PN-ABC-619

INSTITUTO NACIONAL DE HABITACAO FINANCIAL STRATEGY AND PROSPECTS

Bureau for Private Enterprise
U.S. Agency for International Development

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Sponsored by: *Financial Markets Project*
Project Number: 940-2005
Prime Contractor: Arthur Young

January, 1988

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I. Introduction

This report is a preliminary assessment of the financial plans and prospects of the Instituto Nacional de Habitacao, or INH, based on the author's field trip to Portugal in late July, 1987. Since INH had not begun operations until June 1984, it was somewhat early to assess what INH has done, but not too early to assess its planning for the future. I have tried to avoid extensive overlap with the companion paper by Don Gardner, which provides the historical background to the formation of INH and a description of the agency's operations to date.

A major theme of my report is that research should be a major component of INH planning and that such planning should have a broad focus, covering the housing sector as a whole and its relationship to the general economy.

II. The INH 1988-1990 Plan

The first strategic plan developed by INH marks a major step forward for the institution, especially as concerns its capacity to develop budgetary forecasts of fund sources and uses. The plan document also has some useful background data on housing needs and construction by area of the country and housing affordability in Portugal. The plan itself, however, does not cover the housing sector, but only INH's own operations. The dwelling unit "targets" are for INH-supported operations only.

This is a deficiency of the plan, since the statute establishing INH viewed the agency assuming responsibility for the housing sector as a whole. This is clear from the attributions in Chapter 1, Article 2.

It is understandable why a narrower focus might emerge in the first planning exercise of a new agency. The operational focus on low income housing, encouraged by AID, may be partly responsible. Furthermore,Portugal has a powerhouse housing finance institution in the Caixa Geral de Depositos (CGD) and this may make INH reticent to acknowledge responsibilities that go far beyond what it can accomplish with its own resources. Nevertheless, in establishing the future direction of the agency, it is important that INH at least recognize its broader responsibilities.

A second deficiency of the plan is the lack of sufficient recognition of INH's role as a source of information and research about the housing sector and the housing finance system. Again, the statute establishing INH clearly views this as a central responsibility. Chapter 1, Article 3 of the statute lists seven items under the information-research rubric that use such words as "inquiries", "studies", "assess", and so on. While these items are all quite vague, it is INH's responsibility to provide the specificity.

In my view the research function is of crucial importance. INH has limited financial resources, indeed, in finaical terms it is dwarfed by CGD. If INH is to become the major housing finance institution in Portugal it must develop its <u>intellectual</u> capital. When the agency becomes recognized as the foremost source of useful ideas and plans for the future of the housing sector, it will also be in a strategic position to define its own role in the system.

On the assumption that INH's research role is of crucial importance, I view this report as constituting in large part a research agenda. Each of the major topic areas discussed below can be viewed as a potential research topic for INH.

III. The Role of Caixa in Portugal's Housing Finance System

CGD is a dominating presence in Portugal's housing finance system, accounting for about two-fifths of total subsidized housing loans. Since CGD will cast a shadow over everything that INH may do, it is of central importance that the role of CGD in the system be thoroughly understood.

Even more important than CGD's large share of total housing loans in Portugal is the special relationship that CGD has with the Bank of Portugal (BP). From all indications, CGD under existing arrangements has unlimited funds for making housing loans.

Because the Portuguese banking system always has excess liquidity, BAP depends on credit ceilings to control the total supply of bank credit in the system. Every month BP indicates to each bank the increase in that bank's total loans that is permissible for the following month. Housing loans made by CGD, however, are not part of that bank's credit allocation, such loans can be made by CGD without reducing the amount of other loans CGD can make under its credit allocation. This means that for all practical purposes there is an unlimited supply of housing loans available through CGD.

This is a very unusual situation for a country in a relatively early stage of financial development and one does not find it today even in advanced countries. In the United States, the supply of housing loans was completely elastic before 1951 when the central bank was supporting the prices of government debt. Any institution wishing to make housing loans could do so by selling government securities at prices supported by the central bank. But this changed in 1951 when the policy was adopted of allowing bond prices to find their own level and since then it has always been the case that housing loans had to compete with other types of credit in the marketplace.

The elastic supply of housing loans in Portugal helps explain some characteristics of the housing finance system that at first glance I found puzzling.

* Developers focus mainly on obtaining construction loans, taking the availability of long-term financing for granted. This is the opposite of the practice in the U.S., where developers always arrange the permanent financing first, then line up the construction loan. Lenders in the U.S. will not make a construction loan unless the developer already has a commitment from a permanent lender, for fear that a credit crunch at the time the houses come on the market will prevent their being sold and the construction loan repaid.

* The incentives provided by the savings-for-housing program in Portugal are very different from those offered by such programs in other countries. In every other program I have seen, a low and unattractive rate is paid on the savings account, the inducement to participate in the program being the commitment of the lender to make a housing loan when the savings period is over. In Portugal, the savings rate is <u>above</u> the rate paid on other types of savings accounts and on top of this the interest is tax exempt, but the saver is <u>required</u> to take down a loan or forego the tax benefit. This difference in program structure reflects the fact that in other countries housing loans are rationed, but in Portugal they are not.

There are several possible qualifications to the important point that the supply of housing loans in Portugal is completely elastic. First, since the elastic supply of housing loans is provided through CGD, but no through any other banks, supply may be constrained in the short run by CGD's capacity to process loans. Indeed, at the time of my visit CGD evidently had accumulated a large backlog of applications and the period required to have an application processed was very long, reportedly up to a year in some cases. (Some part of the processing delays are due to inefficiencies in recording mortgages which are not within the lender's control.) Officials at CGD, however, indicated that they were decentralizing responsibility for loan processing among a number of branches and that this would allow them to work down the application backlog. It seems prudent to assume that in the future supply elasticity will not be constrained by processing problems at CGD.

A second and very important qualification is that elasticity is provided at the maximum legal rate set by BP, 19.5% at the time of writing. The need for maintaining equilibrium in its balance of payments more or less obliges BP to set legal maximum rates that are at or close to competitive market rates (the rates that would exist if markets were competitive and free to adjust without interference). This 19.5% rate is well above the rate of inflation and constrains the demand for housing loans relative to what it would be if an elastic supply was available at a below-market rate. This point has relevance to the issue of the role of the housing sector in Portugal's inflation, which is discussed later.

A third possible qualification is that the conditions that give rise to the elastic supply of housing loans may not continue for long. This will also be discussed later.

The central role of CGD in Portugal's housing finance system raises a question as to whether CGD rather than INH should be the institutional cornerstone for the formulation of housing policy? Is AID backing the wrong horse?

Despite the plausibility of using the largest of the existing institutions, a persuasive case can be made against it. For one thing, the government has, at least on paper, selected INH for this role and there is a presumption that it had some good reasons for doing so. Among the possible reasons are that CGD is already too large and powerful and that it is too bureaucratized and inflexible. the impressions I obtained from interviewing officials at CGD are consistent with this view. They seem to have no interest in assuming the kinds of responsibilities the government has thrust on INH and their views on most issues seemed narrow and parochial. For example, they took the position that the existing housing subsidy system in Portugal could not be improved upon!

But if CGD is the wrong institution to assume leadership responsibilities because it to too set in its ways, it remains a powerful force in the system that INH will neglect to its peril. If INH is to be successful in assuming the leadership role, it must give high priority to understanding CGD.

One useful way to view CGD is as the principal channel through which changes in the general economy affect the housing sector. viewed in this way, CGD is part of a larger macroeconomic problem having to do with the relationship between the housing construction and housing credit sectors on the one hand and the general economy and capital markets on the other.

IV. The Macroeconomics of Housing and Capital Markets

The housing sector is importantly affected by and in turn affects the general economy. Certain aspects of this relationship are crucial for INH to understand, since they influence both its own operations and its ability to formulate general housing policy in an intelligent way. I have not been able to give this problem the time it deserves and the ideas presented below should be viewed even more as questions to be explored than the ideas in the rest of the paper.

It was noted earlier that under existing arrangements the supply of housing loans was completely elastic at the legal maximum interest rates. This situation is of great importance to INH, for example, it bears directly on the need for a secondary mortgage market in Portugal. So long as this situation exists there is neither a financial incentive nor a social reason to develop a secondary market. (While the directors of a commercial bank indicated to me that they would be interested in making more housing loans if they could sell some of them, this is in the abstract. So long as an elastic supply of loans is available at the primary level through one source, a second potential source would not find it profitable to originate loans for sale.)

But will this situation continue for long? A plausible hypothesis is that it will not. the reason is that the current situation is related not only to the social priority accorded housing and the special role accorded CGD, but also tot he method of credit control employed by BP. The BP has already indicated an intention to shift to open market operations as the capital market in Portugal develops further. This shift would permit BP to eliminate the excess liquidity of the banks and control total credit by manipulating the total reserves of the banking system, leaving it to bank competition for deposits to determine how these reserves will be allocated among them. In a credit control system of this sort where the central bank is not directly involved in the allocation process, the kind of special relationship that BP now has with CGD would be viewed not only as highly inequitable to the other banks, but also as a potential challenge to the effectiveness of the system.

This scenario may or may not be valid. It is presented as a hypothesis warranting further work. If the scenario makes sense, timing will depend in part on developments in capital markets which INH ought to keep abreast of.

One of the reasons that the type of relationship CGD now has with BP would be viewed as a threat to the effectiveness of monetary policy when policy is implemented with open market operations is that such a relationship would be viewed as opening the door to inflation. But this implies that the housing sector may have contributed to inflation in the past through this same mechanism. This is a topic that warrants careful study, since it bears on the appropriateness of dropping or maintaining the special relationship of BP to CGD in the future.

Another very important channel through which the housing sector affects the economy is the interest rate subsidy program for housing loans. Under this program an important component of the government's budgetary outlays reflect subsidy commitments made in prior years. This outlays, furthermore, vary with the current level of interest rates, in a manner that is very difficult for the government to control. This program will be discussed in more detail later.

V. The Availability of Construction Loans

The point was made earlier that developers in Portugal viewed the acquisition of construction loans as much more serious hurdle than the acquisition of permanent financing. This raises a question as to whether construction lending might not be a bottleneck in the system?

My experience with construction lending in other countries suggests that it is seldom a major problem, since commercial banks generally view such lending as a core bank product. A common situation in less developed countries is that banks are willing to make construction loans but not permanent loans, reflecting their strong preference for short-term assets.

Nevertheless, construction lending is generally viewed as quite risky unless developers can cover a significant part of the total cost of a project with their own capital. However, developers everywhere in the world have in common that they invest as little of their own money as possible, preferably non at all. Hence, banks often find that if they want to do a significant volume of construction lending they must adopt other methods of controlling their risk exposure than requiring builders to invest their own money. The methods they adopt consist of making their own assessment of the marketability of the project and disbursing the loan in a controlled fashion to meet construction costs as they arise. This type of risk control is costly.

Banks operating in different markets under different conditions may very greatly in the degree to which they control their risk exposure on construction loans by controlling the construction process, as opposed to imposing capital investment requirements on developers. "Lazy" banks not subject to competition from other banks, or "fat" banks that can meet only a small part of the demand for loans, may take the easy road and impose large investment requirements on developers. In such cases, construction loans could be a bottleneck in the sense that more houses would be built if banks eased their capital requirements. There is no precise point on the spectrum of lender requirements, however, that defines a bottleneck situation.

In general, we are likely to find banks relying excessively on developer capital to protect themselves under the following conditions:

Interest rate ceilings on construction loans are established at such low levels that banks are not compensated for the costs of risk control;

Markets are not competitive;

Banks have not yet learned the techniques of controlling risk on construction loans.

I am not in a position to say anything very definitive about how banks in Portugal control the risk of construction loans, or about the extent to which the conditions listed above exist in Portugal. These questions should be part of INH's research agenda.

Subsidized construction loans provided by INH raise a similar question regarding risk control. INH has evidently required less capital of developers and exercised greater control over the construction process, than the banks. This had made the INH program more attractive to the smaller builders, although most have participated through co-ops rather than directly through the CDH program. Larger builders have not been attracted, as Gardner points out, because of the controls on profit margins.

On the face of it, policy of encouraging small builders would seem to be a good idea and the question arises as to whether INH should ease its requirements even more? If INH can control the development process sufficiently to assure the marketability of the houses, which given the subsidy it should be able to do, builders could be chosen strictly on the basis of their capacity to produce. Under such arrangements, some small builders might very quickly become large ones.

Another issue that arises in connection with subsidized housing loans is whether iNH should have a monopoly of such loans, or whether the authority should also be given to banks? While it might be useful to subject INH to competition, it is not clear that this would be consistent with the objectives of the subsidy program. The program is designed to support low-priced and innovative housing and while price could be controlled the innovation objective requires institutional commitment that can not be easily monitored. Furthermore, I would be concerned that if banks could make subsidized construction loans to developers, the value of the subsidy would be creamed off by them rather than transferred to home buyers.

Where an experienced and sophisticated co-op was involved, there might be less danger that this would happen, since the co-op would protect the interest of the home buyer. But not all co-ops are experienced and sophisticated.

Despite my negative priors, I believer that it would be useful for INH to consider this question. It would be refreshing (and perhaps good public relations) for an institution to raise the question of whether other institutions should share its privileges. Perhaps more important, the exercise would help INH in sharpening its own understanding of the important social functions it is exercising.

VI. The Role of Cooperatives

To date INH has operated mainly through cooperatives, for reasons discussed by Don Gardner. I want to look at the role of co-ops in housing low-income families in a somewhat different way.

There are four functions that housing co-ops can perform:

* They can assume the role of developer, acquiring land, hiring builders, obtaining necessary permits, arranging financing, etc.

* They can market the units, finding qualified buyers before construction begins. (Although marketing is often viewed as another aspect of development, it is useful for current purposes to break it out as a separate function.)

* They can assume responsibility for loan repayment, by acting as an intermediary wherein the co-op takes out a large loan and relents to each of its members; or by acting as servicing agent, collecting payments and remitting them to the lender.

* They can assume responsibility for maintaining community infrastructure after the project is completed.

Co-ops have a comparative advantage in performing the last three functions. They can market units before construction in a way that developers cannot and they can often mobilize social discipline to minimize payment delinquencies an maintain community facilities. They have no particular advantage as developers, however.

While the INH co-op program seems to be working very well, long-term prospects may be affected by the fact that the co-ops have been performing the development function at which they have no comparative advantage and they have <u>not</u> been involved in the loan repayment process in which they can often make a unique contribution. Regarding the first, we might expect that over time private developers will become increasingly efficient relative to co-ops, unless the latter remain in the development process indefinitely, in which case they would become more like private businesses and lose their social character.

Evidently the banks in the past had some bad experiences with co-ops as borrowers, which is why co-ops are not involved in financing today. There are those who believe that the bad repute of co-ops as borrowers is not warranted by the historical facts, although I am not in a position to make any judgement about this.

Given that INH is doing most of its business with co-ops, it seems to me that a major research priority ought to be an assessment of their strengths, weaknesses an future. A useful focus would be the functional breakdown shown above and a very relevant question is whether it is worth attempting to rehabilitate the co-ops role in financing.

VII. The Development of Secondary Markets

A major thrust of my mission was to examine new ways that INH might raise funds for housing loans, with specific reference to the development of secondary markets in housing loans. With secondary markets, loans (or securities collateralized by loans) can be sold as a way of raising money for more lending. The creation of secondary markets would seem to be a natural development for Portugal because of the recent development of other segments of the capital market, especially investment banking, which plays a very important role in the development of secondary mortgage markets.

For a variety of reasons, secondary markets can be created in long-term housing loans but not in construction loans. Since INH has been making construction loans rather than long-term loans, the creation of secondary markets would not provide any additional funds for INH. Such markets would in principle help long-term lenders, especially Caixa, if they needed to raise more loanable funds. Caixa, however, has zero incentive to sell loans, since it has unlimited funds for making new loans as explained earlier.

Indeed, so long as Caixa can make new loan without constraint, other lenders that <u>are</u> subject to restraints would not find it profitable to originate loans for sale in secondary markets. The reason is that the process of transferring ownership of loans is costly and originator-sellers could not cover this cost if they had to compete with Caixa. Under existing arrangements, there is no financial incentive to create or use secondary markets, nor is there any social benefit that would be derived from such markets.

It was argued earlier, however, that there was a good likelihood that the special arrangement between Caixa and the Bank of Portugal that underlies the unlimited supply of housing credit could end in a year or two. In such case the development of a secondary market would indeed become relevant.

Despite the fact that INH has no portfolio of its own that it could sell, INH could become the prime mover in the development of secondary markets. A perquisite for the development of secondary markets is the provision of some type of mortgage insurance and it is not necessary for an insurer to have a portfolio of loans of its own. The experience of the United States suggests that private mortgage insurance does not emerge in the process of development until the feasibility of it has been demonstrated by government-supported insurance.

INH could be the prime mover in the creation of a secondary market in a number of possible ways:

1. It could offer loss insurance, probably on newly created loans only, which would make the loans saleable by those who originate them. Loss insurance reimburses the holder for losses they may incur if the loan goes into default and the proceeds from the sale of the property are not sufficient to pay off the loan balance plus accumulated interest. This type of insurance is quite common and it is often modeled on the program of the Federal Housing Administration in the United States.

   While loss insurance may make newly originated loans saleable to investors who maintain relationships with loan originators, it does not create an aftermarket where loans can be readily bought or sold. Hence, investors who want to hold only readily saleable assets may not find loss insurance an adequate inducement to acquire mortgages.

2. As a supplement to 1, INH could also buy insured mortgages, financing the purchases in the short-term by selling its own short-term liabilities in the capital market, later selling the mortgages and retiring its liabilities. This is what the Federal National Mortgage Association (FNMA) in the U.S. tried to do for several decades. Unfortunately, FNMA bought a lot more than it could sell, largely because it almost always paid too much and its holdings grew inexorably over the decades. When interest rates exploded in the late 70s and early 80s, FNMA came to the brink of insolvency because its assets were long-term and its liabilities very short. The FNMA experience suggests that the function of "making markets" is best left to the private sector.

   INH could become a mortgage conduit-insurer. It would buy mortgages, package them into pools, issue and sell securities collateralized by these pools, which securities it would also insure. The insurance offered the investor would guarantee the scheduled payment on the due date, called "cash flow insurance", which is more expensive to an insurer than loss insurance, but much more valuable to investors. With cash flow insurance, the securities would enjoy an aftermarket because their homogeneity would encourage investment bankers to make a market in them.

Conduit-insurer programs have been successfully adopted in the U.S., first by the Federal Home Loan Mortgage Corporation (FHLMC), later by FNMA as a replacement for its unsuccessful market-making program. A conduit program imposes the discipline that the agency must set purchase prices on the mortgages it buys in the morning at a level such that it can make a profit when it sells securities against these mortgages in the afternoon. The conduit continuously offers loan originators a place to sell their loans, while providing investors with a continuous source of securities.

As a variant of the conduit-insurer program, INH could swap its own securities for mortgages, leaving it for the seller of the mortgages to resell the securities to others.

4. INH could offer cash flow insurance on securities issued directly by loan originators that are collateralized by newly created mortgages. The securities are then sold by the issuers. This type of program allows small originators to access the capital market directly. The prototype program was developed by the Government National Mortgage Association in the U.S. and is the largest of all the secondary market programs. The underlying mortgages that are pooled by issuers under this program also must have loss insurance, although this is irrelevant to investors who rely on the cash flow insurance.

The above models do not exhaust the possibilities and a number of modifications are possible to meet special circumstances. In researching the best model for Portugal, it would be necessary for INH to understand the strengths and weaknesses of the various models and then apply this knowledge to the conditions here. A key question that will arise in this process is, "What investors are we trying to attract to this market, what type of mortgage or mortgage security must we offer them and what is the lowest cost way of doing this?" A second key question is, "What loan originators do we want to encourage and what is the lowest cost way of doing this?"

In developing the best model for Portugal, INH would do well to pay particular attention to investment banking firms for whom the matching of instruments to investor needs is a stock in trade. These firms would have an enormous vested interest in the development of a secondary market and therefore they are likely to be willing to provide all manner of developmental assistance.

VIII. The Borrower Subsidy Program

The major type of housing subsidy used in Portugal is the interest rate subsidy which is open to anyone meeting the income and maximum sale price requirements of the program. In one form or another this program has been around since 1976, in its graduated payment form since 1980, and each of the numerous revisions of the program has added to its complexity. Since contractual changes in the program affect only new contracts, at this point the program includes a number of different groups who began at different times in the past under a different set of rules.

INH has had little if any involvement in the development and administration of this program. Because of the central importance f the program, however, INH will have to make it a high priority item in its research program if the agency is to assume intellectual leadership in the formulation of housing policy.

Under the current version of the program, maximum sales prices are established for eligibility t the program, varying by section of the country and the size of the particular family. For example, under the current schedule (which is revised every year) a family of 4 could pay up to 5500 contos in Lisbon. Within each of 6 family size groups (1,2,3,4,5 and 6 or more), four family income groups are specified, each group being entitled to a different level of subsidy. (These income groups are also adjusted every year.) For example, among families with 4 persons the highest subsidy group would have incomes below 1028 contos per year; they would be entitled to an initial subsidy equal to 40% of the initial mortgage payment. The second income group among 4 person families would have incomes between 1028 and 1185 and they would be entitled to a subsidy of 30% of the payment. The next two income groups would be eligible for subsidies of 20% and 10% respectively. Each of the other 5 family-size groups would be similarly divided into 4 income groups, the income levels rising with the family size.

Each of the four subsidy groups is assigned a predetermined rising payment schedule, defined per 1000 contos of loan, over a 25 year period. These payment schedules are designed to amortize the loan fully over the 25 year period, at the initial rate specified in the contract (currently 19.5%), with the portion of the payment provided by the subsidy gradually declining over time.

This system is quite ingenious in the way that it exploits the graduated payment feature of the loan to minimize the required subsidy. Furthermore, by stipulating maximum sale prices without limiting eligibility to any particular houses, one of the major problems of the interest rate subsidy programs in the U.S. seems to have been avoided here. In the states, sellers of houses under the subsidy program had to be certified by the government, which meant that subsidy recipients were obliged to purchase their homes from such certified sellers. This often allowed sellers to capitalize some or all of the value of the subsidy in the price of the house.

Nevertheless, the interest rate subsidy system in Portugal has some very serious problems which potentially get worse with every passing year. For this reason I believe that serious attention should be given to an alternative approach.

One source of concern that I have with the existing system is that defaults could become a major problem in the future as inflation rates drop. Under the graduated payment mortgages used in Portugal, where payments rise for the entire 25 year period of the loan, the payments in the early years fall well short of the interest payment so that the loan balance rises for a long period. At a 19.5% rate, the balance rises for about 17 years, reaching a level almost twice the initial level, before it begins to decline. This can be compared to graduated payment loans in the U.S. where the period of graduation never exceeds 10 years and the general rule of thumb is that the scheduled rise in the balance should never exceed the initial level by more than 25%.

The danger is that if property values rise less rapidly than loan balances, home owners will find that their equity in their houses has disappeared, providing them with a financial incentive to default. To be sure, if inflation declines interest rates should also decline, which will result in a less rapid increase in loan balances in the early years. However, the change in homeowners' equity from a price decline (or less rapid rise) can occur very quickly, whereas the reverse effect through less rapid buildup of the loan balance occurs very slowly.

Default rates have not as yet been very high on subsidized loans, but then the system has not yet been tested. The graduated payment loan system has existed only since 1980, and a long period of rising loan balances stretches ahead. Research on this problem would make heavy use of simulation exercises that show what would happen to homeowner equity and payment-to-income ratios under a variety of possible future scenarios covering interest rates, household incomes and property values.

A second problem of the existing interest rate subsidy system is that interest rate changes create a major adjustment problem. Aside from a few fixed rate loans that go far back to the beginning of the program, all subsidized loans have adjustable rate contracts, wherein every time the legal maximum rate is changed the rate on every old as well as new contract is also changed. Every time this occurs, the government must make decisions regarding the allocation of the interest change between the borrower and the government, for all loans on which part of the payment is being subsidized. This is a discretionary process which must be carried through separately for each cohort of subsidized borrowers, where a cohort represents a given subsidy group formed under a given set of subsidy rules. Once these decisions have all been made, lenders must begin the horrendous task of adjusting their servicing procedures.

Since the evolution of the capital market is in the direction of freer markets, the expectation is that interest rate changes will occur with greater frequency. Hence, this problem is going to get worse unless the discretionary element in the process can be eliminated. In the U.S., rate changes on adjustable rate mortgages occur automatically according to the procedures called for in the specific contract, but then there is no subsidy involved in these contracts as there is in Portugal. It is worth exploring whether it might be possible to develop an adjustment algorithm that would allow a mechanical adjustment. Such an algorithm would have to incorporate all the social concerns that are now taken account of in the process of making discretionary adjustments.

But by far the most serious problem with interest rate subsidy programs is that they constitute a largely uncontrollable component of the government's budget. When a loan carrying a subsidy is written, the government commits itself to pay a subsidy that year and through a succession of future years as well. Hence, the subsidy amounts that must be budgeted for any given year are largely predetermined by the loans made in prior years. In principle, the only point of control is the new loans that will be made in the current year, but in practice there is no control here either because of the existing arrangement between the Bank of Portugal and CGD, as discussed earlier.

But even if this arrangement was curbed and the government became capable of controlling new loan commitments, even to the point of terminating them altogether, the degree of budgetary control over subsidies would not be large because of the heavier weight of prior commitments. The longer the program remains in force the heavier will be the weight of old subsidy commitments relative to new commitments, in the total budget.

As the interest rate subsidy amounts become an increasingly important component of the government's budget, it could easily begin to affect macroeconomic policy in unfortunate ways. a reemergence of inflationary pressures that posed the need to raise interest rates, for example, would carry the prospect that interest rate subsidy payments would also have to be raised. Unless the government could find ways to reduce other outlays, which is always difficult, it would find that its monetary policy and fiscal policy were working at cross purposes. Another possibility would be that in order to avoid having to increase subsidy payments, the government would not allow interest rates to rise, thus allowing the inflation to continue.

To prevent this problem from getting worse, serious thought ought to be given to replacing the existing interest rate subsidy program with a capital grant program. The difference in the two may perhaps be explained best with an example.

Assume a given family is eligible to purchase a 6000 contos house requiring a 5400 contos loan at 19.5%. If 33% of the family's income will cover only 60% of the initial payment, under an interest rate subsidy program the government will pay the remaining 40%. Under a grant program, the borrower would assume the loan it can afford, or 3240 contos (60% of 5400), make the same downpayment of 600 contos and pay 3840 contos for the house. The government would provide a grant equal to the difference between the amount paid by they buyer and the price, or 2160 contos. Since the government paid 27% of the total price, it would have a claim to 27% of the equity in the house.

Under a grant program, the government pays the full subsidy for each borrower at the beginning, which means that the required outlay is much higher than where the government only supplements the payment. In the second year of the contract, however, instead of the government having to make an additional payment, the borrower begins to pay the government if his income has risen from the prior year. In effect, the borrower begins to buy back the government's share of his house. If the borrower sells the house before repurchasing the government's share, the government would receive its prorata share of the sale price.

Under a grant program it would be unadvisable to use graduated payment mortgages in which the loan balance rose significantly over time, since this could result in the borrower having negative equity at time of sale. Perhaps the rule should be that the loan balance should not rise by an amount in excess of the borrower's original downpayment.

A grant program has three major advantages over an interest rate subsidy program. The first is that it allows for complete budgetary control of housing subsidies. The government this year commits itself only to make payments this year, not in any subsequent year.

The second advantage is that over the long-run the cost will be lower because provision is made for borrowers to repay the subsidies. As a borrower's income rises or the house is sold, the government enjoys a net inflow.

The third advantage is that interest rate adjustments no longer require discretionary subsidy adjustments. Rate adjustments will affect repayments to the government, so that borrowers are still buffered against the full effects of rate changes on their total payment, but the process would be automatic and require no soul-wrenching decisions by the government.

These comments are meant to be suggestive and far from exhaust the factors that would have to be considered in a comprehensive evaluation of a housing grant system. Because the cost of the existing subsidy system is likely to rise indefinitely, INH should view the study of an alternative as a very high priority.

January, 1988