DISCUSSION PAPER

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FINANCING SHELTER

by

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The views presented here are those of the author, and they should not be interpreted as reflecting those of the World Bank.
The author is presently Housing Finance Adviser at the World Bank. The views presented in this paper are based on the author's experience, but they cannot be attributed to the World Bank or any of its affiliates. This paper has benefited from discussions at the seminar on SHELTER, SETTLEMENTS AND DEVELOPMENT held by UN/HABITAT in New York, April 24-26, 1985. It is intended as a chapter of a book with the same title. Ariana Van Meurs assisted in its final editing.
ABSTRACT

This paper is addressed to a broad audience. It reviews the lessons from experience in financing shelter in developing countries and indicates the direction that policies should take in view of current economic conditions in Third World Countries. The most radical departure from earlier policies regarding the financing of shelter lies in the realization that public budgets do not have the resources nor public institutions the capacity to meet all the needs of low income households. New policies must aim at the development of viable and flexible shelter production system based on the comparative advantage of the public sector which lies in institutional and regulatory support as well as in infrastructure investment while the private sector's strength lies in the production of housing and the supply of financial services. The paper stresses the renewed importance of household savings mobilization, affordability, the transparency of subsidies and cost recovery. It concludes with an outline of the proper role of regulators, housing finance institutions and public developers in the current economic context of TWC's.
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FINANCING SHELTER

I. INTRODUCTION

Urban development policies in developing countries are at a new threshold. In sharp contrast with the relative financial stability of the period 1965-1973, the decade 1974-84 has been a period of financial instability. First, Third World Countries (TWC's) experienced expansion from 1974 to 1980 which was then followed by a period of contraction and financial crisis beginning about 1980 and lasting into the present in many countries. Policy makers are facing a very constraining environment. Third World Countries are experiencing low growth, exports are sluggish, levels of unemployment are rising and the high levels of foreign debt are leading to stringent fiscal austerity. In spite of these economic conditions urban areas continue to grow steadily in population and appropriate strategies to finance shelter are taking renewed importance.

In the public discussion of shelter financing misunderstandings abound. First, is there a difference between "housing" finance and "shelter" finance? One of the major lessons from ex-
perience in the shelter sector in TWC's is that there is a crucial economic and functional relationship between housing and its related infrastructure. It is therefore necessary in this review to address the problems of financing both, even if the required institutions and instruments are quite different. Second, is it possible to limit an analysis of shelter financing to a discussion of the problems of housing the poor? Again, experience shows that if housing policies are to be integrated effectively into national policy-making and not confined to marginal institutions, the entire housing sector and all income groups must be considered. Third, whose problems do you analyze? There is a very wide ... of participants in the housing market: a variety involved in the production of housing, a diversity of financial institutions involved in its financing and very different households to be served either as owners or as renters. Improving financial mechanisms in the housing delivery system of a country requires that more than the specific problems of households be analyzed with great care. In particular, with an instable financial environment the problems of developing viable and adaptable housing finance institutions have taken new urgency. The growth of the housing finance system cannot be separated from the rest of the financial sector.

In the demanding economic context of the present, the objective of this paper is to review the lessons from experience and analyze directions which policy makers should consider to restructure activities in shelter finance.
II. HOUSING DELIVERY SYSTEMS IN TWC's: LESSONS FROM EXPERIENCE

Considerable progress has been made over the last 15 years in understanding the operations of housing markets in TWC's and what might constitute appropriate policies and projects in a given country. In particular, it has become very clear that access to formal financing is not the only constraint on expanding the supply of housing. There are constraints on both sides: on the real side of the housing markets and on the side of housing finance institutions exposed to their own capital market constraints. In the formulation of policies, more progress has been made in understanding housing market constraints than financial sector constraints, so the structure of TWC housing markets is reviewed first.

A. Activities to be Financed and Role of Institutions

1. Different Types of Financing Needed

The process of converting a parcel of raw agricultural land into a fully serviced housing unit is a lengthy and complex one. Many public sector shelter projects in developing countries take seven to eight years from planning to full occupancy. The type of financial services to be provided during the process of developing a shelter project are quite varied. Looking at an individual project, there is a need to finance the acquisition of
the raw land, to finance its infrastructure (sometimes called
off-site and on-site; sometimes classified as primary, secondary
and tertiary infrastructure, depending on the capacity of the
networks), to finance construction and finally, the sales of the
project.

In developed countries these financial arrangements are quite
complex and involve interactions between the private project
developer, local and, often, central government agencies. The
amount of lending, the degree of financial leverage, the level of
equity participation among different partners, loan maturities,
risks and quality of collateral vary significantly according to
the phase of the project financed and its nature.

Formal financing for private development activities
is typically very difficult to find in TWC countries even for
high income projects. Development and construction financing
which in boom periods can be quite profitable to both developers
and lenders is always risky; paradoxically, this stage of
financing is rendered even more risky by the inability of
most financial institutions to provide "take-out" long-term
mortgage financing to households at the end of projects. In such
cases, private developers typically resort to pre-sale and
pre-financing by their buyers to reduce their inventory risks in
addition to having equity sharing arrangements with those who
contribute the land. This method, which is heavily based on the
equity contribution of buyers, limits such private developments
to upper income groups during periods of prosperity when partici-
pating households can cash other assets to finance the new units. Moreover, private and public banks tend to limit their development financing to their own subsidiaries in order to maintain some control over risks. An asset-based, asset-financed demand for housing ownership is very sensitive to economic conditions and can cause sharp fluctuations in output in this segment of the housing market depending on the impact of market conditions on the ability to sell a piece of land to finance building. It is not a very effective way to reach ownership for lower-middle and low-income households without very significant assets but good incomes.

The availability of long term mortgage financing can be a very strong factor in reorienting the supply of housing toward more appropriate housing standards. Experience shows that quite a few private developers are prepared to change their product in order to reduce the large risk of unsold inventories or incomplete projects. Another great constraint is the provision of basic infrastructure services which require large amount of financing and the intervention of the public sector. In the absence of efficient housing finance systems, households must generate resources entirely through their own saving efforts and reach ownership very late in life, if at all. In middle-income countries there is a large incremental housing sector which is quite capable to produce buildings of good quality but not to service land with appropriate trunk infrastructure, road access, clean water and sanitation.
2. Low Levels of Financial Intermediation in Housing

International statistics on the level of financial intermediation in TWC's are yet to be developed systematically. When intermediation is defined in terms of flows as the ratio of the annual value of new mortgage loans made to the estimated value of new housing it is quite low and typically less than 20%. Other measures are based on outstanding loans. For instance in Korea, which is one of the most rapidly growing and better managed TWC economies, housing mortgages represented only 6.9% of GNP in 1984 indicating that access to ownership is heavily dependent on the previous ownership of assets and that the housing finance system is still very little developed. In comparison this ratio varied from 15% in Japan, to 28% in France and the U.K., 37% in Canada and Germany, 41% in the United States and 64% in Switzerland by the end of 1982.

B. Three-Tier Structure of TWC Housing Markets

The difficulty of obtaining financing for financial institutions, together with other major constraints regarding physical and institutional infrastructure found in TWC's, generate a typical three-tier structure of the housing markets found practically everywhere. At the top of the income scale can be found a small, well financed upper income market entirely supplied by the private sector. In the middle can be found a fairly narrow subsidized market composed of middle-class
salaried workers and civil servant households who are the main, if not exclusive, beneficiary of public housing finance policies. Then, finally, there is a large and private incremental housing market which has had no access to formal financing services and is encompassing a wide range of incomes and of housing units; some of it consisting of good quality buildings, other parts being destitute slums, but all of it characterized by its non-conformity to official rules and standards. Within this incremental housing market, financial arrangements are made all the time by individuals who are trying to build their own house. In that sense financing is taking place and a financial market exists, but the services provided are small, expensive, very costly to provide and unpredictable. Such a structure is shown in the case of Tunisia in Table 1 and Figure 1.

The Tunisian data describes the housing market over the period 1975-80 from three convergent viewpoints: (a) the relative contribution of each market tier to total housing output, (b) the position within the income distribution of those who are found in each tier, and (c) the contributions made by public and private institutions in the financing of total output. One can see that the public sector is dominant in Tunisia in terms of the value of the infrastructure and housing investment which it controls or regulates, but this is not always the case in other countries. In contrast, the public sector is involved in the production of only 25.6% of all units, including the incremental sector in the private sector. The reason for this contrast is that a signifi-
### TABLE 1
THREE-TIER STRUCTURE OF A HOUSING SECTOR:
TUNISIA 1975-1980

<table>
<thead>
<tr>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of Housing Investment (millions of TD)</td>
<td>Number of units (1,000)</td>
<td>Households Served</td>
<td>Institutional Financing (including subsidies) (excluding down-payments)</td>
</tr>
<tr>
<td>I. &quot;Legal&quot; Private Sector</td>
<td>ugian 268</td>
<td>rural 4.3</td>
<td>100th to 80th percentile (90th to 30th percentile)</td>
</tr>
<tr>
<td></td>
<td>total 272.3</td>
<td>total 64.4</td>
<td>(20.5%)</td>
</tr>
<tr>
<td>II. Public Sector Controlled Con</td>
<td>urban 265</td>
<td>rural 63.2</td>
<td>90th to 30th percentile</td>
</tr>
<tr>
<td></td>
<td>(41.2%)</td>
<td>(25.6%)</td>
<td>(34.4%) (including subsidies)</td>
</tr>
<tr>
<td>III. &quot;Informal&quot; Sector (urban &amp; rural)</td>
<td>urban 144.9</td>
<td>rural 50.9</td>
<td>50th percentile zero</td>
</tr>
<tr>
<td></td>
<td>total 195.5</td>
<td>total 169.2</td>
<td>(53.9%)</td>
</tr>
<tr>
<td>IV. TOTAL</td>
<td>TD 796 million</td>
<td>314.0</td>
<td>TD 134 million</td>
</tr>
<tr>
<td></td>
<td>(100%)</td>
<td></td>
<td>(16.8% of column one)</td>
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</tbody>
</table>

**Source:** Tunisia Housing Sector Review 1982, The World Bank, unpublished (1 Tunisian Dinhar equals US$2.00)
Figure 1
TUNISIA HOUSING FINANCE SYSTEM 1975-1980
(Millions of Tunisian Dinars)

Private Household Financing (406)
(downpayment) (62.3%)

Private Sector Investment Exclusively (817)
(65%)

Institutional Financing (21)
(loans) (2.7%)

Total Value of Housing Investment (795)
100%

Private Household (166)
downpayments (20.8%)

Public Sector Controlled Investment
(279)
(35%)

Public Sector (113)
Financing (14.2%)

(70) loans
(8.8%)

direct (43) subsidies (5.4%)

Share of loans in total financing:
i.e., Role of institutional financing in the provision of housing. (If subsidies are included, the percentage rises to 16.8%.)

Source: Tunisia Housing Sector Review 1982, World Bank
(1 T.D. equals US$ 2.00).
cant proportion of public investment in housing is devoted to urban infrastructure.

The limited reach of financial institutions into the housing sector is also quite visible: institutional financing represents only 7.7% of the estimated value of the "legal" (fully conforming) private sector investment. Institutional financing represents only 34% of public sector investment and only 16.7% of the entire Tunisian housing market for new housing. If one separates budget allocations from financing by institutions the latter ratio drops to 11.4%. One of the implications of these figures is that in order to buy housing families have to "chase loans" from every possible source such as social security systems, pension funds, and borrowing from their employers' social funds as well as friends and relatives. This process is very inefficient and costly and can sometimes lead to very high debt-income ratios. Paradoxically, the financial agency of the housing sector (CNEL) has been extremely successful in mobilizing housing savings and collected more than half of all national household savings in 1983. Clearly, during that period there was a mismatch between household demand and the financial services provided. In addition, non-financial constraints appeared to be quite important because households had difficulty finding affordable houses to buy once they had accumulated financial savings.
C. Non-Financial Constraints Affecting Housing Supply

Whenever the role of financial institutions in the housing sector is limited and the value of loans made is quite small compared to the total value of the investment put in place it is for two reasons. First, there is a crucial economic and functional relationship between housing and basic physical and institutional infrastructure. Important non-financial constraints on the housing sector side make it very difficult to provide financing adequately. Second, other important constraints on the provision of housing finance services arise from the state of development of financial markets and their regulatory environment. Non-financial constraints are examined first.

Policy makers and urban planners are often fond of saying that the problem with housing is the lack of financing but in many countries serious weaknesses in the housing delivery systems also prevent the flow of banking funds into the sector. These non-financial constraints have a direct impact on the provision of financing by making it either extremely costly or simply impossible for formal institutions to provide long-term mortgages.

1. Poor Land Administration and Institutions

The foremost constraint on the provision of formal finance and on orderly urban development is land management and adminis-
tion. Poor land administration, unclear land titles and unclear land tenure produce unbankable, non-conforming (illegal) housing arrangements. Inappropriate land policies succeed mostly in restricting land availability and can raise the cost of housing very significantly in urban areas. It is not excessive to say that one can judge the overall urban development potential of a country (in contrast with uncontrollable growth) by the quality of its land institutions.

Mortgage lending for home ownership can be one of the safest forms of bank lending in spite of very long loan maturities because of the safety of the real estate collateral. This is confirmed by the fact that, in quite a few countries, particularly in East Asia where land is scarce and values are high, commercial banking practices are often criticized for being based on the value of the real estate collateral provided rather than on the commercial evaluation of the intrinsic merits of the projects to be financed. However, the cost of registering and evaluating land can be prohibitively long and extremely expensive, even for large moderate income projects.4

Uncertainty of tenure of course makes formal lending impossible. It has important additional economic and financial effects that have been observed in practically every low income shelter project in the world. When offered security of tenure, even prior to full legalization but with clear political and technical evidence that it is being done, low income households reduce and restructure their consumption, they convert their few
assets currently kept in economically sterile but movable form such as jewelry and valuable durable goods, they obtain transfers from relatives and they invest these resources into housing improvements which produce additional housing services.

Creating an appropriate institutional infrastructure and running it efficiently is the highest priority for governments. It has a direct feedback on public revenues and the financing of physical shelter infrastructure. For instance, in the case of low income projects, the cost of slow processing of land titles can be high for governments, because in most countries the ability to recover the cost of public infrastructure and to charge user fees and taxes for its maintenance is tied to the transfer of full titles to the beneficiaries of the project. Since there is an element of subsidy in such projects and less than 100% of cost recovery has too often been planned, this additional resource shortfall can have a serious impact on the ability of public agencies to move on to new projects, particularly in periods of stringent fiscal austerity.

2. Excessively High Standards and Building Costs

Significant progress has been made over the last two decades with the growing acceptance of the necessity to do a systematic analysis of project designs and standards according to the income carrying capacity of the target population to be served. Many countries have revised their building codes in order to eliminate some of their negative economic and social impacts. In housing it always seems to be easier to deal with visible physical issues
than with equally crucial but publicly less visible institutional and managerial issues. It is not yet fully appreciated that the cost of delays in permit delivery as well as the inconsistent application of building codes can substantially raise the cost of housing. The cost of delays in delivering permits is very significant in most countries because of the very high level of real interest rates prevalent in most countries. Moreover, regulators are too often indifferent to the indirect increase in administrative costs which they impose on builders for nobody's benefit. The alternative for builders is to resort to non-conforming housing construction which generally cannot be financed by formal financial institutions.

The other problems faced by financial institutions are the correct appraisal of real estate values and the respect of financial contracts implying full and timely repayments of loans as well as the possibility of foreclosure in extreme cases. These two factors combined often induce private mortgage lenders with scarce resources to offer only low loan-to-value ratios on mortgages to account for default risks. On the other hand, public lenders, particularly in Latin America, sometimes fall into the opposite situation of allowing excessively high loan-to-value ratios for low-income households.

3. Lack of Major Trunk Infrastructure

The provision of major trunk infrastructure is the responsibility of the public sector. It is a service that private
developers do not have the legal, technical and financial capacity to provide in most cities. A shortage of serviced land prevents private builders from producing the type of housing which could be financed by financial institutions. In the case of existing housing whether it consists of good quality housing on unserviced land or massive slums in depressed areas, the government is also confronted with the need to upgrade, and improve or plainly provide the infrastructure.

The sheer magnitude of these infrastructure deficiencies combined with fiscal austerity is leading to a fundamental reanalysis of the issue of infrastructure provision in many countries and to increased pressures for realistic approaches to the role of the public sector in shelter. The emerging division of labor is to reserve public sector financial resources for the provision of basic trunk infrastructure and area-wide improvements limiting drastically the public financing of shelter units and of on-site infrastructure. On the other side financial institutions are being encouraged to mobilize household savings for the more efficient provision of mortgage finance.

4. Rent Control Legislation

A final policy factor having a negative impact on the flow of financial resources into housing is rent control legislation. Starting with the well meaning social objectives of protecting low income families and aged households, most rent control laws have had mostly negative impacts on the operations of housing markets.
Rent controls can appear to have some short-term beneficial effects, particularly for elected politicians, but in the very dynamic environment of TWC cities they have three consistent effects: (a) reducing the rate of return on housing thereby discouraging investment in shelter; (b) creating arbitrary windfalls and invisible asset transfers from landowners to current tenants in the short-run; and, (c) inducing illegal side payments in the long-run. Rent control legislation has been shown to be an inferior way to arbitrate conflicts between landlords and tenants, it represents a capricious and unpredictable way of providing subsidies to tenants without appearing to have an impact on public budgets.6

By discouraging the private supply of housing, rent control may progressively push the public sector into supplying more and more subsidized housing to the middle class as resources are available; causing a substitution of suppliers rather than net additions to the total housing stock. In this case funds necessary for infrastructure investment go into needless public housing construction. Moreover, there is no evidence that public builders are consistently more efficient and cheaper than private builders when taking into account their tax status, access to low cost funds, regulatory advantages and legal powers. The structure of the housing construction industry is also likely to become more concentrated into fewer large organizations with heavier overheads and the ability to afford the costs of working with various ministries and regulatory agencies.
III. ROLE OF THE PUBLIC SECTOR AND SHELTER FINANCE

The most radical change taking place in recent years in shelter policy is the changing view about the appropriate role of the public sector. Since the early 1960's many governments had taken the position that the public sector has a major responsibility in providing housing and infrastructure services. Various influences were at work including rapid growth, cheap international funds, comprehensive planning ideologies, the welfare state policies of many OECD countries and, in many countries, colonial legacies. Experience has shown the limits of public budgets which could not accommodate large and rapidly growing urban populations and of the implementing capacity of public institutions. Developing countries have found that conventional subsidized public housing is not the answer to providing shelter for large low income populations and that public agencies should focus their activities on the provision of infrastructure (physical and institutional), move away from the direct production of housing units and strive to facilitate private housing construction at all income levels.

From a financial viewpoint two issues dominate discussions of the role of the public sector in shelter finance: subsidies and cost recovery which control a government's ability to maintain its programs over time.
A. Subsidies

There is an endless variety of ways of generating subsidies and, depending on circumstances and on the analyst, some are considered legitimate while others are not. At a time when national resources are scarce it is imperative that the most significant subsidies be correctly measured so that governments can determine whether more could not be achieved with the same resources. This is crucial because the inefficiencies and distortive economic and financial effects of subsidies need to be controlled.

For the convenience of this review, one can regroup subsidies into two broad categories: subsidies provided through the pricing and taxation of the various phases of shelter production and subsidies provided through credit programs. Subsidies through production can include public land pricing, the provision of infrastructure below cost, subsidized construction costs through tax incentive to specially designated builders or construction services provided by untaxed public enterprises, waivers on real estate taxes, public services provided below cost, rental allowances, reduced rents, etc. Among the subsidies provided through credit programs one can find low-interest rates, cash housing allowances at time of purchase, mortgage terms unadjustable for inflation and unpaid arrears.

The efficiency and equity aspects of shelter subsidies are important, after all they are their original justification. The efficiency argument arises when the public sector steps into
the supply process in order to reduce market risks and encourage
the supply of new shelter services or technologies not yet
available locally. The difficulty is to determine at what stage
and at what level of subsidies public sector activities are
actually beginning to prevent the emergence of private suppliers.
On the other hand, there is somewhat less difficulty in differenti-
tiating between public and private goods in the shelter sector
and between infrastructure and housing.

From an equity viewpoint, it is important to return to the
three-tier structure of housing markets described earlier. It can
be seen that the essential beneficiaries of subsidies through
housing programs are found in the second tier of the housing
market where the salaried, private or civil service middle-class
households are concentrated.

If governments want to have housing programs that are
sustainable over time they should clarify their use of subsidies
and contain them; particularly in periods of fiscal restraints
when they are confronted with a sharp trade-off between deeper
subsidies for a few or lighter ones for many. In addition, since
subsidies represent a transfer of wealth between income groups
they are questionable in countries where all incomes are
low. Two points seem clear. In housing programs which include
an element of subsidy, this subsidy should be confined to the
lowest income groups so that the impact per household can be
material and the greatest number helped. In addition such subsidy
should focus most heavily on infrastructure and direct government
production of housing avoided as far as possible. Subsidies should be transparent, i.e. easily measurable and the sources from which the transfers will have to be made should be clearly known.

B. Cost Recovery

Cost recovery is the mirror image of subsidies, with the qualification that there are unintended subsidies implicitly present in the failure to recover some costs. Therefore one can define the basic policy equations of cost recovery as being: (a) total project resource cost equals cost recovered plus total subsidy, and, (b) total subsidy equals intended subsidies plus unintentional failure to recover costs.

The recovery of project costs can take two forms because of the mix of public and private goods present in public shelter projects as well as the mix of infrastructure and housing services provided: a direct method and an indirect one. The beneficiaries of a project can pay directly for services such as roads, water and sanitation, street lighting, refuse collection, through monthly plot charges, utility tariffs and other user charges; construction costs and business loans can be repaid through monthly or periodical financial payments. Indirect recovery methods imply that a wider population than that benefiting immediately from a project is expected to share in covering its costs. Services whose costs are indirectly recovered are of a public good nature where users and non-users cannot be
easily segregated and user fees charged. Typically projects with large investments in trunk infrastructure and community facilities have higher shares of planned indirect cost recovery.

The causes of failure in cost recovery are varied. In the case of low income projects, with repeated operations and growing experience with planning as well as improved managerial ability, cost recovery tends to improve over time. The typical causes of failure to recover costs are: inadequate legislation; poorly organized and supervised collection procedures; difficulties with land tenure and the transfer of titles; weak administration or unwillingness to adjust tariffs and user charges for inflation and the true cost of providing services; and sometimes plain unwillingness to pay on the part of beneficiaries. No generalization on cost recovery is entirely safe geographically or over time, but typically local governments tend to have more difficulty in enforcing cost recovery, particularly small municipalities which are used to getting most of their resources from central government grants.

The failure to recover cost has two main results: it provides a windfall to those who have already been served and threatens the viability of public programs. If governments want to be able to expand their programs of infrastructure provision, they must confront the fact that good infrastructure has to be paid for and that, without cost recovery, even the maintenance of the existing capital infrastructure is in jeopardy. During this period of scarce resources public sector savings must be raised.
and public sector institutions should be expected to follow sound financial practices in their internal management and to know exactly what and where their resources are. Financial management in public housing authorities is greatly in need of improvement.

IV. FINANCIAL INSTITUTIONS AND CAPITAL MARKET CONSTRAINTS

In addition to non-financial constraints such as poor land administration which impede the supply of housing finance there are other constraints on the financial market side which limit the growth of housing finance institutions. If the public sector is now expected to concentrate its financial resources on infrastructure and public services, what can be expected from financial institutions? The period of financial instability which many countries are currently experiencing is bringing into sharp relief the nature of the constraints on the financing of housing.

A. Financial Development Over the Last 20 Years

To understand better the potential of housing finance institutions it is useful to place them within the general context of financial development. During the 1960's and early 1970's exchange rates, commodity prices and the domestic price level were all relatively stable. Recent data compiled by the World Bank show that for a sample of 35 of the largest developing countries representing a very high percentage of
the global GNP of developing countries, the average inflation rate was 7% per year. Only a few countries lived through periods of sustained double-digit inflation. During the same period inflation in the industrial countries averaged 5% per year. Negative real rates of interest were a serious problem only in the high inflation countries which in fact pioneered indexation of financial assets, in particular home mortgages. It is estimated that the real rate of interest on term deposits averaged minus one percent. This was a period when low inflation and reasonable interest rates made the holding of financial assets possible and attractive. Most countries showed significant increases in their level of financial intermediation and the use of banking services, the ratio of M2 to GDP rose markedly, and non-bank financial intermediaries grew well. Most countries followed conservative investment strategies and depended primarily upon their own resources to finance their investment programs. National savings provided 80% of investment needs.

Since 1974 and the first oil crisis, financial conditions have been quite different. Between 1974 and 1980 commodity prices rose sharply, fell abruptly and recovered again. The oil revenues which could be seen as a heavy tax on industrial countries were redeposited at commercial banks which recycled these funds as international loans. Much of this lending was short-term and longer term lending was increasingly done at variable rates reflecting in part the new pattern set by fluctuating exchange rates since 1971 and the impact of US monetary policies on
capital markets. High inflation spread from a few developing countries to many. The average annual rate of inflation rose from 7% to 19%; including the few high inflation countries of the earlier period the average was 25%. Inflation rose in industrial countries, but much less, to an average of 10%. The average real rate of interest in developing countries fell to minus 8% on average thereby discouraging domestic savings mobilization through financial institutions.

During this second period most developing countries followed very expansionary policies. The average rate of investment rose from 20% to 24%, most of the increase reflecting additional public sector investment. Domestic savings were discouraged by negative deposit rates but international loans were cheap and countries kept borrowing abroad to sustain their growth, finance their trade deficits and raise investments. Domestic savings dropped to 74% of investment, medium and long-term foreign debt rose from 24% to 31% of GDP; in addition, countries made extensive use of short-term debt at commercial terms which amounted to an additional 6% of GNP in 1980. This period saw a massive internationalization of capital markets which became really global in their operations.

The second oil crisis of 1979 created much more serious problems than the first one. It included a recession in industrial countries, a sharp fall in commodity prices and deteriorating terms of trade. For the first time in 30 years the value of international trade actually declined in 1981 and inter-
national interest rates became sharply positive, increasing the
debt burden of TWC's which rose to an average of 48% of GNP in
1983 as a consequence of devaluations. At the same time much of
voluntary international lending stopped. Because of their heavy
foreign debt servicing burdens and their previous inability to
increase their debt servicing capacity in step with their
borrowings, government had to tighten their fiscal policies,
making domestic conditions worse. Quite frequently, the failure
of the public sector to pay its bills also eroded the liquidity
position of private firms and directly or indirectly that of the
financial institutions. Among the most seriously affected have
been the specialized, public, long-term lending institutions.

B. Characteristics of Housing and Form of Financing Required

Housing has characteristics which affect the form of
financing it requires. There are several major reasons why a
household would want to purchase a house and would take out a
long-term loan: the transaction costs of frequent moves are high
for families; the quality of the services provided by a house is
very sensitive to the way it is used; housing is one of the most
durable goods providing a flow of services over a long period of
time; and, a housing unit generally costs three to four times the
annual income of its occupants, making it very difficult to
acquire it through a pure cash (equity) rather than debt trans-
action. From a financial institution's viewpoint mortgage
lending is costly: in addition to the long maturities required, a mortgage loan is a fairly small investment transaction compared to commercial lending and the cost of creating such a financial asset is high. In developed countries with well developed and competitive financial systems, mortgage interest rates are marginally higher than the cost of long-term corporate funds in order to avoid shortages of funds.

The recent past has not been favorable to many housing finance institutions. As shown by recent events, because of the need for long-term financing, the biggest burden on developing viable and flexible housing finance systems is severe inflation accompanied by high and fluctuating interest rates. On the other hand, a necessary but not sufficient condition for the sustained growth of a housing finance system is an environment of sound monetary and fiscal policies.

C. Types of Housing Finance Systems

There are basically four ways of channeling funds from savers to borrowers and housing finance systems consist in combinations of these four ways. The direct route (informal financing) is obviously the most widespread in developing countries, it is the only method for the large incremental shelter sector. It involves many inefficiencies and needs to be better understood. The objective of financial policies should obviously be to reduce the scope of informal financial markets.
but artificially low, regulated interest rates and directed credit policies as well as taxation have helped the direct route to endure and often grow.

The contractual route where the home buyer receives his loan from an institution collecting funds on a long term contractual basis is used in a variety of countries where financial markets are fragmented and not well developed and is generally used by highly specialized financial institutions. CNEL in Tunisia is an important illustration of that approach. For a variety of financial management reasons it is not possible to rely exclusively on this approach.

The deposit financing route where short term savings are packaged into long-term loans by intermediaries has been popularized by the building societies, savings and loans associations and other mutual credit institutions around the world. Their success requires low inflation rates, interest rates set freely at competitive levels and easy access to depositors through a network of branches. They can offer loans at moderate price but are sensitive to term intermediation risks (borrowing short and lending long).

The mortgage bank route where funds used to financed mortgage loans are mobilized through long-term bonds purchased by institutional investors rather than individuals is a fourth way to finance housing. The two main considerations in this approach are the cost and the volume of funds accessible from other deposit taking institutions; funds are more expensive than from
direct deposit taking but maturity risks are small and there is no need for extensive and costly branch networks. This approach is used in Morocco and in India. It has been argued by some that the mortgage bank route followed by deposit taking later may be one of the easier way to create a new housing finance institution rapidly, deposit taking being added to the institution at a later stage. In that case, dependence on long-term funds from the public sector should be carefully controlled.

D. Lending Policies and Viable Housing Finance Systems.

Lending policies are central to the viability of housing finance systems. Many discussions of housing finance are exclusively concerned with the problems of the households and with the financial techniques that can be used to make housing affordable to beneficiaries, basically in four ways: by lowering interest rates, by lengthening mortgage maturities, by using graduated payments or by reducing the equity contribution that households must make. While it is important to distinguish clearly between policies to improve the efficiency of housing finance systems and the desire to provide subsidies through credit programs, it must also be recognized that directed credit programs are deeply entrenched in many countries and are considered a major instrument of policy, including in housing.

By insisting on low interest policies irrespective of current levels of financial savings, inflation and the oppor-
tunity cost of capital, many housing ministries are greatly underpricing financial services and making housing finance institutions dependent on public subsidies for their operations. Without funds available in financial institutions, households draw none of the benefits of financial intermediation and end up paying considerably more in the informal markets. Lasting housing finance policies must address on one hand the affordability problems of the households and on the other the interest rate risk, maturity risk, liquidity risk and default risk faced by the financial institutions; otherwise housing finance services cannot be provided in a stable and flexible way.

E. Expanding the Volume of Housing Finance Funds

1. Voluntary Deposits

The logic of financial institutions is such that if they are to lend at very low interest rates they are in no position to offer attractive rates to their depositors on a competitive basis. During the earlier period of large negative real interest rates imposed on many financial institutions, wealth transfers from depositors to borrowers were taking place. In the case of housing credit and agricultural credit, lending rules, particularly low loan-to-value ratios were often such that the borrowers had considerably higher income status than the depositors. When inflation is high, loan maturities in the financial markets shorten drastically and under the pressure to lend at low rates
the only institutions remaining active in housing finance have been public institutions receiving long term concessional loans. The importance of offering positive real rates of interest has also been demonstrated by the success of indexed deposits in the UPAC system of Colombia when the housing finance system kept expanding very successfully under inflation.11

2. Directed Credit Programs

Given inflation and the behavior of interest rates, the problem for policy makers is to develop stable sources of long-term capital at the lowest cost possible. Money markets are short term and capital markets are undeveloped in Third World Countries, offering at best only short maturities. Governments have therefore resorted to various means to generate funds that market forces alone would not provide in sufficient amount or quickly enough. The decisions to choose such techniques have depended on the degree of priority accorded to the housing sector in national policies and on the degree of development of the financial system. The need to develop some source of long-term funds explains why direct credit programs are playing such a significant role in many countries.

The four main non-market techniques used to create a supply of long-term housing finance have been: tax based social housing funds, the use of retirement systems, directed credit policies applied to commercial banks, and forced deposit schemes where people interested in purchasing housing must give proof of having opened a housing account. Depending on how they are managed such
systems can make a major contribution to housing or dissipate scarce financial resources.12

F. Current Macro-Economic Opportunities and Constraints.

The shelter sector plays a very important role in every TWC economy. Housing investment as a share of annual gross domestic fixed capital formation (gross investment) varies between 15% and 30%. Even in very depressed periods such as in Turkey in 1981, housing investment still represented 12% of GDCF. Housing has other features which make it currently important. It is a major non-traded sector with limited needs for foreign exchange in most countries, except island economies. It is a labor intensive sector able to provide employment to low income workers. Most governments are therefore interested in stimulating investment in housing as a countercyclical tool to revive their economy and as a means of lessening the impact of the economic recession on the lower income groups. However, there are two opposing factors which reduce considerably the scope of a housing stimulus in spite of the pressing needs of the sector. One is the intensified competition for domestic savings and the other is the weakened effective demand for housing.

From the viewpoint of national accounts, there are four main sources of gross savings in an economy: the household sector, the business sector, the government and the foreign sector (foreign lenders). The household sector is typically a net lender and the
business sector a net borrower, while the net position of the government and the foreign sector can vary from period to period and country to country. With the problems of foreign debt -- when so many countries have experience net transfer of resources in favor of the foreign sector -- and large government deficits, the household sector is currently the last source of savings to keep national economies growing, however slowly.

Presently, governments would prefer to see household savings go to investment activities with a more rapid capital recovery period and lower capital output ratios than housing. In addition, the need to curtail public sector deficits makes it very difficult for them to pursue vigorously through the public sector the social housing policies most beneficial to low income groups. It must be noted in this respect that past emphasis on heavily subsidized public housing had led some economists to recommend curtailment of investment in housing as a non-productive sector which is not the case of infrastructure investment nor of private non subsidized housing.

The other major current constraint is that the demand for housing has weakened considerably with the recession. The annual supply of new housing is a small proportion of the existing stock. Relatively small shifts in real income, prices, interest rates and expectations can lead to sharp year-to-year fluctuations in housing output. In most countries this instability is accentuated by the lack of long-term financing. At present, the problem in TWC cities is more immediately one of income
generation through employment than one of housing, especially for low-income groups. Among the households which could normally aim at home ownership, the current demand for new housing has weakened as real incomes have either stagnated or declined, inducing families to draw on their savings.

The gap between ability to pay and socially desirable housing consumption has been widening. Governments have to identify the narrow path between stimulating housing demand and avoiding using large amounts of scarce public resources as subsidies. This implies a lowering of individual household expectations and a reorientation of housing supply to more modest housing units.

V. LEVEL OF DEVELOPMENT AND HOUSING FINANCE

A. Cross-Country Differences in Housing Investment

Micro- and macro-analyses concur in showing that the housing sector becomes increasingly important as the per capita income of a country rises. Housing and housing finance policies reach a peak of importance in middle-income countries that are urbanizing rapidly.

The structural characteristics of housing demand (price and income elasticities in particular) have been found to be remarkably similar across cities and countries. On the other hand, there are systematic variations in the share of housing
in household expenditures as a function of the level of per capita income of countries (or cities). Similarly, all available studies show that the share of housing in GDP varies between 1% and 7%, these two numbers being extreme values that are not sustained over long periods of time. This share of housing investment is generally very low at early stages of development when a country's per capita income is very low. The highest values are generally found among middle-income countries that are already significantly urbanized and with strongly growing economies, in which case both the total level of national investment and the share of housing in that investment are high. Studies also show that the systematic variation between per capita income level and housing investment is stronger than the effect of demographic variables. Among other intervening factors, indicators of financial development such as capital deepening suggest that countries with more developed financial markets invest relatively more in housing.13

These macro-analyses are consistent with micro-analyses of households in TWC's in finding that the force that drives housing demand is a rising household income level before anything else. It is possible to interpret the levelling off of the housing share of GNP as the net result of the positive effect of rising income balanced with the negative effect of increasing housing prices with rising urbanization and population concentration.

Such findings already suggest that from a national viewpoint
it is difficult to give a high level of priority to the construction of housing units in very low income countries where public resources are scarce and institutions limited. In these countries public priority should typically go to developing cost-effective, basic institutional and physical infrastructure which will organize and support private activities. The weight and complexity of housing policy both for private and public activities increases as countries move toward the middle-income level.

B. Regional Differences in Housing Finance Systems

As could be expected, there is a broad correlation between the level of per capita income of a country and the degree of development of housing finance systems, but as is shown by Boleat's review of some 50 countries, no single approach to developing housing finance systems is clearly preferable over all the others and the national financial history is quite important. The institutional structure originally chosen to mobilize household savings, for instance whether special systems such as postal savings or banking institutions started first, has a lasting impact on the evolution of housing finance systems. This is particularly true in small and still fragmented financial systems.

An important element of consideration for what can be done in housing finance in the immediate future is the extent to which various national financial systems have been affected by
the present period of financial instability. The overall quality of national economic management policies regarding price stabili-
ty, directed credit and interest rate policies determines the economic environment in which housing finance institutions have to operate.

Many of the Sub-Saharan countries were over-extended during the 1970's and even if their aggregate volume of their foreign debt was not large on a global basis, as a percentage of GNP the debt burden is as heavy as for the Latin American group of countries that has been making headlines. The problems are severe because most countries are currently on a trend of economic decline, and per capita income are falling implying that domestic savings rates are seriously affected. Many of the housing finance institutions in the region have been touched by the financial crisis and are dormant. Clearly, more than anywhere else, the concentration of efforts on developing the institutional and basic physical infrastructure is a priority during this period of restructuring. The problems in the shelter sector are compounded by the fact that the highest rates of city growth are anticipated in Sub-Saharan Africa for the rest of the century.

The middle-income countries of North Africa and the Middle East which had open trade and capital markets and were fairly dependent on foreign borrowing were also seriously affected by recent international trends. But the experience of the region is heterogeneous and some of these countries are making slow but steady progress in modernizing their shelter delivery systems in
spite of the weaker economic environment. Considerably more attention is now being placed on improving housing finance institutions through better mobilization of resources and new financial services. Efforts are also being made to develop more coherent shelter support systems, starting with land management institutions.

The newly industrialized countries of Latin America have been most severely affected by the financial crisis. During the 1970's their economies became overheated through inflation and they had become heavily dependent on foreign savings. In Chile and Brazil, the housing finance systems went through traumatic periods with non-performing loans and unstable deposits whose effects have not yet been fully played out. In Mexico, the fragmented housing finance system needs to be better coordinated and structured. Interest rate policies in some parts of the system are wasteful and in need of major improvement. Because of high levels of inflation, many countries in the region are heavily dependent on indexed instruments to mobilize funds, but these tools are not always easy to manage and subsidies through credit programs are very large and difficult to bring under control.

The countries of East Asia and South Asia which had kept better control over their domestic economy than in other regions are not pressed by financial instability except for the Philippines. In that region, the issues are not issues of restructuration but of continued modernization of shelter
finance. Trends toward more liberalization of the financial systems are inducing reviews of housing finance institutions, which still remain quite specialized.

In the large countries of South Asia, differences are marked. In India, the housing sector still remains a low priority, but discussions on how to modernize the housing finance system have taken place over the last few years because the housing sector is already quite important in absolute size. In Pakistan, the decision to move to a full Islamization of the financial system by 1986 is raising unusual issues: it would appear that the main approach to housing finance may be through some form of shared equity mortgages which might not be convenient given the structure of the national housing market. In Indonesia, progress is being made in improving the shelter delivery system in a general context of improved national economic and financial management.

VI. THE EXPERIENCE OF INTERNATIONAL AGENCIES

International agencies have no choice but to adjust to the new economic environment of expensive international capital and scarce domestic savings by encouraging more efficient management of scarce public resources and assisting in identifying better policies. The volume of resources that they can devote to shelter finance is limited, they are therefore placing increasing emphasis on the design of viable and adaptable systems that will
not be heavily dependent on foreign savings in what is essentially a non-traded sector where foreign exchange risks should be avoided.

The 1960's were marked by the take-off of efforts in favor of housing in developing countries. A lack of familiarity with the facts and processes of housing markets in low-income countries sometimes lead to unwarranted attempts to transfer policies, institutions and procedures from high-income, slow urban growth industrial countries to Third World countries.

The 1970's were marked by the emergence of a clearer understanding of the nature and scope of urbanization in developing countries and of its implications for housing markets. The rapid growth of the world economy and the expansion of public sector institutions facilitated experiments in the housing sector and did not render the cost of mistakes too heavy.

The 1980's are a period of slow growth, high inflation and fluctuating interest rates with heightened competition for domestic savings. At the same time well over 50% of GNP originates in cities in most TWC economies and urban institutions must therefore continue to be modernized and better managed given their impact on the efficiency of cities which themselves have an impact on the productivity of national economies. The needs of the various regions of the world are also growing increasingly diversified in spite of the now global nature of international financial markets.
VII. CONCLUSIONS

The most radical departure from earlier policies regarding the financing of shelter lies in the realization that public budgets do not have the resources nor public institutions the capacity to meet all the needs of low income households and that subsidized conventional public housing will not provide sufficient shelter for all the poor. New policies must aim at development of viable and flexible shelter production systems based on the comparative advantage of the public sector which lies in institutional and regulatory support as well as in infrastructure investment and of the private sector which lies in the production of housing and the provision of financial services.

A. Role of Regulators

The role of governments as regulators of the shelter sector begins with the formulation of a policy framework which is not exclusively focused on what the public sector does but also on the needs of the private sector which will remain the main source of new housing. The costs of regulations caused by delays and uncertainty in the processing of permits should be reduced. Building standards should be in harmony with prevalent levels of income.

Within the context of shelter policy, the four principles
which should govern both the provision of shelter and the supply of basic infrastructure are: household savings mobilization, affordability, replicability, cost recovery. Without getting into detail, we can elaborate their meaning for the present decade as follows:

1. **Household Savings Mobilization:** In order to provide cheap loans government have too often insisted on low lending rates, which cannot be sustained without imposing also low deposit rates (often negative in real terms). A few lucky borrowers are therefore subsidized by many small depositors while others are driven away from formal financial institutions. The only recourse is informal financing which is often considerably more expensive due to various inefficiencies. Artificially low lending rates are therefore harmful to the growth of housing finance.

2. **Affordability:** The only sustainable way to increase the delivery of housing is to encourage the supply of housing of a kind compatible with the income level of the country. High standards for a few will not help.

3. **Replicability:** Whenever governments are engaged in the production of social housing in which they want to include an element of subsidy, such subsidy should be confined to the lowest income groups and it should focus most heavily on infrastructure elements. Subsidies should be transparent, i.e. easily measurable, and the sources from which the transfer will have to be made should be clearly known. Direct government production of housing should be avoided as much as possible in favor of infra-
structure.

4. Cost recovery: If governments want to be able to expand their programs of infrastructure provision, they should educate the public about the fact that good infrastructure has to be paid for and that, without effective cost recovery, even the maintenance of the existing capital infrastructure is in jeopardy. In addition, public sector institutions should be expected to follow sound financial practices in their internal management and to know exactly what and where their resources are.

B. Role of Financial Institutions

The primary requirement for a successful housing finance policy consists in a set of macro-economic policies conducive to price stability and increased domestic savings. Without price stability housing finance policies can only be of a short, remedial and unstable nature requiring large government interventions for rather limited and ephemeral results.

As noted earlier, the biggest burden on developing viable and flexible housing finance systems is severe inflation accompanied by high and fluctuating interest rates. In fact, as a general rule of thumb, one can say that the volume of direct government subsidies and the scope for their misallocation is in direct proportion to the level of inflation. The weakness of approaches disregarding savings mobilization has been exposed during this period of economic slowdown combined with positive
real rates of interest. Heavy subsidies provided through housing finance, insolvent public sector agencies and continuing attempts at financing public activities through inflation have been the cause of major financial instability in quite a few countries in recent years.

The strategic variable for the expansion of housing finance systems is the mortgage interest rate level. Financial institutions should keep this rate close to the market cost of funds in order to be able to pay appropriate rates on deposits and to mobilize funds. Legislative frameworks limiting the flexibility of housing finance institutions should be reviewed to permit them to experiment with more varied mortgage instruments; as a rule all institutions should use mortgage instruments with periodically adjustable interest rates. Financial institutions should develop their project appraisal capacities with respect to the financial, technical and commercial characteristics of the projects submitted to them for financing.

C. Role of Public Developers

The existence of public developers is inevitable as desired instruments of public policy. Their priority should lie in the coordination and/or production of shelter infrastructure. They should be used to determine at each level of urban development what is the appropriate balance between public and private sector activities. They should play a leading role in the
selection of appropriate technologies and in the development of innovative production techniques. They should also play a leading role in the improvement of shelter regulations, particularly in the improvement of building codes. They should aim to minimize their involvement in the direct production of housing units and, in any case, should withdraw from loan origination and investment in long-term mortgages and leave such activities to financial institutions.

2. This second ratio is affected by the completeness of financial reporting. It also reflects mortgage maturities, loan-to-value ratios and the tax treatment of housing. For more details, see Marc Boleat, *National Housing Finance Systems*, Croom Helm, London, 1985.


4. For instance in a very recent case in the Ivory Coast, a commercial bank financing a moderate income housing project of 500 units was appalled to find that for the lower price units the cost of registering titles was equal to the down-payment that families had accumulated over two years through a contractual savings scheme, amounting to 10% of the value of the unit.

5. In a Caribbean country where permits must be obtained from several administrations using different building standards and applying them inconsistently internally, it has been estimated that the cost of delays and redesigns imposed even during the construction phase might be raising the building cost of a legal unit by as much as 50%.

6. This is of course a mistaken impression because the real estate tax base of residential buildings is seriously eroded by rent controls. One of the better known cases is Bombay where after many years of hesitation, the government recently came to the conclusion that rent controls had mostly negative effects and decided to take some corrective actions. In particular, because of rent control the courts had ruled that the property tax base should be determined by the rental value of buildings which was frozen by rent controls at the date of construction. The net effect being that the property tax raised less funds in this large city than the old and ineffective octroi tax on goods entering the city limits. Lacking a resource base how could a government maintain public infrastructure or expand it?

7. The recent example of Korea is very interesting. Since 1981 Korea has been restructuring its economic management strategy to take into account the new international economic environment and improve its foreign debt position. An important part of the new strategy is to have better managed public sector enterprises by giving managers greater autonomy in their decision making together with more sharply defined external performance and internal management objectives. Since 1984, the 25 government...
invested corporations are subject to the "Basic Law on Management of Government-Invested Business Organizations". Among these 25 organizations are the three key shelter agencies: the Korea Land Development Corporation, the Korea National Housing Corporation, and the Korea Housing Bank. Their managers are evaluated every year on the basis of publicly known criteria, they can receive bonuses or be penalized on the basis of their performances which are reviewed by managerial committees composed of public and private experts. Ratings are reported in the press.

8. Argentina, Brazil, Chile, Indonesia, Uruguay, Israel.

9. The prior saving period which would be required for an outright cash transaction is not too difficult to evaluate as a function of the housing cost (say 3.5 times annual income), the family savings rate (say 15%) and the real interest rate on financial savings (say 3%): for the figures quoted it is 18 years. Such long waiting periods explain the progressive investment approach followed by most households in TWC's where no long-term financing is available in the informal sector. As one should expect, given the actual market fluctuations of all these variables, the availability of financing has a positive impact on the quality of the dwelling that households own. See Raymond Struyk and Margerie Austin Turner, Housing Finance and Housing Quality in the Philippines and Korea, Unpublished World Bank research paper, January 1985, 169pp.


11. For more details on indexation not discussed in this review, see for instance Roger J. Sandilands, Monetary Correction and Housing Finance in Columbia, Brazil, and Chile, Gover Publishing Company, Farnborough, United Kingdom, 1980.

12. An interesting contrast can be made between the major contribution made by the provident fund of Singapore to solving the housing problem with the management of Infonavit in Mexico. Both funds draw their resources from mandatory contributions based on employment. In Singapore employers and employees contribute. In Mexico Infonavit resources come from a 5% tax on salaries paid by employers. Currently Infonavit still makes long-term mortgage loans at 4% fixed rates when inflation in the country has only declined from 100% to about 40% in the last four years.