from a bank.

Three questions arise with this procedure. The first one touches on the social justice issue. Land owned by the government is also a scarce resource. FONDUR, the institution created in 1975 to assemble and purchase land to develop public projects and control land speculation has not been able to achieve the assigned goals mainly because of lack of funds[1]. Thus, there is relatively little urban land owned by the government in relation to the amount needed to pursue the required public projects. As we saw in Chapter 2, the government is directly carrying out projects of sites and services and finished units for a strata of the population with even lower incomes than the one attended to by the private sector. Supplying too much land for the private sector programs will reduce the land available for the development of projects targeted to the group below 3,000 Bs of monthly income. However, developing public/private partnerships where the government acted as an equity investor, could be a way of orienting the production of housing for the low-middle income groups and at the same time generating more resources to carry out the lowest-cost housing projects. These kinds of arrangements, although perhaps not attractive for big developers, who own land, are likely to

1. See Declarations of Victor Fossi, President of FONDUR. El Universal 1980.

be attractive for small to medium scale contractors who don't own land and who could be willing to share in some profits. In any case, the decisions of whether or not to supply land for the development of finished units, requires the evaluation of trade-offs, taking into account the time, effort, and money invested by the government in the assembly of urban land and the reduction of land available to undertake other public projects.

The second question relates to the chances the purchase and sale of land benefits a few. We must be aware of the possibility that land could be bought from and sold to the same group or developer. Even though restrictions on contracts were contained within the policy, there would always be room for speculation. The third question refers to the effectiveness of the controls on the units' characteristics. Check ups are always difficult to carry out and they consume time and money. However, they must be carefully outlined and carried out. In addition, penalties for failures of the contracts should be included. In order to minimize the administrative expenses within the government, the financing institution could carry out the supervision. It is also important to evaluate the possibility of laying penalties if the project does not sell, for an unjustifiable reason. In this way, we will use the market control mechanisms to improve the quality of the units produced. Those penalties

should include also the banks if they have received the refinancing.

Another subsidy element already built into the program refers to the availability of construction financing. In Chapter 4 it was demonstrated this variable was critical to orienting investment. In the interviews, the developers expressed that given 100% financing was available for all categories, they chose to build the more costly units because the households who could afford them have higher potentialities for getting long term mortgages, the units could be built at the regulated prices given construction costs, and still left them with a fair amount of profit. Land was their equity, so they would try to maximize its utility.

For the preceding reasons, we conclude the availability of construction financing can be used to orient production. In order to achieve distributional effects, construction financing must be graded among the categories "A", "B", and "C". The availablility of construction financing for units costing more than 200,000 Bs should be left to market conditions because we can expect their production will occur without the government spending the scarce resources. A positive measure included in the policy was to tie the developers benefits to the condition of them getting long term credit for the buyers with the terms expressed by the program. This measure speeds up the process and avoids the government getting involved in the obtaining of long term

credit, thus reducing bureaucratic expenses. Consequently, it is suggested that condition be kept.

Modification to the Incentives

The first modification related to the incentives to the developers is the tax exemption. It was mentioned in Chapters 3 and 4; the fiscal incentives could have been a failure because of three reasons. First, even though the tax exemptions were graduated higher for the lower cost units, we could argue the comparative tax savings between building the cheaper or the more expensive units were not so different. In order to support this argument better, we will need to carry a comparative analysis of tax savings. The information required for that kind of analysis is very difficult to obtain because we need to obtain the earnings from sale, the incurred construction costs, and financing charges to be able to apply the corresponding tax rate. Developers are in general unwilling to provide that information. Moreover, in the cases the information was obtained, we may expect inaccurate data. However, regardless of this limitation, we know that even though tax exemptions are higher for the lower cost units, the comparative earnings are also smaller; on the contrary for the higher cost units, tax exemptions are lower, but the earnings are much higher. Second, the taxation system in Venezuela is very inefficient and it is plagued with evasions and bribes. Third, tax pay-

ments are money due in the future. For these reasons, we argue the tax regulations only complicated the program, but did not contribute to orient production toward the lower cost units. They generated additional red tape and bureaucratic expenses and they increased the potential for corruption in the country. In addition, they contributed to encouraging the generalized attitude in Venezuela of, "If nobody pays the required amount of taxes, why should I?" The Venezuelan taxation system needs a serious revision in design and implementation, but until a more effective regulation is implemented we should not rely on it to orient housing production. Another argument to support the elimination of the tax shelters is that in the years to come, the Venezuelan government will need to rely more on the internal sources of revenues given the reduction of income for conception of oil exports. The knowledge of the expected tax revenues from construction activities would allow the government to plan better for the future. The tax losses for concept of fiscal incentives can be estimated, but it would be better to simplify the system until it functions properly.

Another important variable that our analysis revealed as critical in influencing the characteristics of the units supplied, and one that could be reinforced, is the perceived marketability of the units. This variable is linked with the state of the economy and with the willingness or ability

of the financing institutions to provide long term mortgage credit. A higher level of confidence in the marketability of the low cost units could be built up if the government acquires the compromise of purchasing the units built after a reasonable period. However, the definition of that period and the conditions under which the units will be purchased will require close examination. It could happen that the developers might prefer to make a single and simplified sale to the government which would generate a lot of expenses and time consumed by the government in marketing the units. It also could happen the developers overlooked the quality of the units produced given the reduction of marketability risks. Thus, the likely advantages and disadvantages of this measure should be weighed.

Complementary measures to reduce the marketing risks have to do with strengthening the regulations and incentives for the financing institutions. A new regulation for portfolio restrictions should be outlined. That new regulation should be more specific about the proportion of mortgages issued per category. Lumping the categories, as in the last regulation, should be avoided in order to better control the distribution of prices. The portfolio regulations need to be backed up by tax exemptions to compensate for the issuance of higher risk loans. Here, controls on tax payments should also be enforced, given the way the taxation system works. Similarly, it is very important to keep the refinan-

cing program to assure continued influx of funds to the housing financing system. Given that we are proposing to restrict the range of beneficiaries, the amount of resources needed by the government to accomplish the refinancing task would be more attainable. However, macro-economic measures are necessary as well, for the banks to have funds for long terms loans. Those measures relate mainly to the interest rate paid by the banks for time deposits and savings accounts and the interest rate charges on short and long term loans. Given the results from the last period, it seems in Venezuela a system of control of the interest rates is more effective because the degree of control over the housing market increases and speculation with interest rates reduces. Nevertheless, the regulation of the interest rates reduces the funds circulating in the system because savers prefer to invest in the more competitive international markets. However, the discussion about the most appropriate measures for the capital market is out of the scope of this paper, but we should be conscious that whatever the decisions are the features of the housing program must be coordinated with them.

Assuming there were no major inconveniences in the mortgage banks issuing long term loans, effective controls on the portfolio restrictions, tax payment, and illegal investment banking would be necessary. These considerations lead us to evaluate the feasibility of implementing such cont-

rols. We must keep in mind the financing sector represents one of the strongest elements in the Venezuelan socio-political structure. In many cases, in order to achieve more strict controls, profound changes would need to be made. Thus, we could assume irregular behavior will take place.

The subsidy program seems to be an appropriate measure, not only to increase the affordability level of the households, but to decrease the developers' perceived higher risks in marketing the cheaper units. Of course, this program depends on the financing institutions providing the long term loans, but assuming that were not an obstacle, we see it as a positive measure. However, the subsidy program needs to be evaluated in depth to determine the feasibility of positive changes. Currently, it has proved to be very difficult to bear with the government given the enormous differences between the market interest rates and the subsidized rates. As it was mentioned before, alternative mortgage mechanisms should be analyzed to come up with a more realistic approach.

Summary of Modifications to the Program 4

In sum, the recommendations to increase the likelihood of private developers undertaking the supply of low cost housing units and responding better to the government's objectives, are as follows. First, a reduction in the range

of target households is proposed, because we can achieve better distributional effects and we will avoid the concentration on production of the most expensive units. Moreover, the limited resources would be channelled to the population that the private sector would not attend to otherwise. In this sense, we are proposing to take out of the program the construction of the units "D" and "E". Second, a variable regarding areas should be included among those designed to regulate the quality of the units. This recommendation pretends to avoid the speculation carried out by reducing exaggeratedly the areas of the units. Third, complementary actions to allow cost reductions for the production of the lower-cost units must be undertaken and encouraged by the government. Those actions involved the revision of urbanization norms and building codes to allow the development of alternative design approaches to the high rise development that could reduce costs and the evaluation of the building system and building technology currently in use by private developers in order to search for alternative cost-effective solutions. Fourth, a higher level of subsidies is necessary in order for the developers to produce the cheaper units and get a reasonable profit from it. In this sense, it has been recommended to evaluate the possibility of making government owned land available to the developers, but including a proposal for equity participation by the government. It is also recommended that the availability of construction financing be kept within the program and be

tied to the developer's getting the long term financing for the users. However, it is recommended the proportion of construction financing be graded in inverse relation to the sales price of the units produced. Fifth, tax exemptions should be eliminated from the package of benefits to the developers because they have not been effective instruments to regulate production, but they contribute to increasing administrative expenses and room for violations. Sixth, we are proposing that it is necessary to increase the confidence of the developers in the marketability of the lower cost units, and we are advising to keep the concept of the subsidy program for the buyer, but re-evaluating it.

In order to increase the marketability confidence, different measures have to be taken. Some of them are tied to the incentives and regulations for the financing institutions. Others refer to actions the government could carry out itself. Still others are related to macro-economic measures that make it feasible for the banks to issue long term mortgages. This last refers mainly to the regulation of the interest rates. Among the regulations for the financing institutions, one of the most important is the control of the portfolio composition. It is also recommended that tax exemptions be kept as a counterpart for the issuance of higher risk loans. The refinancing program is considered critical to guarantee the flow of funds to the housing market. In addition, it is recommended the government examine the pos-

siblity of securing for the developers, the purchase of the units. Lastly, the subsidy program should be maintained to increase the affordability level of the target group and also to contribute to improving the marketability expectations. However, a proposition is made to evaluate in depth the outcome of the past 3 years experience to correct the shortcomings. In this sense, it is recommended that a look be taken at the level of subsidies the government could undertake and to avoid tying the government input to the program to interest rate fluctuations that make the program unmanageable.

We must be aware from our analysis, the developers' confidence depends much more on expectations, than on promises implied in regulations. They are within the system, and they know of its failures and weaknesses. Consequently, for some of the measures to be more effective, profound changes in the overall socio-economic system would need to occur. Since these changes are not likely, at least in the short run, we remain uncertain to what extent we can improve the developers' attitude toward building the lower cost units. However, we think that the increase in the level of subsidies for the construction of cheaper units would be effective. Some level of "disinvestment" could occur in private residential construction for the more expensive units as a consequence of the more stringent regulations, but that would be one of the desired outcomes. It is difficult to

estimate how much the disinvestment will be. However, we can get a first approximation of the problem by recognizing those developers who have a stake in residental construction or in construction in general, are likely to remain. This is because they have already built up the organizational infrastructure, such as personnel and offices, and they have capital invested in materials and equipment. Also, in most cases, these developers are part of the construction materials industry and are owners of land. Therefore, it will be hard for them, at least in the short run, to switch to other investments. On the other hand, other investors, who have not built up a stake yet, and who entered the market recently because of the potential benefits, are likely to leave if alternative investments offer them higher expectations for profits, with less risk.

In order to evaluate the consequences of a reduction in the level of private residential construction, an input-output analysis would prove very helpful. The analysis could be carried out on two levels. An interindustry analysis could evaluate the impact on directly or indirectly related industries. Similarly, it could allow estimations of impacts on the GNP, employment, and incomes. An intraindustry analysis could give us more detailed insights within the construction industry. However, in the evaluation of the outcomes, we should be aware that decisions are a matter of trading off potential outcomes. In this case, we are balan-

cing the benefits from keeping the private sector working at the preceding levels, but helping to promote units that do not sell; or reducing the level of production, but trying to get more appropriate outcomes. In any case, resources as invested previously in residential construction by the private suppliers, could be channelled to other kinds of construction activities.

The Search for Alternative Developers

Until now, we explored some measures to improve the producer oriented approach for producing low-cost housing for the low-middle income groups. At least two other alternatives remain. A second approach considers the government as producer. In it, the government will take the responsibility for planning, financing, and developing the project, although construction and design could be carried out by private firms. This approach has the government owning the land, obtaining the financial resources, and marketing the units. This scheme is the one currently followed by INAVI and Vivienda Rural. The third alternative, a consumer oriented approach, requires the participation of the potential buyers. Governmental responsibility will not be to carry out the project, but rather, to facilitate its development. The responsibility of planning, financing and developing the project would be in the hands of cooperatives and civil societies. Those associations could contract out specific

stages of the process, such as design and construction. Government support could be making land and financing more accessible, providing materials and equipment, or backing up their purchase or rent, and providing assistance in managerial or administrative tasks. The scheme of incentives and subsidies recommended before for the producer approach could be evaluated for its applicability to the consumer approach.

The producer and government approaches had been tried out in Venezuela. The consumer approach, although it has been mentioned in the last two housing policies, has not been really implemented, mostly because resources and effort have not been channelled to it. The scheme of incentives to cooperatives and associations has been briefly mentioned as included in the incentives for the private sector, but there has not been a particular program or regulation to allow its development. There are some private experiences in Venezuela with this approach, the efforts coming in the majority from starting professionals. Examples are built in the Caracas Metropolitan Area, Ciudad Guayana and Maracaibo. Similar approaches that were carried out, but with public subsidies, are the upgrading projects for the squatter settlement areas implemented by FUNDACOMUN.

There are advantages and disadvantages in each one of these approaches. The producer approach makes use of the

existing suppliers who have access to the resources and know how to move within the system. The likelihood of faster and greater production is also higher compared to the public sector. When we evaluated the production during the 1979-1983 period, we found the private sector produced 36,000 units more than the public sector. However, this comparison without taking into account the amount of resources invested and the quality of the units produced, gives us only an indication. We know the units built by the public sector included low-cost finished single and multifamily units, and the so-called "housing solutions", being those core units, sites and services projects and loans for home improvement. The planning of private production by the government is based on estimates from the amount of resources available, but real control of the production is lower. The task of the government in this approach, consists of designing and legislating an effective policy to orient the private production. The disadvantages with this approach are related to the adequacy of the units produced. As it was mentioned, units produced will respond less to the needs of the consumers, and they will tend to be too expensive, too small, or in bad locations. In addition, the potential for market deformities is greater because the legislation requires a high degree of sophistication that could never take care of all potential loopholes. The degree of control required, if we were to check up on every item, would be unmanageable. Thus, the resources targeted by the government have no

guarantee of being used in the intended manner, and there is a high degree of uncertainty about whether by introducing more strict measures, we will get the desired outcomes. Another disadvantage is that this approach tends to generate gigantic projects that require huge sums of capital. Leaving aside the issue of environmental quality, we can question whether the issuance of such large construction financing for single projects increases the risk of failures, and represents a threat to the portfolio balances of the banks. This is exacerbated when we recall the low level of feasibility studies carried out by the developers and the financing institutions. Finally, an addtional drawback of this approach is that it incites the concentration of wealth in powerful groups, the ones who currently enjoy the access to resources.

The main advantage of the government approach is that the degree of control over what gets produced will be higher. This approach will be easier to program and will be politically, very convenient, in the sense that it will reinforce the image of a paternalistic government solving the country's problems. On the other hand, it will face political opposition from the industrialists, who will claim too much interference. We will have high uncertainty about the performance of the approach, in the sense of quantity of units produced and production speed. However, given past performances, it seems inadvisable to increase the produc-

tion load of the government. If the government were to undertake the direct production of housing units for the lower middle class, in addition to the programs for the lowest income groups of the country, the resources needed would at least double those estimated for the last housing program. This would be a direct consequence of the fact the additional units are more expensive. In addition, some resources like land, are simply not available in the amounts required, unless they were taken away from other programs. If the government has failed in achieving the goals for other programs because of the lack of funding, we can not realistically expect the resources allocated to housing will increase by such an amount. In addition, with the public approach, the government will have to acquire the financial compromise, invest the time and effort required to put up housing projects, and undertake the marketing risks. Thus, the equity required from the government with the public approach would be much higher. The producer approach is in this sense, the one which requires from the government a lesser amount of direct resources and less equity. The public approach would also increase the degree of bureaucratization and we will not encourage the development of the human resources existing outside the bureaucratic structure. In this sense, we would not stimulate the entrepreneuership so badly needed in the country. We would also increase the potential for corruption and at the end, the responsibility for failures would be left entirely with the government.

Overall, to increase the public program to that magnitude, would make it administratively very difficult to handle.

The potential for the adequacy of the units produced will be greater with the consumer approach. Since the initiative will come from cooperatives or civil associations which will organize, find the land and financing, and contract the constructor; the possibility the units will reflect better the needs and desires of the buyers is greater. Besides, this procedure will stimulate personal contacts among the different actors involved in the program. Variables like prices, size, and location are likely to be weighed better and the outcome will be more appropriated. This mechanism is in contrast with that of the producer approach where the projects are built for unknown users. The consumer approach will also require a lesser amount of resources per project because the scale will be reduced so that financing risks could be distributed better. Wealth will be distributed more evenly because small to medium sized contractors and developers will have the opportunity to participate. Given the administration of the projects will not be in the hands of the government, there will be less room for bureaucratization and corruption. However, the planning and programming of this approach will be more difficult because it is a new approach and it will require the design of special legislation. It is also likely it will find political opposition because to introduce it would

imply a reduction of the benefits to the formal private developers. Fedecamaras and La Camara de la Construccion (Chamber of Construction) will voice their concerns aloud. A very important consideration is that alternative uses for the resources, mainly labor, will have to be planned. This is necessary because this approach will need a learning stage, and there will be difficulty to maintain the rhythm of production at the same level as the one with the producer approach. A minimization of this effect can be achieved by combining the two approaches. For the consumer approach to be implemented, public support is needed given the housing production system is now adapted to the producer approach. Therefore, the government will need to facilitate production, at least until momentum has built up in the process.

As a consequence of the former evaluation, we could argue the most viable alternative is a mixed approach which combines the producer oriented approach and the consumer oriented approach. That combination will allow the making use of the existing resources and expertise, while introducing a new alternative into the system with greater potential for producing the units with the required characteristics. In any case, additional subsidies will be necessary in order for any kind of developer to build the cheaper units given the market costs, but a combination of the aforementioned strategies to cut down the costs with a redesign of the program of incentives and an increase in the level of subsi-

dies, is likely to increase the production of the cheaper units. A mixed approach will not face such strong political opposition because the formal private sector will still participate. Moreover, it will not cause a drastic reduction in residential construction activity that could have serious consequences in economic growth and unemployment. This mixed approach will leave the government carrying out the programs for the lowest income strata but it will not assign to the government unrealistic responsibilities. Lastly, with this mixed approach, we will create the incentives for a better distribution of wealth because another scale of developers now oppressed by the market, will have the opportunity to participate. The first step in pursuing this approach will be to undertake an evaluation of the potential for the development of cooperatives and civil societies in Venezuela among the middle income groups. That analysis will have to evaluate the past experiences and identify the obstacles for its implementation. Undoubtedly, experiences from other countries will be helpful as a framework and for reference purposes.

LIST OF CHARTS

List of Charts (cont'd)

LIST OF FIGURES

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