Housing for All: The Challenges of Affordability, Accessibility and Sustainability

The Experiences and Instruments from the Developing and Developed Worlds

A Synthesis Report

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Foreword

As we move into the new millennium, one trend overwhelms our concerns: the rapid urbanization with deepening poverty, environmental degradation and increasing slums, which poses tremendous challenges for achieving adequate shelter for all. The challenges we face in human settlements cannot be met by governments, private sector or civil society alone. It requires the actions of all sections of the society.

Human settlements are places of organised human activities. The way in which human settlements are organised is influenced by the pace and breadth of socio-economic development. Such development cannot take place without linkages and continuous interactions between physical, institutional, economic and social structures. Human settlements are the product of deliberate planning or of spontaneous and uncontrolled economic and social activities. The problems and issues of human settlements cut across the conventional socio-economic sectors and are of multi-sector and multi-disciplinary nature.

The national resource allocation and finance strategies are evolving towards the identification of national development priorities and challenges. Therefore, a full understanding of human settlements needs to be looked at in the national policy context, and its links to finance and to policy debate. This approach is increasingly appreciated by policy-makers and planners when addressing human settlements problems and policy options. The ***Human Settlements Finance and Policies*** series aims to explore the intricacy of finance and policy interrelations and to promote better human settlements finance policy and strategies.

This series addresses the most important issues in improving human settlements. It draws the intellectual leaders and practitioners from the governments, local authorities, private sectors and civil society to confront human settlements and finance problems and to exchange views and experiences in tackling human settlements problems and issues, and to explore and promote innovations in policies, strategies and methods to address challenges in human settlements. Papers in this series provide opportunities to move towards a deeper understanding of the broad range of human settlements and finance issues.

Our habitat is shaped by human actions and policies. Policies have profoundly shaped our cities, towns and villages in the past, they will continue to define the 21st century. Decision-makers face challenges of designing policies that allow their countries and cities to meet the increasing human settlements challenges. In the new era I hope that this series will contribute to the policy debate and will enhance the capacity of member states to design new policies and strategies to address human settlements challenges. In human settlements policy debate, choices made today will impact our common future in the habitat of tomorrow.

Dr. Anna K. Tibaijuka
Under-Secretary-General and Executive Director
United Nations Human Settlements Programme

Abbreviations and Acronyms

ACHR – Asian Coalition for Housing Rights

ADB – Asian Development Bank

ASA - Association for Social Advancement

BAAC - Bank for Agriculture and Agricultural Co-operatives

BAPINDO – Bank Pembangunan

BBD – Bank Bumi Daya

BDN – Bank Dagang Negara

BNI – Bank Negara Indonesia

BRAC - Bangladesh Rural Advancement Committee

BRBD – Bangladesh Rural Development Board

BRI - Bank Rakyat Indonesia

BTN – Bank Tabungan Negara

CBO – Community-based organisation

CDT – Community Development Trust

CEL - Comptes d'Epargne Logement

CHF – Co-operative Housing Foundation

CMHC – Canadian Mortgage and Housing Corporation

CMP – Community Mortgage Programme

CNL – Caisse Nationale du Logement (National Housing Fund)

CRA - Community Reinvestment Act

CSH – Contractual Savings for Housing

CUDS – Center for Urban Development Studies

DFID – UK Department for International Development

EIU - Economist Intelligence Unit

EXIM – Ekspor Impor Bank Indonesia

EHLP – Expanded Housing Loan Programme

FHA – Federal Housing Administration

FDI – Foreign Direct Investment

FONHAPO – *Fondo National de Habitaciones Populares* (National Housing Fund)

FOVI – *Fondo de Operación y Financiamiento Bancario a la Vivienda* (Bank of Mexico Trust Fund)

FOVISSSTE - Institute of Social Security and Services for State Workers (*Fondo de la Vivienda del Seguro Social al Servicio de los Trabajadores del Estado*)

FUNHAVI – Foundation for Habitat and Housing (Mexico)

GBPHBUMC – The General Board of Pensions and Health Benefits of the United Methodist Church

GDS – Gross Debt Service

GHB – Government Housing Bank in Thailand

GHIF – The Group for Home & Infrastructure Finance, Inc.

GLAP – Group Land Acquisition and Development Programme

GMD – Gender, Media and Governance

GOT – Government of Tanzania

GSIS – Government Service Insurance System

HA – Housing Authority

HDMF – Home Development Mutual Fund

HFC – Home Finance Corporation

HFHT – Habitat for Humanity Tanzania

HIS – Institute for Housing Studies

HIGC – Home Insurance Guaranty Corporation

HRF – Housing Revolving Fund

HUD – US Department of Housing and Urban Development

IDB – Inter-American Development Bank

IMF – International Monetary Fund

INFONAVIT – National Housing Fund for Workers (*Instituto del Fondo Nacional de la Vivienda para los Trabajadores*)

JPMC – JPMorgan Chase

KUK – Kredit Usaha Kecil (small business loans)

LDU – Direction locale de l'Urbanisme (Local Urban Planning Directorates)

LGU – Local Government Unit

LEHC - Limited Equity Housing Co-operative

LIHTC – Low-income Housing Tax Credit

LISC – Local Initiative Support Corporation

LTV – Loan to Value

MBS – Mortgage-Backed Securities

MDG – Millennium Development Goal

MFI – Microfinance institution

MIS – Management Information System

MLGHE – Ministry of Local Government, Housing and Environment

MMIF – Mutual Mortgage Insurance Fund

MOF – Ministry of Finance

MOH – Ministry of Housing

NACHU - National Co-operative Housing Union

NBFI – Non-bank financial institution

NGO – Non-governmental organisation

NHC – National Housing Corporation

NHDFC – Nepal Housing Development Finance Company

NHMFC – National Home Mortgage Finance Corporation

NLTB – Native Land Trust Board

NSB – National Statistics Bureau

PEL – Plan d'Epargne-Logement

PELITA – Five-Year Development Plan

PRIDE - Programme Intégré pour le Développement de l'Entreprise

PRB – Public Rental Board

RDA – Rural Development Administration

SACCO - Savings and Credit Co-operative

SHDLP – Social Housing Development Loan Programme

SHF – Sociedad Hipotecaria Federal (Federal mortgage corporation)

SIDA - Swedish International Development Agency

S & L – Savings & Loans institution

SMMS – Secondary Mortgage Market System

SOFOLES – *Sociedades Financieras de Objecto Limitado* (Non-banking financial institutions)

SPARC – The Society for the Promotion of Area Resource Centers

SRA - Slum Rehabilitation Authority

SSS – Social Security System

SU – Support Unit

SUPF – Solidarity for the Urban Poor Federation/Squatters and Urban Poor Federation

TAWLAT – Tanzania Women Land Access Trust

THB – Tanzania Housing Bank

UHLP – Unified Home Lending Programme

UNCTAD – United Nations Conference on Trade and Development

UNDP – United Nations Development Programme

UN-HABITAT – United Nations Human Settlements Programme

UNDESD – United Nations Department of Economic and Social Development

UNIDO – United Nations Industrial Development Organisation

UOD – University of Dar es Salaam

UPDF – Urban Poor Development Fund

USAID – United States Agency for International Development

USG - The Urban Sector Group

VA – Veteran Administration

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PART I

Introduction

Chapter 1: Introduction

Rapid urbanization in the developing world is the most unprecedented phenomena of the world's development in the past few decades. The pace of urbanization has exceeded many developing cities' capacity to absorb the needs of a growing population, despite all innovations and efforts. One of the most pressing problems is to provide adequate housing for all, particularly for the poor.

Poor urban housing conditions are a global problem, but conditions are worst in developing countries. UN-HABITAT (2003) reports that 1 billion people live in life-and health-threatening homes. This represents about one third of the world's total urban population, while the developing world has a substantial proportion of the urban population living in inadequate housing conditions.

The threat of mass homelessness is greatest in Africa, Asia, and Latin America because that is where population is growing fastest. It seems that old paradigms are unworkable, many existing formal supply channels often hopelessly inadequate to low income people, and most conventional approaches largely irrelevant given the magnitude of the growth of the sub-standard settlements.

However, the commitment and efforts for the poor people are often limited, given the limited resources faced by the developing world. Many developing countries struggle to solve their housing problems. They often find that there are lack of adequate knowledge and experiences in housing. Their housing poverty is not only linked to economic poverty but also linked to knowledge poverty and skills poverty. This is the reason why member states consistently call for increased normative activities.

In the past century, the world has witnessed great changes and improvement of living conditions in many countries along with their economic growth. Various innovations and instruments arise to tackle the housing problem. There is much variation in policies, instruments and innovations in different countries. There is a need to find common ground in search for solutions for housing. There is a great need for sharing experiences and practices across countries. There is a huge demand among countries to learn from other countries' experiences and practices.

This book provides a comprehensive synthesis of various innovations and instruments in low and moderate income housing. It focuses on the issues of affordability, accessibility and sustainability, with special reference to housing finance. It illustrates the principal instruments, innovations and policies in housing provision and housing finance; from specialized housing finance institutions to community based financing initiatives; from mortgage finance to housing microfinance; from self-build to cooperative approaches; from market-driven instruments to government-led initiatives; from revolving funds to credit enhancements; from experiences of individual countries to practices of multilateral institutions; from developing countries to developed countries; from specific instruments and methods to the improvement of systems. It aims to provide an "all-in-one" synthesis of tools and experiences and practices in housing provision and housing finance for low and moderate income households.

PART II

The Challenge of Housing Finance

Chapter 2: The Challenge of Access to Housing Finance for Low-Income Households

Why Formal Financial Institutions Do Not Work for the Poor[w]

Rapid urbanisation leads to a crisis of unprecedented magnitude in urban housing delivery. UN-HABITAT reports that every year the world's urban population expands by some 70 million, most of it in developing countries where economic capacities cannot cope in terms of housing and urban services provision. As a result, cities feature very high proportions of informal dwellings, which either were constructed to standards that do not conform to established legislation, or built on land for which the occupier has no proper title – or both. In some cities, up to 60 per cent of dwellings are in informal settlements. These dwellings are appropriate responses of the poor to their social and economic circumstances. In many countries, there is de facto security of tenure as governments discourage evictions, acknowledging their failure to enable the land and housing market to supply shelter affordable to the poor, and cognizant of the votes wielded by the occupants of these areas. Housing in such areas can be built incrementally according to the budget and circumstances of the households involved. The construction of housing is financed by informal financial mechanisms, mostly through household savings, loans from relatives, and other means.

If Millennium Development Goals (MDGs) are to be achieved, affordable housing is goint to be required on a massive scale and strategies must be developed for immediate implementation. The key to providing housing does not lie solely in the number of humanitarian programmemes launched by institutions such as UN-HABITAT, the World Bank, non-governmental organizations or even governments. It has taken decades to recognise that marginalized communities have a major role of their own to play, too. They must be given the technical and planning skills and techniques enabling them to implement acceptable solutions to provide affordable housing. Governments over the last three decades have tried to address the problem of affordable housing. The United Nations Declaration of 1974 was drafted primarily to encourage developing nations to expand low-cost housing on a "self-help" basis, through establishment of co-operatives utilising, as much as possible, local raw materials and labour. Many governments around the world have planned to increase housing delivery along these lines on a sustainable basis. Progress as observed is very good, such as in China and Eastern Europe, while remaining slow in many other countries, and the problem of large informal settlements is not just still there, it is growing, too.

Despite the increasing expectation that the private sector should play a very important role in financing the down market, the formal financial sector is reluctant to serve the low income sector. The poor are excluded from the formal financial institutions because they (1) require to have bank accounts with minimum deposits, discourage small, regular deposits from poor clients; (2) charge high fees; (3) financial institutions are located outside the areas where the poor live and increase the travel cost for the poor to access such services; (4) the poor do not have formal legal

Box 1 Informal settlements under government threats of demolition

Compare what has occurred in Mumbai with evictions and homelessness in Kenya or Mexico City or New Delhi. In terms of both the sheer numbers of poor people affected and the brutality of the demolitions, the evictions in Mumbai qualify as amongst the worst cases anywhere in the world, with as many as 90,000 shanties torn down between 4 December 2004 and 5 March 2005. Evictions took place on Sundays or religious or festival days. Evictees' belongings were then set on fire. Bulldozers demolished homes when people were still inside. This violates a range of human rights, including the right to adequate housing. The demolitions are in effect creating apartheid in the city, with a clear demarcation of where the rich and the poor live. The poor are standing in the way of enormous profits to be made through land speculation — among the highest in the world — and if that helps build a so-called world-class city, well, who cares for the poor? Nobody seems to be looking at the social and psychological impacts of such a clear case of dispossession. Is anyone looking at the impact on specific groups—on women, on children, on Dalits? Mumbai needs a judicious mix of public housing with lower rent costs, co-operative housing, microfinance (an option where the poor can contribute partly even where there is a subsidy) and a socially sensitive use of available legislation. The solution has to be based on a human rights approach that meets the needs of the vulnerable first, that respects the views of all women, men and youth in the city and includes their participation in the planning process.

– Miloon Kothari, United Nations' Special Rapporteur on Adequate Housing after visiting the scene of the evictions.

Source: Habitat Debate, Volume 11, No. 2, June 2005, Page 15

titles to provide collateral security as required by formal financial institutions; (5) the poor do not have capacity to make monthly repayment over a long period; (6) the poor often do not have formal employment. Therefore the formal financial institutions fail to provide financial services to the low-income sector.

The Mystery of Lack of Money

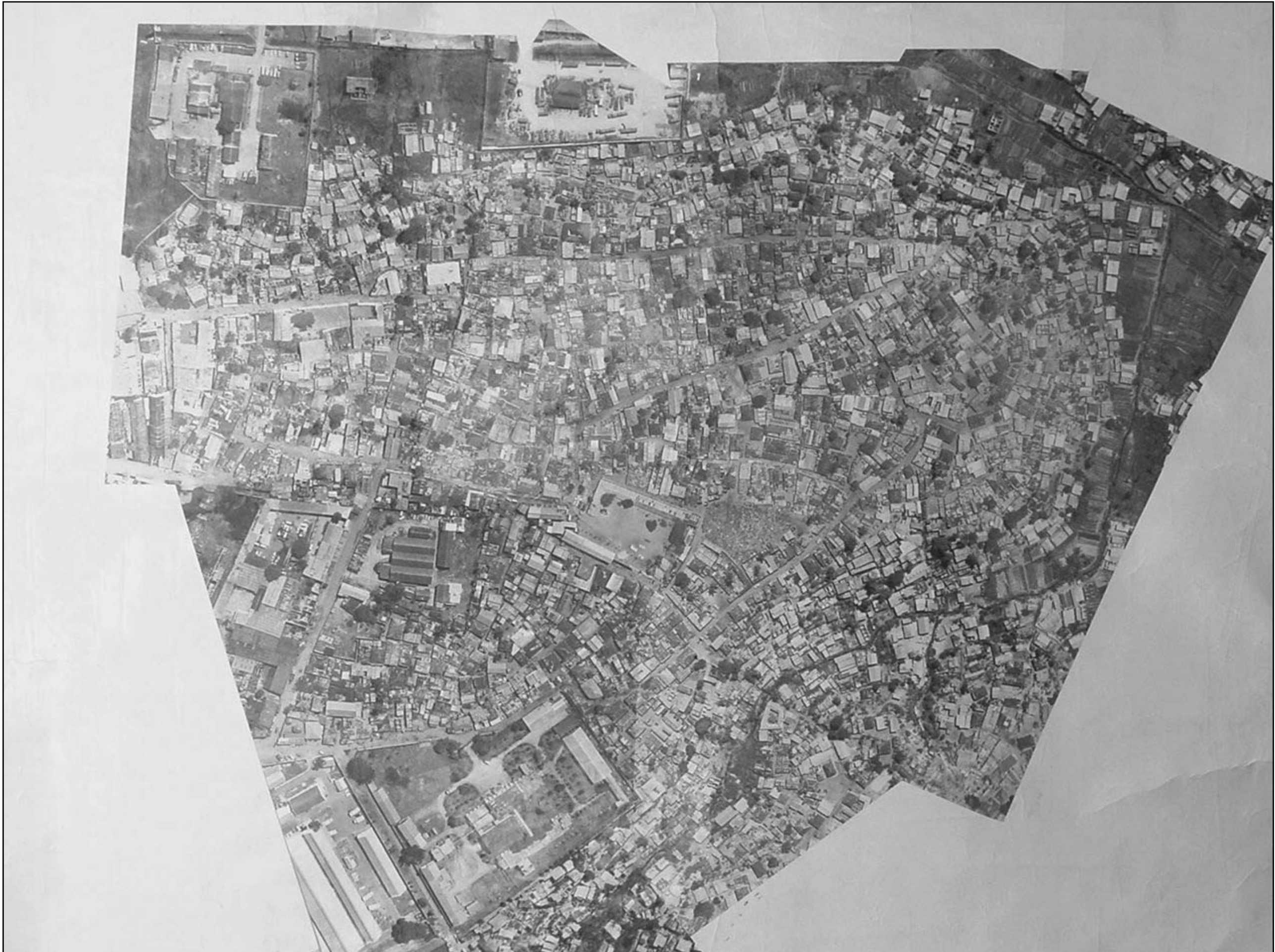
It is a common belief that poor countries lack the resources to provide finance for low-income housing. However, research shows that poor countries are not as poor as they are thought to be. They have capital. The poor do save portions of their earnings. The value of savings among the poor is huge – 40 times all the foreign aid developing countries have collectively received since 1945. In Egypt, the wealth accumulated by the poor is 55 times foreign direct investment (FDI). In Haiti, the total assets of the poor are more than 150 times greater than all the FDI received since independence in 1804; untitled real estate assets are together worth some USD 5.2 billion. However, to use the phrase coined by De Soto, these assets are "dead capital" which cannot be transferred in the market. Many poor people live in houses that do not carry any legal titles. In Egypt, "dead capital" housing accounts for 92 per cent of urban residents and 83 per cent of urban residents [x]. However, this argument may lead to an illusion that poor people are actually "rich", having locked money in the form of unmoveable assets like dwellings. This optimism obviously overestimates the value of poor people's housing. Most poor people live in substandard housing and slums which have little exchange value on the market. Therefore, the housing asset worth of the poor is much more imaginary than real.

Lack of a Property Market to Facilitate the Functioning of a Housing Finance System

Assuming that poor people do have a wealth of capital locked in the form of housing, it is difficult to make use of it for lack of a property market. Many developing countries have no clear, definite, private property rights, which are the pre-conditions for any effective property market. Informal settlements often exist outside the legal framework. They lack titles for formally legal transactions. Many informal settlements are under constant threats of demolition from government (see Box 1).

In some developing countries, people are required to go through extremely tedious procedures to legalize their land plots and housing units, or to obtain legal titles for their properties. In Peru, it takes six years and 11 months to obtain authorization to build a house on State-owned land, and it takes 728 steps to obtain a legal title for that piece of land. In the Philippines, it takes 13 to 25 years to purchase land legally, involving 53 public and private agencies. In Egypt, would-be buyers must go through at least 77 procedures to acquire and legally register a piece of State-owned land [y]. Although these might be extreme or even exaggerated cases, they reflect the challenging nature of legal titles and attendant transactions in some developing countries. The extreme difficulties involved in the delivery and transfer of legal titles make it more difficult to use land and housing property as collateral for access to loans.

Figure 2.1 Survey of Land for Regularisation in Tanzania



Source: GOT

However, some developing countries have made efforts to survey and regularize land parcels (Figure 2.1).

The Long Process Towards Ownership

Research shows that most low-income households aspire to own houses. Housing is the most expensive asset for most households. The substantial investment required, to buy a finished unit is often way beyond the means of low-income households. Rather, it becomes a socio-economic process that involves self-build and incremental housing construction. Families and relatives provide assistance towards achieving home ownership such as (whenever possible) in the form of "soft loans" requiring little if any interest and repayments. In developing countries, the vast majority of low-income households have built their houses incrementally over long periods of time [z]. The incremental process of construction reflects their limited financial resources. It also creates emotional ties between families and their houses; as a result, poor families may be more reluctant to use their homes as mortgages for loans. The high rate of home ownership among the poor in Lima points to the fact that they value their "houses" very highly.

Lack of Property Rights Restricts Women's Access to Credit

Access to credit is more difficult for women because they lack property rights under their own names. In 1995 Kenya, less than one per cent of women owned land. In 2005, this percentage rose to four per cent – still leaving 96 per cent of land in male ownership. The land tenure system and property rights are severely skewed towards men [aa].

Kenya is not an isolated case. Women around the world face various constraints to access to land and property. In some African countries, patrilineal kinship is the basis that justifies men's superiority over women in practice. The prejudice against women starts from the day of birth, as they are always under the control of men – father, husband or brother. Land is passed from men to men, for example from father to son. Lack of access to property rights in

rural areas often forces women to migrate to urban areas. Custom is not the only factor that denies women's access to land and property: their economic inability to purchase these is another factor. As women are not able to provide collateral, they often find themselves in no position to secure loans from the formal banking system [ab].

Poor Credit Cultures and Information Systems

Credit culture has a major impact on the financial sector. Financial institutions have their own internal credit culture to guide their lending operations. Credit is not granted unless there is a demonstrated capacity and willingness for repayment, which goes through a rigorous analytical scrutiny for every loan. This scrutiny focuses on the ability of the borrower to generate constant cash flows to cover the periodic repayment [ac]. Such scrutiny is often found humiliating by the poor and scares them away from the formal financial sector, since many have no regular employment or stable income sources.

In centrally-planned countries, the financial sector suffers from a lack of credit culture. Loans from State-owned banks are often subject to government directives or plans, though not to a thorough analysis of the borrower's repayment capacity. In the absence of a credit culture, State-owned banks have been associated with lower growth in income and productivity. They often have high rates of bad loans [ad].

In countries where the credit culture is poor, banks often do not assess the borrower's repayment capacity, and borrowers do not take loan repayment obligations seriously. In some African societies, some people even treat loans as grants or income. This culture is encouraged by non-enforcement of loan contracts by State-owned financial institutions. This poor credit culture results in significant increases in banking risks. For example in the year 2000, one Tanzanian State-owned bank had a 44 per cent bad loan rate [ae].

Another issue associated with poor credit culture is lack of credit information systems. These act as information brokers that improve the transparency of credit markets. However, in many developing countries credit information systems are lacking or still in infancy. Financial liberalization enhances competition between lenders, which increases over-indebtedness, reduces loan repayment incentives and causes an accumulation of repayment arrears. Asymmetric information between borrowers and lenders can lead to adverse selection and moral hazard. The high default rate and non-sustainability of many microfinance institutions, which specialize in lending to the poor, point to the problems caused by an absence of credit information systems [af].

Absence of Robust Credit Markets in Developing Countries

The absence of robust credit markets in developing countries is a significant impediment to solve the housing problems. To most families, housing is the largest investment in their lifetime. They need loans to finance investments in homes. However, in developing countries, dreams of decent homes run against most people's inability to obtain loans. In contrast, there is widespread access to credit in most developed countries, including for home purchases. Research shows that credit is one of the most important factors that facilitate expansion in real estate markets and housing in developed countries [ag].

Figures 2.2 and 2.3 show a strong correlation between economic development and credit markets. The more developed a nation's economy, the more developed its credit markets. High-income countries feature far higher rates of domestic credit to the private sector in terms of per centage of GDP. The United States has the highest rate. The least developing countries have the lowest rates of domestic credit to the private sector, followed by heavily indebted and low-income countries. Domestic credit from the banking sector follows the same trends as domestic credit to the private sector. In 2000, annual domestic credit provided by the banking sector in high-income countries averaged 210 per cent of GDP. For the USA, the figure was 258 per cent of GDP. The average was 42 per cent of GDP for low-income countries,; 27 per cent for heavily indebted poor countries; 24 per cent for least developed countries; and only half of that – 12 per cent – in Tanzania [ah]. The disparity in domestic credit markets between low-income and high-income countries is even greater than these figures indicate, because the range of available financial instruments is smaller in those with low incomes For example, high-income countries have sizeable bond markets and other significant sources of credit, while banks are the primary sources for credit in low-income countries [ai].

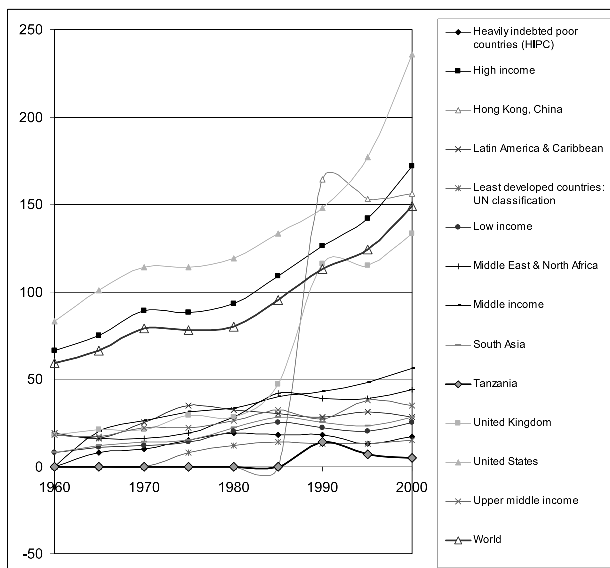
Asset-Liability Mismatch and Lack of Long-Term Credit

Developing countries have low levels of domestic credit, but, even when credit is available, loans are often to be repaid in a very short time period. In many of the least developed countries, three to five years will often be the longest available maturities for loans. For example, in Tanzania, a women's group had reached an agreement with a commercial bank on provision of 10-15 year home loans; but eventually the bank cancelled the agreement and reduced the maturity to three years, which was the longest term the bank could offer in 2005. This contrasts with the 10 to 40 years it will often take for a household on salaried

income to repay in full. Therefore, short repayment periods make most families unable to generate enough income to meet repayment requirements.

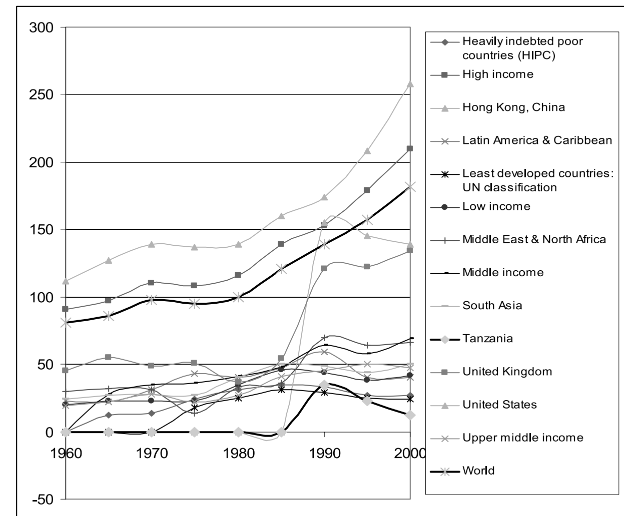
On the other hand, the lending policies of the mortgage finance sector in many developing countries are also affected by a number of factors – economic instability, fluctuations in inflation, and foreign exchange rate risk – which force the banking sector to raise real interest rates and to reduce maturities in order to curb the high risks [aj]. These factors further contribute to the lack of long-term credit.

Figure 2.2 Domestic Credit to the Private Sector (per cent of GDP)



Source: Based on World Bank data 2005

Figure 2.3 Domestic Credit by the Banking Sector (per cent of GDP)



Source: Based on World Bank data 2005

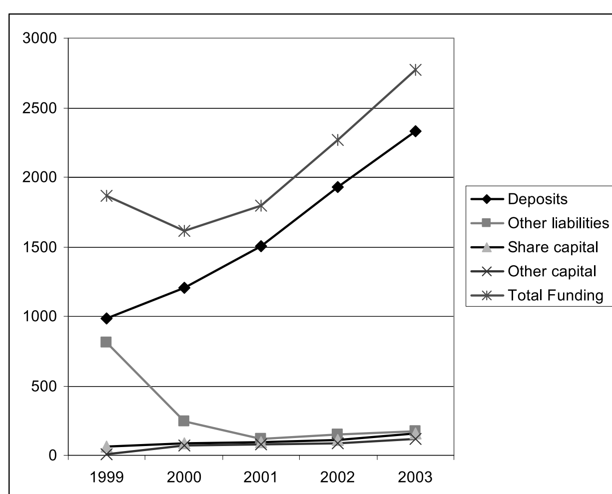
High Collateral Requirements

Many banks in low-income developing countries do not offer home loans to individuals. When they do so, they will often impose more requirements than lending to corporations. High collateral requirements for home loans is another hassle for borrowers. In a recent discussion with a State-owned bank in Tanzania, it appeared that collateral requirements for home loans exceeded 180 per cent of loan amounts, while the maximum ratio of loans to value was only 65 per cent. These harsh conditions preclude most potential borrowers, and the poor in particular, from obtaining loans.

Poor Management of Financial Assets

Low credit amounts are not entirely due to a lack of funds in the banking sector. For example, in Tanzania, the banking sector has experienced significant increases in funds in recent years, which contributes to an expansion in deposits. In 1999, deposits accounted for 53 per cent of total funding sources, and other liabilities 43 per cent. The deposits expanded very quickly and their proportion in total funding sources rose to 84 per cent in 2003. Other liabilities accounted for six per cent, share capital for another six per cent, and other capital for four per cent (Figure 2.4). Banks increasingly rely on deposits to fund loans.

Figure 2.4 Funding Sources of the Banking Sector in Tanzania (billion Tshs)



Source: Based on BOT data

However, a large portion of the deposits do not go into loans but instead remain in the form of liquid assets such as cash positions, inter-bank loans and government securities. The three largest domestic banks in Tanzania (National Bank of Commerce (NBC), Co-operative and Rural Development Bank (CRDB) and National Microfinance Bank (NMB)) together hold over 60 per cent of total deposits, but lend only about 30 per cent of these, compared with some 60 per cent for those international banks operating in the country. In the USA, by comparison, banks only keep six per cent of total deposits in liquid assets and the bulk of their capital is used for loans. Banking in Tanzania is characterised by excessive liquidity and extremely low credit. This represents a massive failure of the financial system to allocate capital to the most productive uses [ak].

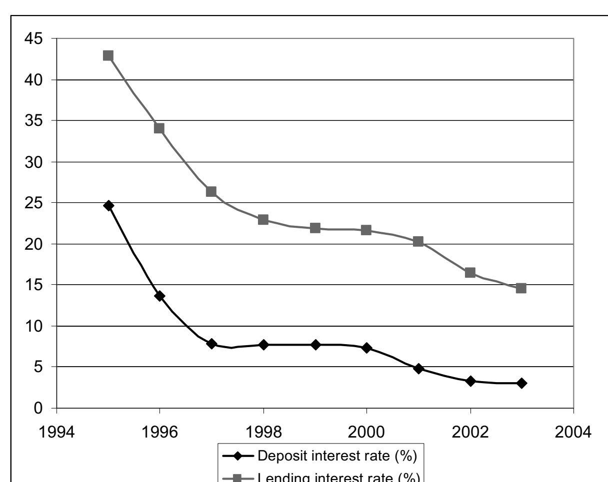
High Borrowing Costs

In Tanzania, one of the main challenges for borrowers is the high cost of credit. In 1995, the average deposit interest rate was 25 per cent and the lending rate was as high as 43 per cent. Since then, gradual economic stabilization and improved competition have brought the rates down (Figure 2.5). By May 2005, lending rates had dropped to 14-17 per cent and deposit rates to 3-4 per cent. The spread between lending and deposit rates decreased from some 18 per cent in 1995 to about 11-13 per cent in May 2005. One of the reasons for maintaining such high spreads was to compensate for low utilisation of deposits due to weak market demand and high transaction costs. This practice brings additional challenges to individual customers. It makes credit unaffordable for the vast majority of individuals, and next to impossible for those on low income.

Ineffective Legal and Judicial Systems

Effective legal and judicial systems are essential for any financial system. Whether the legal and judicial system will enforce contracts and the law effectively will affect the willingness of lenders to make mortgage lending or other loans. In addition, lenders want a system that can settle disputes promptly. Therefore, availability of alternate dispute resolution mechanisms is important to boost bankers' confidence in housing finance. In Tanzania, the judicial system is far too slow when it comes to commercial dispute settlement. An officer at the National Bank of Commerce (NBC) told of difficulties they faced when trying to settle default issues in court. One client used land as security against a loan. When he defaulted, NBC attempted to repossess the land. But the case had been pending in court for several years no settlement was yet in sight.

Figure 2.5 Interest Rates in Tanzania (per cent)



Source: Based on IMF data

The High Costs of Lending to the Poor

To banks, the risk of credit default is higher with the poor as their circumstances are much more likely to change over time than for any other segment of the population. The amounts they borrow tend to be relatively small, maturities are short and transaction costs are higher. Therefore, the formal banking sector is reluctant to enter this market. Many lenders in this market 'manage' customer repayments, rather than relying on customers to pay on time: agents collect repayments from customers' homes, which further contributes to high lending costs [97].

Low Participation of Individuals in the Banking Sector

Currently, the banking sector in Tanzania focuses on corporate banking services. The participation of individuals in banking services is very low. The Government's household budget survey showed that only 6.4 per cent of households had a bank account in 2000. Privatization of national banks resulted in reduced outreach of individual customers due to high transaction costs. The country's poor credit culture makes the banking sector reluctant to expand business and serve the general public, particularly the poor. However, in recent years, banks began to show their interest in reaching the general public through microfinance services. Some banks have established microfinance departments or subsidiaries. Although microfinance loans are typically short term, the move reflects the changing attitudes of Tanzania's banking sector towards low-income people. But there is a long way to go to build a robust credit market for individual clients.

PART III

Experiences and Instruments for Low and Moderate Housing

Chapter 3: The Hopes and Challenges of Housing Microfinance for Low-Income Households

The Formal System Makes Affordable Housing Finance Next to Impossible

Formal housing finance remains a Utopia to the poor. The formal system has proved unable to meet the needs of poor people around the world [am]. Any effective housing finance system requires the balancing of three elements: affordability for households, profitability for financial institutions, and the capacity to scale up the transactions. Daphnis states that in practice, lenders, governments and donors understand these three principles as the need to finance a complete housing unit under terms that are affordable to the poor, profitable to the commercial sector, and on a scale large enough to help solve the housing problem. However, the same author claims that this is simply impossible to achieve in poor and very poor countries, where mortgage lending and secondary mortgage markets have never materialized as financially viable options when addressing the housing needs of low-income households. Poor households lack the capacity to repay large amounts of money borrowed at real interest rates to finance complete housing units. Housing finance normally requires long repayment periods. However, in developing countries, most sources of funding are short-term, which creates a serious asset/liability mismatch for financial institutions, which significantly raises the risk of long-term lending. Poor households often have difficulties to sustain regular repayments for long periods of time. Investors do not want to risk their savings in securities backed by such loans. Therefore, no reliable secondary mortgage market for housing loans targeting poor people exists in developing countries. The donor–supported housing banks that had been aiming to serve the poor either went bankrupt or evolved into full-fledged commercial banks and shifted loan portfolios away from poor households [an].

Can Microfinance Meet the Housing Finance Needs of the Poor?

Poor people face two problems when looking to use financial services: access and cost. Many poor people have to turn to informal moneylenders for access to credit. But these financial services come at high costs, with nominal monthly interest rates typically ranging from about 10 to more than 100 per cent – a multiple of the monthly interest rates of formal financial institutions [ao]. Such high interest rates make it prohibitive for poor people to borrow large amounts of money for long periods. The informal finance mechanism is too costly for the poor to finance complete housing units. Therefore, slum clearance and rebuilding through informal finance is often not a feasible option for the poor.

As for microfinance institutions (MFIs), they can only provide small amounts of credit at a time to individual poor households. Although MFI interest rates are typically lower than those of informal moneylenders, they are much higher than those charged by formal financial institutions. In Mexico, the average size of housing micro-credit introduced by CHF International and FUNHAVI is USD 1,800 with annual interest rates of 54 per cent. Loans must

Table 3.1 Selected Housing Microfinance Schemes

Institution	Average Loan Size (US$)	Maximum Repayment Period (months)	Security Collateral	Required Time with Programme	Savings Required	Solution Type	TA to Clients
ADEMI	1,800	36	collateralized	None	No	Variable	No
FUNHAVI	1,500	20	2 co-signers	None	No	Variable	Yes
CHF/Gaza	4,800	36	2 co-signers	None	No	Variable	Yes

Source: Daphnis & Ferguson (2004)[ar]

be repaid with 18 months for first-time borrowers. Table 3.1 shows the typical housing microfinance schemes in operation [ap]. Loans are typically very small and repayment periods are short with a maximum of three years. The basic ideas behind housing microfinance evolved from the microfinance revolution. Therefore, the main principles of housing microfinance reflect those of microfinance in general: (1) loan sizes are relatively small and are disbursed based on borrowers' capacity for repayment; (2) repayment periods are relatively short; (3) loan pricing is expected to cover the real, operational cost and risk premium; (4) loans are not heavily collateralized; (5) loans do not aim to finance complete housing units at a time, but rather housing improvements and incremental expansion of home space; (6) although savings are not a prior condition for obtaining housing micro-credit, MFIs often link loans to clients' savings profile and habits [aq]. To put it briefly, housing microfinance enables the partial financing of housing needs which meet only some of poor people's aspirations to proper homes.

Various initiatives have been launched to address the high cost of credit for the poor around the world. These programmes try to bring down the borrowing cost for the poor. They are often supported by government or donor-financed nonblank financial institutions. But most of these institutions are capital constrained and can not meet the needs of the vast majority of the poor [as]. They are often not financially self-sustainable. The survival of these financial institutions depends on constant capital injection from governments or donors. In other words, they are heavily subsidized by governments or donors. However, subsidies can be on a large scale to cover all the needs of the poor. When coming to housing, the scale of subsidies is too high for the government to afford. Therefore, the wide replication of such initiatives is often economically not viable for the poor countries.

Poverty and the Microfinance Revolution

Growing Poverty Drives Poor People Away from Access to Formal Sector Financial Services

About half of the world's population (three billion) live in poverty (less than two US dollars per day). Of these, 1.3 billion population live in severe poverty (less than one US dollar per day), and 800 million lack access to basic healthcare. Nearly 800 million population are hungry or malnourished and 2.4 billion lack access to proper sanitation[at]. As many as 1.2 billion have no access to safe drinking water. Some 275 million children never attend or complete primary school education, while 870 million of the world's adults are illiterate. As for health, three million people die from HIV/AIDS every year (a cumulated 25 million in the last 20 years), and 70 million will die from the condition by 2020; 40 million people are currently infected with HIV/AIDS and will die within 10 years. 13 million children have been orphaned by HIV/AIDS since the epidemic began, and the number is expected to double to 26 million by 2010. With regard to housing, over 100 million people live in slums. An estimated 25 to 50 per cent of urban residents in poor, developing countries live in impoverished slums and squatter settlements[au].

Poor developing countries (host to 80 per cent of the world's population) pay the rich developed countries an estimated nine times as much in debt repayments as they receive in aid. Africa spends four times as much on repaying debt as it spends on healthcare. In 1997, the foreign debt of poor countries stood at over two trillion US dollars and was still growing. This amounts to USD 400 of debt per head in the developing world – where average annual income in the very poorest countries is less than a dollar a day, as mentioned above[av]. With its associated vicious cycle of low productivity due to lack of capital and skills, poverty makes people unable to meet the standard requirements for credit. In those areas where poverty is concentrated, many economic activities are also organized in informal ways. These entail specific characteristics that are often different

Table 3.2 Reasons for Not Applying for Formal Loans

Reasons	First Quartile per cent	Second Quartile per cent	Third Quartile per cent	Four Quartile per cent	Total per cent
Other Credit Sources Available	17	20	21	23	20
Lack of Collateral	21	17	16	18	18
Fear of Inability to Repay the Loan	19	18	16	18	17
Lack of Bank Relations	10	12	12	14	12
Difficult and Lengthy Procedures	7	3	6	7	6
Lack of Financial Documents	2	4	5	2	3
Other	1	1	1	2	1

Source: CHF International (2005)[ba]

from those of formal enterprises, including, for example, scarcity of capital, family ownership, small-scale operations, lack of legal status, lack of security of business operations, labour-intensive production, informal education and training, low skill levels, products transacted on informal markets, etc.[aw] These defining features restrict the scale of production and high risks and instability of informal economies, which in turn deters the formal financial sector from providing financial services.

The Demand of Microfinance Unmet in Formal Financial Sector

The microfinance revolution is best understood against the background of developing countries' population and income patterns as well as the formal financial sector's inability to meet demand[ax]. The Consultative Group to Assist the Poorest (CGAP) estimates that over 500 million poor people around the world need financial services[ay]. Robinson argues that the number is much larger, with some 360 million households badly needing savings or credit services from formal financial institutions. If we assume that the average household size is five persons, then it is some 1.8 billion people who demand microfinance services.

Research shows that in a country like Morocco, most microfinance demand from the poor is met by the informal sector, including friends (38 per cent), family and relatives (38 per cent), colleagues (21 per cent) and money lenders (3 per cent). The poor hardly have any opportunity to turn to formal credit institutions since these often deny them access. Among poor people, 20 per cent said that when they have other alternatives, they will not consider formal financial institutions; 18 per cent said that they did not approach formal credit institutions because they had no collateral available;17 per cent worried about repayment ability; 12 per cent thought that formal financial institutions were not pro-poor; and six per cent were put away by the difficult and lengthy procedures of the formal financial institutions (Table 3.2).

The Rapid Expansion of Microfinance Services

Across the world at the end of 2003, as many as 2,931 microfinance institutions were in operation serving 80,868,343 clients, 54,785,433 of whom were among the poorest when they took their first loan. Of these poorest clients, 82.5 per cent, or 45.2 million, were women. Assuming an average five persons per household, the 54.8 million poorest clients served in late 2003 spread the benefits of microfinance loans to some 274 million people. This represents a 38 per cent annual growth in the number of microfinance clients, compared with its starting point of 7.6 million poorest families at the end of 1997. The overall microfinance growth of 621 per cent between 1997 and 2003 averaged about 39 per cent per year (Table 3.3).

The Emergence of Housing Microfinance

Housing finance sources in developing countries generally falls into three categories or tiers. The first category is

Table 3.3 Expansion of Microfinance Services

Year	Number of Programmes Reporting	Total Number of clients served	Number of "poorest" clients reported
12/31/97	618 institutions	13,478,797	7,600,000
12/31/98	925 institutions	20,938,899	12,221,918
12/31/99	1,065 institutions	23,555,689	13,779,872
12/31/00	1,567 institutions	30,681,107	19,327,451
12/31/01	2,186 institutions	54,932,235	26,878,332
12/31/02	2,572 institutions	67,606,080	41,594,778
12/31/03	2,931 institutions	80,868,343	54,785,433

Source: Daley-Harris S (2004)[bb]

comprised of private commercial institutions providing credit for upper-income households at market interest rates upon the certification of income streams and provision of collateral. This category of financial institutions avoid involvement in provision of housing finance for the poor due to their lack of collateral and steady income, perceived high default risk, and high transaction costs. The second category is the public sector, which usually provides subsidized funds for middle-income groups and civil servants by way of specialized or non-specialized housing finance intermediaries. In many developing countries these public housing programmes have failed to reach the poor. Their eligible beneficiaries normally operate within the formal economy, can demonstrate basic home ownership capacities, and have some access to capital. Public programmes attempting to target lower income households have been impeded by weak political will, a paucity of available funds, leakage of funds to non-eligible groups through corruption, or a failure to comprehend the socio-economic and political dynamics of the situation within which the poor operate. Since they often work in the informal economy, the poor have (with only a few exceptions) been excluded from access to capital from formal private or public financial institutions. They have to rely on informal sources, including savings, informal loans from friends and family, remittances from family members working abroad, and the sale of whatever assets they have. Housing microfinance programmes, as administered by microfinance institutions and shelter advocacy groups, have recently emerged to address the shelter needs of these groups and to fill the financing gaps not covered by traditional, more formal institutions. The target population with unmet demand for housing credit from formal financial institutions typically account for the bottom 40 per cent to 70 per cent of national income distribution [bc].

Ferguson points out that in developing countries, the vast majority of the population (80 to 90 per cent) do not qualify for mortgage finance from formal financial institutions to purchase the least expensive, economically built housing unit. They are left to build their own housing units without formal financial sector support, and must rely on piecemeal or incremental financing support from non-formal financial institutions. Many developing countries even have nothing like a viable mortgage finance sector [bd].

Providers of Housing Microfinance Services

On aggregate, housing loans are still very small in low-income developing countries – only three per cent of outstanding credit, compared with 27 per cent in high-income countries. The experience of the microfinance industry in housing loans has been neither very lengthy nor extensive. MFIs typically offer working capital loans to business. Recently, MFIs have become more responsive to the wide spectrum of poor people's needs, including housing finance. Some banks have also managed to reach the bottom tier of the market, which includes those low-income households who are willing to invest in home improvement. In Tanzania household income ranges between USD 50 and 500 per month. Loans for new (often incremental) house construction are also offered by some MFIs, but general-purpose MFIs typically will not allocate more than 10 per cent of their portfolios to housing. Loans for new home purchases are normally not available. Those for land acquisition and infrastructure are mostly available from NGOs and CBOs[be]. A variety of institutions are involved in different types of housing microfinance.

Indeed, an increasing number of institutions are becoming involved in housing microfinance services, including MFIs, NGOs, community-based organisations (CBOs), and formal financial institutions (Table 3.4). MFIs use a wide range of mechanisms and techniques for providing housing services. These are either "stand-alone" or "linked"

Table 3.4 Providers of Housing Microfinance Services

Types of Institutions	Area of Focus	Examples
MFIs	Large-scale MFIs with over 100,000 clients; Housing portfolio often borne out of a disaster situation or as diversification; May be a reward for successful completion of a micro-enterprise loan. Medium-sized MFIs with 10,000-100,000 clients; Most have already achieved best practice in microfinance; Similar principles are applied to housing products (short term, small amounts); Some have taken government funds for expansion; Commercial funding usually not available for these loans, resulting in funding mismatch	Grameen Bank CALPIA (El Salvador, specialized finance company), BancoSol (Bolivia, bank), ADEMI (bank, Dominican Republic), MiBanco (bank, Peru), CARD Rural Bank (specialized bank, Philippines)
NGOs and CBOs	Capacity to transfer technologies across affiliates in various countries; Limited focus on technical assistance for housing products; Currently working on commercial funding for conventional micro-enterprise portfolios; Could leverage financing for housing; Some are direct lenders and some are wholesale providers of credit	Accion, CHF International, FINCA, Homeless International
Co-operatives, Mutuals and Municipals	Locally owned and often locally started housing programmes; Good experience and best practice; Usually part of networks that enable cross-experience sharing	Jesus Nazareno (S&L co-op, Bolivia), Mutual La Primera (housing co-op, Bolivia), Caja Arequipa (municipal co-op, Peru)
Government Housing Programmes	Some are professionally run; others are very political and/or not market-based; Major source of second tier financing for housing but with limited outreach; Demonstrated outreach to low income clients	Ex-FONVIS (Bolivia), FONAVIPO (El Salvador)
Commercial Banks	Some downscaling to housing faster than to microcredit; Security is a major issue; Have the capacity to expand; Could mobilize large amounts of commercial financing	Banco de Desarrollo (Chile), African Bank (South Africa)

Source: adapted from Escobar and Merrill (2004)[bg]

housing services. Stand-alone housing microfinance does not require clients to demonstrate a prior loan/repayment history with the provider as a criterion for lending. Loans are typically offered to individuals rather than groups. Loan sizes are small (USD 1,000 to 5,000) with short repayment periods (1.5 to four years). No mortgage is involved since loans are not collateralized by any property. Some MFIs have introduced "linked" housing microfinance services, which set additional conditions for qualifying loans such as participation in savings schemes. Therefore, "linked" loans are secured to a degree.

Microfinance institutions have grown rapidly to try to meet huge demand for credit. Some have developed into 'giants', with over a million clients each, including : Grameen Bank, the Bangladesh Rural Advancement Committee (BRAC) and the Association for Social Advancement (ASA) (in Bangladesh), Bank Rakyat Indonesia (BRI), the Bank for Agriculture and Agricultural Co-operatives (BAAC) in Thailand, and the Sri Lanka National Savings Bank. However, MFI outreach remains dwarfed by demand, with only fewer than five per cent of poor households having access to microfinance services.

Housing Microfinance by Commercial Banks

Accion has identified several models for those commercial banks intent on microfinance business of a general nature: (1) creating an internal unit within the bank; (2) creating a financial subsidiary; (3) creating a private service company; (4) creation of new MFIs with bank co-investors . However, formal financial institutions are not keen on involvement in housing microfinance. In Asia, only four commercial banks have a profitable microfinance business: BRI in Indonesia, together with three small private commercial banks (Bank Dagang Bali in Indonesia, Hatton National Bank in Sri Lanka, and Krishna Bhima Samruddhi Bank in India). In addition to these, a 1997 USAID study found eight commercial banks in Latin America and three banks in Africa where microfinance is a small but profitable business. Altogether, in 1998 only 15 commercial banks were engaged in profitable microfinance business in the world[120]. The practice of commercial banks in housing microfinance is more limited, with only very few commercial banks involved such as Banco de Desarrollo in Chile, CashBank/BoE and African Bank in South Africa[121]. Overall, commercial banks account for 78 per cent of the total number of outstanding microcredit[bk].

Housing Microfinance by Co-operatives

Co-operatives play an important role in the provision of housing microfinance. They enable low-income households to save and borrow, where formal financial services are not available. They can provide significant linkages between banks, housing agencies and individual members of low-income communities. They are more responsive to the needs of low-income members. Terms of credit are more attractive and lower than most market rates. Although credit unions or savings and credit co-operatives (SACCOs) do not aim to provide housing microfinance, the amount of loans used for housing has increased rapidly[bl].

One example is the National Co-operative Housing Union (NACHU) in Kenya. It was established in 1978 to support housing co-operatives through technical assistance and training, and offering housing microfinance to co-operative members. Its main efforts are focused on low-income housing co-operatives[bm]. On top of funding, NACHU has also sought to address issues like land availability and collateral through a combination of savings and lending programmes with resettlement. While it is pursuing this approach in several communities, the most advanced project is to be found at Bellevue, a five-acre community west of Nairobi. Launched in 1994, the project involved the resettlement of 184 households. NACHU lends USD 705 per quarter-acre plot, the interest rate is 15 per cent, and the maximum loan term is four years. Unlike most housing microfinance schemes, NACHU retains land titles until all members have repaid their share. The NACHU experience at Bellevue provides valuable insights into the way creative housing finance can overcome obstacles relating to land availability, access to basic services, and affordability[bn].

NACHU runs three distinct types of housing microfinance: (1) housing rehabilitation/improvement loans; (2) new house loans; and (3) resettlement and infrastructure loans. Housing rehabilitation/improvement loans are small loans averaging Kshs 50,000 each targeting the poor who cannot afford to build or buy new housing units, but look for opportunities for housing improvement. The maturity is four years with an annual interest rate of 19 per cent. The new house loans are designed for the poor co-op members who have bought land and started construction of their housing units in an incremental sort of way. The loans help them to expand the units. New house loans range between Kshs 100,000 and 400,000. The resettlement and infrastructure loans target co-operative members who live in slum areas and want to use their own resources to relocate to areas with more secure tenure[bo].

NACHU grants loans to co-operatives which on-lend the monies to eligible applicants. Conversely, the co-operatives pass repayment monies on to NACHU. But variations may be allowed. For example, borrowers can pay either at the co-operative office, at the society bank or at the predetermined location that suits them best. The mode of repayment is usually discussed and agreed with the community in order to reduce the potential for default[bp].

Housing Microfinance by NGOs and CBOs

NGOs and CBOs are involved in many housing microfinance activities, including for instance Accion, CHF International, Habitat for Humanity, FINCA and Homeless International. Habitat for Humanity Tanzania (HFHT) provides loans to families who live in inadequate shelter with monthly incomes between Tshs 40,000 (or USD 39.00) and 120,000 (or USD 144.00). Loan repayment periods range between seven and 10 years[bq].

In Cambodia, most housing microfinance schemes have been launched by NGOs and CBOs, including for example the Urban Sector Group (USG) and the Solidarity for the Urban Poor Federation (SUPF). NGOs' primary services are savings schemes for land and housing, with housing micro-credit as an aside. SUPF operates in half of Phnom Penh's 500 poor settlements through district-based "Khan" units and women's savings groups. On top of using members' savings to acquire land and housing, SUPF has managed to raise awareness of land and housing issues among one third of all squartter communities. The housing microfinance loans of CBOs and NGOs are granted to small groups, and most NGOs and CBOs in Cambodia have resorted to this group guarantee as an effective tool for loan recovery[br].

In 1998 and in co-operation with several other NGOs such as the Asian Coalition for Housing Rights (ACHR), Cambodia's SUPF created another NGO, known as the Urban Poor Development Fund (UPDF). UPDF aims to make housing micro-credit affordable for poor urban communities in order to enable them to improve housing and settlements. It was also intended to act as a tool to strengthen the Federation of community savings groups through support of, or 'topping up', the financial resources required to scale up community-driven development schemes[bs].

As for CHF International, it is also a very active provider of housing microcredit through programmes in various countries. For example, CHF Romania has been offering individual and group home improvement loans since 1998. It makes individual housing loans available to first-time and repeat borrowers with secure monthly incomes and good credit histories. Typical lending periods range between three and 18 months, with 12 per cent monthly interest rates plus a three per cent up-front commission. Loans range from USD 50 to 450 for first-time borrowers and can reach USD 800 for repeat borrowers. Loan amounts reflect borrowers' individual repayment capacity, which is estimated at 25 per cent of the household monthly income. Security against loans is secured through recourse to co-signers, whose mailing addresses must not be the same as applicants'.[bt]

CHF Romania also offers housing microfinance loans to groups. These group loans allow securitization through co-signers or through a mortgage instrument for the largest principal amount available. Maximum loan size is USD 750 per person in a condominium homeowners group and the maximum lending period is three years. The monthly interest rate is 16 per cent and loan commissions range between two and four per cent, depending on loan sizes. However, housing microfinance group loans face four main operational difficulties, including: (1) wide ranges of incomes and repayment capacities within target groups; (2) the challenge of reaching consensus among condominium residents; (3) the limited number of collateral options available to them; and (4) the high overhead costs of putting together such group loans.[bu]

Housing Microfinance by MFIs

If housing loans are small with short maturities, MFIs may be the ideal providers. The amounts and maturities of housing microfinance loans are usually significantly lower than those of mortgage loans. Interest rates on housing microfinance are closer to those on microbusiness loans than on conventional mortgages. Clients are mostly poor households, with whom MFIs are used to deal. MFIs have developed specific lending methodologies to reduce the risk of low repayment rates, and many have achieved significant results such as BancoSol, FIE, Caja de los Andes and Crecer in Bolivia; Compartmos in Mexico; Genesis Empresarial and SIFFE Credit Unions in Guatemala; Banco Ademi in the Dominican Republic; Financiera Calpia in El Salvador; and Caja Social in Colombia[bv].

FINCOMUN is a Mexican MFI with 17,200 clients in low-income Mexico City neighbourhoods and an outstanding loan portfolio of more than three million US dollars. FINCOMUN also provides housing microfinance loans as an extension of existing enterprise loans; loan sizes range from USD 500 to 1,000, with weekly instalments and a six per cent monthly interest rate calculated on a declining balance basis. In addition, FINCOMUN estimates that 10 to 15 per cent of business loans is diverted to housing improvements related to business operations[bw].

Housing Microfinance by Developers

With proper incentives, some developers offer housing microfinance services.

Funding Strategies of Housing Microfinance

Savings

Traditionally, savings has been a primary source of funds for financial institutions. In the USA, 97 per cent of

Table 3.5 Selected Microfinance Providers (December 2003)

Member	Country	Number of Active Borrowers	Gross Loan Portfolio (USD)	Number of Depositors	Deposits (USD)
ASA	Bangladesh	2,130,000	166,500,000	2,330,000	16,200,000
Banco del Desarrollo	Chile	33,500	31,500,000	18,100	8,500,000
BancoSol	Bolivia	56,700	91,200,000	53,300	70,100,000
BRAC	Bangladesh	3,400,000	190,900,000	4,100,000	104,400,000
BRI	Indonesia	3,100,400	1,717,700,000	29,869,200	3,244,900,000
CERUDEB	Uganda	44,800	34,900,000	397,800	59,400,000
Citi Savings	Ghana	1,100	3,000,000	34,000	5,100,000
EBS	Kenya	67,000	21,800,000	252,000	42,200,000
FINAMERICA	Colombia	20,700	18,300,000	1,100	11,900,000
Kafo Jiginew	Mali	52,700	11,000,000	120,300	12,200,000
K-REP	Kenya	45,400	20,500,000	17,300	4,300,000
Los Andes	Bolivia	49,700	80,200,000	39,000	48,500,000
Mibanco	Peru	116,700	113,900,000	36,600	44,900,000
PRODEM	Bolivia	25,300	60,500,000	65,900	48,600,000
UMU	Uganda	28,600	6,300,000	35,600	700,000
XAC Bank	Mongolia	18,535	9,598,647	25,666	8,936,865
Average		574,446	57,339,910	244,762	32,395,791

Source: based on Microfinance Network

total commercial bank liabilities are deposits of various maturities which fund the banks' lending operations. The financial success of many housing microfinance providers, including Bancosol, BRAC, BRI and EBS, depends largely on their ability to raise savings (Table 3.5). However, many MFIs are not allowed to take deposits until they can meet certain minimum capital requirement mandated by regulatory authorities. Many MFIs are small and unable to meet these criteria, and those that can often find themselves falling far short of loan demand[bx]. Table 3.5 shows the savings and loans portfolios of selected microfinance providers. Average deposits amount to USD 32,395,791 against an average loan portfolio of USD 57,339,910. The number of borrowers are more than twice that of deposits. Most microfinance lenders cannot rely on client deposits alone and must rely on additional, alternative sources to meet the demand for loans.

Donors, Governments and International Institutions

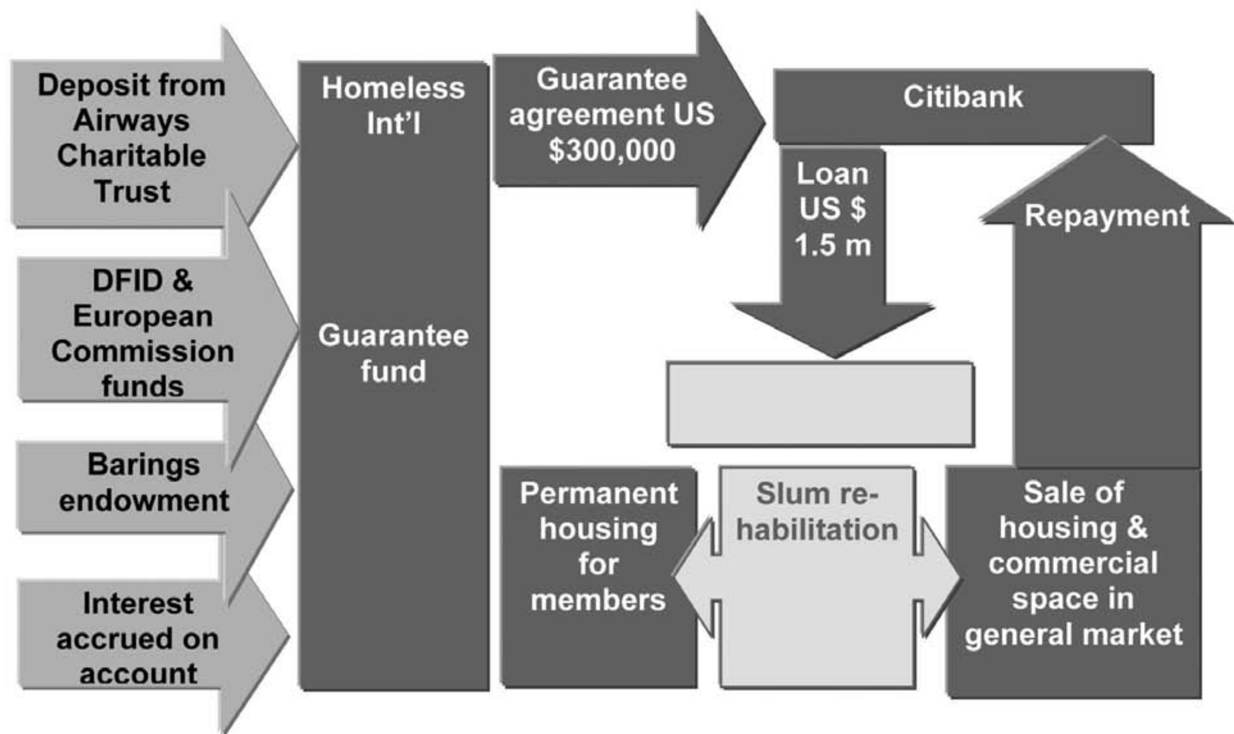
Donors play a very important role in promoting and funding microfinance programmes. For most MFIs, the principal source of funding remains grants and highly subsidized loans. Grants and loans are mainly provided by international donors (e.g. Sweden's SIDA, the UK's DFID, USAID), multilateral banks (e.g. World Bank, Inter-American Development Bank) foundations (e.g. Ford Foundation), and apex organizations (e.g. Women's World Banking, ACCION, FINCA) . For example, South African NGO People's Dialogue is 95 per cent funded by international donors and the remaining five per cent by the South African government[bz]. International grants and loans typically include conditions and requirements, and they are limited in amounts.

While donors are valuable sources of funds, they are not the most desirable ones for MFIs as they are neither sufficient nor sustainable. Donor pritorities and focuses can be versatile and their support is often conditional and temporary, not to mention lack of knowledgeable staff. From a business perspective, this segment is not growing. For example, the United States foundation giving is down as much as 20 per cent since 2000[ca].

Access to Commercial Banks through Loan Guarantee Programmes

The format developed for the Rajiv Indira Suryodaya project in Mumbai, India, demonstrates how NGOs can access funds from commercial banks to leverage

Figure 3.1 The Homeless International Guarantee Fund
The Guarantee for the Rajiv Indira Suryodaya Project



Source: CGAP (2004)[cd]

the security provided. In 1997 and under the new Slum Rehabilitation Authority (SRA), SPARC-Nirman embarked on the first-ever attempt by an NGO in India to construct apartment buildings for 209 households living in a slum in Mumbai. This slum development scheme was established by the government of the State of Maharashtra in 1995 to provide incentives for private builders to construct free tenements for 800,000 poor households. However, the SRA scheme did not take off, and only a fraction of the anticipated tenements have been built to date. In light of the poor performance of the SRA, the SPARC-Nirman alternative to commercial builder-driven housing is an important step. Five apartment blocks will be built and each tenement will be a minimum of 225 square feet. Three buildings will house community members and the other two will be sold on the market to make up costs and generate profits[cb].

Apart from using its own revolving funds, SPARC-Nirman took a loan for this project from Citibank and the UK-based NGO Homeless International acted as a guarantor for 20 per cent of the principal. Nirman expects to recover its costs once all the buildings are completed and the flats and commercial premises are sold. The costs are expected to be met from the sale of transferable land development rights (34 per cent), apartments (51 per cent), and commercial spaces (15 per cent). Backed by collateral provided by the Homeless International Guarantee Fund (established in 1994), organised groups of poor urban residents can negotiate more equitably with banks for the financial services they need. The fund has had some support from the UK Department for International Development (DFID) and from the European Union. However, the bulk of funding came from non-governmental sources, such as deposits by the Airways Charitable Trust (Figure 3.1)[cc].

A variety of funding strategies are available. However, MFIs find that any single funding source is generally insufficient. They often use mixed funding sources to meet demand for loans. Table 3.6 shows the most common funding strategies adopted by microfinance providers.

The Characteristics of Housing Microfinance Products

Criteria for Housing Microfinance

Lending criteria for housing microfinance are mainly based on repayment capacities. The home is the most

Table 3.6 Funding Strategies of Selected Microfinance Providers

Strategies	SPARC	CARD	BRI	Grameen Bank	People's Dialogue
Mandatory Savings	Yes	Yes	No	Yes	Yes
Bank Funding	No	Yes	Yes	Yes	No
Donor Funds	Yes	Yes	No	Yes	Yes
Foundation Funds	Yes	Yes	No	Yes	No
Public Funds	Yes	No	No	No	Yes
Credit Enhancement	Yes	No	No	No	No
International Investors	No	No	No	Yes	No

Source: Escobar and Merrill (2004)[ce]

important asset for poor people and something to which they are strongly attached. Therefore, they are prepared to spend a high per centage of their income toward building, expanding and maintaining their homes. Most lending institutions recommend that 20 to 35 per cent of household income can be spent on housing loans. For example, the percentage of household income used for repayment is 25 per cent for CHF in Gaza, and 33 per cent for FUNDHAVI[cf].

Loan Size

The size of housing microcredit loans is usually small, between USD 300 and USD 5,000. Sizes are smaller in Asia than in other regions, typically a few hundred US dollars, compared with up to USD 5,000 in South America. For middle-income countries, loan sizes are accordingly higher. In South Africa, housing microcredit loans can be as high as USD 8,000 (Table 3.7).

Loan Terms

Loan maturities vary according to purpose. Home improvement loans are for two months to two years. Most land purchase or construction loans range from two to five years. Some housing microfinance maturities are almost as long as those of mortgage finance. For example, Banco de Desarrollo in Chile and People's Dialogue in South Africa both offer loan terms of 15 years. Table 3.8 illustrates the range of terms currently offered by housing microfinance providers.

Interest Rates

Interest rates on housing microfinance loans are determined by several factors such as cost of funds, transaction costs, risks, and affordability for clients. Interest rates are normally higher than those charged by commercial banks. However, they may be lower or higher than for micro-enterprise loans, or the same. For example, for housing

Table 3.7 Loan Size of Selected Housing Microfinance Providers

Institution	Country	Average/Maximum Loan Size USD
Diaconia	Bolivia	800
FUNHAVI	Mexico	1,400
ADEMI	Dominican Republic	5,000
BancoSol	Ecuador	1,095
Grameen	Bangladesh	600
SEWA	India	300
CARD	Philippines	350
People's Dialogue	South Africa	1,200
CashBank	South Africa	8,000
African Bank	South Africa	2,500

Source: Escobar & Merrill (2004)[cg]

Table 3.8 Loan Terms of Selected Housing Microfinance Providers

Institution	Country	Term
ADEMI	Dominican Republic	12-36 months
Calpia	El Salvador	Up to 60 months
MiBanco	Peru	Up to 120 months
FUNHAVI	Mexico	18 months
CHF/Gaza	Gaza	36 months
Genesis	Guatemala	Average of 30 months
BancoSol	Bolivia	Average of 80 months
CARD	Philippines	12 months
Grameen (basic)	Bangladesh	120 months
SEWA	India	60 months
Banco de Desarrollo	Chile	180 months
People's Dialogue	South Africa	180 months
CashBank	South Africa	180 months

Source: Daphnis (2004)ch and Escobar & Merrill (2004)[ci]

microfinance programmes such as Calpia, Grameen and SEWA, interest rates are lower than for micro-enterprises; for FUNHAVI, the interest rate is higher than that for microenterprises; CARD charges the same interest rates for housing and micro-enterprises (Table 3.9). In most cases, the interest rates for housing and micro-enterprises range between 20 and 50 per cent. Grameen charges much lower and subsidized interest rates (eight per cent) for housing, which is not common in the microfinance industry. High risks and significant transaction costs make low interest rates commercially less viable and sustainable from the microfinance institutions' perspective.

The effective rate of credit is often higher than nominal interest rates because of fees and other charges. The effective rate captures all financial costs related to the loan. Borrowers pay not just the nominal rate on the principal and additional fees, but also forego the interest they would earn if they were not forced to keep the required balance on their account. For example, Union Popular Credit Union in Guatemala requires members to have credit access-linked share accounts to qualify for loans, and these accounts carry lower interest rates than passbook deposits. A borrower will lose 10 per cent on interest earnings for keeping money in share accounts in order to secure access to credit .

MFIs widely adopt fixed interest rates for their housing microcredit. The short period of loans and higher interest rates of housing microcredit will reduce the risk

Table 3.9 Interest Rates of Housing Microfinance and Microfinance Business Loans

Institutions	Housing Microfinance	Microfinance for Micro-enterprises
ADEMI	N.A.	18 per cent - 24 per cent
Calpia	23 per cent	32 per cent
MiBanco	45 per cent (MiCasa)	30 per cent + (Mi Capital)
FUNHAVI	58 per cent	N.A.
Genesis	25 per cent	35 per cent
BancoSol	16 per cent - 22 per cent	32 per cent
CARD	20 per cent	20 per cent
Grameen	8 per cent (subsidized)	20 per cent
SEWA	14 per cent	17 per cent

Source: Daphnis (2004)[ck]

of macroeconomic fluctuations to lenders. Low-income borrowers are also liken on fixed interest rates because of its clarity of periodic payment amount[cl].

Security and Collateral Requirements

Many housing micro-loans are unsecured[cm]. However, housing microfinance providers increasingly seek to make security arrangements for housing loans in order to reduce risk. Housing micro-loans are often not collateralized. Since many developing countries have no adequate legal system to support the use of collateral to secure a loan, it is very difficult to liquidate the collateralized asset to repay the loan balance in case the borrower defaults. Therefore, many housing microfinance providers do not choose to collateralize the loans. Instead, they resort to co-signers as an alternative type of security for housing microcredit[cn].

Most MFIs use co-signers as security for lending. For example, 71 per cent of loans by Union Popular use co-signers guarantee. Only five per cent of micro-loans use a mortgage as security; two per cent use both co-signers and a mortgage; 16 per cent use savings as security[co]. In Mexico, FUNHAVI offers housing microcredit ranging from USD 800 to 2,000 for incremental housing construction/improvement, such as addition of an extra room, roof replacement or basic sanitation, with repayment periods of one to three years. FUNHAVI uses co-signers as security for loans. Co-signers must feature the same repayment capacity standards and eligibility requirements as the borrower, and cannot be members of the borrower's immediate family[cp]. Some housing microfinance providers such as SEWA put more emphasis on savings as security; other institutions, like SPARC, CARD and Genesis, use group solidarity for housing and infrastructure micro-loans[cq].

Table 3.10 shows the common security measures adopted by housing microfinance providers. Most housing microfinance providers use co-signers as security. Some use mortgages. Linked housing microfinance providers use both co-signers and savings as security. Since the amount of loans is small, mortgage is not often used. The use of co-signers should be adequate. Co-signers should be credit-worthy and have resources which can be clearly accessed by lenders in case clients default[cr]. Since housing micro-loans are small, short-term and charged with high interest rates to compensate the possible high risks, the security for the loans are far less important, compared to long-term housing finance. Therefore, housing microfinance is more based on character and willingness to pay than on collateral. The strategies housing microfinance currently uses to secure loans including: (1) personal guarantee (co-signers); (2) land title and buildings; (3) mortgage/lien on assets; (4) assignment of future income (wages); (5) joint liability and group guarantees (character-based lending); (6) other financial assets (for example, life insurance policies and pension funds)[cs].

Underwriting

Almost all housing loans are made on an individual basis. People's attachment to their homes may make them more likely to repay housing loans. Many MFIs have developed a well-functioning individual loan appraisal methodology that measures borrower repayment capacity before issuing housing loans. Given the longer loan terms and higher amounts, some MFIs that offer housing in addition to other products charge lower interest rates on housing loans. As a result, some clients may be tempted to apply for a housing loan to take advantage of a lower cost, and then apply the funds to another purpose. To avoid the diversion of housing loans, MFIs can write into the loan contract that a higher interest rate will be charged if the loan is not used for housing[cu].

Table 3.10 Security Requirements of Selected Housing Microfinance Providers

Institution	Land Ownership Requirement	Security Requirements
Calpia	Yes	Mortgage on 59 per cent of housing loans
FUNHAVI	No	2 co-signers
CHF/Gaza	Yes	2 co-signers
Genesis	Yes	Group guarantee and land title
BancoSol	Yes	Mortgage and ownership title
CARD	Yes	5 co-signers; borrower's savings
Grameen	Yes	5 co-signers; borrower's savings
SEWA	No	2 co-signers; borrower's savings

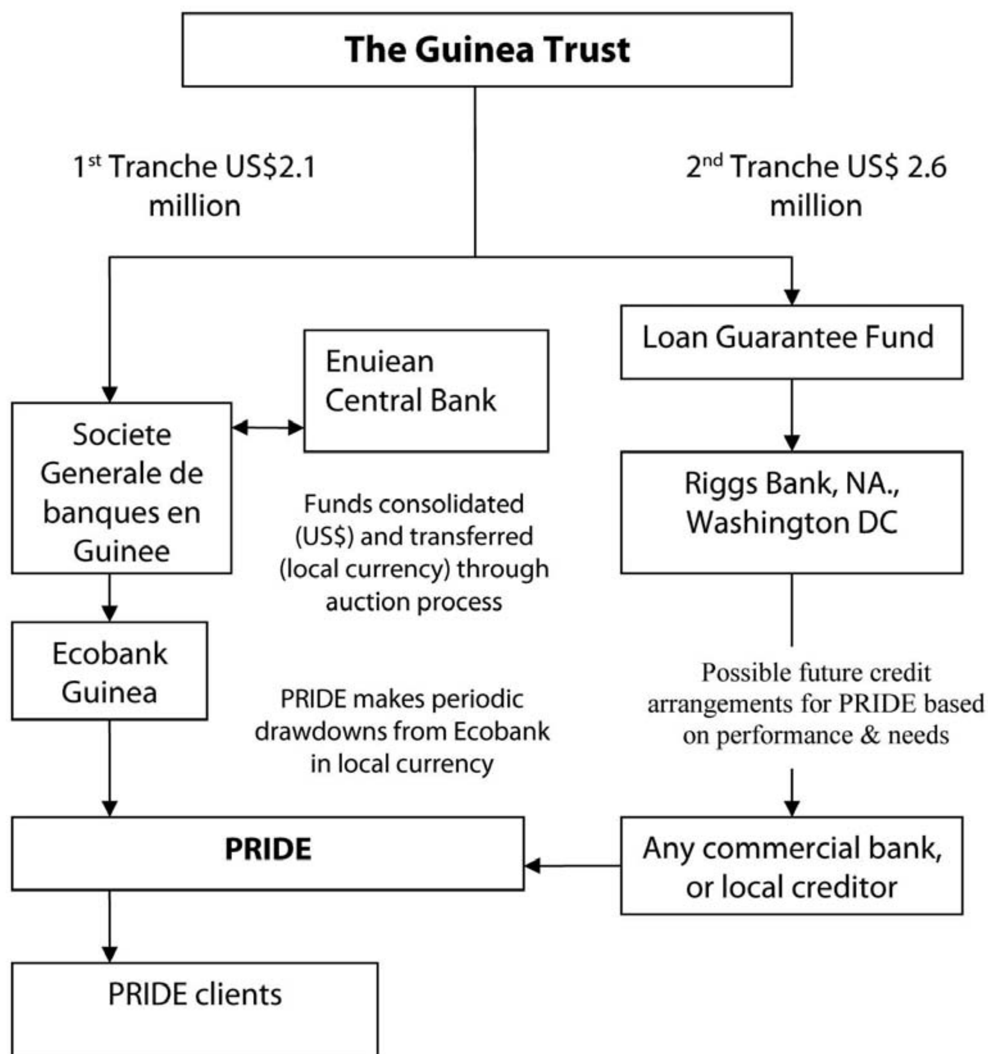
Source: based on Daphnis (2004)[ct]

In housing microfinance, there is a wide variation in the ratio of loan to value. Normally it ranges from 40 per cent to 80 per cent. The repayment does not exceed 25 per cent of household income. Some MFIs require previous loan history with lending institutions, or mandatory savings. For salaried borrowers, it requires a minimum employment period and a notarized asset list. Payroll deductions are used as a payment method for salaried workers, which are common in South Africa. Savings accounts are another method to make payments. Mandatory savings are sometimes used as alternative collateral. Many experienced MFIs require ownership of land or housing units, even if the loan is not secured by a mortgage. They are even providing technical assistance to clients in securing titles, for example, BancoSol. Co-operative Jesus Nazareno keeps the title documents, not as collateral but as pressure for repayment[cv]. For micro-entrepreneurs, it requires minimum experience, proof of ownership and a notarized asset list. MFIs often provide mandatory training and counseling, and assistance in securing titles and building technology. They also adopt aggressive serving such as frequent visits and embarrassment tactics[cw].

Delivery Process of Housing Microfinance

Housing microfinance programmemes attempt to ease the delivery process. FUNHAVI in Mexico takes 11 main steps and about an average 10 days from clients' initial visit to the actual disbursal of the loan. Most (75 per cent) of new clients are referrals. FUNHAVI distributes promotion materials at grocery stores and construction-material suppliers. Clients wanting a loan FUNAHVI must go to their office for an initial interview, during

Figure 3.2 Example of Linking Microfinance to a Formal Finance System



Source: based on USAID (2000)[db]

which the potential clients will be briefed about the programme and eligibility requirements and application procedures. If applicants meet the criteria for loans, they need to go to FUNHAVI to deposit a fee for an architect's visit to assess the housing improvement needs as well as assessing the existing housing structure and its quality, and collects other information about applicants such as household size, income and housing tenure. This helps to determine the loan size and payment duration. The architect meets with the applicants at FUNHAVI office to review and finalise housing improvement design, budget and a list for required construction materials. This housing improvement proposal was then referred to the chief architect for review, who will forward the application to the credit department. The credit department makes credit analysis and further forward the loan application to the Executive Director for final review and approval. Upon the Executive Director's approval, the credit department meets with the applicant and the co-signer in which they sign the loan agreement and promissory note. The applicants receive instructions on the loan disbursement process, repayment schedules, and other technical assistance information[cx].

FUNHAVI has developed relationships with the construction industry, particularly the material suppliers such as Cementos de Chihuahua and local hardware stores. FUNHAVI's cooperation with the construction industry ensures its clients to be able to access the quality of materials and reduce the costs to its clients. FUNHAVI also develops a relationship with the S-MART supermarket group to collect clients' monthly loan repayments. The S-MART supermarket chain operating 24 hours a day provides great convenience for clients to make payments. This arrangement allows FUNHAVI to streamline the payment process and reduce operating costs. S-MART provides the services for free on the consideration that this arrangement will generate consumer flows and enhance customer loyalty[cy].

Linking Microfinance to Formal Finance Systems

One promising example of linking microfinance to a formal finance system is the Guinea Trust. It works through Ecobank which has identifid microfinance lending as one of the expanding opportunities. The bank serves as the financial intermediary for PRIDE microfinance project, and allows itself to access one of their targeted markets, but leaves the intensive groundwork of managing thousands of microfinance clients to the experts at PRIDE. The Guinea Trust serves as a bridge. The first tranche of US$2.1 million fills an immediate loan capital shortage of PRIDE. But PRIDE needs to access commercial capital to finance growth in its loan portfolio. A catalyst was needed to permit PRIDE/Finance access to Guinean capital markets. The Loan Guarantee Fund programme with an additional US$2.6 million in authorized but unallocated funding is an instrument to provide PRIDE access to commercial capital[cz].

With the goal of achieving sustainable results, a unique link was forged with Riggs Bank, N.A. in Washington, D.C. in order to facilitate PRIDE's access to private sources of commercial funding. Riggs agreed to establish a US$2.6 million trust fund, the "Guinea Trust," that would leverage additional loan capital in future funding for PRIDE by collateralizing standby letters of credit (L/Cs) in favor of commercial banks such as Ecobank. The L/Cs would backstop domestic money market borrowings by PRIDE from the commercial banks, functioning as a form of commercial paper stand-by line. This serves two purposes: 1) it allows PRIDE market entry for domestic financing; and 2) it acts as a catalyst for the development of the Guinean money market. With the loan guarantee fund in place, PRIDE can negotiate a loan with any local commercial bank, provided that PRIDE continues to meet performance-based standards (see Figure 3.2)[da].

Linking Housing Microfinance to Technical Assistance

Housing microfinance programmes often have components of technical assistance or develop cooperation with organizations which provide technical assistance. ITDG works very hard to bring down the building costs in order to benefit a wider range of housing microfinance users in terms of their improved housing affordability. ITDG develops and identifies low cost technology that can be easily implemented by poor households. For example, in Kenya, ITDG promotes two low cost building technologies (i.e. Stabilised Soil Blocks (SSBs) and Ferro-Cement (FC) construction. These approaches reduce the use of high cost inputs such as cement and stone, and use locally available cheap or free materials. The use of these two low cost technologies leads to the significant reduction of construction cost and therefore improves the affordability for the poor (Table 3.11).

Variations in Performance of MFIs

Latin American MFIs have achieved greater financial scale than other regions. They have larger average balances per borrower but reach fewer active borrowers than Asia and African MFIs. The average higher loan size is partly due to the high GDP per capita level in Latin America than any other region. Latin America MFIs are more successful in leveraging their equity and access commercial financing than in other regions. The average leverage ratio of MFIs are 2.7 for Latin America, 2 for Africa and 1.6 for Asia. The regulatory environments in many Latin American

Table 3.11 Impact of Low Cost Construction Technologies on Affordability in Kenya

Type of Construction	Construction Cost	Monthly Disposable Income Required to Save in 5 Years	Monthly Disposable Income Required to Repay in 5 Years (20 per cent annual rate)
Without Low Cost Technologies			
1 room stone unit, no services	US$ 1,090	US$ 17.71	US$ 28.88
Stone basic unit with 2 rooms and service connections	US$ 2,564	US$ 41.66	US$ 67.93
With Low Cost Technologies			
1 room stone unit, no services	US$ 545	US$ 8.85	US$ 14.44
Stone basic unit with 2 rooms and service connections	US$ 1,538	US$ 24.99	US$ 40.75

Source: Cities Alliance (2002)[dc]

countries make MFIs more easier to mobilize savings in Latin America than in other regions. MFIs in Latin America pay the highest average cost for financing as per centage of total assets and are less profitable than in other regions. In terms of scale, larger MFIs are more efficient than smaller ones. Most large and medium-sized MFIs are financially self-sufficient. But many small MFIs are not financially self-sufficient[dd].

Limit of Housing Microfinance

Inadequate Financial Infrastructure

One of the limitations for the development of the housing microfinance industry is lack of financial infrastructure (i.e. legal, information, supervision and regulation). Most governments have focused on creating institutions or special programmemes to disburse funds to the poor, but pay little attention to building the financial infrastructure that supports, strengthens and ensures the development and sustainability of the microfinance industry. Lack of a legal framework conducive for the emergence and sustainable growth of small-scale microfinance institutions and corresponding supervisory and regulatory systems have impeded the development of market-based microfinance services and limited their access to commercial sources of funding[de].

High Default Rate

The most dangerous problem a microcredit programmeme has to face is the problem of the default of repayment. If the money invested by the organisations cannot be recovered, then the whole programmeme might cease to operate. For this reason, many MFIs (particularly small ones) are not sustainable. In Bangladesh, a significant number of organisations could not sustain their operation due to high default rate of their clients. For example, the default rates of some NGOs in 1996 were: the Comilla Proshika Centre for Development (CPCD) - 20.75 per cent, the Adarsha Samaj Seba Samity (ASS) - 40 per cent, the Come To Work (CTW) - 45.55 per cent, the Palli Kallyan Sangstha (PKS) - 50 per cent, the Mukti Shikha - 62 per cent, the Rural Development Society (RDS) - 82 per cent, the Organisation for Distress People - 84 per cent, the New Earth Concern (NEC) - 91.67 per cent. The increased rate of default, if cannot be checked, can even jeopardise the whole programmeme. Although the Association for Social Advances (ASA)'s repayment rate is satisfactorily high, sometimes it has to face untold sufferings due to increase in the rate of default in some regions. In Norshingdi district, ASA's overdue loan was 370,451 in September 1995 and it rose to 481,464 in February 1996; in Netrokona it was Tk. 70,919 in September 1995, but rose to 260,489 in February 1996 and in Manikgonj it was 9,772 in September 1995, but became 663,994 in February 1996. In 1994 the Habigonj region of ASA was the worst affected. Microfin Caribbean Holdings Ltd in the Caribbean generates a loss of US$ 3.91 million after amortization of pre-operating expenses of US$ 216,680, depreciation cost of US$ 330,533 and loan loss provisions of US$ 2.59 million[df]. Although we do not have data on the default rate of housing microcredit alone, the above information describes a serious challenge facing all microcredit programmes[dg].

When microfinance is provided to the poor at a very high price, it increases clients' indebtedness and re-enforces a vicious cycle of poverty and increases the likelihood of default.

Table 3.12 Delivery Cost of per TK. 100 Disbursed Loans for Selected Projects in Bangladesh

Project Name	Cost of Operation	Cost of Fund	Overhead cost	Total
RD-5	10	9	1	20
RD-9	43	10	9	62
RD-12	9	12	1	22
RPCP	43	12	6	61
WP	26	11	2	39
RPAP	20	9	1	30

Source: BRBD (1997)[dj]

High Costs of Operation

The total cost of providing funding directly to MFI is usually very high. This is particularly true when the cost of feasibility studies, appraisal missions, monitoring, administration, evaluation, reporting (by both the donor and the MFI), and so on are included. This is even more the case when the funder does not have a permanent office in the country where the MFI is located, where the donor's local office does not have decision-making authority, or where the local office is located in a capital city far from the MFI. The high costs of personnel (head office staff, local staff with all their allowances, and consultants) and the slow-moving nature of aid bureaucracies, which until recently were not familiar with the unique nature and needs of microcredit programmes (as compared to more traditional give-away or relief-type programmes), make for a costly and slow-moving process[dh].

A study by BRBD shows that the microfinance delivery cost accounts for 20 per cent to 62 per cent of the loan amount. The main factors affecting delivery cost are the cost of operation, cost of fund, and overhead cost in relation to the total amount of loans disbursed. The higher the loan amount disbursed the lower the delivery cost. This shows the scale of economy (Table 3.12). The existing capacity of RD-9 and RPCP projects is under utilized. The RD-9 project also has separate group organizers for social development and mobilization activities such as group formation, group management and other social development activities. These are not included in the estimated staff cost[di].

Hard to Reach the Poorest

As a result of the high costs involved in providing funds directly to MFIs, as well as the high costs incurred by many MFIs while providing a portion of the funds received as microcredit, a relatively small amount of these funds are actually provided as loans to the poorest. It is estimated that between 10 per cent and 25 per cent of the funds actually reach the poorest. In the best cases, the funds not only reach the poorest once, but also reach them again and again, as they re-circulate through the loan fund every year, or sometimes as often as every quarter[dk].

There is an increasing awareness of the failure of the microfinance industry to reach the poorest. CGAP noted that most microfinance clients today fall in a band around the poverty line and the extremely poor are rarely reached by microfinance. Reaching the poorest is much more expensive than reaching the poor. The poorest require smaller loan amounts and a lender has to make more loans to achieve the same volume level. This will require more staffing time and increase the cost. The risks for lending to the poorest are higher than for the poor. The poorest is more vulnerable in terms of income, health and opportunities. Therefore the cost of lending to the poorest is much higher than to the poor, but the lenders can not charge too high prices to cover their additional costs to lending the poorest since the affordability level of the poorest is lower than the poor[dl]. Lack of institutional capacity at the retail level to expand the scope and outreach of the microfinance services also limits many microfinance institutions to cost-effectively reach the poorest of the poor[dm].

Small Loan Size

In the case of established MFIs, demand for housing microfinance typically involves loan amounts - often in the $300 to $5,000 range - that are higher than the demand for low-end microfinance loans. Unless the provider has experience with high-value individual loans, fulfilling a demand for housing loans may entail altering the MFI's worldview on what constitutes an allowable repayment period. For instance, MFIs that target poor and very poor clients often develop group-based methods of lending that feature repayment periods of one year or less. The short repayment period is in direct relation to the default risk the MFI associates with its clients. The poorer the client, the more likely the MFI will attempt to manage default risks by reducing the time over which the client must repay the loan. As clients successfully complete lending cycles, loan amounts may increase and repayment periods may expand. MFIs that use a short repayment period to minimize credit risk may have to consider significant increases to the allowable repayment time for housing loans.

High Interest Rates

People with access to housing microfinance often do not need to qualify for the conventional loan requirement. In addition, the microfinance has far higher transaction costs and risks, therefore, the interest rates charged on housing micro-loans are much higher than conventional loans. This means the poor people need to pay a higher price for access to housing microcredit while their affordability level is lower. Sometimes, the interest rate of housing microfinance is as high as a couple of times that charged for conventional mortgage loans. This high price makes the housing affordability of the poor further deteriorating.

Short-Term

The loan term of housing microfinance is normally very short. For the same amount of loan with the certain interest rate, the shorter the term, the higher the monthly repayment. Therefore the short-term can increase the significant challenge to the affordability issue. For a loan of US$ 1,000 at the annual interest rate of 15 per cent, if the term is 15 years, the monthly repayment is US$ 14; if the term is 1 year, the monthly repayment suddenly increases to US$ 90.3; if the term reduces to 6 months, the monthly repayment increases to US$ 174. The monthly repayment for a 6 month loan of the same size is 5.3 times the repayment for a 15 year term. Therefore, we can see the tremendous challenges the short term puts on the affordability of the poor.

Chapter 4: The Co-operative Housing Approaches to Low Income Housing

The Difficulties of the Conventional Formal Sector in Meeting the Housing Demand

There are severe housing shortages in many developing countries. The rapid urbanization and increasing housing demand often surplus the pace of housing supply. Housing supply by the formal sector cannot even meet the new increased demand each year. This leads to the increased housing shortage and the growth of informal housing sector. Although we do not have updated data on the housing situation in many developing countries, Table 4.1 shows the typical situations in developing countries where most countries faced increased housing shortages. Most housing demand is met by the informal sector. While some countries like Costa Rica show positive signs of reducing housing shortage and informal housing settlements.

Housing Co-operatives

Limited Equity Housing Co-operatives

The Limited Equity Housing Co-operative (LEHC) is a form of group home ownership that provides benefits to individual home ownership. Individual members of LEHC owns stock or shares in the co-operative. Each member has the right to occupy an individual housing unit. The deed of the whole project remains with the LEHC co-operative. Members do not have the deeds for their individual units. Members enjoy the property tax exemption for home owners. They can also deduct their share of the co-operative's mortgage interest and property taxes on their income tax returns. But the co-operative has its restrictions on the resale value of its memberships or shares. Individuals typically pay 5 per cent to 10 per cent of the market value of the individual units for their memberships. For a unit of US$ 20,000, the membership would sell for US$ 1,000 to US$ 2,000. The co-operative would borrow the balance by loans that are secured by the whole project, while members pay monthly mortgage interest and property taxes for their share [dp].

Role of Limited Equity Housing Co-operatives in Affordable Housing

Limited equity co-operatives are much more affordable over the long run than either market rate rental housing or condominiums because resale prices are restricted which result in low carrying charges (the equivalent of mortgage payments). For example, the median monthly membership charges in 2003 were just about half of the

Table 4.1 Mismatch of Housing Demand and Supply in Selected Developing Countries

Country	Estimated Accumulated Housing Shortages	Increase in Housing Demand (units/year)	Housing by Formal Sector (units/year)	Estimated Housing – Informal Sector
Nicaragua	520,000 (1979)	20,000 (1979)	1,100 (1958-1978)	80 per cent
Mexico	8,000,000 (1989)	700,000 (1989)	360,000 (1989)	65 per cent
Guatemala	840,000 (1991)	56,500 (1991)	13,000 (1988)	65 per cent
Cuba	813,000 (1993)	49,000 (1993)	17,300 (1990-1993)	35 per cent
Panama	240,000 (1990)	20,000 (1990)	6,500 (1086-1988)	65 per cent
Costa Rica	265,510 (1993)	25,000 (1992)	34,500 (1993)	-
El Salvador	573,676 (1983)	15,000 (1983)	21,800 (1983)	63 per cent

Source: based on Landaeta (1994)[do]

Table 4.2 Comparative Monthly Costs in District of Columbia USA in 2003

LEC median carrying charge	1 bedroom	2 bedroom	3 bedroom
LEC median carrying charge	US$ 504	US$ 587	US$ 761
HUD Fair Market Rent	US$ 984	US$ 1,154	US$ 1,573

Source: Coalition for Nonprofit Housing & Economic Development Study (CNHED) (2004)[dr]

central government's fair market rental rate in the District of Columbia in USA (Table 4.2). A recent survey of housing markets in the District of Columbia shows that a household would need an annual income of US$ 115,000 to be able to afford purchase a media-priced 2-bedroom condominium housing unit costing US$ 352,500 and an income of US$ 74,000 to afford to rent a median priced 2-bedroom apartment at US$1,859 per month. However, a household with an annual income of only US$ 23,740 could afford the current median monthly carrying charge of US$ 587 for a 2-bedroom limited-equity co-operative unit (Table 4.3).

Community Land Trust

The community land trust (CLT) model was developed in the 1960s by community activists. It is a democratically structured, community based non-profit corporation, designed to achieve a fair balance between individual and community interests and to meet the strategic requirements for a new approach to address land and housing problems to achieve affordable housing. What CLT does is to acquire land and remove it from the speculative, profit-oriented market. The land is made available to individual families, co-operatives, and/or other non-profit organizations through renewable long-term leasehold (typically 99 years). All lessees are members of the CLT, and they are represented on its Board[ds].

Land assigned to individuals can be inherited by the leaseholders. Most CLTs have limited equity policies and formulas that restrict the resale price of housing units in order to maintain the long term affordability. Communities increasingly recognize the versatility and value of CLTs, they saw the rapid growth of CLTs as one of affordable housing models. In most cases, CLTs have been formed as a grass-roots response to specific local needs for low income people and communities. Many CLTs have been established to ensure access to land and housing for low income people. They often focus on increasing homeownership[dt].

The Case of Lopez Community Land Trust

The Lopez Community Land Trust (LCLT) is a non-profit affordable housing and rural development organization in San Juan Country, Washington State in USA. 13 per cent of the population in Lopez lived in poverty in 1998. The purpose of LCLT is to act as a resource for low income households by providing access to affordable housing and land and by cultivating sustainable economic development, to enhance the entire community in terms of housing and economic opportunities[du]. Figure 4.1 depicts the organizational structure of the Lopez CLT.

In response to the need for affordable housing, LCLT has established three low-income single-family housing co-operatives. The housing was built by residents with additional support from local skilled individuals and construction interns. They were financed with assistance from Community Block Development Grants, the Washington Housing Trust Fund, private banks, churches, foundations and private individuals. LCLT was the overall contractor and project manager, supervising resident selection, training, site development, construction and co-operative development.

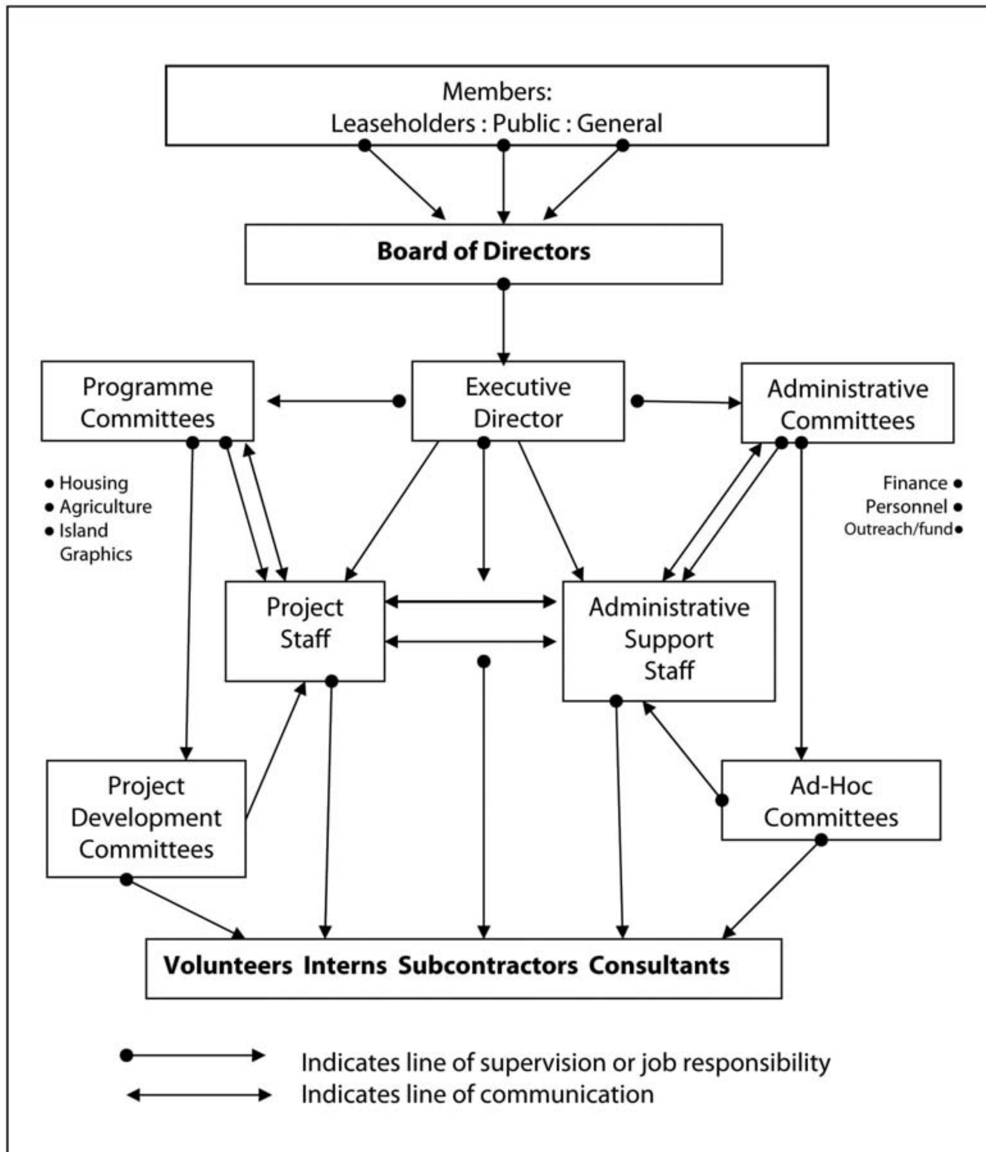
The membership selection process was advertised, interested individuals made contact with LCLT, received a handbook and were invited to attend guidance/application workshops. After application workshops, individuals submit full applications with a USD 30 fee. Eligible applicants meet two housing co-operative members and

Table 4.3 Income Required to Affordable Housing in District of Columbia in 2003

Type of Housing	1-bedroom	2-bedroom
Market-Rate Condominium	US$ 79,702	US$ 115,566
Market-Rate Rental	US$ 51,900	US$ 74,360
Limited-Equity Co-operative	US$ 22,000	US$ 23,740

Source: Coalition for Nonprofit Housing & Economic Development Study (CNHED) (2004)

Figure 4.1 The Organisational Structure of the LCLT



Source: LCLT

receive further information before proceeding to the final selection stage. Selected members pay an additional USD 200 fees. Those who are not selected can start an appeal process[b].

Members do not own the land they occupy. LCLT retains ownership of the land and subsidies and offers a 99 year ground lease with a one-time renewal option. The ground lease is the legal document that specifies conditions and terms between the co-operatives and the LCLT. The Trust raises funds from various sources and acts as owner and developer for the construction of housing units. Upon completion, LCLT transfers the housing units to the co-operative. LCLT and the co-operative sign a legal document. The co-operative is responsible for the payment of any loans and all expenses, including property taxes. The monthly rent under the ground lease is determined by the minimum amount required to pay for land taxes, as well as a portion of the LCLT office overheads related to LCLT's limited responsibilities as lessor. The co-operative leases the housing units to its members for a period of 99 years. The monthly rent for the housing units is determined by the annual budget of the co-operative, which includes property taxes, loan repayments and reserves for maintenance and repairs. A member can sell his/her membership in the co-operative and transfer the Occupancy Agreement on terms they negotiate between the co-operative and eligible buyers. Such resale is subject to two restrictions: (1) the potential purchaser/transferee must meet the federral government's criteria of a low-income person in the same

area; (2) the sale/transfer price cannot exceed the amount the selling member originally paid for the membership, increased by five percent (or the percentage rise in the consumer price index (CPI), if greater than five percent) simple interest rate per annum and the amount paid by the member for authorized capital improvement during the member's tenancy[c].

Housing Co-operatives in China[c]

In the late 1970s, China experienced a most severe housing shortage on top of substandard housing conditions, which from 1978 onwards determined the country to embark on housing reform and to explore new housing solutions. Housing co-operatives were one of the innovative housing solutions. They first emerged in Wenzhou (Zhejiang) in 1980. Since then, co-operative housing has experienced rapid growth. By 1992, more than 100 such co-operatives had been established in China. The schemes involved an aggregate 370 million yuan investment raised from individuals; 1.22 million sq. metres of housing were built and 20,000 member households moved into co-operative housing units[e]. The housing co-operatives in China consist of three major types of organisations: government bodies, civil society bodies (non-government organisations) and enterprises (work units).

Government-organised Housing Co-operatives: This type of housing co-operative is organised by local governments or government bodies. Individual membership is open to all urban citizens within the local administrative boundaries. The Kunming housing co-operative was the first example of this type. It was launched by the Kunming Municipal Government in November 1987. Households under housing hardship were given priority to join the co-operative. The entrance fee for a member was 50 per cent of the cost of the housing unit the member applied for. The remainder of the cost had to be paid within three years after the member moved into the housing unit. By 1993, 16 government-organised co-operatives had been established in Kunming. They invested more than 62 million yuan, built 115,000 m^2 and provided housing for 1,572 households (or a 73m2 average per household). The funding of co-operative housing was mainly from individual members, with extra support from work units and the government[f].

Social Sponsorship of Housing Co-operatives: Local workers' unions are the most important type of social body that can be found behind housing co-operatives in China. In 1980, the United Workers' Union in Wenzhou city launched a co-operative. The scheme admitted members through its union's work unit divisions on a voluntary basis. By 1988, 21.65 million yuan had been raised from individual members and 2,695 households were provided with new housing units. Local workers' unions established similar co-operatives in other cities, including Beijing[g].

Housing Co-operatives based on Work Unit (Employer): Work units have played a very significant role in this type of housing co-operative, typically in major areas like organization, management and partial funding. These co-operatives were based on single work units or single groups of work units. Individual membership is only open to employees of the sponsoring work units participating in the schemes. In 1986, Shanghai No. 6 Toy Factory established China's first single work-unit based co-operative, Xin Xin Housing Co-operative. Individual members were only required to pay one third of the cost of their housing units, with the remaining two thirds being funded by the work unit. The Government provided support in the form of tax relief. Housing was allocated and managed by the co-operative[h]. Shengyang Dadong District United Co-operative was a typical example of multi-work unit-based co-operatives which involved 230 work units[i] .

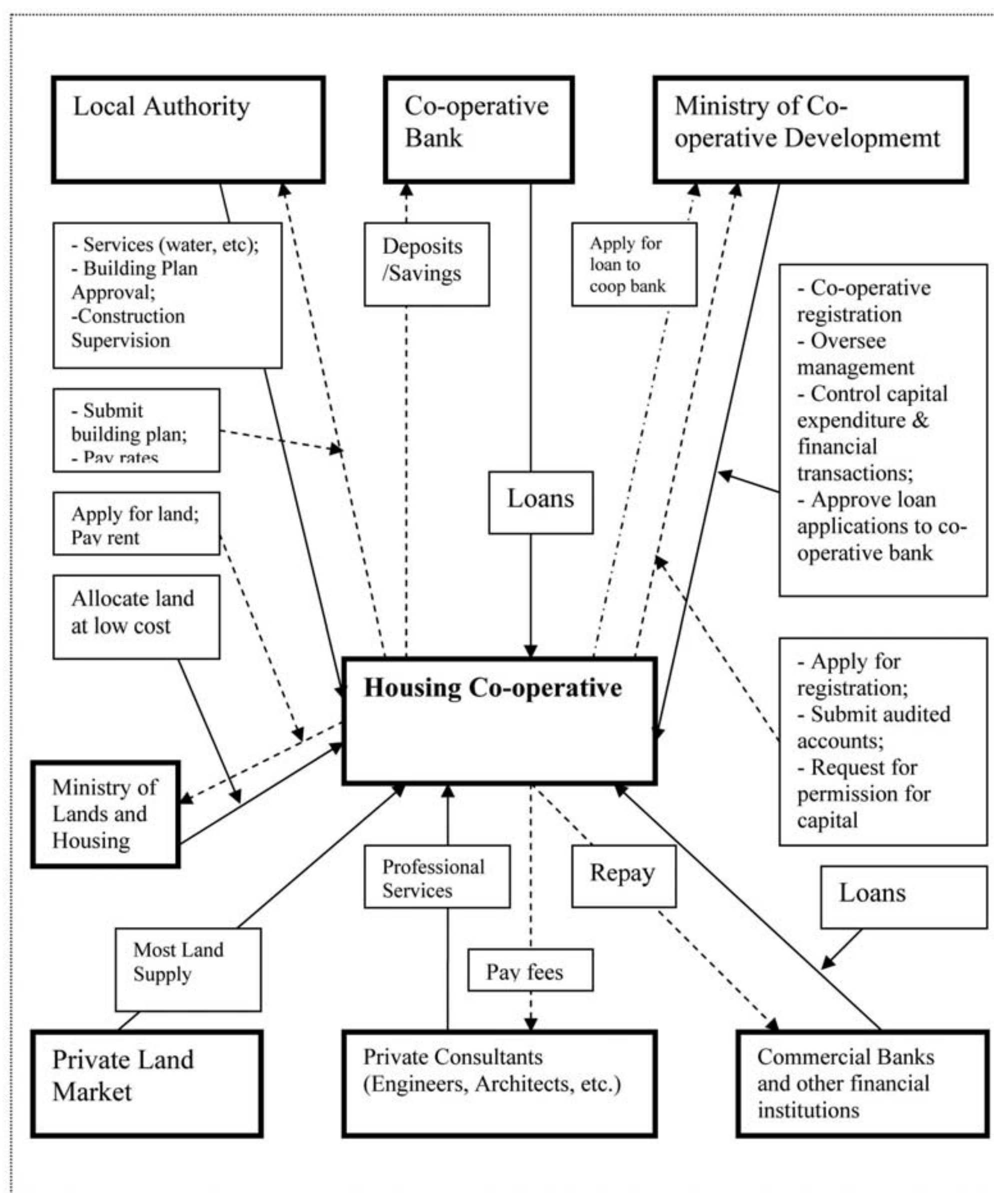
Despite their different methods of organisation, housing co-operatives had several characteristics in common. A member only needed to pay the full or partial cost of a housing unit allocated to him/her. He/she did not need to pay the cost of common facilities, as the commercial housing purchasers had to do. The remaining costs were financed by the sponsoring work units or other co-operative organising bodies. The government provided support for co-operative housing through tax exemption, low-interest loans, provision of land and low-price building materials. Co-operative housing was regarded as a good way of attracting investment from individuals and of enhancing housing affordability for low- or moderate-income households.

Housing Co-operatives in Kenya

The development of housing co-operatives in Kenya can be traced back to 1908 but they officially came into existence in 1931 when the first Co-operative Societies Ordinance was passed. In 1974, the government regarded housing co-operatives as an appropriate solution for the national housing problem. It encouraged the promotion of co-operative housing programmes in order to mobilize people's own resources. At the national level, the Kenya National Federation of Co-operatives (KNFC) was formed to act as a mouthpiece for the co-operative movement. The Co-operative Bank was established to provide banking services to co-operatives. By 1983, over 2,400 co-operatives were in operation with about 1.6 million members[j].

As part of the co-operative movement, housing co-operatives were launched in 1948 in Kenya and by 1983 over 70 were registered. Housing co-operatives acquire or build housing units for their members and own them

Figure 4.2 The Institutional and Operational Model of Housing Co-operatives in Kenya



Source: Adapted from Gatabaki-Kamau (1985)[n]

in an initial phase. They will subsequently sell the units to members on a tenant-purchase basis. Members who have paid the full purchase price own their housing units, but co-operatives maintain ownership of the land on which the units are built. The co-operatives issue ownership certificates to those members who own their housing units. However, members cannot sell their units without permission, since the co-operative holds the titles to the land. Maisonettes are typically for rental. Experience shows that the development of housing co-operatives in Kenya faces three main obstacles: (1) lack of suitable and affordable land; (2) lack of financial resources; and (3) lack of technical, managerial and administrative capacities. In response to these constraints, a National Co-operative Housing Union (NACHU) has been created to plan and develop feasible housing programmes for low-income housing co-operatives, and to help them to secure finance and estate management services[k]. Figure 4.2 summarises the institutional and operational organisation of housing co-operatives in Kenya.

The Gikomba Housing Co-operative Society in Kenya

The Gikomba Housing Co-operative was launched by former slum dwellers in the Gikomba area. The slum dwellers qualified for a plot allocation in the Kariobangi Site and Services Scheme implemented by the Government

of Kenya and Nairobi City Council. Membership of the co-operative was open to those people who had been allocated plots in the Kariobangi scheme. Members paid a KES 10 entrance fee and were required to buy 20 shares of KES 50 each over time. Total membership was 45 in 1972 and the co-operative built as many six-room housing units for them. The sources of funds for construction of these housing units were members' contributions (KES 25,000), a KES 400,000 loan from the National Housing Corporation and rents from completed housing units (KES 110,000). Housing was initially built through self-help and subsequently switched to paid labour, both because of the building skills required and as some members found permanent jobs elsewhere[l].

Out of the 45 member households, only 10 (22 per cent) lived in the housing units built by the co-operative. Other members rented out their units and lived in rural areas or other areas in Nairobi. Belonging to a housing co-operative membership as a homeowner had obvious economic advantages and improved housing affordability. The homeowners and the tenants who participated in the Gikomba Housing Co-operative project had similar income levels, but homeowers spent about eight per cent of average monthly incomes on housing, compared with some 18 per cent for tenants[m].

Self-Build Housing[o]

Self-build housing has a long history. It has always been the only form of housing provision in most rural areas. It was also a dominant form of tenure in urban China before the Communists came to power. Even after the 1949 Socialist revolution, the government continued to encourage self-build as a supplementary form of public housing provision to tackle the severe housing shortage. In the early 1950s, 2.3 million m2 self-build housing units were completed. Subsequently, left-wingers took to promoting 'Yida Ergong' (nationalised large-scale construction) which greatly affected individual self-build initiatives, which were even outlawed in many localities [p].

Self-build was rediscovered as an approach to privatisation after 1978. Sine then, growth has been fast. In 1979, self-build accounted for 1.51 million m2. It became particularly popular in small cities or towns – mostly in the latter because of the earlier tradition of self-build: at one point, for example, 83 per cent of self-built housing in Jilin and 76 per cent in Helongjiang provinces were in town areas. In some towns, self-build has become the largest housing sector since 1979, for instance accounting for 75 per cent of total housing construction in Wangkui county and 73.2 per cent in Shuangcheng county (both in Helongjiang province) [q].

In July 1980, a government report listed a number of steps further to encourage self-build. The report highlighted the three major advantages of self-build over other forms of housing provision. (1) Self-build helped to tackle existing severe housing shortages. (2) The cost of self-build was much lower than other forms of housing provision – by about half compared with public housing. (3) Self-build is quicker. In view of these benefits, the report proposed subsidies as incentives to accelerate the development of self-build activities. A few months later, by the end of 1980, 110 cities had promoted self-build initiatives. In 1981, the State Council required local authorities to support and expand self-build. The Council reiterated its commitment to self-build in a 1983 set of self-build regulations and stated that any urban residents or workers with housing hardship could apply for self-build. This further encouraged individual initiative and self-building, which expanded at a rapid, steady pace. By 1988, self-build housing reached 94.33 million m2, accounting for 18.5 per cent of total housing completion in urban China that year (Figure 7.3). However, self-build was affected by overall economic conditions and the political environment. Inflation in 1988 and political events the next year forced the government to put construction under tighter control. This led to a decrease in self-build as well. However, in 1992, Deng's call for fast economic development gave self-build a fresh boost again.

Self-build in China has developed under a variety of forms over the last few decades. It can be categorised into three main types: Full, Subsidised, and Co-operative Self-Build.

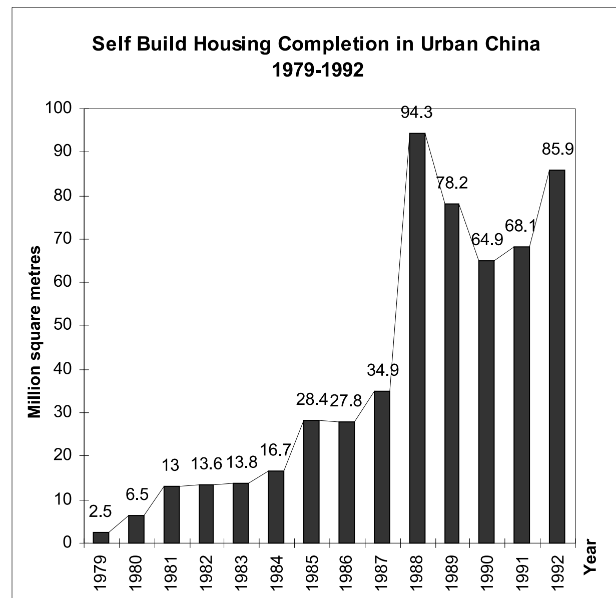
Full Self-Build: This refers to housing built by households themselves without the need for any help from public authorities in terms of finance, materials, design and construction. This has been the typical formula for redevelopment of old owner-occupied housing in China. People who were unemployed or whose work units were unable to support self-build were likely, or had, to opt for this form when granted permission for self-build.

Subsidised Self-Build: Self-build relies entirely, or nearly so, on individual initiative and labour. Local authorities or work units have provided only limited financial or institutional support. In 1983, the Government stated that public financial support for self-build should be no more than 20 per cent of housing costs.

Co-operative Self-Build: This happens when households interested in self-build come together and provide mutual (mainly labour) support for construction of their respective homes. It has been more widespread in small towns than in cities. China's small town have

been under stronger influence from the rural tradition of co-operative self-build, which was often community-based; a vivid neighbourhood spirit made it easier to help each other with self-build housing.

Figure 4.3 Self-Build Housing Completion in Urban China (1979-1992)



Source: Zhang (1998)

Chapter 5: The Role of Government in Low-Income Housing

The Role of Government in Low-Income Housing

In a perfectly competitive economy, the supply of goods and services and the set of prices are determined by the price mechanism in accordance with consumer preferences and incomes. However, in reality, markets often operate in circumstances that are at odds with the assumptions of perfect competitive markets. Left to its own devices, the market system is unlikely to be efficient[s]. Given the potential for market failure, governments in all countries have perceived the need to intervene and correct market failures or to introduce policies or measures to compensate its effects[t]. A vast majority of poor people cannot meet their housing needs on the open market. Therefore, even in developed countries, government plays a strong role in the housing delivery system. As Table 5.1 shows, about one third of the housing stock in 1980 was public housing in Austria, the Netherlands, Sweden and the United Kingdom.

Government can play four types of role in the housing market: (1) an *allocative* role: to intervening in the allocative function of the market to improve efficiency; (2) a *distributive* role: as market-based distribution may not achieve equity, government may step in to align the distribution of outcomes with equity principles; (3) a *stabilization* role: government can stablise the market through various steps and policies; (4) a regulatory role[v]: the most common form of intervention in the housing sector is through regulation, direct provision and subsidies.

Direct Provision of Public Housing: The Case of Hong Kong

World War II and Civil War in China caused a massive wave of immigration from mainland China to Hong Kong, where the population surged from 900,000 in 1945 to 2.3 million in 1949[w]. The market system could not cope with the increase in housing demand on such a massive scale. Because supply of housing is inelastic in the short run, any increase will shift the demand curve upward, causing prices to rocket. Soaring prices became unaffordable to increasing numbers, putting the Hong Kong government under stronger pressure to step in. However, initially the government maintained a non-interventionist approach and took no action beyond rent controls. The government held the view that in most circumstances it was futile or damaging to the economy if attempts were made to plan and control the allocation of resources available to the private sector and to frustrate the operation of market forces. Therefore, the government kept well away from any direct provision of housing in the face of the severe housing shortage, overcrowding and squats in the late 1940s.

Public housing provision in Hong Kong started as an emergency response to disaster conditions. The big fire of Shek Kip Mei, on Christmas Eve 1953, reversed government

Table 5.1 Government Intervention in Housing in Selected Developed Countries (1980)

Country	Government Housing Expenditure as per cent of GNP	Government Housing Expenditure as per cent of public expenditure	Public Expenditure as per cent of housing owned by government	Housing consumption as per cent of private consumption
Austria	2.9	11	26	16.8
Finland	0.7	3.3	5.3	13
The Netherlands	2.7	7	31.7	10.7
Sweden	2.1	3.4	23	18
United Kingdom	2.2	5	32	20
United States	0.2	0.6	1.5	16

Source: Harsman & Quigley (1991)[u]

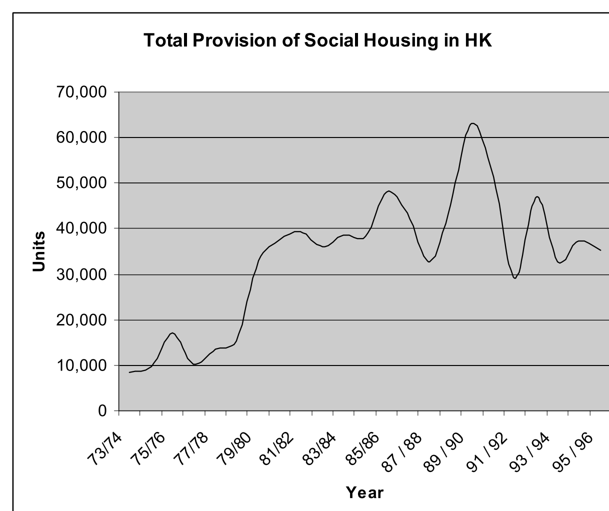
Figure 5.1 First Public Housing Estate Built in Hong Kong in the 1950s

Source: UN-HABITAT/X.Zhang

reluctance at direct intervention. The fire made more than 50,000 residents homeless. The government demonstrated its effectiveness in a crisis situation as it moved to relocate fire victims, and at the same time became aware of the large scale of squatter settlements in Hong Kong. In 1954, a Resettlement Division was established within the Public Works Department to provide housing for the victims of the 1953 fires and to relocate squatters, all at the lowest possible costs. The authorities looked to relocate 50,000 individuals every year in these government-provided housing estates. The spatial standard of public housing was 2.2 m^2 per person with an average room size of 11 sq m^2 . Figure 5.1 shows that the first public housing estate was built by the government in Hong Kong in the 1950s. In retrospect, this came as the first stage in a most ambitious involvement in housing provision. By the end of the 20th century, half of the housing stock in Hong Kong was government-sponsored, proving that public provision can be a most effective solution to the housing problem of low-income people.

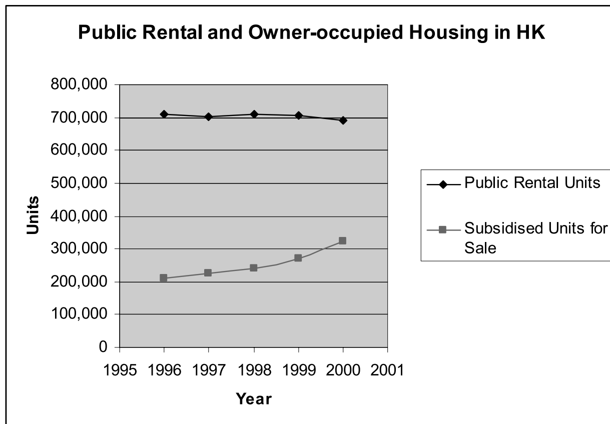
Government provision focused on resettlement during the first 10 years of the public housing programme, with the numbers remaining below 10,000 units a year between 1954/55 and 1959/60. In the early 1960s, the government began to expand public housing beyond resettlement. Total annual public supply increased from 9,917 housing units in 1959/60 to 14,130 units in 1978/79. However, provision of social housing (public housing plus a very small number of units produced by housing societies) has increased tremendously since the 1980s. In 1979/80, annual completion of social housing increased 115 percent over the previous year. Average housing production experienced significant increases in the 1980s and 1990s (Figure 5.2). Annual production of social housing increased from 32,975 units in 1996/97 to 89,002 units in

Figure 5.2 Total Annual Production of Social Housing in Hong Kong



Source: Based on HK Housing Authority Annual Reports, various issues

Figure 5.3 Public Rental and Subsidised Owner-occupied Housing in Hong Kong

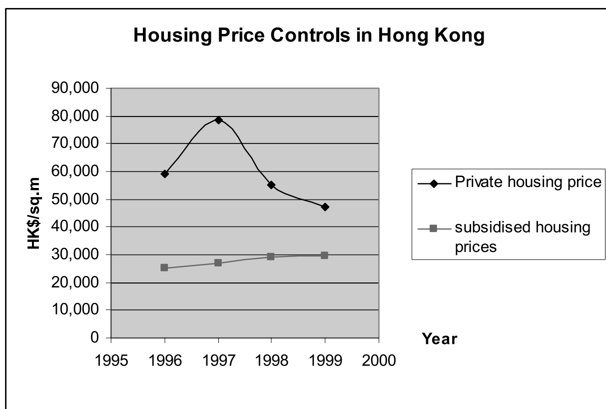


Source: Based on HK Department of Census and Statistics

2000/01. The government has not only increased its own production, it has also extended the scope of intervention since the 1970s, restructuring and reinforcing its housing function accordingly. Apart from traditional production of public rental housing, the government began to promote subsidized homeownership schemes. Figure 5.3 shows the increase in the production of subsidized owner-occupied housing units, which reflects the shift of government intervention in Hong Kong.

The government played an extremely important role in low- and moderate-income housing in Hong Kong. By 2000, 961,200 public rental and 324,700 subsidised units were available for sale. The population living in public housing reached 3,235,200 in 2000/01.

Figure 5.4 Prices in the Private Sector and Subsidised Owner-Occupied Housing in Hong Kong



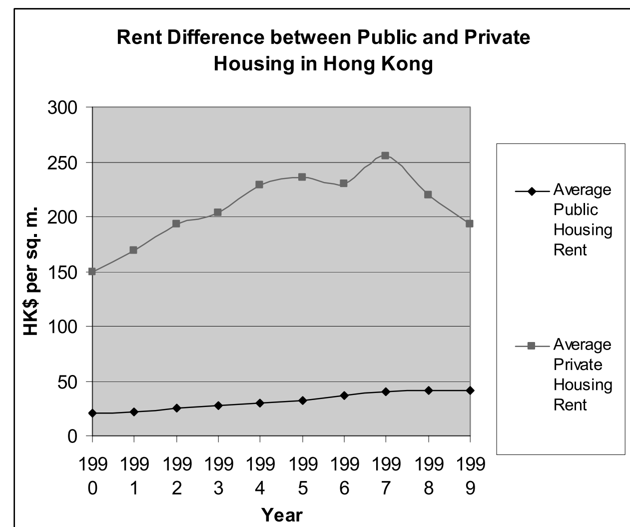
Source: Based on HK Housing Department

Housing Subsidies in Hong Kong

Subsidies are frequently used by governments to alter the allocation of resources and the distribution of incomes. There are two types of subsidies in practice: *producer* and *consumer* subsidies. Producer subsidies take the form of capital grants or below-market interest rates for housing built by public authorities or non-profit social organizations[y]. Government can also provide land free of charge to housing authorities, or at very low prices for private initiatives in social housing. Increasing involvement by social organizations (such as the Hong Kong Housing Society) and by the private sector to achieve certain housing objectives favours the producer subsidy approach over direct housing provision by the government.

Under the consumer subsidy approach, public authorities alter relative housing prices rather than making explicit housing allowances to the public. The subsidy takes the form of relatively below-market prices. Since the prices

Figure 5.5 The Gap between Public and Private Housing Rents in Hong Kong

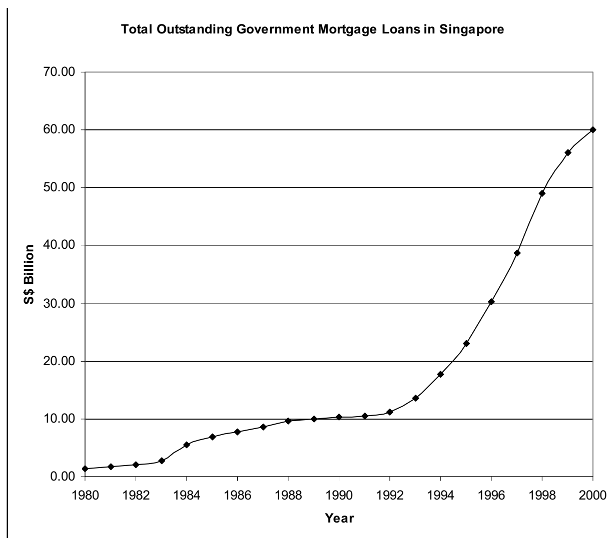


Source: Based on HK Housing Authority; Census and Statistics Department

Note: Private housing rent refers to the average rent of housing units less than 40 sq m. on Hong Kong island. Rents for large-size housing units are higher.

of public housing, as those of social housing provided by the private and community sectors, are controlled by the government, tenants and purchasers of price-controlled housing units receive in-kind subsidies.

Figure 5.6 Total Outstanding Government Mortgage Loans in Singapore



Source: based on Government of Singapore data

The Contribution of Public Housing Initiatives to Affordability in Hong Kong

In Hong Kong, the government plans and builds public housing and determines public housing rents and prices. Owner-occupied public housing sell for over 50 per cent cheaper than private sector housing (Figure 5.4). For rentals, the gap is even wider, with rents in public housing are on average one fifth of those in private housing (Figure 5.5).

Government Mortgage Loan Schemes: The Case of Singapore

The government plays an extremely important role in Singapore, as it provides the bulk of housing units: about 90 per cent, which in the year 2000 was host to 88 per cent of households in the city-State. The government is not only the largest housing developer, but also the largest mortgage provider through the Housing & Development Board (HDB). Figure 5.6 shows the massive scale of government mortgage loans: these totalled 60.1 billion Singapore dollars (SGD) in the year 2000, which was much higher than the total housing loans of the private sector (SGD 38.6 billion)[z]. HDB provides housing loans to all eligible buyers of public housing. In 2005 the loan ceiling was 90 percent of the purchase price or market valuation. Home buyers are assessed for credit risk to determine the amount of loan that can be granted to them. This depends on the buyer's age, household income, loan ceiling and the available Compulsory Provident Fund (CPF) balance in the Ordinary Account. The maximum loan maturity is either 65 years minus the applicant's age, or 30 years whichever is shorter. Borrowers can use CPF savings to repay housing loans[aa].

However, all buyers must exhaust their CPF funds before they are eligible for HDB mortgage loans. No loans will be granted to buyers aged 65 or more. Monthly loan repayments cannot exceed 40 percent of monthly household income[ab]. From 19 July 2005, the government introduced a staged scheme for down payments, which were also reduced from 20 to 10 per cent of the purchase price of a housing unit in order to ease initial pressure on buyers. The 10 per cent down payment is paid in two stages: five per cent of the price is paid at the time of signing the Agreement for Lease, and the remaining five per cent when taking possession of the new flat, or about two to three years later. The interest rate is subsidized. Since 1986, HDB mortgage loan interest rates have been pegged at 0.1 per cent above the CPF savings interest rate. This amounted to 2.6 per cent per year in 2005. Interest rates are adjusted every other year.

In Singapore, government policy also considers the impact of macroeconomic conditions on the affordability of borrowers. Therefore, in response to the economic hardship brought by the Asian financial crisis, the mortgage loan policy was adjusted in 1998 to allow public housing purchasers to include one or more (up to four) eligible family income earners as joint owners. As a result, borrowers can use co-owners' CPF savings to repay the mortgage and reduce the burden on individual borrowers. Furthermore, the government has introduced a Reduced Mortgage Repayment Scheme; under the arrangement, repayments can be reduced to 75 percent of the normal amount for the first five years in order to relieve the pressure during that early period. From the sixth year onwards, the monthly repayment is re-calculated based on the balance of the loan as outstanding at the beginning of that year[ac].

Government-Sponsored Enterprises in Mortgage Finance: Fannie Mae and Freddie Mac in the USA

History

The Federal National Mortgage Association (FNMA, colloquially referred to as Fannie Mae) and the Federal Home Loan Mortgage Corporation (FHLMC, colloquially referred to as Freddie Mac) are the two largest housing finance intermediaries in the USA and since 1968 have operated as government-sponsored enterprises (GSEs). The two bodies are privately owned and under shareholder supervision. They are protected and supported by the US Federal Government. Such support and protections include access to a credit line with the US Treasury, exemption from State and local income taxes, and exemption from the supervision of the Securities and Exchange Commission (SEC)[ad].

Fannie Mae was established in 1938 as part of the then president Franklin Roosevelt's New Deal favouring (among other things) government intervention in the housing market. The Great Depression of the 1930s discouraged private lenders from investing in home loans. Fannie Mae provides banks with federal funding to extend home mortgage loans in order to spread home ownership on more affordable conditions. A second GSE – FHLMC or Freddie Mac – was established in 1970. Today, Fannie Mae and Freddie Mac together control some 90 percent of the secondary mortgage market in the United States. Backed by strong government support, both agencies have experienced unprecedented financial growth. The current assets of these two companies are 45 percent larger than those of the largest bank in the USA. They are the only two Fortune-500 companies that are not held by SEC public disclosure requirements on their operations[ae].

Fannie Mae and Freddie Mac do not lend directly to home buyers. Instead, they work with credit institutions and operate exclusively in the secondary mortgage market. They help mortgage credit in two ways. First, they purchase mortgages from credit institutions and hold them in their portfolios. Lenders use the proceeds from the sales to grant more mortgage credit to clients. Second, the two agencies issue mortgage-backed securities (MBSs) on the financial markets, and use the proceeds to purchase more mortgage loans from credit institutions[af].

The Privileges of Fannie Mae and Freddie Mac

Fannie Mae and Freddie Mac are no ordinary privately-owned companies. They are government-sponsored enterprises and enjoy various privileges compared with other companies. They feature the following characteristics and advantages[ag]:

- They were established by US Congress under special federal charters, while all other companies normally hold charters granted by a State;
- The US president can appoint five out of the 18 board members of each company;
- Each company has a line of credit with the US Treasury for up to USD 2.25 billion;
- Each company is exempt from State and local income taxes;
- Each company can use the US Federal Reserve system as their fiscal agent;
- Their debt is eligible for use as collateral for public deposits, for purchase by the Federal Reserve in open-market operations, and for unlimited investment by commercial banks and S & Ls;

Table 5.2 Balance Sheets for Fannie Mae and Freddie Mac on December 31, 2000 (As a percentage of total assets)

	Fannie Mae	**Freddie Mac**
Assets		
Mortgage portfolio	90	84
Investments	8	11
Advances	n.a.	n.a.
Other assets	2	5
Total Assets	100	100
Liabilities and Capital		
Debt securities	95	93
Other borrowing	2	4
Equity	3	3
Total Liabilities and Capital	100	100
Total Assets (USD billion)	675	459

Notes: As of December 31, 2000, Fannie Mae and Freddie Mac had contingent liabilities for outstanding mortgage-backed securities of USD 707 billion and USD 576 billion, respectively.

n.a. = not applicable.

Source: US Congressional Budget Office (2001)[ai]

- Their securities are exempt from the Securities and Exchange Commission's registration and reporting requirements and fees;
- Their securities are explicitly government securities under the Securities Exchange Act of 1934;
- Their securities are exempt from the provisions of State investor protection laws.

These advantages bring financial benefits to both enterprises, which will be discussed later.

Portfolios and Funding

Fannie Mae and Freddie Mac are heavily invested in mortgages and depend on debt securities for funding. Up to 95 per cent of Fannie Mae funding comes from debt securities, three per cent from equity and two per cent from other borrowing. The funding pattern at Freddie Mac is broadly similar, with 93 percent of debt securities, three per cent of equity funding and four per cent of other borrowing (Table 5.2).

By the end of 2003, Fannie Mae held USD 1,010 billion in assets, compared with Freddie Mac's USD 803 billion. They are respectively the second and third largest companies in the USA in terms of assets. At that date, Fannie Mae's mortgage portfolio stood at USD 902 billion (with USD 1,300 billion outstanding MBSs) and Freddie Mac's was USD 803 billion (USD 769 billion outstanding MBSs). The two agencies also stand as the largest and second-largest MBS insurers (and guarantors) in the USA[ah].

Guarantees of Mortgage-backed Securities by Fannie Mae and Freddie Mac

Mortgage-backed securities (MBSs) are financial instruments that use pools of mortgages as collateral and are issued to investors on the securities market. MBSs differ from traditional debt instruments that promise a series of predetermined payments to investors. Instead, MBSs pay a share of the cash flows from the underlying pool of mortgages. The cash flows are often uneven and unpredictable. For example, when mortgage interest rates

Table 5.3 Outstanding Mortgage-Backed Securities and Debt in Fannie Mae and Freddie Mac, Year-End 1985-2000 (USD billion)

	Fannie Mae		Freddie Mac	
	MBSsa	Debt	MBSsa	Debt
1985	55	94	100	13
1986	96	94	169	15
1987	136	97	213	20
1988	170	105	226	27
1989	217	116	273	26
1990	288	123	316	31
1991	355	134	359	30
1992	424	166	408	30
1993	471	201	439	50
1994	486	257	461	93
1995	513	299	459	120
1996	548	331	473	157
1997	579	370	476	173
1998	637	460	478	287
1999	679	548	538	361
2000	707	643	576	427

Source: US Congressional Budget Office based on data from the Department of Housing and Urban Development's Office of Federal Housing Enterprise Oversight.
a. MBSs = mortgage-backed securities; excludes holdings of the enterprise's own MBSs held in its portfolio.

Table 5.4 Annual Value of Tax and Regulatory Exemptions for Fannie Mae and Freddie Mac, 1995-2000 (USD million)

	1995	1996	1997	1998	1999	2000
	Fannie Mae					
State and Local Taxes	239.6	312.4	347.0	371.6	435.2	478.6
SEC Registration	55.3	79.4	70.7	139.7	122.2	85.0
Rating Fees	5.3	6.7	8.0	9.3	11.0	12.7
Subtotal	300.2	398.5	425.7	520.6	568.4	576.3
	Freddie Mac					
State and Local Taxes	126.9	143.8	157.1	188.5	252.9	282.7
SEC Registration	39.9	53.0	44.8	92.7	96.4	66.5
Rating Fees	5.3	6.7	8.0	9.3	11.0	12.7
Subtotal	172.1	203.5	209.9	290.5	360.3	361.9

Source: US Congressional Budget Office.
Note: SEC = Securities and Exchange Commission.

fall sharply, borrowers are more likely to prepay loans through selling or refinancing their housing units, causing uncertainty on the pace of repayments or prepayment risks. A third party's credit guarantee on an MBS issue provides assurance against the instability and unpredictability of the cash flows on which investor returns rely. Fannie Mae and Freddie Mac provide a guarantee of timely payment on MBSs. They assume the credit or default risks in exchange for a fee, and investors accept the repayment risks in exchange for a higher rate of return than on a non-callable debt security. By the end of the year 2000, Fannie Mae and Freddie Mac had more than USD 1.28 trillion in MBSs. Guarantees on such large-scale issuance increase both the risks and the fees for Fannie Mae and Freddie Mac[aj] (Table 5.3)

Government Financial Support to Fannie Mae and Freddie Mac

As mentioned earlier, Fannie Mae and Freddie Mac are exempted from State and local income taxes as well as from SEC registration. They also enjoy lower costs of credit rating services for debt and MBS issues. Such benefits were equivalent to USD 1.2 billion in the year 2000. The benefits increase with the growth of business. The value of exemption from taxes accounted for USD 478.6 million for Fannie Mae and USD 282.7 million for Freddie Mac (Table 5.4). The largest component of the total financial benefits lies in the reduction in interest rates for borrowing by Fannie Mae and Freddie Mac. Subsidies to debt increased from USD 1.7 billion in 1995 to USD 3.6 billion in 2000 for Fannie Mae, and from USD 0.8 billion in 1995 to USD 2.4 billion in 2000 for Freddie Mac (Table 5.5). Both bodies enjoy an implicit or implied government guarantee. Their securities are considered second in safety only to those of the US Treasury. The implied government guarantee is worth six billion dollars to Fannie Mae and Freddie Mac[ak].

Table 5.5 Subsidies to Fannie Mae and Freddie Mac debt, 1995-2000 (USD billion)

	1995	1996	1997	1998	1999	2000
Capitalized Subsidiesa						
Fannie Mae	1.7	1.5	1.8	3.2	3.3	3.6
Freddie Mac	0.8	1.1	0.8	3.3	2.4	2.4
Total	2.5	2.6	2.6	6.5	5.7	6.0

Source: US Congressional Budget Office.
a. The subsidies to GSE debt are present values.

Government Support Boosts GSEs' Rapid Growth and Monopoly Positions

The basic purpose of Fannie Mae and Freddie Mac is to provide more funds to the housing market by linking prospective homebuyers and investors with the capital market. The two GSEs take advantage of their privileged credit ratings to borrow at low costs on the capital market and use the funds raised to acquire residential mortgages from brokers and other mortgage originators. The GSEs package the mortgages acquired from originators into "pass through" mortgage-backed securities that are collateralised with their residential mortgages. Homeowner principal and interest payments are then "passed through" to investors holding the securities[al].

During much of the period, Fannie Mae did not play a major role. By 1965, Fannie Mae and other government credit support accounted for only six percent of the market in residential mortgages. Savings and loan associations (S&Ls), savings and commercial banks accounted for the rest, together with life insurance companies. However, the GSEs were granted significant privileges, which result in strong competitive advantages over other participants in US housing finance markets. These privileges enable the GSEs to borrow cheaply and supply low-cost capital that enables mortgage originators to provide lower-rate mortgage loans to the public. This gave Fannie Mae and Freddie Mac unique opportunities for rapid expansion. By the 1980s and early 1990s, they were dominant on the housing finance market, and rapid expansion continued into the 1990s. GSE involvement in outstanding mortgage credit increased substantially, from USD 1.0 trillion in 1990 to USD 3.4 trillion in 2003[am].

The Limits on Fannie Mae's and Freddie Mac's Contributions to Housing Affordability

Fannie Mae and Freddie Mac have traditionally focused on mortgages for one-family owner-occupied properties. In the year 2000, of all housing units financed by the two GSEs, 77 per cent of Fannie Mae's units and 83 per cent of Freddie Mac's were one-family owner-occupied properties. Fannie Mae purchased USD 235 billion worth of mortgages which financed about 2.3 million such properties, and Freddie Mac bought USD 175 billion mortgages which financed nearly 1.7 million[an].

The two GSEs focus less on other types of properties. In the year 2000, Fannie Mae purchased USD 10.1 billion worth of mortgages on multifamily properties, which accounted for 13 per cent of the total housing units it financed that year. Freddie Mac's purchases of multifamily mortgages totalled USD 6.8 billion, accounting for 10 per cent of the total housing units it financed[ao].

Most one-family owner-occupied properties and multifamily properties are for well-off households. Therefore, the vast majority of households benefiting from the housing finance provided by Fannie Mae and Freddie Mac are middle-class and upper-class rather than low-income households.

Most low-income households in the USA cannot afford to buy homes, particularly one-family and multifamily properties. From 1965 to 1990, residential mortgage credit had expanded more than tenfold from USD 220.8 billion in 1965 to USD 2.6 trillion in 1990, but the homeownership rate only rose from 63.3 per cent in 1965 to 63.9 per cent in 1990, which was almost identical[ap]. This means that significant government intervention failed to turn one third of US families into homeowners. Low-income households still lived in rental housing, which hardly benefited from any support from the two GSEs.

The two GSEs were beneficial to homebuyers because they provided lower-rate mortgages. Expanded mortgage credit availability results in higher home prices[aq]. These and appreciation of property values are beneficial to homeowners. However, higher home prices force low-income households to give up on home ownership and improved housing conditions. Fannie Mae and Freddie Mac make housing more affordable for middle-income and upper class families through lower mortgage interest rates, but they worsen housing affordability for the poor through a concomitant increase in housing purchase prices.

Government Programmes for Improved Conditions in Slums: the Case of Colombo, Sri Lanka[ar]

Colombo is the capital of Sri Lanka and the country's largest city. Official statistics show that 66,022 households live in 1,506 slum areas without proper sanitary facilities. About 51 per cent of the total population in Colombo live in slums . Most of these have no proper access roads, with only narrow footpaths that are not wide enough for two people to pass at the same time. The paths are full of garbage holes. Houses are flooded in the rainy season. Slums are the most visible testimony to the housing crisis pervading Colombo. Many families have migrated from rural areas and are forced to spend large portions of earnings on rents. In the year 2000, the average civil servant earned a monthly 5,000 rupees, (LKR) compared with about LKR 3,000 for a labourer. However, the monthly rent for a two-bedroom house with electricity and running water was about LKR 8,000 (or USD 102). As a result, most workers can only settle for houses without water or power, unless they rent a single or double room in a house or flat[as].

They are in effect excluded from the urban mainstream. The government of Sri Lanka has introduced legislation that seeks to improve the living conditions of the poor through several strategies.

In Sri Lanka, greater emphasis has been placed on the redistribution of wealth through taxation, land reform and ceilings on house prices. In addition, a scheme for worker participation in all economic sectors is being worked out. In the social sphere, education and healthcare have been made more accessible to those of smaller means. Rations of basic foods and other essential commodities are provided free or at nominal costs, and school books are distributed free to poor families.

In the housing sector, redistribution of wealth and improved living conditions for the poor are taking place through two distinct channels. First, the government has introduced legislation to control rents, protect tenant rights and restrict the number of dwellings any individual may own. Landlords are forced to sell any excess houses to tenants. Since home ownership reflects social status in Sri Lanka, new homeowners stand to gain in this respect and the gaps between the two groups are narrowing.

The second approach takes the form of government housing programmes to improve the living conditions of the urban poor in a direct way. The components of this approach are:

(a) Slum clearance;
(b) Slum improvement;
(c) Resettlement of shanty dwellers in aided self-help projects.

Each of these housing programmes is discussed below, but most attention is given to resettlement.

Slum Clearance

The traditional approach of slum clearance is applied to areas where no improvement is possible, i.e., areas that are overcrowded, with dilapidated buildings beyond repair.

The policy is to select the areas, plan them to modern standards, and carry out redevelopment in a phased programme that reduces disruption to the normal life of the occupants of the area to a minimum.

Slum Improvement

Though a policy of slum improvement has existed for many years in Sri Lanka, implementation has been virtually impossible until recently. The main reason is that most slums were owned by private landlords, and use of public funds to improve private property was not a practical proposition.

This situation changed with the implementation of new ceilings on housing property, which became law in 1973. This law allows an individual, his wife and each of his children under 18 years of age to own one house each, and no more. As a result, the State now temporarily owns most of the slums that have been declared excess property by the previous owners.

The government has improved these slums at taxpayers' cost and a major programme was planned for 1976 under the auspices of the Common Amenities Board. This was regarded as the most humane and democratic way of helping slum dwellers without breaking up their family lifestyles, community standards and close-knit integrated patterns by imposing on them middle-class styles of apartment living. The Common Amenities Board did improve slums through maintenance, repair and the addition of common facilities such as water taps, latrines and drains. This reduced the pressure on,, and over-use of, the few already existing facilities so that their rapid deterioration and unhygienic use could be avoided.

Resettlement of Slum Dwellers through Aided Self-help Housing

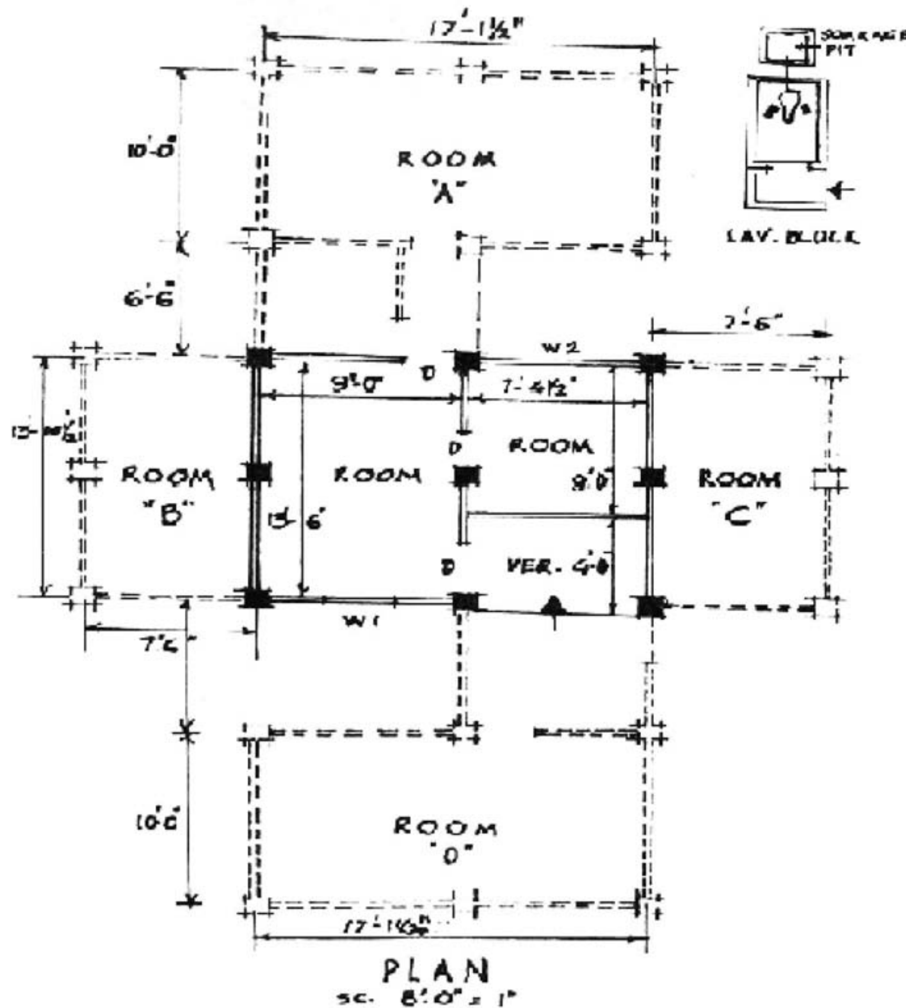
The Ministry of Housing and Construction has launched a programme of aided self-help housing to provide decent housing at the lowest possible cost to squatters who either have no land or cannot afford monthly rentals in excess of 20 rupees. In the self-help scheme, as is the norm for construction of indigenous housing in Sri Lanka's rural areas, land and materials are supplied at the site to suitable participants; in the next step, they build their own dwelling units to modern housing standards, under the supervision of technical officers from the Department of National Housing.

The following section details this type of aided self-help programme as carried out in the Colombo suburb of Hendala.

Project Description

The project, the first of its kind in Sri Lanka, was launched at Hekitta in Hendala on 25 November 1972. Forty five dwelling units were constructed on three acres of land. The area allotted to each house varied from seven to 10 square perches, (1 perche = 30¼ sq. yds) and the size of each dwelling unit, consisting of an open veranda and two rooms, was 250 square feet. As shown in Figures 5.7 and 5.8, the design provided for future extensions if the family increased in number and financial circumstances permitting. Each unit is provided with a separate water-sealed lavatory. Drinking water is available from two communal wells. The canal opposite the suburb was to be used for bathing, as is customary in the locality. The

Figure 5.7 Floor Plan of Aided Self-help Housing



Source: United Nations (1978)

houses were allotted to participants only upon completion of the project, in order to ensure that experienced builders would apply their skills equally to all construction and not favour the specific houses they expected to own. In this way, uniform quality was guaranteed. Participants were required to bring their families, friends and well-wishers along to assist them, and due credit was given to each participant for his or her labour input. The project was programmed to ensure continuity of work; in order to meet the target dates for construction, assistance was given when necessary, with co-operation from local voluntary organizations.

Selection of Tenants

The participants were selected by advertisement, and the following requirements were stipulated:

(a) The head of household must be legally married;

(b) The family unit must consist of four persons, including two children or two dependants living with the head of household;

(c) The head of household must be permanently employed or self-employed with a regular source of income, and earnings must be such that he can afford the monthly rental;

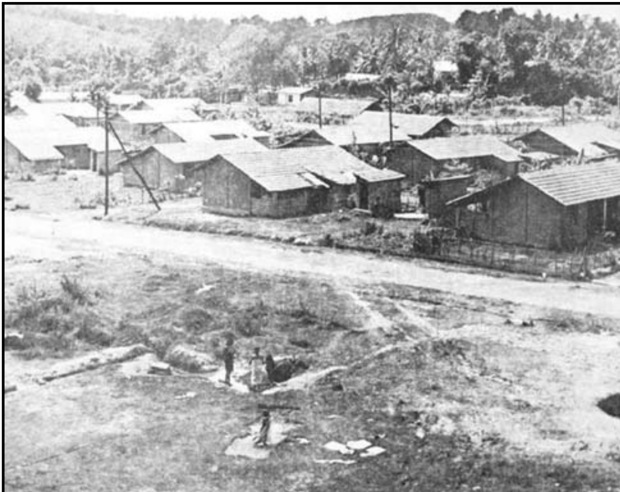
(d) The total monthly income of the family unit must be between LKR 150 and 350;

(e) A participant or his spouse must have had a minimum 10-year period of residence or employment within five miles of the project;

(f) Participants must be physically able to carry out construction work and other responsibilities in the self-help scheme;

(g) Participants must agree to take part in group education and social work;

Figure 5.8 Aided Self-help Housing



Source: United Nations (1978)

(h) Participants must agree to put in a minimum of 20 work-hours per week, even if that means working at night, on holidays and week-ends;

(i) Participants must be willing to co-operate with each other and accept the majority decisions of the working partners;

(j) Applicants must be between 25 and 45 years of age.

Those applicants complying with the requirements for selection were interviewed. Carpenters, masons and unskilled workers were selected in the ratio of 1:3:9. The 45 participants were advised to form a society, with officers to administer the work during the construction period and, thereafter, to attend to their day-to-day maintenance requirements. In later programmes, where masons and carpenters were not available within the squatter settlement, they were either hired or selected to join the programme without fulfilling the conditions specified above. A model house was constructed to serve temporarily as an office and demonstration house.

Estimation of Labour and Material Inputs

Besides issuing materials and programming and directing the work, the technical officers from the Department of National Housing maintained a record of the labour input of each participant, his family and helpers, on the following basis:

(a) A skilled worker was given 20 points for eight hours of work;

(b) An unskilled worker was given 10 points for eight hours of work;

(c) Women and children were given below 10 points for eight hours of work, depending on their performance.

Actual output was an important consideration, and any difficulty in a proper assessment of poor output was handled by the technical officer with help from the society established by the participants. This method saved about LKR 800 per unit in labour costs and reduced monthly rentals by five rupees.

Computation of Monthly Instalments for Purchase

Monthly instalments were based on recovery of the basic cost of material and overhead over a 20-year period. The land was leased at a three per cent annual rate. Therefore, average monthly instalment on the above basis was about 20 rupees.

In order to compute the amount to be paid by each householder, the total number of points obtained by all participants was divided by the number of homes built. This represented the average number of points per house. Participants who had put in more points than the average paid less; those who came under the average had to pay more. After 20 years the tenants own their homes, while the government retains ownership of the land.

Benefits

Since the first project at Hekitta was such a success, the Commissioner for National Housing has ascertained by advertisement the demand for this type of construction in other areas. Where demand was identified, the Commissioner has proceeded to acquire land and launch similar schemes. Construction work on 60 such projects is under way at present and further projects are being investigated.

The benefits derived by the participants from aided self-help housing programmes in Sri Lanka are as follows:

(a) They acquire a house of about 250 square feet, for a monthly repayment of only 20 rupees, paid for a period of 20 years;

(b) They obtain a building site without any initial capital expenditure;

(c) Building materials are made available at the site;

(d) Participants buy their building materials – which have been purchased at minimum, competitive rates that take advantage of bulk discounts and with easy, deferred payments;

(e) Participants receive plans and technical advice at the site during all stages of construction, so that their houses comply with the requirements of the Housing and Town Improvement Ordinance, ensuring minimum standards;

Table 5.6 Urban Poor Participating in Aided Self-help Programmes in and around Colombo, 1971-1974

Category	Number of Persons	Percentage of Total Urban Poor Population
Persons relocated to flats and houses due to slum clearance	13 000	4.0
Persons relocated to aided self-help housing due to slum clearance	5 340	1.6
Persons benefiting from slum improvement through the Common Amenities Board	8 300	2.6
Persons currently at work on Common Amenities Board programmes	11 000	3.4
Total	37 640	11.60

Source: United Nations (1978)

(f) They receive the services of other participants without any apparent hiring costs;

(g) Participants may take advantage of training facilities and opportunities to acquire contruction skills;

(h) They make profitable use of the free time and talent available in squatter areas:

(i) They develop a spirit of co-operation and good-will towards their neighbours and fellow participants.

Those who learn a skill in an aided self-help scheme are later employed by the government in the construction industry. Over time, residents expand their homes and variety is added to the initial standard design, reflecting resident preferences and individualities.

Unfortunately, because aided self-help houses must comply with relatively high housing standards, they are beyond the means of 50 per cent of slum dwellers in Sri Lanka. To overcome this problem, the government is now supplementing aided self-help with sites-and-services programmes. At the time of writing such programmes were still in the planning stages and, no construction had yet begun.

Table 5.6 shows the number of urban poor who have benefited from aided self-build schemes. Although only 11.6 per cent had benefited during 1971-1974, this figure has since been on the increase.

Chapter 6: Financial Instruments for Low-Income Housing

Financial Instruments for Low-Income Housing

Community-based Savings Schemes for Lowest-Income Housing

Formal housing finance systems do not work for the poorest households. Therefore, the poorest have developed their own survival strategies through informal financing. Informal finance has funded the vast majority of lowest income housing in the world and is to be found behind the creation of maintenance of the slums, shanties, squatter camps and pavement dwellings that provide shelter for about more than half of the urban population in developing countries. However, attempts to link this ingenuity to the financial resources managed by the formal finance system have proved relatively unsuccessful. NGOs have sought to create financing structures outside the formal finance system, which include Revolving Loan Funds, providing loans to organizations and groups of the urban poor specifically for housing and infrastructure. Community-based savings schemes are an essential part of such community-led organizations. With small savings deposits pooled together over time, a pool of resources builds up from which members can take low interest loans for housing improvements. These schemes provide the poorest the access to credit they are otherwise denied by the formal finance system[at].

Compulsory Savings Schemes

Funds accumulated in compulsory savings schemes (such as provident or pension funds and other social-security systems) are the most important form of household savings; they are also particularly suitable for housing finance since they are held for long maturities and build up into large amounts. One of the most successful examples of compulsory savings schemes is Singapore's Central Provident Fund (CPF). Contributions to CPF accrue from two related sources: payroll deduction of a certain percentage of an employee's salary, and employer contributions equivalent to a specific percentage of the employee's salary. The percentages are adjusted from time to time to reflect economic performance and market conditions[au]. In the mid-1980s, the combined contribution rate was as high as 50 per cent of an employee's salary. After the Asian financial crisis of the late 1990s, the rate was reduced significantly to alleviate the burden on employers and to allow employees to have more cash to bring home for consumption. The CPF contribution rate also varies according to age. The older an employee, the lower rate s/he contributes to CPF. The contribution rate is 33 per cent of monthly salary for employees below 50 years; 30 per cent for those aged 50-55; 18.5 per cent for those aged 56-60; 11 per cent for those aged 61-65; and eight per cent for those over 66 (Table 6.1).

Virtually all working Singaporeans and permanent residents are CPF members. CPF has 3.04 million members with a total balance of 116.96 billion Singapore dollars (SGD). The CPF savings interest rate is reviewed quarterly. It is derived from the major local banks' three-month interest rates. Between 1 May 2005 and 31 July 2005, this worked out as an annual 0.59 per cent. However, the CPF Board will be paying the higher rate of 2.50 per cent per annum as the CPF Act provides for a minimum CPF interest rate of 2.50 per cent per annum. This minimum rate is higher than the 12-month fixed deposit and savings rates of the major local banks[av].

During the second quarter of 2005 alone, SGD 1.16 billion CPF funds were spent on public housing and another SGD 633.3 million on private housing. A total 629,174 members used the CPF fund to repay mortgages on public housing and another 125,124 on private housing. By the end of June 2005, a total 1,255,358 members had used CPF funds to pay for their public and 211,674 members for their private housing units[aw]. This reflects the significant impact of CPF funds on affordable housing solutions for society as a whole. Thanks to the contribution of CPF funds, today about 84 per cent of Singapore's population live in public housing and most of the remaining 16 per cent use CPF funds for mortgage payments for private sector housing.

A number of other countries have also introduced compulsory savings schemes in the form of social security systems or provident funds. Typically, contributions in the form of payroll deductions as a percentage of monthly salaries are shared by employees and employers, with the ratios varying from time to time. The fund, usually managed as a government or parastatal body, allows members to withdraw or borrow against their balances for certain uses, such as the purchase of housing units. However, members are typically formal sector employees. Such schemes often do not involve rural populations or informal sector workers[ax].

Table 6.1 Contribution Rates to Singapore's CPF (2005)

Employee Age (years)	Contribution By Employer (per cent of salary)	Contribution By Employee (per cent of salary)	Total Contribution (per cent of salary)	CPF distribution among accounts		
				Ordinary Account per cent	Special Account per cent	Medisave Account per cent
35 & below	13	20	33	22	5	6
36 - 45	13	20	33	20	6	7
46 - 50	13	20	33	18	7	8
51 - 55	11	19	30	15	7	8
56 - 60	6	12.5	18.5	10.5	0	8
61 - 65	3.5	7.5	11	2.5	0	8.5
Above 65	3.5	5	8.5	0	0	8.5

Source: Adapted from Singapore CPF Board

This contrasts with the fact that in many developing countries, a considerable proportion of the population lives in rural areas or is employed in the informal sector, and therefore cannot benefit from such schemes.

The savings held in such institutional funds often look like an ideal source of funding for human settlements improvements for three main reasons: (1) funds are available as medium- to long-term capital; (2) they are held as financial assets and provide steady inflows of capital over time; (3) investment by these funds is closely controlled by government to ensure safety. Similarly, these financial resources can be channelled into human settlements in three ways:. (1) public sector institutions can issue debentures to fulfil security requirements; (2) development of mortgage-backed securities market into which provident and social security funds can invest; (3) direct investment in the human settlements sector by institutional funds[ay].

Contractual Savings for Housing

Contractual savings can be brought to bear on housing through dedicated schemes (known as contractual savings for housing or CSH). Contractual schemes normally offer below-market interest rates on savings, while giving savers the right to take out a loan at a low fixed interest rate when the savings contract is fulfilled. The major benefit is that housing loans are insulated from market interest fluctuations[az]. CSH links the accumulation of savings to the extension of a loan in the future. The promise of a loan at a predetermined, below-market fixed rate of interest is particularly attractive to households in a volatile financial market environment, making home purchasing more affordable. Financial institutions can also raise long-term funds through CSH schemes. The regular deposits built into the savings schemes for a number of years provide financial institutions with the liquidity and long-term funding required to finance long-duration housing loans[ba].

The Characteristics of Contractual Savings for Housing

There are two dominant forms of CSH: the "closed" German *Bauspar* system and the "open" French *épargne-logement*. In a "closed" CSH system, access to housing loans often is through a queue of savers waiting for their turn for a loan from a specialist institution. In an "open" system, the saver can legally demand extension of a loan at contract maturity, irrespective of liquidity conditions of the relevant financial institution. The two models differ substantially for structure and options, as shown in Table 6.2.

The "Closed" System of Contractual Savings for Housing: The Case of Germany

The German CSH system follows the principle of mutuality. The funds are only available to members/participants of the CSH scheme, which is managed by a specialized institution, the *Bausparkasse*. When funds are not enough to meet CSH loan demand, members are served according to pre-defined queuing rules. The CSH system is insulated from capital markets. It was established in the 1920s based on social, economic and financial grounds. At the beginning, the *Bausparkassen* ('saving for housing banks') attempted to provide all the monies required by homebuyers. However, this proved impossible and therefore the Bausparkassen concentrated on providing second mortgages, backed by a network of savings banks. The first mortgage funding was provided by a network of mortgage banks which raised funds from the capital markets through mortgage bonds. The 1952 Dwelling House Construction Premium

Table 6.2 Characteristics of Contractual Savings for Housing in France and Germany

Features	Epargne-Logement (PEL) France	Bauspar Germany
Provider	Commercial and Savings Banks	Specialised Institutions
1. SAVINGS PHASE		
Initial Savings Deposit	Small minimum	No minimum
Minimum Annual Savings	Yes Early deposits are rewarded	No, but preference will be given to regular savers
Minimum Total Savings	Initial + annual + interest	Pre-set by saver in contract
Maximum Savings Amount	Yes	No
Savings Interest Rate	Competitive after-tax yield	Below-market after-tax yield
Savings Liquidity	Yes; contract transferable to relative	No, therefore “interim” loans are extended
Government Incentives:		
i. Tax-free yield	i. Full interest tax-free	i. Full interest tax-free
ii. Interest subsidy	ii. State interest subsidy (“interest premium) based on interest paid by the bank. Ceiling: FRF10,000 (until 1999)	ii. Income-targeted interest subsidy, but only for housing loan
2. MINIMUM WAITING PERIOD	4 years (except 1981-1992: 5 years) Some contract benefits extended on request. 10-year-limit since 1992	2 years
3. LOAN PHASE		
Date of Loan Availability	Right to loan immediately at the end of the savings phase, with option to call loan extensible up to 10 years	After waiting period of uncertain duration
Maximum Loan Amount	Loan such that interest paid on loan equals 2.5 times interest earned in savings. Ceiling of FRF400,000	Multiple of contracted savings amount (1-1.5 times)
Loan Term	2 to 15 years at borrower’s options, but constrained by interest rules.	6-15 years at borrower’s option; rules give preference to shorter term loans
Loan Rate	Contract deposit rate paid by bank plus regulated servicing fee.	Minimum spread of 2 per cent over savings rate
Loan Payment	Level	Level
Loan Servicing Fee	1.7 per cent of outstanding principal	2 per cent spread
4.CONTRACT OPTIONS		
State Interest Subsidy	State interest subsidy have ranged from 4/9 to 2/7 of bank interest on savings available after contract maturity with or without loan	State subsidy is part of the contract
Transfer of Rights	Mature contract benefits can be transferred to relative to improve subsidy + maturity of a loan	Limited transfer
Uses of Loan	Purchase of new unit, existing unit, new secondary residence, rehabilitation, energy retrofit, housing REIT (since 1993)	Purchase, construction, rehabilitation
Timing of Loan	Once contract matures, up to saver responding to market conditions. Right to a loan can be extended to 10 years	Up to lender, but actually according to pre-specified queuing rules
Tax Free Interest	Bank paid contract interest remain tax free beyond the 10 year limit	Not Applicable

Source: Lea & Renaud (1995)[bb]

Act boosted the development of the CSH scheme, which encouraged savings for owner-occupied housing. Savers who fulfilled the savings contract received a government interest premium equivalent to 25 to 35 percent of their total savings. This incentive stimulated the expansion of the CSH scheme[bc].

The "Open" System of Contractual Savings for Housing: The Case of France

France established its first contractual savings for housing scheme – the *Comptes d'Epargne Logement* (CEL) (housing savings accounts) – in 1965. It is very similar to the German *Bauspar* model. However, this scheme has not been very successful due to lack of funds for loans and despite the efforts made to create a mortgage bond market. In 1970, France introduced a new CSH scheme – the *Plans d'Epargne Logement* (PEL) (housing savings plans). Compared to CEL contract, the PEL offers a higher loan multiplier (2.5 times for PEL, instead of 1.5 times for CEL). The savings period is longer (four years for PEL, a minimum 1.5 years for CEL). CEL allows withdrawals while PEL blocks them for five years. The PEL featured attractive deposit rates (eight per cent) which was competitive with after-tax yields on long-term Treasury bonds. The deposit rate had two components: a basic deposit rate of four per cent provided by the deposit bank and an interest rate premium of four per cent from the government. While the lending rate is 5.5 per cent, the spread is 1.5 per cent (now 1.7 per cent) over the banks' deposit rate[bd]. This makes it possible for PEL savers to borrow from the system at a lower interest rate than the one on their savings. This acts as a huge incentive for households to participate in the CSH scheme, which as a result is able to mobilize a wide base of savings, including non-borrowing savers.

CSH accounts holders in France and Germany represent more than one third of the population in their respective countries. The schemes have also been running in a number of other industrialized countries, particularly in Western Europe, but have rarely been emulated in the developing world. Savings for housing schemes can be an opportunity to deepen domestic financial systems, to reach out to low-income households, and to mobilize untapped household savings; still, they run into major obstacles in developing countries: (1) the savings period of three to five years required before loans are granted exceeds the planning horizon of most low-income households; (2) most low-income households lack steady income flows owing to predominant informal sector employment, making sustainable savings difficult over a number of years, and therefore are not eligible for loans; (3) macro-economic instability and the fear of hyper-inflation discourage people from participating in low-interest earning savings; (4) due to inadequate supply of suitable housing, savings do not necessarily secure homes; (5) loans are related to unreasonably restrictive housing standards, further restricting people's choices[be].

Special Housing Funds

The Mass Housing Fund in Turkey

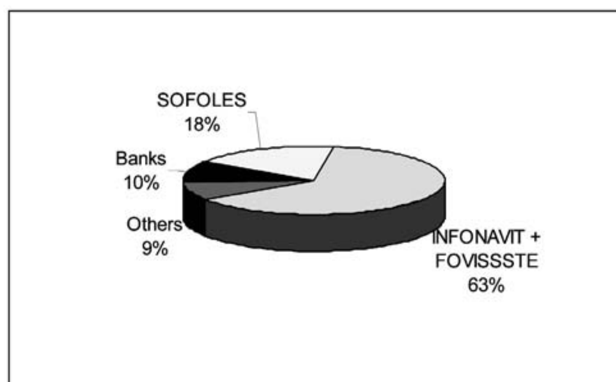
In March 1984, the government of Turkey established the Mass Housing Fund (MHF) to counter the negative cyclical impact of market fluctuations on housing affordability. At the time, more than 200,000 housing units had been left unfinished due to increases in interest rates and reductions in household incomes. Having realized that MHF would run short of funds if it relied solely on allocations from the national budget, the government introduced special taxes on a number of imports and other items to secure additional resources. During 1984-1987, the main funding sources of MHF were taxes on certain imports (28 percent, on tobacco and spirits) as well as on consumption of petroleum products (27 percent)[bf].

Since then, MHF has provided a substantial, steady inflow of funds for financing housing and infrastructural investments. Being funded through taxes it does not mobilize savings from households, and therefore can be regarded as a fiscal instrument. Benefiting from a steady resource inflow, MHF does not need to be concerned with returns on lending capital and can make loans at subsidized, low interest rates. MHF came in response to the ineffectiveness of the conventional housing finance system in the face of accelerating inflation and increases in market interest rates of 40 to 50 per cent, which had combined to make long-term housing finance too expensive for low- and moderate-income Turkish households[bg]. MHF offers financing for the construction of up to 100,000 housing units a year. Funds can be used to improve existing slums (known as *gecekondus*) or for new construction, and can be lent to homeowners, co-operative associations, or contractors. Although MHF can not solve all slum-related problems, it helps to contain the proliferation of *gecekondus*[bh].

The Housing Provident Fund in China

The Housing Provident Fund (HPF) scheme was first established in Shanghai in 1991. The rationale was to raise funds from individuals and work units on the widest possible scale. Individuals and work units were each required to pay five per cent of individual salaries into their HPF accounts. The money could be used for housing-related purposes such as home purchase, repairs

Figure 6.1 Number of Mortgage Loans Originated in Mexico in 1995



Source: Based on Babatz (2006)[bm]

and self-build. HPF opened up a source of funding both for housing construction and for home purchases. By the end of 1996, HPF had raised 11.4 billion yuan (CNY) in Shanghai; CNY 8.4 billion were lent to work units for housing construction and another CNY 2.0 billion in mortgage loans to 46,000 households for home purchases. One fourth of total social housing construction in Shanghai was financed by HPF in 1996[bi].

Encouraged by the Shanghai HPF experience, in a 1994 housing reform resolution the government required the establishment of HPFs in cities across the country. Like the Singapore model, since 1994 HPF has been compulsory for all work units and their employees in cities. However, practice shows otherwise. Participation rates vary across cities. It is as high as about 90 per cent in coastal cities in both Zhejiang and Jiangsu provinces and 98 per cent in Shanghai. But in most cities, the participation rate is below 50 per cent, and even under 20 per cent in Beijing. Contribution rates to HPF also vary across individual accounts, while most cities require rates under five per cent. The changes are a function of economic conditions in individual cities[bj].

Special Housing Funds in Mexico

Mexican authorities established INFONAVIT (National Housing Fund for Workers) and FOVISSSTE (Housing Fund of the Institute of Social Security and Services for State Workers) in 1972. INFONAVIT provides low-cost housing and financing to urban workers in the private sector. It is funded through employer contributions (five per cent of employee salaries) in the formal sector. Initially, the fund operated primarily as a housing developer. A reform in 1992 turned it into a mortgage financing institution. The fund provides mortgage loans to eligible borrowers within the target income range (minimum salaries). The interest rate is capped at four to nine per cent regressively according to the income level within the target range. In 2004, the fund had a portfolio equivalent to USD 36 billion, or about two thirds of outstanding mortgages in Mexico. In 1995, INFONAVIT and FOVISSSTE had a combined market share of 63 per cent of mortgage loan origination (Figure 6.1). INFONAVIT grows very rapidly. In 2002, it had a 57 per cent market share in terms of mortgages originated and 72 per cent in terms of loan value, compared with two per cent of originations and eight per cent of mortgage value for banks[bk]. FOVISSSTE provides low-cost housing and financing to urban workers in the public sector[bl]. It had a two per cent market share in terms of mortgage originations in 2002.

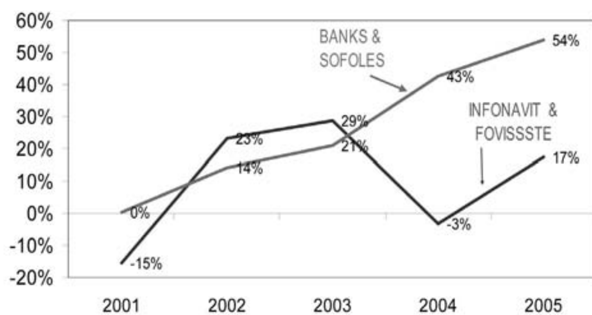
FOVI *(Fondo de Operación y Financiamiento Bancario a la Vivienda)* is a Bank of Mexico trust fund. It has no retail operations as it on-lends funds to low-income borrowers through commercial banks and specialized non-banking financial institutions – known as SOFOLES *(Sociedades Financienras de Objecto Limitado)* – on a risk-sharing basis. Since creation in 1994, SOFOLES have been originating and servicing loans. They offer mortgages for purchase of new or existing housing units by individuals for owner-occupation or rental, land development, commercial infrastructure and home equity. Loans are offered at fixed rates or indexed to the minimum wage. SOFOLES also offer loans to workers in the informal sector and to the self-employed. They make credit more accessible

Figure 6.AD FONHAPO Lending Categories in Mexico (2002)

Loan Type	Number of Loans	Value of Loans (000s of pesos)	Average Loan Size (pesos)
Home Improvement	117,792	290,668	2,468
Progressive Housing	25,047	705,423	28,164
Finished Housing	85	12,723	149,685
Total	142,924	1,008,814	7,058

Source Joint Center for Housing Studies

Figure 6.2 The Growth of National Housing Funds and Private Intermediaries in Mexico



Source: Babatz (2006)[bp]

to informal and low-income households in two distinct ways. First, the lending criteria they have developed are appropriate for the informal sector. Households can pay a monthly sum equal to their desired mortgage payment into an account and for a period of time in order to demonstrate their ability to pay and to accumulate funds for a down payment. Secondly, SOFOLES provide in-person physical delivery of statements, collect payments at on-site locations and outside of business hours, which on top of convenience makes for a congenial atmosphere[bn]. SOFOLES performance has been very good and their delinquency rates are very low – below 2.5 percent. They have a 20 per cent market share and have been growing at a quick pace since 2001 (Figure 6.2).

FONHAPO *(Fondo Nacional de Habitaciones Populares)* is a housing fund and since creation in the early 1980s has been the primary funding source for low-income housing in Mexico. The fund targets the lowest income segment of the population with incomes under 2.5 times the minimum wage. FONHAPO is funded by the Mexican government and international donors. It provided more than 140,000 loans in 2002, which accounted for about 30 per cent of total national housing loan origination, but only about one per cent of mortgage lending in terms of value since average loan size is very small[bo]. Figure 9.3 shows the distribution of lending across housing categories, showing that FONHAPO heavily concentrates on home improvement and progressive housing.

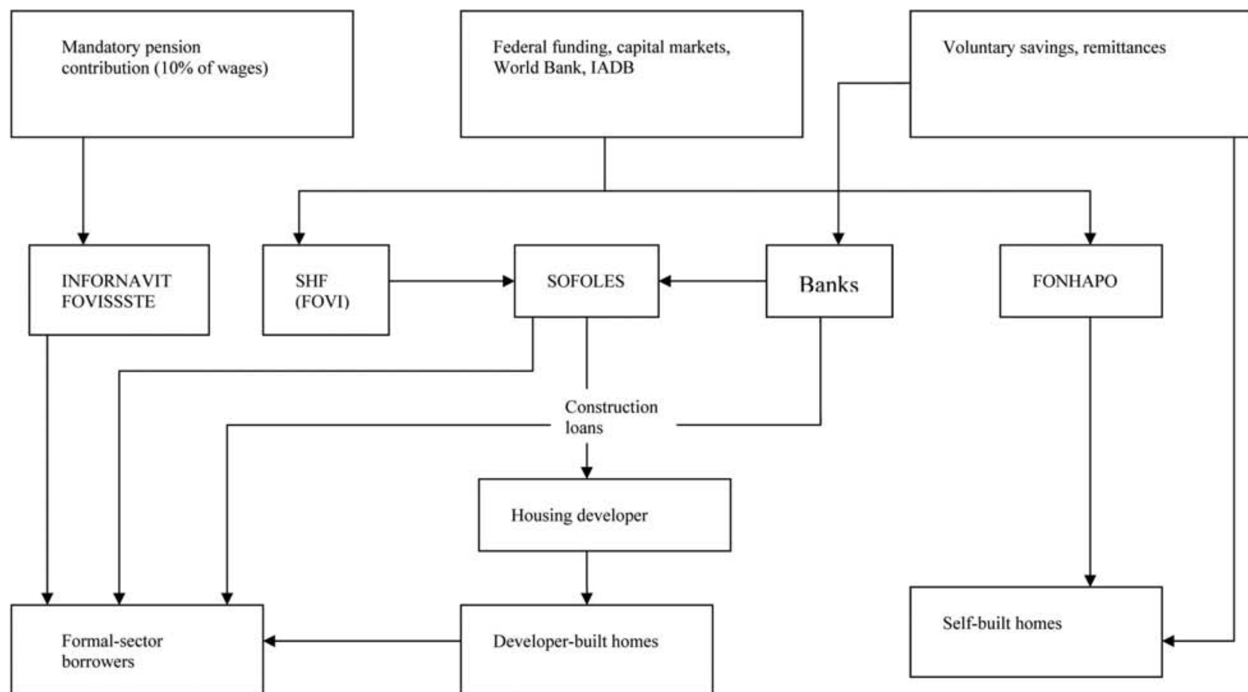
Table 6.7 shows the conditions for mortgage loans provided by FOVISSSTE, INFONAVIT, SOFOLES and banks. FOVISSSTE and INFONAVIT do not need any down payment, while SOFOLES and banks require a minimum 10 per cent down payment. FOVISSSTE and INFONAVIT offer maturities of up to 30 years, or 10 years longer than those available from banks and SOFOLES. As mentioned

Table 6.7 Conditions for Mortgage Loans in Mexico (2006)

	FOVISSSTE	INFONAVIT	BANKS (pesos)	SOFOLES (pesos)
Minimum Down payment	0 per cent	0 per cent	10 per cent	10 per cent
Maximum Maturity	30 years	30 years	20 years	20 years
Currency /Index	Minimum Wages	Minimum Wages	Pesos	Pesos
Interest Rate (A)	Δ per centM.W. + 6 per cent	Δ per centM.W. + 9 per cent	N.A.	15.79 per cent
Interest Rate (B)	Δ per centM.W. + 6 per cent	Δ per centM.W. + 9 per cent	12.28 per cent	15.74 per cent
Initial payment per USD1000 of outstanding balance (A)	5.99	8.94 *	N.A.	13.76
Initial payment per USD1000 of outstanding balance (B)	5.99	12.22 *	12.36	13.72
Loan Limit in USD (A)	43,000	25,210	N.A.	23,500
Loan Limit in USD (B)	48,050	25,210	59,500	50,510
Note: For an individual of 35 years old or above. M.W. stands for minimum wage. A) For an individual with a monthly income of USD 980. B) For an individual with a monthly income of USD 2,100.				

Source: SHF

Figure 6.4 Government Housing Funds and the Housing Finance System in Mexico



Source: Joint Center for Housing Studies (2004)

earlier, FOVISSSTE and INFONAVIT interest rates are indexed to minimum wages. FOVISSSTE rates are based on changes in minimum wages plus six per cent. INFONAVIT interest rates are based on changes in minimum wages plus nine pe rcent. Maximum loan amounts are USD 48,050 for FOVISSSTE, USD 25,210 for INFONAVIT, USD 59,500 for bank loans, and USD 50,510 for SOFOLES.

Mexico's housing finance system is dominated by a network of housing funds in the form of public institutions that serve the various segments of the population (Figure 6.4). The richest four per cent are served by commercial banks. The income group between the 95th and 85th percentiles resorts to FOVI. INFONAVIT and FOVISSSTE cater to households between the 90th and 60th percentiles while SOFOLES takes care of those between the 100th 50th percentiles. Finally, FONHAPO serves the people at the lowest tier of the formal sector.

Housing Bonds

Bond issuance is one of the traditional instruments mortgage banks use to mobilize financial resources. Institutional investors, such as insurance companies and pension funds, are the main purchasers of such bonds. These are registered and traded on stock exchanges. Investors can convert the bonds into cash while mortgage lenders receive long-term funds to match their long-term housing finance needs. Making long-term housing bonds attractive is important to mobilize funds for housing finance. In this respect, exempting earned interest from income tax is common practice. This enables mortgage banks to issue bonds at below-market interest rates, lowering their cost of capital, while investors can earn higher net after-tax returns on the bonds compared with other financial instruments. Therefore, the bonds are remaining attractive to investors. Income tax exemption acts a government subsidy[bq]. Housing bonds is an area where the United States has accumulated a wealth of experience.

Housing Bonds – The Case of the USA

Tax-exempt housing bonds were first issued after World War I but have only been widely used since the early 1970s. This is when many State housing agencies started to issue tax- exempt bonds for mortgages on apartment buildings and on owner-occupied houses. States and local governments issue bonds at relatively low, tax-exempt interest rates and on-lend the proceeds as mortgage loans at slightly higher interest rates. For owner-occupied housing, the State agency issuing the bonds funds the private lending institutions where individuals apply for mortgage loans. Applicants are reviewed for creditworthiness and any requirements imposed by federal and State laws and by the issuer. Tax-exempt bond issuance for owner-occupied housing increased dramatically in the late 1970s, with the proceeds of bond issues soaring from USD 1.3 billion in 1976 to USD 12 billion in 1980[br].

Table 6.3 Selected Bonds Issued for Mortgages on Owner-Occupied Housing by State Housing Agencies (1981)

Insurer	Date of Issue	Bond Issue Amount (USD million)	Bond Net Interest Cost (per cent)	Mortgage Interest Rate (per cent)	Bond Rating	
					Moody's	S & P
Alabama HFA	12/1/81	100.00	13.47	13.85	A1	AA-
Alaska HFC	11/1/81	100.00	12.50	10.00a	AA	AA-
Alaska HFC	12/1/81	100.00	11.54	10.00a	AA	AA-
Connecticut HFA	12/15/81	200.00	12.89	13.50	A1	AA
Hawaii HA	12/1/81	20.00	12.81	12.87	A	A
Idaho HA	12/1/81	30.07	12.79	13.00a	-	A
Kentucky HC	12/15/81	36.00	13.22	-	Aa	AA
Louisiana HFA	12/1/81	150.00	11.81	13.50	Aa	AA-
Michigan SHDA	12/1/81	25.00	13.79	-	A	AA-
New York SMA	11/1/81	104.75	10.97	14.00	Aa	AA-
North Carolina HFA	11/1/81	30.00	12.80	13.30	A1	A1
Oklahoma HFA	12/1/81	100.00	13.72	13.90	A	A
Rhode Island HMFC	12/1/81	40.00	12.95	13.75	A1	A+
Rhode Island HMFC	12/15/81	25.00	13.92	14.60	A1	A+
Tennessee HAD	12/1/81	50.00	13.96	12.00	A1	A+
Virginia HDA	12/1/81	100.00	13.28	13.70	A1	AA
Wisconsin	8/1/81	10.05	11.50	12.31	Aa	AA-
Wyoming CDA	12/1/81	75.00	13.46	13.00	Aa	AA-

Source: US Congressional Budget Office (1982)[bu]

Bonds for Owner-Occupied Housing

Tax-exempt bonds for owner-occupied housing were first issued by California after World War I and by Oregon shortly after World War II. The rationale was to provide veterans mortgage loans at below-market-rates. In the early 1970s, State housing agencies began to issue tax-exempt bonds to finance mortgages on single-family housing for all residents with low or moderate incomes. In 1978 cities and counties started issuing bonds, too; at the same time, State agencies shifted their housing delivery efforts from rental housing to owner-occupied housing that was often targeted at middle-income families and located in suburban areas[bs].

The operation and management of each bond programme is slightly different. Some State and local housing agencies have adequate capacities and play an active role in the routine management of their programmes, while others lack appropriate personnel and consist of boards of local citizens who only meet to approve bond issues. However, the basic principles of the issues are all the same. Bond proceeds are on-lent to private financial institutions for mortgage lending according to rules laid out by the issuer. The private lenders process loan applications, automatically accepting those that meet the following criteria: (1) the issuer's eligibility requirements; (2) any restrictions imposed by federal and State laws; and (3) the borrower's creditworthiness. Those homeowers who have been granted mortgages make monthly repayments to the lenders, who forward the money to another financial institution which pays the bondholders. The bonds are generally not secured by the issuer's credit; bondholders and mortgage issuers assume the risks of bad mortgages. Federal government subsidies are shared by bondholders and homebuyers, with another portion also going to the various intermediaries in the process[bt]. Table 6.3 shows some of the bonds issued in 1981 for mortgages on owner-occupied housing backed by State housing agencies.

Many State and local governments have consistently imposed low-income limits on homebuyers whose mortgages are financed by tax-exempt bonds. In particular, beneficiaries must be first-time buyers. There are also

Table 6.4 Percentage of Mortgage Funds Expected to be Used for Newly Constructed Housing (by the 10 Largest Bond Issuers, 1998)

Issuer	Amount of Issue (USD million)	Value of Mortgages (USD million)	Value of Morgages on New Housing (USD million)	Percentage of Mortgage Funds for New Housing
Connecticut HFA	200.0	170.6	30.0	18
Louisiana HFA	150.0	134.1	63.7	48
New York SMA	104.8	89.0	26.7	30
Alabama HFA	100.0	87.6	61.3	70
Alaska HFC	200.0	235.5	82.4	35
Oklahoma HFA	100.0	97.5	N.A.	N.A.
Virginia HAD	100.0	85.3	59.7	70
Wyoming CDA	75.0	64.9	58.4	90
Montgomery County, Maryland HOC	75.0	64.9	58.4	90
Rhode Island HMFC	65.0	63.2	6.3	10

Source: US Congressional Budget Office (1982)[bw]

restrictions on the prices of housing units that can be bought with mortgages financed by tax-exempt bonds. The limit for new houses located outside targeted areas is 90 percent of the area median price of new houses. Limits in targeted areas are 110 percent of the area median price of new and existing houses. Data is vary scarce on whether mortgages financed with tax-exempt bonds go to newly constructed as opposed to existing housing units. The proportion varies across States[bv]. Table 6.4 shows that the percentage ranged from 10 percent newly constructed in Rhode Island to 95 percent in Montgomery County, Maryland.

Bonds for Rental Housing

The first tax-exempt bonds for rental housing were issued by New York State in 1955. In the early 1970s, many other State housing agencies also began to issue bonds for rental housing. In the mid-1980s, these agencies became heavily involved in the 'Section 8' housing project programme, under which the federal government pays private project owners a large portion of rent on behalf of low-income tenants. Housing agencies issue tax-exempt bonds to finance construction of privately-owned 'Section 8' apartment buildings. The Housing Act of 1937 habilitated local housing agencies, non-profit organizations and individuals designated as public instrumentalities to issue tax-exempt bonds. In the late 1970s and early 1980s, most tax-exempt bonds issued by State housing agencies were used to finance 'Section 8' projects, while some others supported market-rate rental housing. The mortgages on market-rate housing projects are issued by the Federal Housing Administration (FHA). The Mortgage Subsidy Bond Tax Act of 1980 subjects tax-exempt bonds for rental housing to two new requirements: (1) all bonds issued after 1 January 1992 must be issued in registered form, which means that the trustee or some other party must have a current record of the names of all bondholders. The maintenance of a record of bond bearers will make it easier to collect estate and gift tax[bx].

Bonds for Home Improvement Loans

Tax-exempt bonds can be issued for home improvement and rehabilitation loans as well as for home mortgages. Loans financed with bonds are insured by the Federal Housing Administration (FHA) and payable over a 15-year period. Home improvement projects financed with these loans must improve the basic conditions or energy efficiency of a housing unit. Authorised improvements under such loans include plumbing and electric system renovation, kitchen remodelling, and additions to living space. Home improvement bonds are subject to all the restrictions imposed on owner-occupied housing, except the purchase price and first-time homebuyers rules, and are limited in sizes[by].

Housing Banks

The Government Housing Bank in Thailand

The Government Housing Bank (GHB) was established under the Thai Ministry of Finance by the Government Housing Bank Act and was officially open for business in 1953. The bank had an initial capital of 20 million

Table 6.5 GHB Financial Performance (THB million)

	2004	2003	2002
Total Assets	448,437	377,004	333,005
Total Liabilities	425,584	357,428	316,236
Government Capital	17,320	17,320	17,320
Equity	22,853	19,576	16,769
Interest Income	15,256	14,968	15,489
Other Income	1,043	1,127	778
Total Income	16,299	16,095	16,267
Net Profit	4,644	3,607	2,112
Net Profit/Total Income	28,49	22.41	12.98
Return on Equity	20.32	18.43	12.59
Return on Assets	1.04	0.96	0.63

Source: GHB Annual Report 2004

baht (THB) The primary objective of GHB is to provide housing mortgage loans for low- and medium-income households. The bank offers residential mortgage loans, house building and purchase loans or for existing housing renovation. GHB currently operates through 107 main branches and 38 sub-branches throughout Thailand[bz].

One of the GHB's main functions is to mobilize funds for on-lending to home buyers in the form of affordable mortgages. On top of this, GHB also undertook land development, housing construction, property rentals, and hire-purchase, and acted as a developer of residential real estate. In 1972, several of these roles were taken over by the newly created National Housing Authority. This allowed GHB to concentrate on mortgage loans and other related financial services. GHB provides financial support to the National Housing Authority and private housing developers in the form of financing and guarantees[ca].

The GHB grows at a brisk pace, has a very significant market share and generates substantial net profits. It is the leading housing finance lender in Thailand, providing about 30 per cent of all new residential mortgages. As of 30 September 2004, GHB had outstanding loans worth THB 369.16 billion which accounted for about 38.5 per cent of the whole Thai market (THB 962.27 billion)[cb]. Total GHB assets increased from THB 14.6 billion in 1987 to 448.44 billion in 2004 when liabilities stood at THB 425.49 billion. Before 1984, GHB funding came mainly from off-shore sources and local intermediaries. Nowadays, deposits from the general public are the major source. Other sources of funding are GHB-issued bonds and other domestic borrowing[cc] (Table 6.5). The bank's non-performing loans are at 11.17 per cent of the amount outstanding, or THB 41.13 billion.

The GHB branch network is not wide-ranging, keeping overheads low. The bank has started to offer higher deposit rates and lower lending rates without any subsidy from the government. In 2006, fixed deposit interest rates were 3.75 per cent for one year, four per cent for two years, 4.25 per cent for three years, and 4.50 per cent for five years[cd]. GHB offers a range of mortgage loans with lower interest rates: (1) loans to purchase land with house; (2) loans for home repairs and expansion; (3) loans to buy condominium units; (4) refinancing loans; (5) additional loans on existing accounts. A borrower can borrow up to 80 per cent of the property value, and can choose a fixed or an adjustable interest rate. Maximum loan maturity is 25 years. For the savings-and-loans scheme, borrowers are required to make 24 monthly deposits to qualify for a loan that is 75 times the instalment saving amount. The scheme is specially designed to assist those borrowers who work in the informal sector, or the self-employed who have difficulties to prove their income or credit-worthiness through formal means. If employers maintain deposits equal to or higher than the total loan amount, interest rates (which are pegged at one to two per cent above the deposit rate) can be further lowered,[ce].

In 2006, GHB interest rates were as follows: one year: 3.5 per cent; two-year fixed step-up: 4.75 per cent for the first year and 5.0 per cent for the second year. Five-year fixed step-up rate: 5.25 per cent for the first year, 5.75 per cent for the second year, 6.25 per cent for the third year, 6.75 per cent for the fourth year, and 7.25 per cent for the fifth year. The 10-year fixed step-

Table 6.6 Interest Rate on GHB Loans Offered to Individuals in 2006

Loan Maturity	Annual Interest Rate (per cent)
1 year fixed	3.50
2 years fixed step-up rate	
1 year	4.75
2 years	5.00
3 years fixed step-up rate	
1 year	4.75
2 years	5.75
3 years	6.75
5 years fixed step-up rate)	
1 year	5.25
2 years	5.75
3 years	6.25
4 years	6.75
5 years	7.25
10 years fixed step-up rate	
1 year	5.25
2 years	6.25
3 -10 years	7.00
Fixed interest rates for borrowers opting out of floating rates	
3 years fixed step-up rate	
1 year	5.25
2 years	6.25
3 years	7.25
5 years fixed rate	
1 -5 years	6.25
5 years fixed step-up rate)	
1 year	5.25
2 years	5.75
3 years	6.25
4 years	6.75
5 years	7.25
10 years fixed step-up rate	
1 year	5.25
2 years	6.25
3 -10 years	7.00

Note: Data as of 2 February 2006

Table 6.7 Capital Raised through Bond Issuance, 2000-2005 (cedi million)

Bond Holders	2000	2001	2002	2003	2004	2005
Ghana Government	30,145	37,870	44,034	49,362	57,401	64,523
SSNIT (National Pension Fund)	60,221	87,609	103,246	115,738	133,448	151,286
HFC Unit Trust	507	648	748	535	-	-
HFC $ Housbond	71,841	69,076	78,956	63,945	59,634	50,253
HFC £ Housbond		12,906	16,068	18,818	20,877	18,829
Total	162,714	208,109	243,052	248,398	271,360	284,891

Source: Akuffo (2006)

up rate was 5.25 per cent for the first year, 6.25 per cent for the second year and 7.0 percent for the period from the third to the 10th year (Table 6.6). GHB also offers re-financing to holders of mortgage loans with higher interest rates. Taking their cue from the GHB, commercial banks have alsotaken to lower their own rates in order to keep customers. Such competition in the home loan industry generally brings down lending rates, making homes more affordable to borrowers. In 1980, the cheapest new private-sector housing unit on the market was affordable to only 15 per cent of households in Bangkok; today, the proportion has soared to some 80 per cent under GHB housing loan conditions. About 40 per cent of the borrowers are women. GHB also runs a dedicated home-loan programme for rural co-operatives. The bank provides funds at wholesale interest rates to co-operatives for them to on-lend to members for housing-related purposescf.

Thailand's GHB plays a significant role in achieving government policy initiatives. In addition to developing innovative financing options, the Government Housing Bank helps to develop an appropriate legal infrastructure and the mechanisms for converting slum-dwellers' and squatters' informal rights into legal rights. GHB enables low-income individuals with no prior credit histories to purchase homes. The scheme is based on the hire-purchase contracts from the National Housing Authority, which holds the titles on these properties for three to five years while purchasers repay loans. Once a borrower demonstrates their ability to pay with these hire-purchase contracts, title is transferred and the Government Housing Bank grants the purchaser/ borrower a loan mortgaged on their homecg.

The Home Finance Company Limited in Ghana

The government of Ghana established the Bank for Housing and Construction (BHC) in 1973 to boost the housing finance industry. However, BHC was unable to focus on housing finance and shifted to commercial banking. Mobilising long-term capital was too much of a challenge due to the poor savings associated with the harsh macro-economic conditions of the mid-1970s and the 1980s, which combined high interest rates, substantial non-performing bank assets and an over-valued currency. BHC was eventually liquidated in the year 2000.

The Home Finance Company Limited (HFC) was another specialized institution which the World Bank sponsored in 1990 as a special vehicle to promote housing finance. HFC was owned by the government of Ghana, the National Pension Fund (SSNIT) and Merchant Bank (Ghana) Ltd. Initial capital was USD 24.4 million, including a USD 7.2 million, 30-year loan from the World Bank, a USD 16.2 million 20-year loan from SSNIT and a USD 1.0 million technical assistance grant from the World Bank[ch].

HFC acts as a fund raiser for primary mortgage lenders – mainly commercial banks. HFC raises funds from the World Bank and SSNIT and through bond issuance, and on-lends the proceeds to primary mortgage lenders. HFC has already raised USD 18 million on the Ghana Stock Exchange through a number of five-year bond issues – the only listed corporate bonds on the Ghanaian capital market. Table 6.7 details the capital raised through bond issuance[ci].

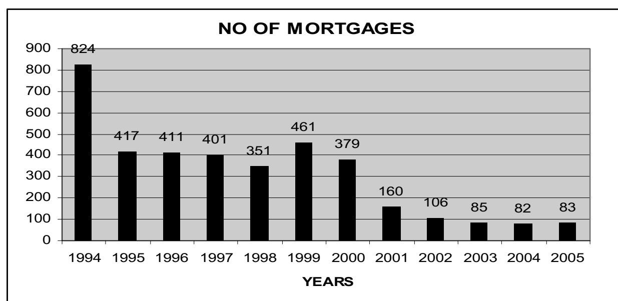
Specialised lenders provide mortgage loans to moderate-income earners. The loan-to-value ratio is 80 per cent or under. Interest rates are determined by the three-month average change in the consumer price index, plus 3.5 per cent. Bondholders earn a yield equivalent to the rate of inflation plus one per cent. Originators and servicing institutions earn a 1.5 per cent fee on the mortgage portfolios under their management. HFC earns a one per cent fee to cover management expenses. However, commercial banks consider this margin as too low for them to commit resources to originate and manage loan portfolios[cj].

HFC also raises funds on the capital market through public share offerings. HFC became a public company listed on the

Ghana Stock Exchange in 1994. Today it has more than 1,000 shareholders, but 95 per cent of the shares are held by only eight institutions. HFC obtained a deposit-taking license in 2001 and a universal banking license in 2003 in order to offer commercial, mortgage and investment banking services. In 1991, the bank established an HFC Unit Trust to pioneer a collective investment scheme. Today, HFC manages three funds that are valued at USD 23 million[ck].

So far, HFC has granted more than 3,000 mortgage loans, some 90 per cent of which were for new housing units. However, for all the efforts to diversify funding sources through public bond and share issues, the number of mortgage loans has been decreasing rapidly since 2001. This has prompted HFC to re-think its role as a specialized mortgage lender and to diversify both functions and funding sources (Figure 6.5). HFC realized that capital market funding was more expensive than other sources. Accordingly, its strategy for the future is to attract lower-cost deposits, which caused HFC to turn into a universal banking institution in 2003[cl].

Figure 6.5 Number of Mortgage loans granted



Source: Akuffo (2006)

Rent-to-Purchase Housing Schemes

The Rent-to-Mortgage Scheme in the UK[cm]

The UK's Rent-to-Mortgage scheme is an upshot of Right-to-Buy. Under the Right-to-Buy scheme, public (i.e., council) housing tenants and some housing association tenants can buy their homes at a discount. The rate of the discount depends on the length of time as a public housing tenant, up to a limit. The Rent-to-Mortgage scheme makes home buying more affordable for public housing tenants, as it allows them to become homeowners through payment of only a portion of the Right-to-Buy price. The buyer can obtain a mortgage from a bank or building society. A public housing tenant buys a housing unit with an initial (partial) payment. Since the initial payment is smaller than the full Right-to-Buy price, the landlord retains a share in the value of the property. The share owned by the buyer is a function if his/her initial payment. If the buyer pays 70 percent of the Right-to-Buy price, the landlord's share in the property value is 30 percent.

The buyer cannot pay less than a minimum, or more than a maximum, initial payment. The minimum initial payment should reflect the amount which banks or building societies may be willing to lend the buyer on a standard 25-year repayment mortgage. This is based on the premise that the minimum initial payment should reflect what the buyer can afford for a mortgage on which the monthly repayment is equivalent to current rent the buyer is paying. While the maximum initial payment is 80 percent of the Right-to-Buy price, those buyers willing to pay more can purchase the housing unit outright under the Right-to-Buy scheme.

A buyer receives a discount on the initial payment. If the property is a house, the discount rate starts at 32 per cent and increases by one per cent for each additional year to a limit of 60 per cent. If the property is a flat, the discount rate starts at 44 per cent and increases by two per cent a year to a limit of 70 per cent. Once s/he makes the initial payment, the buyer will own the property on freehold (although the formal landlord will have a share). If the property is a flat, the buyer will be given a long lease, normally 125 years.

Trusts

The Community Development Trust in the USA[cn]

The Community Development Trust (CDT) is the only private real estate investment trust with a public purpose. CDT makes long-term debt and equity investments in affordable projects. CDT was established in 1998 by the Local Initiative Support Corporation (LISC) and a number of socially motivated institutional investors. CDT operates like a mutual fund, mobilising capital from institutional investors to acquire or provide financing for affordable housing. All CDT investments must meet the requirements laid out in the Community Reinvestment Act (CRA). CDT invests in long-term debt capital through purchases of smaller, fixed-rate multifamily mortgages from community lenders. The trust also invests in equity capital either in cash or by providing a tax-advantaged transition for existing properties to a new set of owners committed to long-term affordability.

CDT operates a debt programme that creates a secondary market for smaller Low-Income Housing Tax Credit (LIHTC) loans. CDT leverages its own, limited capital as it mobilizes institutional investors to purchase a 90 per cent senior interest in each loan, with CDT holding a 10 per cent subordinate interest. In this way, for every million dollars worth of capital, CDT leverages USD 10 million in loans. For example, CDT signed an agreement

with a socially motivated pension fund – the General Board of Pensions and Health Benefits of the United Methodist Church (GBPHBUMC). The pension fund agreed to purchase a senior interest in each mortgage loan subject to certain underwriting criteria, and CDT retains the subordinate interest. GBPHUMC initially provided USD 30 million in capital, raising it to USD 100 million by 2004. CDT proposed to repurchase a portion of GBPHUMC senior interests and then combine them with CDT-retained subordinate interests. The next step for CDT was to securitise the whole loan portfolio for sale in the open market. The pool totaled USD 44.9 million and consisted of 31 affordable multifamily housing mortgages and more than 2,000 affordable housing units. CDT swapped the mortgages for an equal amount of Fannie Mae mortgage-backed securities (MBSs). The MBSs were then sold to JPMorgan Chase (JPMC).

The loans had an average balance of USD 1.4 million and were secured by properties; the majority were on properties featuring LIHTCs. Repurchasing the senior interests CDT had previously sold to GBPHUMC enabled CDT to expand its programme capacity while demonstrating its ability to securitise the previously illiquid senior interests. The transaction provides GBPHUMC and CDT four major benefits. First, GBPHUMC's ability to sell its senior interest at market prices validates the underlying value of senior interests. Secondly, securitization provided liquidity to CDT, freeing up the capital committed to its existing subordinated holdings. Thirdly, securitization effectively reduced CDT's credit enhancement to a level below the level provided to GBPHUMC. Finally, the repurchase of the seasoned senior interests enabled CDT to deliver new senior interests on a dollar-for-dollar basis, thereby increasing its capacity.

The Broken Dream: Low Income Housing Finance - Subprime Lending[co]

It is ironic that the innovative housing finance instruments for low income people once help millions of people to realize their dreams to have decent homes and now also break dreams of millions. During the last couples of years, millions of people lost their homes and about 50 providers of housing credit for low come people through subprime lending have gone out of business. It results in nationwide subprime lending crisis in USA and affects the global housing and financial market in 2007.

Homeowership Dream through Promotion of Subprime Lending

The subprime mortgage market was formed mainly because of the political will of the Bill Clinton administration to push homeownership to record levels through promoting low income homeownership. Low income people find it difficult to access credit in the formal housing finance system. In the US finance parlance, 'prime' borrowers are those to whom their good credit histories and ability to pay. Subprime lending refers to B-paper, near-prime, or second chance lending, in other words to make loans to borrowers who do not qualify for best market interest rates because of their deficient credit history. Subprime lending is risky for both lenders and borrowers due to the combination of high interest rates, poor credit history, and unstable financial situations often associated with subprime borrowers. Because of the high risks associated with subprime lending, lenders use a variety of methods to offset these risks such as charging a higher interest rate. Subprime mortgage loans have a much higher rate of default than prime mortgage loans.

Because low income people are often denied access to housing finance on the conventional housing mortgage market, they can regard subprime lending is an opportunity window for access home loans to purchase homes. About 21 percent of all mortgage originations between 2004 and 2006 were subprime, and totalled US$ 600 billion in 2006.

Subprime loans have been typically distributed by so-called local Community development banks (CDBs) which serve low-income areas. CDBs can apply for formal certification as a Community Development Financial Institution (CDFI) from the Community Development Financial Institutions Fund at the US Treasury Dept. The CDFI Fund promotes economic revitalization in distressed communities throughout the USA by providing financial assistance and information to community development financial institutions. CDBs/CDFIs can also apply for a State banking charter (from State banking authorities) or for a Federal banking charter (from the Comptroller of the Currency at the US Treasury Dept.).

The benefits of US Federal mortgage insurance through Fannie Mae and Freddie Mac had so far been restricted to the US middle class and did not extend to lower-income segments. Things have changed: by 2002-2003, the two institutions decided that the middle-class market was mature and would not grow as it had over the past few decades; consequently, they began to insure the higher tier of 'subprime' mortgages (which had emerged in the 1990s), which they saw as the next source of growth for their business. They issued securities backed by these mortgages (MBSs); the interest on the securities was paid by individual borrowers' mortgage repayments; Wall Street firms bought the securities and distributed them across their range of investment funds; when individual borrowers began to default on mortgage repayments, it began difficult to pay interest on the securities; the firms/the funds found themselves stuck with bad-quality

securities they could not sell to anyone; instead they had to sell good quality securities on the stock exchange to make up for their 'subprime'-related losses.

The Broken Dream: the Subprime Lending Crisis

The subprime mortgage financial crisis refers to the sharp rise in foreclosures in the subprime mortgage market that began in USA in 2006 and became a global finance crisis in July and August 2007. It caused some subprime mortgage lenders to fail or file for bankruptcy, such as the USA's second largest subprime lender – New Century Financial Corporation. The failure of these lending companies caused the prices of the mortgage-backed securities to collapse. By January 2007, there was 810 billion USD subprime mortgage-back securities which are large enough to affect the entire housing market and the broad economy and spread the impact on the global financial market. The Hong Kong Hengshen Index dropped 924 points on 17 August 2007 which was even more than the drop on 11 September 2001.

Factors Driving the Subprime Lending Crisis

What triggered the crisis in 'subprime' loans? Developers had a double role in the subprime crisis. Their vested interest was in building and building and building for profit, which they did, causing a fall in house prices in the USA. They managed to do this partly by introducing would-be buyers to mortgage lenders: they bloated applicant income and other data and pushed adjustable-rate, interest-only, and other risky loans. This was how in some cases they deliberately attracted a financially marginal clientele who could not afford conventional mortgages – abetting some of the reckless mortgage lending that exposed borrowers to higher risks than they could bear.

The main cause behind the crisis remains reckless mortgage lending. The loans were granted by credit unions and so-called 'community development banks'. CDBs are designed to serve residents and spur economic development in low- to moderate-income (LMI) geographical areas. They provide retail banking services (including mortgage loans) and usually target "financially underserved" customers. Subprime borrowers frequently pay higher points and fees and are saddled with more unfavourable terms and conditions. Some CDBs were predatory (including those who granted subprime loans to borrowers who would have qualified for 'prime' terms and conditions), others (including faith-based, often Christian fundamentalists) were simply reckless in their lending practice.

Countrywide Financial, the largest US mortgage lender, boasts that it will grant loans to four out of five borrowers who have what it calls a 'less than perfect credit rating'. These subprime borrowers are colloquially known as 'ninjas' (for 'no income, no job, no assets'). The problem is that they did not understand the mechanics of their loans in the first place. They did not see that initial terms and conditions were very undemanding, only to escalate sharply after a couple of years or so. Many borrowers were caught between a fall in house prices and a sudden rise in interest rates on their loans (plus an upward trend in the cost of credit in general in the USA), and the attendant surge in monthly repayments proved unsustainable. Strings of delinquencies and bad loans ensued, hitting MBS issues. With the fall in house prices, lenders could not recover their full losses through repossession of failed borrowers' homes. For these reasons a good many lenders and borrowers ended up bankrupt – with borrowers losing their lifetime savings and ending up in the rental market where they had started in the first place.

Lessons

Subprime enabled some borrowers access to next-to-prime loan conditions – a less biased credit-scoring system might have admitted them to 'A' ratings.

The current shakeout is caused by a re-assessment of risk. For borrowers who have employment, reasonable credit histories, and within limits of debt-to-income ratios, not much will change. Fully documented loans will still get the best pricing and terms considered by lenders as lower risk.

- Behind the subprime bubble was poor scrutiny and disregard for one of the cardinal rules in banking – 'know your client' - is taken very seriously in some developing countries.
- An obvious need for better supervision/regulation of community banks/subprime lenders: it is believed that thousands of financial institutions serving the needs of low-income people or communities in the USA either have not applied for CDFI status, or have otherwise not been able to fulfill all of the requirements for formal CDFI certification, and therefore have not benefited from CDFI Fund expertise and financial support.
- Existing community banking-related programmes should be more effectively implemented. Lenders may be required to condition loans on an understanding of credit and family budget management issues (as some low-income lending schemes are already doing in developing countries). Many State governments run special schemes that can help first-time homebuyers in selected price ranges to access affordable housing finance. The schemes typically involve courses in family budgeting and home care/maintenance; they also include 'Home Buyers Clubs' to help would-be borrowers put themselves in positions that will qualify them for housing loans. Those borrowers who have

been through the programmes and have eventually qualified for special mortgage loans have been found to have lower rates of foreclosure.

- As suggested by US Federal Reserve Board chairman in March 2007, mortgage guarantors Fannie Mae and Freddie Mac may be required by Congress to limit their massive holdings to guard against any danger their debt poses to the overall economy. "Legislation to strengthen the regulation and supervision of GSEs (government-sponsored enterprises) is highly desirable, both to ensure that these companies pose fewer risks to the financial system and to direct them toward activities that provide important social benefits,"
- Emphasis at Fannie Mae/Freddie Mac would be on social programmes that boost first-time home buyers and at the same time try to make said programmes more affordable. More effective implementation of its CDFI-targeted 'My Community' programme may be required of Fannie Mae.
- Low-income borrowers in the USA would not end up as complete losers when the dust settles on the subprime crisis.

Chapter 7: The Multilateral Financial Institutions and Low-Income Housing Projects

The Inter-American Development Bank and Low-Income Housing Finance

Financing the Construction of Housing Units

During the 1960s, the Inter-American Development Bank (IDB) on average approved five housing loan projects per year. The projects adhered to the then predominant approach, namely, building completed housing units for low-income households. Projects were implemented by central government agencies, and housing units were assigned to beneficiaries with soft repayment conditions. This approach had several drawbacks. High housing standards put these projects out of reach for lower-income households, despite the direct and indirect subsidies included in the financial terms. The benefits of subsidies finally went to middle-income households. On the other hand, the high standards made the housing attractive and boosted their market value, inducing the original beneficiaries to sell the units to higher income households[cp].

The cost recovery of the IDB housing projects was poor. Most beneficiaries had irregular income patterns, which prevented them from making regular repayments under the transfer terms imposed by the executing agencies. Loan defaults were widespread, since public agencies found it difficult to enforce repayment requirements. Moreover, subsidised interest rates below the cost of funds made the executing agencies unable to recover the cost of capital. The seed capital provided through IDB loans was exhausted rapidly, making it difficult to replicate and upscale the projects, which were financially unsustainable. The financial institutions involved required regular replenishment of funds from the government budget[cq].

The Sites-and-Services Approach to Low-Income Housing

Due to the failure of these financing methods, the IDB significantly reduced its involvement in the 1970s, sponsoring only three projects during that period. Two of the projects were for integrated urban development with a low-income housing component. The Bank turned away from financing completed houses and shifted financing to the sites-and-services formula. In this respect, IDB took to financing services for minimum-size housing lots. The services included potable water, sanitary disposal of waste water, roads, drainage, electricity and individual connections to the services. Beneficiaries built their own dwellings on the serviced lots through self-help, community/co-operatives or other mechanisms. Slum upgrading projects broadly fell in the sites-and-services category. Although slum upgrading efforts focused on rationalization of land uses and provision of secure land tenure, they also included other services similar to those in sites- and-services projects, which could reach wider segments of the low-income population and reduce the need for subsidies[cr].

Sites-and-Services Projects - In 1984, Costa Rica financed a sites-and-services programme through an IDB loan. The programme was for provision of 2,900 serviced plots for households earning less than 2.5 times the minimum wage. Each serviced housing plot was about 100 m^2, with access roads, potable water, sewerage and electricity. Also included was the construction and equipment of a sanitary unit connected to the public utilities. The programme also provided loans enabling beneficiaries to purchase construction materials and build core units of 14 m^2 either by self-help or community help. The loans met 72 per cent of the construction costs of a basic housing unit, with subsidies providing the balance. In 1994, after a three-year delay, 2,791 serviced plots were finally completed. However, the cost was 40 to 80 per cent higher than scheduled. Two and a half years after completion, all the serviced plots had been allotted to beneficiaries and 73 per cent were occupied. Within two years of occupancy, over 70 per cent of households had built at least a one-bedroom house on their serviced plots and 50 per cent enjoyed the benefit of two bedrooms. House sizes ranged between 44 and 66 m^2. Most beneficiaries completed their houses through self-help rather than community help[cs].

Low-Income Housing as A Component of Integrated Urban Development Projects - One such project was at Buenaventura, Colombia in 1977. IDB financed the installation of serviced lots to house the displaced population who previously resided in low-lying flooded areas close to the sea. In the course of implementation, the project underwent significant alterations to the original designs, causing delays and cost overruns. The location and low standards of the site-and-services project did not attract the target families. Eventually, the serviced plots were used by newly arrived low-income migrants rather than the originally intended groups. The project ended

up providing higher subsidies to beneficiaries and the implementation agencies absorbed the cost, which made it even more difficult to sustain the efforts[ct].

The Market-oriented Sector Approach to Low-Income Housing

The 1980s saw the rise of privatization around the world. The IDB was affected by this global shift in perspectives. As a result, the Bank has taken to place more emphasis on the private sector in housing supply and provides long-term mortgage loans for households, while the government acts as market regulator and facilitator[cu].

Isolated projects have proved incapable of solving the housing problems of low-income households. IDB-financed housing has often been occupied by higher-income groups and proved unsustainable. To ensure that projects reach the targeted low-income groups, one must examine the operations of the housing submarkets and take a sector approach to project design and implementation. Any projects for low-income households should be based on a review of the housing markets in which they operate, particularly with regard to the constraints affecting demand and supply of low-income housing. Projects should dovetail with the local housing markets in order to serve a specific target population as part of a coherent system[cv].

The Asian Development Bank (ADB) and Low-Income Housing Finance: The Case of Fiji [cw]

Project Background and Objectives

High land and building costs make it more difficult for many low-income households to afford adequate housing. This is why this segment of the population takes to squatting on land they do not own in order to establish informal housing structures. The private sector is mainly involved in developing and financing housing for upper- and middle-income households. It is not interested in low-income housing projects since profit margins (if any) are low in that market segment. However, the public sector lacks adequate resources to meet the challenges of housing for low-income households. The ADB's project in Fiji came as part of a wider joint initiative also involving the United Nations and other donors. The aim was to address the challenges and improve the housing sector's capacity to meet the needs of low-income households in the Pacific island-State. The project combined normative and operational objectives. Sponsors aimed at four main objectives: (1) establishing appropriate housing policies and standards to support low-income households; (2) strengthening public sector institutions to cope with the challenges of low-income housing provision; (3) improving sector efficiency; and (4) increasing the supply of affordable housing and mortgage finance for low-income households.

Project Components and Activities

The ADB project in Fiji had two components: (1) capacity building; (2) operational activities. The capacity building component included six items: (1) improvement of the operational and financial management of the Fiji Housing Authority (HA); (2) improvement of HA's management information system; (3) improvement in the operations of the newly created Public Rental Board (PRB); (4) development of housing and urbanization policies in Fiji; (5) development of operational guidelines for the new policies under the Ministry of Local Government, Housing and Environment (MLGHE); and (6) improvement of land use planning under the Native Land Trust Board (NLTB). The operational activities component involved the development of 3,320 fully serviced housing lots, provision of mortgage finance for the construction of 4,490 houses, and rehabilitation of 764 rental units for sale to existing tenants and other purchasers. The lots and houses to be financed were targeted for low-income households. The ADB financed improvements in the Fiji HA's management information system; improvement of 760 lots; mortgage finance for 1,570 houses; and rehabilitation of 404 rental units. The total cost of the project was USD 51.3 million, including 20.6 million in ADB funding. In 1989, the ADB granted Fiji a USD 9.6 million loan. The executing agencies were the HA, PRB, MLGHE and NLTB. The ADB also extended three technical assistance grants for the housing sector to support the loan. The project was completed in 1995 and the loan was closed in 1996.

Project Design

The focus of the project design was on housing affordability for low-income households in Fiji. The rationale was to lower the housing standards so as to bring costs down to meet the financial capacity of low-income households. In addition, the project also advocated an incremental approach to housing construction. Under this approach, households could build a very basic core house unit meeting the minimum standards of sanitation and structural strength, and extend the core housing unit over time according to their financial capacity. However, lower housing standards and incremental building were not widely adopted due to implementation problems; as a result, only the relatively better-off households could afford the lots and houses made available under the project.

The capacity-building component required to establish adequate land planning functions was not completed because of the personal problems of the consultant

Table 7.1 ADB-funded Housing Lot Development and Sales Data under the Project in Fiji

	Development Period	Development cost (FJD '000)	Lots w/o house	Lots w/ house	Total Lots	Average Lot Cost (FJD)
Tavakubu II	1991-1993	3,636	351	255	606	6,000
Tavakubu VI	1994-1996	1,530	156	125	281	5,443
Mnikovo	1994-1996	1,618	164	100	264	6,129
Total		6,784	671	480	1,151	5,894

in charge, who was not replaced on departure as the government was reluctant to use loan funds for this kind of capacity building.

One shortcoming of this ADB project in Fiji might have been lack of a better understanding of low-income groups. The target group of low-income households was broadly defined as those between the 13th and 70th income percentiles, which included 57 per cent of Fiji's entire population. The project failed to reach the genuine low-income households. Another issue was that the project design sometimes seemed to be influenced by ideological considerations, rather than what could work for the poor on the ground. For example, PRB had been put in charge of providing homes for households at the bottom tier of the low-income group, while at the same time the project required PRB to reduce the scale of its operations in favour of the lowest income group and to pursue privatization through sales of its housing stock. This externally-imposed directive ran against existing PRB objectives and practice, causing the body to withdraw from the implementation of the ADB project altogether.

Project Outcomes

Low-Income Housing Provision – ADB provided 1,151 lots, which was more than the expected 760 (Table 7.1). However, the project did not do so well when it came to improving the housing sector's capacity to cope with the challenges of providing for the low-income segment. In Fiji, the HA is the only significant provider of housing lots for low- and middle-income households in the formal sector. The PRB and the Housing Assistance and Relief Trust offer small amounts of rental accommodation and have not increased their stock much over a decade. The volume of housing produced by NGOs is relatively negligible, and the private sector focuses on higher income housing development. Between 1990 and 1998, the HA produced 6,070 housing lots and sold 6,165, of which 3,189 were provided under the ADB-sponsored project. The number of urban households increased by 16,000, of which more than 9,000 were on low incomes. Therefore, the delivery capacity of the housing sector was way behind the expansion in new households. As the housing shortage kept increasing, so did informal housing units – by 3,400, which exceeded the project's output of housing lots.

Supply of Mortgage Finance – The ADB project in Fiji provided 1,901 mortgage loans, way under the 4,490 that had been originally planned. ADB provided only 707 loans out of the 1,570 it was expected to grant. The bulk of the loans went to the upper segment of the low-income group or to middle- and upper-income households, since very low-income households could not afford the high costs of the housing lots. For example, the cheapest housing lots were sold HA for 3,606 Fiji dollars (FJD), and the cheapest HA offer was terraced houses for some FJD 24,000. The average mortgage loan was FJD 19,900, compared with an expected FJD 4,200average.

Lessons from the ADB Project in Fiji

Access to affordable land with title is essential to any improvement in the housing conditions of low-income households. Unless affordable housing alternatives are available, low-income households will continue to rely on informal housing.

Projects should define target groups more precisely, avoiding any excessively broad coverage. Where the intended group of beneficiaries is too broadly defined, some segments may in effect end up being left out although they may precisely be those with greater needs.

The ADB proposes a number of follow-up actions to further technical assistance with regard to institutional and policy issues. Of particular concern are the following points: (1) the need to strike a balance between housing standards and the financial capacity of low-income households; (2) the redevelopment of existing informal housing areas; (3) land availability for urban development and land use planning; (4) sorting out any overlaps and conflicts with regard to land subdivisions and building regulations; (5) defining a role for the PRB, and (6) strengthening the institutional framework for the housing sector as a whole.

Major Housing Sector Issues	Strategies/Alternatives
Inefficient Low- income Housing Programmes The government was providing public rental housing units to high standards and costs, and had to subsidise maintenance of the stock. In 1997, the government financed 20,000 public rental housing units for the poor.	The Ministry of Housing (MOH) had experimented with the construction of core units with full ownership - minimum size: 35-50 m2 - at a unit price 2.5 times as low as public rental housing units, and which was completed in less than one year. Private sector involvement significantly improved the construction process. A clear privatization-induced approach was in sight, increasing the rent-to-income ratio for public housing tenants.
Land Issues Although a new law liberalized the land market in 1990, the bulk of public land was not made available to the private sector, but was allocated to public entities at 80 per cent below the market price.	Efforts are in order if the 1990 law is to be implemented and the land market liberalised. The government planned to make public land available to the private sector through auctions, starting in 1998.
Housing Sector Financing and Cost Recovery The government's objective was begin slum eradication in the medium term within a fixed budget allocation. On the other hand, cost recovery from low-income households was almost non existent.	In 1997, the government spent five billion dinars (DZD) for low-income housing, supplying the equivalent of 25,000 housing units to the poor. in 1998 the government planned to spend DZD 12 billion a year and was committed to allocate the budget funds needed to upgrade all slums in the medium term. A full-cost recovery policy was set up for private land development, which was entirely financed by beneficiaries. Direct cost recovery from beneficiary participation was estimated at 20 per cent. Indirect cost recovery was to be be provided by local taxes and connection fees. The total direct and indirect cost recovery for poor households is currently around 50 per cent.

The World Bank and Low-Income Housing Projects: The Case of Algeria[a]

Project Background and Objectives

Severe Housing Shortages – In Algeria, the average increase in housing provision did not exceed two per cent between 1962 and 1995, while the country's population had been growing 2.7 percent a year (5.4 per cent in urban areas). The resulting severe housing shortage led to overcrowded housing conditions and the expansion of illegal settlements and slums. In 1995, more than 400,000 housing units were identified as unfit for habitation and 120,000 slum dwellings were in urgent need of redevelopment. The project sponsored by the World Bank aimed to encourage the government to shift public housing towards provision of sites and services and granting slum dwellers full ownership of core housing units.

Major Sector Issues - The World Bank project identified three broad sector issues, as follows:

Project Objectives - The World Bank housing project in Algeria aimed to address these issues in the following ways:

(1) The project proposed to distribute housing subsidies to the developers in charge of the construction works through the National Housing Fund. The government sells public land to developers at a cost equivalent to 20 per cent of the estimated market price. In the next step, the developer on-sells the land to beneficiaries. Infrastructure costs are paid through the government budget;

(2) Sector Financing: The project sought cost recovery through higher direct contributions from the beneficiaries; resource transfers to the National Housing Fund from the sale of public land were also to be improved;

(3) Land Issues: The project aimed to encourage the emergence of a proper land market and to facilitate the sale of public land at market prices, apart from

Table 7.2 World Bank Project Components in Algeria

Component	Category	Cost (USD million)	% of Total Cost	World Bank financing (USD million)	% of World Bank Financing
Site Development for Low- Income Households	Physical	213.5	98	145.8	68
Training, Research and Equipment to strengthen MOH and CNL (National Housing Agency) management and project management	Technical Assistance and institution building	4.8	2	4.2	88

adapting well-adjusted, affordable technical standards and granting beneficiaries secure titles on land;

(4) Improving the efficiency of slum upgrading and infrastructure programmes in two distinct ways: adapting urban standards to targeted beneficiairies' needs and financial capacities; and increasing private sector participation in such programmes;

(5) Provision of sites and services for low-income households;

(6) Strengthening institutional and management capacities.

Project Activities

The project came in two parts. One part was institutional capacity building within (1) the National Housing Agency; and (2) the Ministry of Housing at local level through training, project preparation and management. The second part of the project was to finance the rehabilitation of existing sites and the development of new ones through the provision of water, sewerage, roads and power, constructing core housing units and granting secure land titles to low-income households (Table 7.2).

The project provided basic services and core housing units to targeted beneficiaries. Basic infrastructure was provided in steps: (1) design and implementation of land servicing; (2) provision of housing core units to households living in inadequate conditions; (3) assigning land titles to those households in non-legal situations. The average infrastructure cost was estimated at DZD 1,600 per m^2. The project serviced about 50,000 lots. Land acquisition cost DZD 100,000 per lot. Developers paid DZD 20,000 per lot, the balance being absorbed by the government.

The physical improvement component of the project was funded by the government through the National Housing Fund, and the funding was managed by *Caisse nationale du logement* (CNL, or National housing fund). For each site, funds were allocated to developers under development agreements which defined the duties and responsibilities of each party (CNL, local town planning directorates (DLU/LDUs) and developers) as well as detailed financing plans.

The project provided core housing units of 30-40 m^2 free of charge to slum-dwelling households. Housing units included a room and adequate sanitary conditions, at a cost of about DZD 10,000 per m^2. A total 13,000 or so core units were financed under the project. Most were built by small and medium-sized enterprises (SMEs) through competitive bidding.

Implementation Agency

The Algerian Ministry of Housing appointed a Steering Committee to carry out its responsibilities in project implementation, such as site selection and approval of site development contracts. The committee also included representatives from the Ministry of Finance (MOF), MOH and CNL. A central project implementation unit, the Support Unit (SU) was to be be established in the MOH Urban Planning Directorate for project coordination. SU staff brings together technical, economical, financial and environmental expertise.

CNL was in charge of managing and monitoring all rehabilitation and development works. It was also to supervise the financial assessment of developers, approve expenditures for the works and make disbursements to

Table 7.3 Project Costs (USD million)

	1999	2000	2001	2002	Total
Land Acquisition	6.8	5.4	0.1	N.A.	12.2
Infrastructure	18.1	47.0	58.9	16.5	140.5
Housing	5.6	19.4	24.2	6.5	55.7
Design and Supervision	0.6	1.7	2.1	0.6	5.0
Consultant Services	2.5	0.4	0.4	0.4	3.7
Equipment	0.8	0.1	0.1	0.1	1.1
Total Project Costs	34.5	73.9	85.8	24.1	218.3

developers' subcontractors. CNL was also to build and manage a database on beneficiaries. CNL was established under the MOH in 1991. Its main functions are to manage public funds as part of the country's housing subsidisation scheme and to monitor and control allocation of subsidies to households.

Site Selection

The Local Directorates of Urban Planning (LDUs) prepared the site concept document, which included: (1) site data, complete with perimeter, housing construction quality, infrastructure and environmental conditions; (2) a local population census, identifying the beneficiaries and local associations; (3) the social objectives of subprojects; (4) tentative estimates for the financial plan, including government subsidies and local council endorsement of site selection. The MOH selected the sites based on physical features and development objectives.

Project Costs

The largest expenditure item in the project was infrastructure, which accounted for USD 140.5 million, followed by construction of the core housing units on the serviced lots (USD 55.7 million). Another USD 12.2 million went to land plot purchases (Table 7.3).

Chapter 8: Revolving Funds for Human Settlements

With housing revolving funds (HRF), loan repayment monies "revolve", i.e., are recycled and made available again for fresh loans. A revolving fund is either funded completely by users, or partly by users and partly by subsidization. The rationale behind revolving funds is to provide a funding mechanism with a business-like *modus operandi* on a commercial or quasi-commercial basis. Operational deficits must be covered off by draw-downs that incur interest charges. There is a fundamental difference between revolving fund activities and their equivalents in the private sector. A revolving fund generally has a mandate to recover full costs and to maintain the draw-down levels that correspond to the amounts shown in the business plan; by contrast, the objective of a private sector entity is to maximize profits[b].

However, slum formation and poverty have multiple causes, and lack of financial resources is not necessarily the main one. Access to credit cannot bring effective solutions if the basic problem is individual lack of skills, unsuitability for work and/or poor repayment capacity. Therefore, before proposing a revolving fund, all the conditions that will make the fund effective should be met. There is a tendency to assume that the main challenge in improving housing conditions for slum dwellers is their exclusion from institutional credit. As a matter of fact, access to finance does not only vary from one target group to another, but even within a single target group, there can be very significant differences in asset holdings, cash incomes and creditworthiness. The complexity and variety of slum-related issues call for proper appreciation of how a revolving fund would further the objectives of a project, and what makes a revolving fund an appropriate solution to the underlying problems. What are the obstacles to slum upgrading which the targeted group members are facing? In addition to finance, what steps can be taken to remove these obstacles[c]?

Designing Revolving Funds for Housing Programmes

Assessing Financial Needs

The first step in designing a housing revolving fund is to assess the target group's needs for credit – including the needs as they perceive them. The next question is: Do the existing channels of housing finance fail to provide the needed resources? Can a HRF be structured to address these needs? Housing revolving funds are often designed to assist low-income rather than median- or high-income households. Unlike well-off households, low-income people have no access to attractively-priced long-term financing. Financial mechanisms such as HRFs are typically designed to bridge this financing gap[d].

Maximising the Benefits of HRFs

When designing a HRF, the major social, economic and housing characteristics of the targeted group/community should be evaluated. This includes household size and composition, employment opportunities, income generation activities, income levels, housing types, housing construction modes and costs, living conditions, housing improvement needs, available financial resources, financing gaps, and the local community's degree of interest in slum upgrading and housing improvement. The targeted group/community should consider all the variables involved in a HRF : eligibility criteria, financing methods, leverage, uses of proceeds, terms and conditions, collateral and general administration. Housing revolving funds can make significant contributions to slum upgrading and housing improvement for low-income households, as they can provide the affordable funding these programmes require[e]. However, individual HRFs typically do not operate on any large scale, due to limited resources; therefore, they will not be in a position to meet all the credit needs of a targeted group/community. Consequently, a HRF will fit particularly well with any activities that link slum upgrading with local or community economic development opportunities which in turn, together with economic empowerment, will help maximize the benefits of the HRF.

The Revolving Fund for House Improvement Loans in the Dominican Republic

Objectives and Loan Policy

The Revolving Fund for House Improvement Loans (RFHIL) is one of the components of the Dominican Republic's Special Fund for the Promotion of Self-help Initiatives. Its overall objective is to improve living and housing conditions in slum areas. The RFHIL grants loans for repairs, improvements, extension and replacement. Loan sizes depend on individual repayment capacities. Loans enable poorer households to improve their shelter step by step. They can even take the form of building materials rather than cash. Loans are disbursed in stages as a function of the construction process and based on available budgets. Borrowers must contribute their own or paid labour whenever able to do so. They are required

either to mortgage the property, or to sign a notarized promissory note[f].

The Structure and Operation of the Revolving Fund

The initial funding of the Dominican revolving fund was provided by the German Society for Technical Cooperation (GTZ). The amount at the start was equivalent to USD 190,000, or some 1,130,000 Dominican pesos (DOP), which at an average loan size of DOP 3,000, could improve the shelter conditions of 376 households during the first project phase and before any loan recovery. GTZ provided funds for the acquisition of building materials and the hiring of labour. The Dominican National Housing Institute (INVI) acted as the implementing agency, providing personnel, office space as well as logistic and administrative services[g].

For the implementation of the revolving fund, two agreements were signed: a bilateral agreement between the Dominican and German governments, and an implementation agreement between the Dominican Planning Ministry, INVI and GTZ. Under this agreement, INVI was responsible for managing the fund, and GTZ was granted a right of control and supervision through its local project office, including periodic accounting and operational audits as well as review of quarterly financial and progress reports[h].

INVI established a Project Unit within its regional office in Santiago. The Unit also had a field office in Pekin where the targeted group was located. The Project Team consisted of a director, technicians, social workers, store personnel, an accountant, a lawyer and a secretary. The Project Team was responsible for the following functions:

- planning the loan schemes for house improvements;
- coordination, supervision and control of the revolving fund operations;
- marketing the project to residents;
- evaluating loan applications;
- designing and budgeting for individual house improvements;
- determining the creditworthiness of applicants;
- recommending endorsement or otherwise of applications;
- formalising loan contracts;
- supervision and follow-up of construction works;
- coordination and follow-up of loan recovery;
- preparing monthly and quarterly reports.

In the course of implementation, the Project Team held weekly and monthly meetings to assess performance and any problems, as well as to plan activities and prepare work schedules. The Project Director was directly responsible to the Director General of INVI, instead of the Division Level Director as in most schemes. There were three reasons for this. First, INVI is highly centralized and almost all decisions must be approved by the Director General. Secondly, as the revolving fund is financed by an external agency, the Director General prefers to supervise in person both project implementation and compliance with the agreement with GTZ. Thirdly, the project was regarded as politically sensitive, since it dealt with slum issues[i].

Loan Conditions

The main objective of RFHIL was to provide low-income households with access to home improvement loans with more flexible conditions, options and alternatives with regard to repayment capacity. Nevertheless, about

Table 8.1 Revolving Fund for House Improvement Loans – Loan Conditions

Type of Improvement	Maximum Loan Value (DOP)	Maximum Loan Period (Years)	Annual Interest Rate (%)	Percent. of Loans Per Type	Minimum Income Required (DOP)	Monthly Income (DOP)
Minimal	500-1000 (USD 79-158)	1.5	14	10	150-300 (USD 5-10)	31-62 (USD 24-48)
Basic	1100-3000 (USD 173-472)	2.5	14	25	218-600 (USD 34-94.5)	43-120 (USD 7-19)
Extension	3100 – 5000	3	14	50	530 – 850	106 -171
Reconstruction	5100 – 8000	6	14	15	515 – 825	105 -164

Source: UN-HABITAT (1991)[k]

30 percent of the poorest could not afford housing loans, and they did not consider access to credit as a priority. Dominican authorities also realized that they had to subsidise housing loans if these were to benefit the targeted group – lower-income households. RFHIL sought to reduce and rationalize the subsidies (which applied to interest rates only), offering various types of loans with different repayment periods. Loan size was determined by an applicant's monthly income and the share of that income available for housing expenditure (Table 8.1)[j].

Processing Loan Applications

The Project Team was trained in the practicalities of implementation. Loan applications were processed as shown in Figure 8.1. At any project field office, a social worker would give prospective applicants an information sheet about the scheme and loan conditions. The social worker would fill in the loan application form to avoid mistakes and misunderstandings. Applicants were asked to provide supporting documents, including an employment certificate (or income declaration) and a land-lease contract. In the next step, the project accountant would review the economic or financial background of the application. S/he would next determine maximum loan size and maturity based on monthly income, the amount of credit required and repayment capacity. This socio-economic evaluation would verify the data provided by each applicant. Based on these elements, the project technician would visit the applicant's house to measure the plot and house, and to prepare a sketch of the existing shelter. Having reviewed the structure, materials and space organisation of the house/plot, the technician would meet with the applicant, discuss the

Figure 8.1 Flow Chart of RFHILP Loan Application Processing

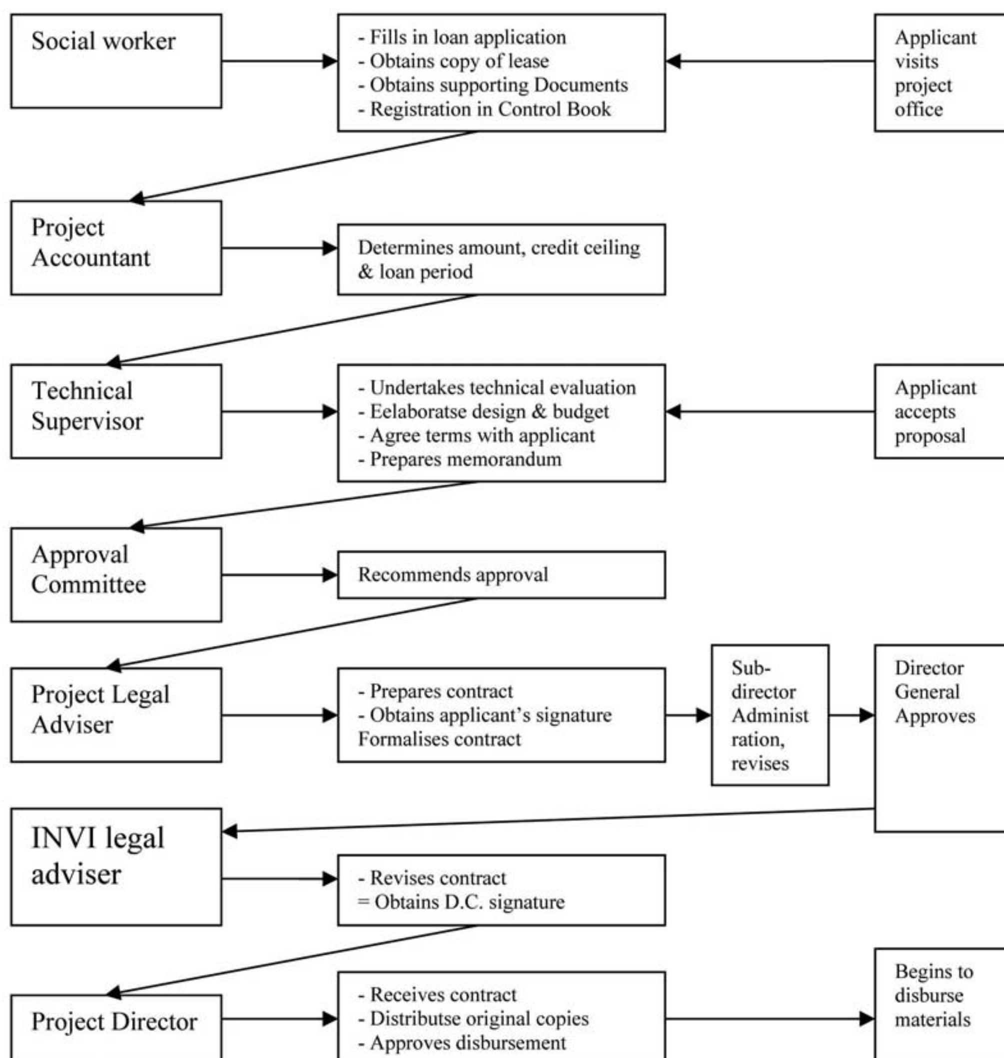
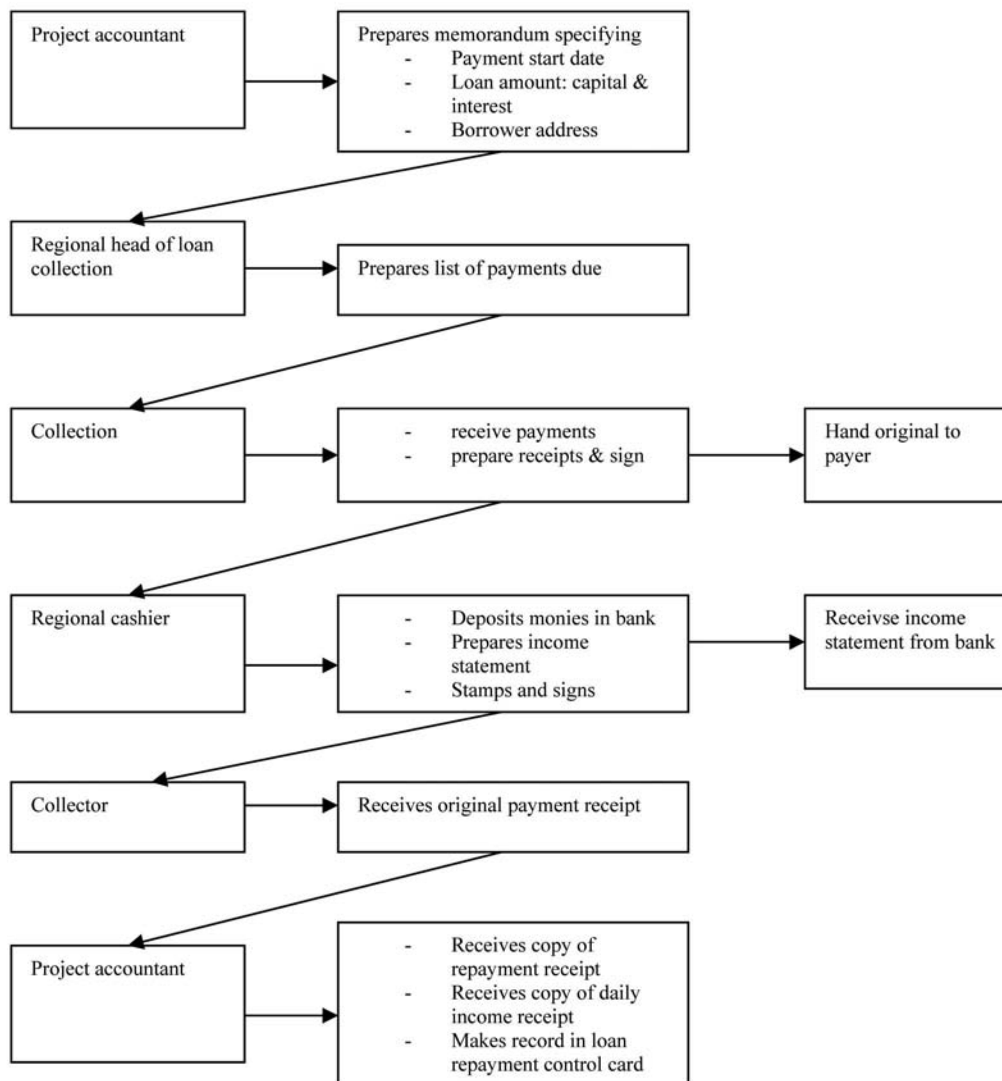


Figure 8.2 Flow Chart of RFHILP Loan Recovery Process



requested or proposed improvements, and estimate the costs. The technician would also conduct a loan analysis and advise on economic feasibility and affordability. Once feasible improvements were agreed upon, the technician would draw a rough sketch of the planned construction work, identifying the quantities and proceeding with the preparation of a budget based on the construction being planned and the disbursement schedule. Once the evaluation and budget were completed, the applicant's file was handed to the Approval Committee, which consisted of the project director, the technical supervisor, the project lawyer and the project accountant. After endorsement by the Committee, ,the file would go to the Head Office for final approval by the Director General or the Sub-Director for Administration, depending on the type of loan. Successful applicants were invited to the project's field office to sign the loan contracts[1].

Administration of Loan Recovery

After the final disbursement of building materials, the project accountant would open a loan repayment control card and inform the head of the collection section of INVI in Santiago by memorandum. The project accountant would prepare a list of borrowers, complete with payment amounts, schedules and addresses, and every month would hand the list over to the INVI debt collector. The collector would issue repayment receipts as needed (the original receipt going to the borrower with a copy for the daily list of recoveries, another for the project accountant and another one to the collection section). The Project accountant would prepare monthly reports on debt

recovery, specifying debit and credit items. The report went to the Director General and GTZ, together with the project progress report. Figure 8.2 illustrates the process of loan recovery.

The Safe Drinking Water Revolving Loan Fund in Oregon (USA)

The Safe Drinking Water Revolving Loan Fund (SDWRLF) offers a long-term, self-sustainable source of finance to build and upgrade drinking water systems in the US State of Oregon. The fund can support diverse activities, from project planning to acquiring land and equipment to building facilities for improved water supply, filtration, storage, distribution, etc. The fund provides direct loans (up to four million dollars per project) to eligible applicants based on repayment ability. Loan maturities only extend as long as a project's useful life, and the maximum maturity is 20 years. Interest rates are 80 per cent of those on State/local bonds. Each applicant must demonstrate their financial, managerial and technical capacities, and projects must undergo thorough analysis to ensure creditworthiness and the safe nature of the loan[m].

Funding the Revolving Loan Fund

The US Congress created a Drinking Water State Revolving Fund in 1996, to be run by the Federal Government. The facility enables individual States to make loans to improve local public water systems in order to meet current or future drinking water standards. The State of Oregon receives an annual grant from the US Environmental Protection Agency (EPA) and channels the bulk of the monies to the local Safe Drinking Water Revolving Loan Fund. The State is required to match 20 per cent of federal funding and does so through bond issues to be repaid with Oregon State Lottery proceeds[n].

The Application and Funding Process

SDWRLF funds three main types of activities: (1) planning and preliminary engineering work; (2) final design and specification; (3) construction. Applications are reviewed by the Oregon Economic and Community Development Department (OECDD). OECDD must be satisfied that the amount of financial assistance sought is essential to project completion. Proposed projects must be feasible, cost-effective and of sound design. OECDD may visit project sites and consult with other appropriate State and federal agencies to check that all legal requirements are met, and to make the best financing options[o].

Loan awards are contingent on certain requirements, such as the receipt of (1) sufficient documentation that the debt and the security pledged are valid and binding on the recipient; (2) a letter of financial commitment regarding any other funds needed to undertake and complete the project. Loan contracts include six major conditions, as follows: (1) the project should be completed within two years from the date of execution of the contract; (2) loan repayments are made promptly, when due, subject to any remedies for non-payment set out in the contract; (3) a repayment plan is secured, as evidenced by pledged resources; (4) thorough maintenance of accounts and records for all matters associated with the project, which OECDD shall be entitled to monitor, to ensure compliance with contract terms; (5) certification that a professional engineer, registered in Oregon, is hired and will be responsible for design and construction of the project; and (6) the presence and upkeep of respective source and service meters on all connections throughout the water system, as well as a comprehensive operations programme for all regular reading and maintenance of all meters[p].

Chapter 9: Credit Enhancement

One of the common features of risk management is the use of credit enhancement, that is, a "cushion" to protect lenders or investors against potential losses. The degree of credit enhancement is sized to reflect a potential loss determined under a series of adverse scenarios that could affect the asset pool during its life. Credit enhancement for a specific deal typically combines several techniques and is a reflection of the specifics of the asset in question[q].

Forms of Credit Enhancement

Mortgage credit risks encompass short-term delinquencies as well as unrecoverable losses due to borrower default. Government agencies can help to eliminate mortgage default risks by guaranteeing timely payment of principal and interest. The agencies can rely on a variety of credit enhancement forms, which are categorized as internal or external according to the provider/sources. *Internal* credit enhancement is provided by the borrower and relies on re-allocation of cash flows within the structure. *External* credit enhancement is provided by an outside party[r]. Table 12.1 shows the main credit enhancement instruments.

External Credit Enhancement

Mortgage Insurance

Mortgage insurance insures a lender against default. If a borrower defaults on repayment of a loan and the property is foreclosed, the mortgage insurance provider must compensate the lender for the whole or a portion of the loss. In the USA, four types of mortgage insurance are available, namely: (1) Federal Housing Administration (FHA) mortgage insurance (FHA-insured mortgage loans are granted by private lenders); (2) the US Department of Veteran Affairs (VA) loan guaranty; (3) mortgage insurance provided by the Rural Housing Services administration; and (4) private mortgage insurance (PMI)[t]. Another type of mortgage insurance is hazard insurance, which may be required if the property is located in areas where natural disasters may occur, such as floods and earthquakes[u].

Virtually all lenders require a borrower to provide standard hazard insurance. Conventional loans are insured by private mortgage insurance companies. Most lenders require mortgage insurance if the Loan to Value (LTV) ratio is above 80 per cent. Mortgage insurance typically covers 20 to 25 percent of the original loan balance. Where LTV is below 80 per cent, PMI is not required[v]. Mortgages with low-down payments make home purchase more affordable to more people. For this type of loan, mortgage insurance cushions lenders against the additional risks they take, while on the other side, the insurance premium is an additional expense for the borrower who cannot afford a 20 percent down payment[w].

Private Mortgage Insurance

In the USA, mortgage insurers are required by State regulators to maintain capital at or above four per cent of outstanding risk, while Fannie Mae and Freddie Mac impose on mortgage insurers a capital ratio equivalent to a minimum five per cent of outstanding risk . This capital reserve represents liquid assets that can be sold to raise cash to pay for claim costs[x].

Table 9.1 Forms of Credit Enhancement

External	Provided by an outside party Bank Letter of Credit Insurance Guarantee Subordinated Loans from third party
Internal	Provided by originator or within the deal structure Reserve account/refunded or build-up from excess spread Originator's guarantee Senior subordinated structure Excess spread Over-collateralisation Minimum required debt service coverage ratio

Source: Adapted from Fabozzi & Choudhry (2004)[s]

Table 9.2 Monthly Payments for Various Mortgage Insurance Plans

	Renewable Mortgage Insurance	Refundable Single Premium	Non-refundable Single Premium
Loan Amount	USD 100,000	USD 102,650	USD 102,000
Principal and Interest Payment (8%)	USD 733.37	USD 753.21	USD 748.44
Mortgage Insurance Premium	USD 29.17	N/A	N/A
Total – Principal, Interest, and Mortgage Insurance	USD 762.54	USD 753.21	USD 748.44

Source: Steinmetz (2002)[aa]

Private Mortgage Insurance Premiums

Loans that are not insured or guaranteed by the US government are known as "conventional" loans. When a conventional loan is greater than 80 percent of the property price or value, the borrower must secure private mortgage insurance (PMI). PMI premiums are expressed in points. The premium is influenced by several factors such as the amount of risk covered, LTV, loan maturity and the physical location of the property[y]. There are normally two ways to pay for private mortgage insurance: (1) adding a small premium amount to each monthly payment; (2) paying a larger, single premium. If the borrower is planning to borrow on mortgage for only a few years, pay-by-month is probably the best option. If the borrower is borrowing on mortgage for a long period, s/he should consider the one-time premium approach. Single-premium plans come in two categories: refundable and non-refundable premiums. Table 9.2 shows that the total monthly payment is somewhat smaller when premiums are financed rather than paid monthly. If a borrower has a conventional loan with private (renewable or monthly) mortgage insurance, or an FHA loan with monthly PMI, mortgage insurance payments will stop automatically when the LTV of the outstanding balance declines to a certain level, for example, 78 per cent[z].

Cancelling Mortgage Insurance

Depending on the type of loan agreement, a borrower may be able to cancel the insurance once s/he reaches a certain amount of equity. If s/he has 20 percent equity (80 percent LTV), s/he may be able to stop paying insurance. The LTV ratio can change if the borrower invests more capital in home improvement, or if the property appreciates quickly, or alternatively if the borrower has paid the mortgage for quite a long time and the outstanding loan balance-to-value decreases[ab].

The Homeowners Protection Act 1999 sets specific guidelines on borrower cancellation or automatic termination of private mortgage insurance. PMI will be automatically cancelled when the borrower reaches 22 percent equity in the original value of the property. However, these provisions do not apply if the borrower has not maintained current status on loan payments in the prior year, or if the loan is a high-risk one, or if there are additional liens against the borrower's property[ac].

US Government Mortgage Insurance

In the USA, the government shifted from direct housing production to enabling through promotion of mortgage insurance. The government increased the amount insured under the FHA home mortgage programme to six billion dollars in 1949; it increased FHA mortgage insurance authorization by USD 2.25 billion in 1950 and by an annual USD 1.5 billion in 1951, 1953 and 1954. At the same time, the US government reduced production of low-rent housing to 75,000 units in 1950, 50,000 in 1951, 35,000 in 1953, and down to 20,000 units in 1954[ad].

FHA Mortgage Insurance

FHA mortgage insurance is financed by the Mutual Mortgage Insurance Fund (MMIF), which is required to be self-supporting. FHA-insured loans come with high underwriting requirements. MMIF focuses on single-family mortgage insurance. By 1980, the Fund had built a comfortable USD 3.4 billion capital reserve and had an estimated value of 5.3 per cent of insurance outstanding (eight billion dollars). In the year 2000, MMIF was worth USD 16.6 billion with 4.01 per cent of insurance outstanding[ae]. MMIF value was expected to grow to USD 34 billion in 2006. In 1999, FHA insured about 1.3 million mortgage loans with a combined value of approximately USD 125 billion. FHA-insured mortgage loans benefit homebuyers in a number of ways, as follows[af]:

Table 9.3 Mortgage Insurance in Homeowner Properties in the USA in 2001 (unit: ,000)

First Mortgage Insurance Status	All properties (owned and rented)	Total (owned)	1 housing unit	2 to 4 housing unit	Condo minimums	Mobile homes
FHA-insured first mortgage	4989	4439	3985	72	326	56
VA-guaranteed first mortgage	1264	1163	1055	13	84	12
Rural Housing Service/Rural Development-guaranteed loan	984	845	786	5	32	22
Insured by State agency	1166	944	842	11	43	48
Insured by State agency with FHA insurance, VA or Rural Housing Service/Rural Development guarantee	41	37	27	0	7	3
Insured conventional first mortgage	5606	4935	4426	70	313	125
Uninsured conventional first mortgage	32856	27961	25289	446	1575	651
Not available	3663	3313	1558	26	57	1672

Source: US Census Bureau

- FHA down payments (three per cent) are lower than the minimum required by many lenders for non-FHA mortgages.
- FHA requirements for homebuyer credit ratings are more flexible than those set by many lenders for non-FHA borrowers.
- FHA allows homebuyers to use contributions from family members and non-profit groups to make their whole down payments, while conventional loans generally require homebuyers to pay at least a portion of the down payment from their own funds.
- FHA allows borrowers to carry more debt than a private mortgage insurer normally permits.

FHA mortgage insurance allows a homebuyer to make a relatively small down payment and obtain a mortgage for the balance of the purchase price. FHA-insured mortgage loans can be granted by banks, savings and loans (S&L) associations, mortgage companies, credit unions or other FHA-approved lenders. FHA compensates the lender if a borrower defaults on an FHA-insured mortgage[ag].

FHA Mortgage Insurance Premiums

For mortgage insurance and as of 2001, FHA charged an up-front premium of 1.75 points (a point is one per cent of the loan amount) and an annual premium of 0.5 point for the whole loan period, unless the borrower made a down payment of more than 10 per cent of the purchase price. The up-front premium can either be paid in cash at the closing or financed as part of the loan. The annual premium is paid monthly. The following example illustrates how to calculate the mortgage insurance premiums required for an FHA-insured mortgage. If the loan amount is USD 50,000, the up-front premium amounts to USD 875 (USD 50,000 x 0.0175), the annual premium to USD 250 (USD 50,000 x 0.005) and the monthly premium toUSD 20.83 (US$ 250 ÷ 12 months); therefore a total USD 20.83 is added to the monthly mortgage repayment[ah].

VA Funding Fees

VA-guaranteed loans are underwritten by the US Department of Veterans Affairs (VA). Immediately after World War II, the then Veterans Administration (VA) began to guarantee old soldiers' mortgage loans in order to facilitate home purchases with little if any down payment and with low interest rates. The VA guarantees payment of a mortgage loan made by a private lender to a qualified veteran in case the borrower defaults. VA-guaranteed loans do not require the borrower to pay any mortgage insurance premium[ai], but instead impose a funding fee. This fee is a function of the amount of down payment made by a veteran. If there is no down payment, the fee is two points on the loan; if the down payment is five percent, the fee is 1.5 points; if the down payment is 10 percent of more, the fee is 1.25 points[aj].

Example: Assume a house has a purchase price of USD 100,000

No down payment:

USD 100,000 x 0.02 = USD 2,000 funding fee

5 % down payment:

USD 100,000 x 0.05 = USD 5,000 down payment

USD 100,000 – USD 5,000 = USD 95,000 loan

USD 95,000 x 0.015 = USD 1,425 funding fee

10 % down payment

USD 100,000 x 0.10 =USD 10,000 down payment

USD 100,000 – USD 10,000 = USD 90,000 loan

USD 90,000 x 0.0125 = USD 1,125 funding fee

First Mortgage Insurance Status

Table 9.3 shows that in 2001, the bulk of conventional first mortgages (32.86 million) were not insured, accounting for 85 per cent of total first mortgages. Insured conventional first mortgage loans (5.6 million) accounted for 15 per cent of total first mortgages. Among insured first mortgages, 39 per cent of mortgage insurance was provided by FHA, 22.5 per cent by VA, 17.5 per cent by the Rural Housing Service and

Table 9.4 Requirements for CMHC Mortgage Insurance

Number of Units	**1 – 4 units, one of which must be occupied by the owner**	
Maximum Loan-to-Value Ratio	1 unit: 95% 2 units (e.g. a duplex): 92.50&% 3 or 4 units: 90%	
Qualifying Interest Rate	The interest rate used to assess borrower eligibility is determined as follows: ■ loan maturity under 3 years – the greater of the lender's 3 year posted rate or the contract interest rate (or VRM cap). ■ Loan maturity 3 years or more – the contract interest (or VRM cap). ■ Standard Variable Rate Mortgage (VRM), regardless of loan term: the lender's 3-year posted rate.	
Minimum Loan Maturity	6 months	
Minimum Equity	■ Minimum equity of 5% from the borrower's own resources is required. ■ Gift down payments from an immediate relative are acceptable and need to be confirmed in a letter from the donor. Gift money needs to be in the borrower's possession 15 days prior to the closing date. ■ An Approved Lender needs to verify the borrower's ability to cover closing costs of at least 1.5% of purchase price. If closing costs are to be borrowed, the loan repayment is to be included in the Total Debt Service calculation.	
Debt Servicing Ratios	■ Gross Debt Service (GDS) ratio: the borrower can commit up to 32% of gross household income toward the payment of principal + interest + property taxes + heat. ■ Total Debt Service (TDS) ratio: the borrower can commit up to 40% of gross household income toward housing obligations and all other debts. ■ when the property has one to three rental units in addition to the owner-occupied unit, TDS formula is: $\frac{\text{(total principal and interest payments + payments on all other debts) x 100}}{\text{gross household income + up to 50\% of confirmed gross rental income}}$	
Maximum Housing Price	Maximum housing prices apply when the LTVs are greater than 90%	
Premium on Mortgages for Home Purchases	*Loan to Value Ratio* Up to and including 65% Up to and including 75% Up to and including 80% Up to and including 85% Up to and including 90% Up to and including 95%	*Premium on Total Loan* 0.50% 0.65% 1.00% 1.75% 2.00% 3.25%

Source: Based on CMHC

Rural Development-guaranteed Loan Programme, and 21 per cent by State agencies.

Government Mortgage Insurance in Canada

Mortgage insurance was introduced in Canada by the National Housing Act in 1954. Under this law, mortgage insurers would compensate lenders' losses in the event of a borrower's defaults.

Government mortgage insurance is provided by the Canada Mortgage and Housing Corporation (CMHC). The agency supports the purchase, improvement and refinancing of new and existing owner-occupied housing units as well as the construction, purchase and refinancing of rental properties by investors. Clients can use CMHC-insured financing not only to purchase homes, but also for a variety of other purposes; those intent on renovating their housing units can use insured mortgage loan services known as "Purchase Plus Improvements".

CMHC Requirements for Mortgage Insurance

The terms and conditions for CMHC mortgage insurance are shown in Table 9.4

Mortgage Insurance for Energy-Efficient Properties

CMHC recently developed a number of financial incentives towards the development of energy-efficient housing. When a borrower uses his/her mortgage to buy an energy-efficient housing unit, or to renovate a home to improve its energy efficiency, s/he may be eligible for a 10 per cent refund on their CMHC mortgage loan insurance premium[ak].

Enhancing the Purchase/Refinance Plus Improvements

In order to facilitate smaller-scale home improvements, CHMC waives the current 10,000 Canadian dollar (CAD) maximum improvement limit under its Purchase/ Refinance Plus Improvements facility, only setting the limit based on the value of the property (10 per cent of the value). The agency simplifies and streamlines the financing process for an easier, quicker provision of insured mortgage funding[al].

Pool Insurance

Pool insurance normally compensates for losses caused by a borrower's economic circumstances, but specifically excludes losses that result from bankruptcy, origination fraud, and hazards[am]. Since pool insurance effectively covers only those losses resulting from defaults and foreclosures, additional insurance is required against losses resulting from other factors such as bankruptcy, etc.[an]

Pool insurance is a common credit enhancement technique among mortgage-backed securities (MBS) issuers. Risk is reduced to a predictable level as it is spread across a large number of policy holders. Pool insurance is provided by composite insurers. Therefore, losses in one business can be offset with profits in another. The rationale behind pool insurance is to ensure that the interest and principal due to creditors/investors are eventually paid[ao].

Letters of Credit

The issuer of a whole-loan security or a third party with a relatively low credit rating can provide a Letter of Credit (LOC) in the amount required by the rating agency to enhance the entire deal, or for a lesser amount to complement other forms of credit enhancement[ap]. The LOC is normally provided by a commercial bank with an AAA credit rating.

Corporate Guarantees

Corporate guarantees cover all types of losses and can be used as stand-alone credit support or in conjunction with other forms of credit enhancement. Where primary credit enhancement is provided by a credit-rated entity, the creditworthiness of the borrower is subject to re-evaluation and fluctuations if that entity's credit is downgraded[aq], or in case of any adverse news or volatility in the quality and performance of that entity[ar].

Government Loan Guarantees

The US VA Loan Guarantee Programme

A typical government loan guarantee programme is run by the already mentioned US Department of Veterans

Table 9.5 Schedules of VA Guarantees (2002)

Loan Amount	Guarantee Amount
Up to USD 45,000	50%
USD 45,001-USD 56,250	USD 22,500
USD 56,251 – USD 240,000	The lesser of USD 36,000 or 40% of the loan
USD 240,001 or more	The lesser of USD 60,000 or 25% of the loan

Source: Lush & Sirota (2003)[au]

Affairs. The operations are managed by 55 regional offices located throughout the country. Loan guarantees are granted to eligible veterans. The programme focuses on guaranteeing loans made by private lending institutions such as commercial banks, S&Ls, mortgage banks and insurance companies. If a borrower defaults on a VA-guaranteed loan, the VA compensates the lender for any losses incurred in the foreclosure and subsequent sale of the property, up to the maximum amount guaranteed[as].

The Characteristics of VA Loan Guarantees

VA loan guarantees are designed to provide veterans with up to 100 percent financing of their home purchases. However, unlike the FHA, which insures the total amount of the balance of a loan, VA loan guarantees only cover the top portion of the losses, which is where the greatest risk lies when a borrower defaults. Therefore, VA loan guarantees offers the type of protection that lenders most want. Table 9.5 shows the schedule of VA guarantees. An eligible veteran can use a VA guarantee as down payment and obtain a 100 per cent loan that is four times the remaining eligible amount (currently USD 240,000, i.e.,USD 60,000 x 0.25)[at].

Partial Entitlement

Since VA-guaranteed entitled amounts change over time (see Table 9.6), a veteran who has used his/her benefits in the past may still be eligible for another VA loan guarantee if s/he has any remaining entitlement. To determine the remaining entitlement, simply subtract the amount used previously from the amount currently outstanding. To calculate the maximum loan allowed with this partial entitlement, use 75 percent of the sales price or appraised value, whichever is the lesser, and add the remaining entitlement to this amount. For example, a veteran bought a house in 1988 using USD 36,000 of his entitlement. In 2002, the veteran decided to purchase a larger house but still kept the original residence. The new house was priced at USD 180,000. The remaining VA entitlement was USD 24,000 (USD 60,000 – USD 36,000). Therefore, the maximum loan available is USD 159,000 (USD 135,000 + USD 24,000)[av].

Loan Guarantees by Foreign Agencies

Loan Guarantees by the Asian Development Bank[ax]

The Asian Development Bank (ADB) aims to promote prudent, long-term debt financing and the expansion of loan options to borrowers in the Asia-Pacific region. ADB guarantees a portion of the risks to improve the credit of a borrower to a level acceptable to lenders.

Types of Guarantees – ADB provides two types of guarantees: (1) a partial credit guarantee; (2) a political risk guarantee.

Coverage – ADB extends guarantees either as primary or secondary obligor. ADB guarantees can cover a wide variety of debt instruments, including syndicated loans from commercial banks, capital market instruments such as bonds and floating rate notes, letters of credit, as well as debt instruments where the government is the primary obligor. ADB may guarantee debt instruments with attached options and warrants to purchase equity and convertible bonds (provided that the entire ADB guarantee terminates upon conversion into equity of all or part of the debt instrument or convertible bond).

Table 9.6 Schedule of VA Loan Guarantee Periods

Loan Amount	Guarantee Amount (USD)
December 1945	4,000
July 1950	7,500
May 1968	12,500
December 1974	17,500
October 1978	25,000
October 1980	27,500
March 1988	36,000
December 1989	46,000
October 1995	50,750
January 2002	60,000

Source: Lush & Sirota (2003)[aw]

Risk Sharing – ADB guarantees are guided by the principles of maximizing risk sharing with other co-financiers while keeping the credit enhancement provided by ADB at a minimum. In practice, ADB only provides partial guarantees, covering part of a loan or specific risk events. The structure and degree of the coverage must be set at the lowest level required to mobilize the financing needed. Commercial co-financiers must bear some or all of the risk in each repayment period. ADB guarantees are only provided to those projects that cannot secure loans from commercial financial institutions without ADB guarantees.

Terms and Conditions – ADB guarantees are subject to the following terms and conditions: (1) ADB will make payment under a partial credit guarantee due to a payment default covered by the guarantee. (2) ADB reserves the right to terminate the liability by purchasing its entire guaranteed obligation of principal together with accrued interest. It will not allow beneficiary lenders to accelerate payment under the guarantee. (3) ADB requires a counter-guarantee for guaranteed loans to a member country or government executing agency. Under the counter-guarantee, the government guarantees payment of all guarantee fees and charges payable by the borrower to ADB. (4) ADB requires that the proceeds of guaranteed loans and bond issues be used for the specific purposes of the project and applied to ADB procurement requirements.

Loan Guarantees by the US Development Credit Authority[ay]

The Development Credit Authority (DCA) is the US legislative authority that permits USAID to issue partial loan guarantees to private lenders. DCA guarantees require risk-sharing where the USAID share of a lender's risk does not exceed 50 per cent (except for those specially approved by the Credit Review Board). DCA seeks high leverage ratios for their loan guarantees. For example, on average, every dollar of USAID contingent liability under DCA guarantees is expected to cost two to seven US cents, which is much lower than making direct loans.

Conditions for Loan Guarantee by DCA – Under the DCA scheme, borrowers select their own lenders. USAID reserves the right to approve the lender selection procedure, the actual lender(s) and the terms of loans guaranteed such as the interest rate. The agency also reserves the right to refuse a guarantee if it believes that the terms are not sufficiently advantageous to the borrower. Although USAID may guarantee payment or collection depending on specific needs, the agency prefers guarantees of collection as a way of providing incentives for the guaranteed party better to manage the collection process. DCA guarantee can be on either dollar- or non-dollar denominated debt. However, in case of non-dollar denominated debt, the total USAID contingent liability must be capped or limited in dollar terms.

Internal Credit Enhancement

Senior/Subordinated Structure

The most common form of internal credit enhancement is the senior/subordinated structure, which has become popular particularly in securitization programmes. Subordination means that the cash flows generated by the borrower are allocated with different priorities to the various classes of debt holders. The cash flows generated by the borrower and his/her assets are first used to repay the principal and interest, while the subordinated piece (also called "equity" piece) receives cash flows in subordinate order but absorbs the losses first[az]. The results are that repayment for the senior class of debt is unaffected by the absorption of all losses by junior classes of debt. Junior debt typically trades at high yields to compensate investors for the risks attached[ba]. For example, take a USD 200 million securitization programme with USD 140 million of class A securities, USD 40 million of class B certificates and USD 20 million of class C certificates. In order for any class to obtain an AAA credit rating, its loss coverage must be equal to or greater than 10 per cent. Subordinating the USD 20 million worth of class C certificates to classes A and B, both class A and class B securities can obtain AAA ratings. Class A may become 'super senior' due to payment priority over both class B and class C certificates if it features a 30 percent loss coverage ratio. This additional loss protection entails an AAA rating for class A securities which, being 'super senior', sell at a premium to investors[bb].

Over-Collateralisation

Another common type of internal credit enhancement is over-collateralisation, where a Special Purpose Vehicle (SPV) holds assets of greater value than subsequent debt issuance. Under collateral structures, the cash flows on the underlying assets should be large enough to cover outgoing payments[bc]. For example, a trust has a market value of collateral trust assets of USD 150 million. The trust issues two tranches. Tranche A is the senior tranche consisting of USD 125 million worth of securities. Tranche B consists of USD 25 million worth of subordinated securities and is repaid after the senior tranche is repaid in full. Therefore, the senior tranche is over-collateralized by 120 per cent. The funds used to purchase the over-collateral for the senior tranche are from the subordinated tranche within the trust structure. This is why over- collateralization is a form of internal credit enhancement[bd].

Excess Spreads

Another type of credit enhancement is known as excess spread. This means that there is a large difference between the amount of cash flow coming into the special-purpose vehicle and the amount of debt servicing[be]. In practice,

this can be the excess spread of the loans held in the SPV and the interest due on SPV-issued securities. The excess spread may increase because SPV assets are of lower credit quality than SPV-issued securities, and therefore yield higher interest rates. A higher yield on SPV assets may also result from other factors such as different maturities[bf].

Cash Collateral

Cash collateral includes cash, negotiable instruments, accounts receivable, deposit accounts, reserve accounts or other cash equivalents subject to lender preferences. Sophisticated lenders may agree to enter into cash collateral agreements because immediate liquidation of the borrower's assets can reduce the amounts realized and maximize the potential for having an unsecured claim. Lenders may also consider entering into cash collateral agreements for limited periods in order to give borrowers time to explore alternatives that are in the interests of both lenders and borrowers[bg].

Excess cash consists of highly rated, liquid instruments such as Treasury securities or high-grade commercial paper (CP) that provide security to a creditor. Cash proceeds received by an SPV from the sale of such securities are used to purchase the underlying collateral and the reserve account. However, cash reserves often earn lower rates of return than those required to fund SPV securities, and therefore are not an efficient form of credit enhancement[bh].

Mortgage

For large housing loans, a lender will ask for security over the property that a borrower wishes to buy, or some other property that the borrower owns. The requirement for security will be stated in the loan approval documents. Mortgage is the most common form of security. A lender can take a mortgage over most forms of property, including houses, land, motor vehicles, boats, household goods and appliances, shares and life insurance policies. In the case of housing loans, the mortgage is normally housing or estate property. If a borrower defaults on his/her loan, the lender can take possession of the mortgaged property and sell it to repay the outstanding balance on the loan. Normally, the lender will register the mortgage, which will protect him/her against claims made by others in respect of the mortgaged property[bi].

Mortgage loans can be divided into two types –conventional and non-conventional. A non-conventional loan is backed by the full faith and guarantee of the government. It is provided (in the USA) by central government agencies such as the Federal Housing Administration (FHA), the Veterans Administration (VA) and the Rural Development Administration (RDA). Conventional loans do not come under any formal government guarantee[bj].

The USA featured 67.67 million homeowner properties in 2001, of which 43.64 million were mortgaged, accounting for 64.5 per cent of the total. Split by categories, there were

Table 9.7 Mortgages for Homeowner Properties in the USA in 2001 (unit:,000)

Mortgage Status	All properties (owned and rented)	Total	1 housing unit	2 to 4 housing units	Condo-minimums	Mobile homes
All properties	83465	67671	56960	1087	3883	5741
Mortgaged*	50570	43636	37968	643	2437	2588
Non-mortgaged	32896	24035	18992	444	1446	3153
MORTGAGED PROPERTIES Type of First Mortgage Instrument Fixed-rate, level-payment mortgage	37541	32900	29850	478	1845	727
Short-term with balloon payment mortgage	2333	1869	1695	17	101	55
Reverse mortgage	11	11	11	0	0	0
Adjustable rate mortgage (ARM)	6474	5119	4489	109	400	121
Other	4211	3737	1923	38	91	1685

** Includes properties with home equity and/or instalment loans*
Source: US Census Bureau

mortgages on 66.7 per cent of one-housing unit properties, 59 per cent of two- to four- housing unit properties, 62.7 per cent of condominimums and 45 per cent of mobile homes. Of the combined 83.47 million rental and owner-occupied properties, 50.57 million were mortgaged. Most first mortgages (37.54 million) were fixed-rate and only 6.47 million were adjustable-rate mortgages. Only 4.6 percent were short-term balloon payment mortgages (Table 9.7).

Chapter 10: Case Studies of Housing Finance Institutions and Systems

The Development of Housing Finance Institutions in Indonesia[bk]

Introduction

Indonesia's long-term development is based on several five-year plans ('PELITA') commencing in 1969. From the first development plan (PELITA I, 1969/70-1973/74) onward, housing became a major component and policies were laid out emphasizing research and development on the technical aspects of housing. During PELITA II (1974/75-1978/79), three important institutions were established: the National Housing Board, the National Housing Corporation (PERUMNAS), and the National Savings Bank (BTN), a government-owned institution that was to focus on housing mortgage finance for low-income people. PERUMNAS was assigned to build 73,000 houses during PELITA II.

PELITA III (1979/80-1984/85) saw the construction of 150,000 houses and the establishment of PT Papan Sejatera (PAPAN), a government-sponsored financial institution engaged solely in housing mortgage loans for the middle-income segment of the Indonesian population. Furthermore, 300,000 new houses were planned under PELITA IV (1984/85-1988/89), while PELITA V (1989-1994) was expected to add another 450,000, of which 330,000 units were for the private sector to build while the balance were to be built by PERUMNAS.

The first year (1989) of PELITA V saw the construction of about 100,000 units, but prospects for the rest of the period looked rather bleak. Financing for construction of houses as well as for mortgages had become scarce and made the 450,000 target unattainable. In any case, 85 per cent of housing development in Indonesia is in the hands of informal-sector developers/builders. Indonesia's housing finance system is illustrated in Figure 13.1.

Indonesia's Financial Market

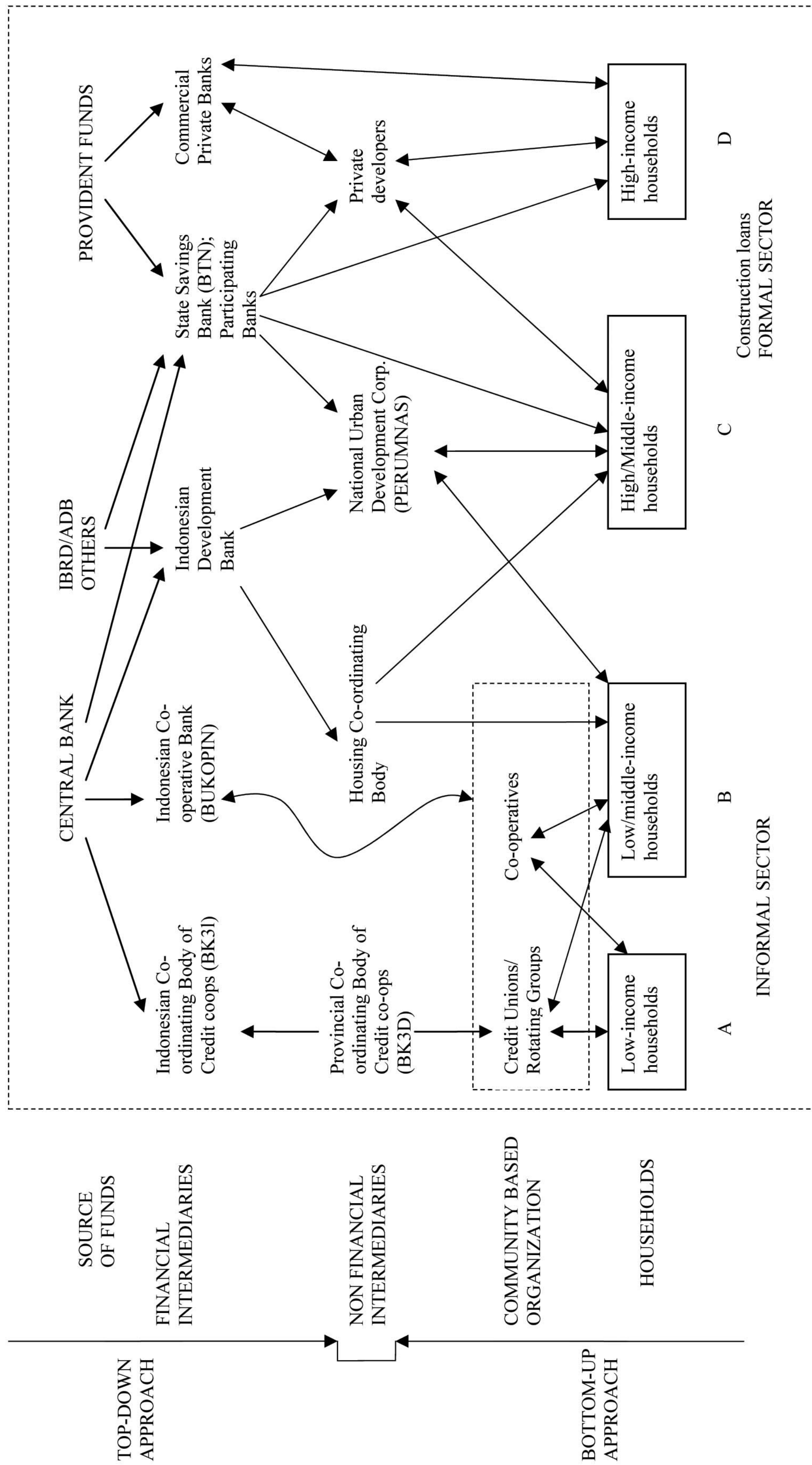
The financial market in Indonesia has been dominated by five government-owned commercial banks: Bank Bumi Daya (BBD), Bank Dagang Negara (BDN), Bank Ekspor Impor Indonesia (Bank EXIM), Bank Negara Indonesia 1946 (Bank BNI), and Bank Rakyat Indonesia (BRI). On top of these there is one development bank, Bank Pembangunan (BAPINDO), and a savings bank, Bank Tabungan Negara (BTN) mentioned earlier. More than 100 private banks also operate in the country, along with about a dozen foreign bank branches and some 20 regional development banks. In addition to banks, the financial system also includes 12 non-bank financial institutions (NBFIs), which it had been proposed to turn into commercial banks in 1992, based on the draft of the the new Banking Act. The operations of these banks and NBFIs are controlled by Bank Indonesia, the country's central bank.

Over the past two decades or so, a number of financial regulations have been introduced to improve the operation of Indonesia's financial markets. In October 1988, a regulation looked to improve mobilization of funds, increase the operating efficiency of financial institutions, improve the effectiveness of monetary policy, and accelerate the development of the capital market. Under this policy, domestic banks were allowed to open branch offices throughout Indonesia. NBFIs, foreign banks and joint-venture banks were allowed to open offices in major cities, namely, Jakarta, Bandung, Semarang, Surabaya, Medan, Ujung, Pan-dang and Denpasar. The formation of new private national banks, rural credit banks and joint-venture banks was made easier than before.

As a result, the number of commercial banks increased from 122 to more than 150 at the end of 1990. Bank branches also expanded substantially from about 1,900 at the end of 1988 to more than 3,300 at the end of 1990. This helped to generate funds for the banking sector. Additionally, private financial institutions were allowed to take deposits from government enterprises, which no longer had to be held exclusively in State-owned banks. In other words, the mobilization of funds was deregulated through elimination of some of the restrictions imposed on private financial institutions.

In 1990, Bank Indonesia introduced several new measures to improve the credit system, focusing on spreading bank credit to a wider spectrum of small businesses (PAKJAN 1990). Each bank (except for foreign banks and joint-venture banks with export-credit obligations) was required to grant at least 20 per cent of total loans either to small businesses ('Kredit Usaha Kecil' or KUK), or to would-be homeowners for the purchase of small- to medium-sized houses. Banks were required to comply with this regulation within one year of enactment. In order to meet the new KUK requirement, a number of private and State-owned banks launched – or expanded – residential mortgage loan programmes. The upshot was that in the first quarter of 1990, and on top of the two financial institutions already in the business (BTN and PAPAN), as many as 18 banks, including a foreign one, were involved

Figure 10.1 The Institutional Structure of Housing Finance in Indonesia



in residential mortgage financing in Indonesia. These banks could originate loans directly or lend indirectly through rural credit banks (Bank Perkreditan Rakyat-BPR) or via other financial institutions which originated the loans and acted as channelling agents. The mortgages were then held in the bank's portfolio. This situation lasted only up to the beginning of 1991, when the government imposed a tight monetary policy (PAKTRI 1991).

Sources of Funds

During the early 1980s, funds for home mortgage finance depended heavily on subsidized loans from the Indonesian government and, to a lesser extent, on five-year bond issues. It was unfortunate that banks that were holding savings as well as time-deposit funds became involved in residential mortgage lending only when the KUK requirement forced them to do so. However, evidence showed that only a small portion of the banks' portfolios consisted of mortgage loans. This kind of lending bears two types of significant risks for lenders: maturity mismatch risk and interest-rate risk. The first risk occurs because the majority of deposits with the banks are short-term. Borrowing short and lending long entails considerable risk and causes liquidity problems. Interest-rate risk arises because fixed-rate mortgage loans leave the lender exposed to fluctuations in the cost of funding. This is why, compared with the other assets of these banks, mortgage lending is small, so that the risk to each bank remains manageable. The government-imposed tight monetary policy in 1991 further discouraged banks from residential mortgage lending, which at the present moment has practically vanished. This leaves only BTN and PAPAN as the two financial institutions still extending mortgage loans. Mortgage interest rates vary with the various product designs, for instance ranging between 12 and 27 per cent in the early 1990s.

The critical issue for housing financing is related to the absence of a long-term funding market for mortgage lending in Indonesia. There seems to be a compelling case for the government to put in place a system that provides a steady and continuous flow of funds into housing finance. One solution would be to launch a secondary mortgage market as a sub-system within the national financial framework. This would call for the creation of secondary mortgage institutions to purchase mortgages from originators, encouraging a greater number of these to participate in residential mortgage financing. Secondary institutions would require government sponsorship and regulation. Funding could emanate from banks, pension funds, insurance companies and other institutions generating steady flows of funds from their operations. This could only happen under strong regulatory measures.

Conclusions

Indonesia's residential mortgage financing deserves serious consideration. Prior to PAKTO 1988 and PAKJAN 1990, the country's financial system did not provide sufficient, if any, infrastructure for channelling funds into housing mortgage finance. Any long-term funding that could be raised was only through five-year bond issues. These were not substantial, though, and competition from non-mortgage banks did little to help mortgage lending institutions, like PAPAN, to raise long-term funds. Another crucial factor was that interest rates on short-term deposits were much more favourable than those on long-term instruments.

As a result of PAKTO 1988 and PAKJAN 1990, the number of financial institutions competing for short-term funds grew substantially. Long-term funds, which were already scarce, literally disappeared. The situation has become worse for institutions in need of long-term money since 1991, when a tight monetary policy was imposed (PAKTRI 1991).

In 1990, PAPAN successfully sold 27.7 billion rupiahs (IDR) worth of mortgages to a government-owned bank. Although this was a direct sale to an investor, it represented the start of a secondary mortgage market. The rationale behind the bank's purchase of the mortgages was to fulfil the 20 per cent KUK requirement. A secondary mortgage market, which should be part of Indonesia's financial system, is still remote, though. Aside from monetary issues, some legal aspects of the mortgage instruments must be ironed out first. The use of legislative and regulatory power is mandatory to create a sub-system that will operate within the national finance system to provide a steady and continuous flow of funds into housing finance. One way of doing this is to create a secondary mortgage market with or without secondary market institutions serving as mortgage market intermediaries. It would be useful if Indonesia's forthcoming banking act mentioned earlier required banks to invest a certain portion of loan portfolios in the form of mortgage securities.

The Development of Housing Finance Institutions in Nepal

Absence of Formal Housing Finance

In Nepal, one of the major constraints to the supply of new houses and maintenance of the existing stock is an absence of organized sources of housing finance, and the development of formal housing finance institutions in the country is still at very embryonic stages. So far, housing has largely been an individual rather than a collective concern. Consequently, the huge investment required to finance housing is almost all undertaken by private individuals in informal arrangements. The role of formal finance in overall housing development is very marginal if not

negligible, both in terms of investment and effectiveness. For instance, based on construction-cost data for 1981 and floor-area approximations, it has been estimated that informal-sector investment in housing in the Kathmandu and the Lalitpur Town *panchayat* (now municipalities) was around 530 million and 200 million rupees (NPR), respectively. These estimates are for building construction only and do not include land.

Compared with this huge investment in housing by private individuals, total government expenditure in a scheme like the Kuleswar Housing Project was just NPR.35 million, and over a period of more than 10 years.

Similarly, formal housing credit from financial institutions is equally limited in both scope and amounts. In Nepal, the Provident Fund and commercial banks do provide loans to subscribers and employees, respectively. In 1981, the loans granted by these institutions accounted for about four per cent of the estimated funding required to build all the housing for which permits had been issued. Average loan sizes were quite small: NPR.59,000 for Nepal Bank; NPR.11,815 for the Provident Fund; and NPR.40,500 for commercial banks. Loans this size would only finance homes ranging between seven and 50 square metres; in other words, households would require additional sources to secure adequate floor areas for their homes. As a result informal mechanisms have, to this day, been the major source of housing finance in Nepal. Accurate data on the various informal sources of housing finance are not available, but conversion of existing family assets such as land or gold is known to be a major one. Other sources include loans from friends or relatives, money-lenders and others. How efficiently, costly and equitably the informal finance sector operates is unknown and calls for research. The vacant land within the built-up areas in Greater Kathmandu can partly be accounted for by the absence of housing finance for construction in the country. More households would be in a position to develop any vacant land they owned if more housing finance was available to them.

Establishing the Nepal Housing Development Finance Company[bl]

As proposed in the Seventh Plan, the Ministry of Housing and Physical Planning established the Nepal Housing Development Finance Company (NHDFC) in March 1990 under the Finance Company Act1985. The main objectives were improving the existing housing-delivery system and launching new housing schemes through dedicated loan facilities and other related services, in order to meet growing demand. The authorized capital of the Company is NPR.100 million, 50 million of which has been issued and another 30 million paid-up. The structure of the share capital is showed in Table 10.1.

The Board of Directors is comprised of the General Manager, the chairman of the National Insurance Company and representatives from the Ministry of Housing and Physical Planning, Nepal Bank Ltd., National Commercial Bank, Agricultural Development Bank, and Nepal Arab Bank Ltd.

NHDFC focuses on the housing sector and grants loans for four major purposes, as follows: improvement of existing housing conditions, launching new housing schemes, supplying housing loan facilities, and providing other housing-related services in order to meet growing demand for housing in Nepal. NHDFC's eight objectives are as follows:

a) Mobilising financial resources (with approval from Nepal Rastra Bank) to launch housing schemes and provide related physical facilities in accordance with government housing policies.
b) Extending mid- and long-term loans to civil servants, corporate bodies or any company or individual, developing plots of lands for residential purposes, building new homes or purchasing or improving existing houses; or acting as an intermediary or guarantee for these purposes.

Table 10.1 Composition of Nepal's NHDFC Share Capital (2006)

Government	10%	50,000 Shares
Rastriya Bima Sansthan	15%	75,000 Shares
Rastiya Banijya Bank	10%	50,000 Shares
Nepal Bank Limited	10%	50,000 Shares
Agriculture Development Bank	10%	50,000 Shares
Nabil Bank Limited	5%	25,000 Shares
General Public	40%	200,000 Shares

Source: NHDFC

c) Making available housing schemes and physical facilities for individuals, companies or institutions, and supply on a lease or hire-purchase basis the machinery, tools, equipment and other goods required for housing schemes.

d) Encouraging the establishment of any commercial or industrial company or institution whose objective is to the build physical infrastructures required for the management and development of housing plots and the construction of housing facilities; and helping in the unification, consolidation, reorganization, expansion and increase in the capital of such companies or institutions.

e) Operating, or assisting in the running of, schemes, training or other programmes committed to the development of residential areas.

g) Acting as a financial intermediary, i.e., supplying capital to borrowers pursuing similar objectives and mobilizing financial resources through deposits, loans debentures, bonds, etc.

h) Performing any other function that may be relevant and contingent to the functions of the company.

Loan Facilities and Performance

NHDFC provides loans for up to 15 years, a type of long maturity that can alleviate monthly repayments and be more affordable to low-income people. Table 10.2 shows the types of loans provided by NHDFC. Table 13.3 shows NHDFC's financial performance.

Resource Mobilisation

If a housing-finance institution is to be efficient and effective, it needs a continuous flow of resources and proper use thereof. Consequently, resource mobilization forms an integral part of housing finance. The following avenues for resource mobilization may, be worth exploring and examining in the Nepalese context.

As mentioned above, investment in housing by private individuals has been quite significant up until now, suggesting a tremendous potential for internal resource mobilization in Nepal. Such resources could be partly tapped through some kinds of "savings and loan schemes" to attract and retain households and individuals. The schemes could benefit from the lengthy experiences of Thailand and other countries in this regard.

Commercial banks in Nepal may also be encouraged to channel portions of their incremental deposits in the housing sector. Their longer experience in banking, together with their trained staff, could be put to good use in housing finance as well. Moreover, they can easily spread their businesses (even in rural areas) without any additional overhead costs as they already have branches scattered all over the country. In fact, Nepal Bank (a commercial bank) had, in the past,

Table 10.2 NHDFC Loan Facilities (2006)

Loan Amount	Loan Maturity/Monthly Repayment Amount		
	5 Years	10 Years	15 Years
1,00,000	2,275.31	1,493,11	1,265.24
2,00,000	4,550.61	2,986.21	2,530.48
3,00,000	6,825.92	4,479.32	3,795.73
4,00,000	9,101.23	5,972.43	5,060.97
5,00,000	11,376.54	7,465.54	6,326.21
6,00,000	13,651.84	8,958.64	7,591.45
7,00,000	15,927.15	10,451.75	8,856.70
8,00,000	18,202.46	11,944.86	10,121.94
9,00,000	20,477.77	13,437.97	11,387.18
10,00,000	22,753.03	14,931.07	12,652.42
11,00,000	25,028.38	16,424.18	13,917.66
12,00,000	27,303.69	17,917.29	15,182.91
13,00,000	29,578.99	19,410.40	16,448.15
14,00,000	31,854.30	20,903.50	17,713.39
15,00,000	34,129.61	22,396.61	18,978.63

Source: NHDFC

Table 10.3 NHDFC Financial Performance (NPR)

	Fiscal Year 1999/2000	Fiscal Year 2000/01	Fiscal Year 2001/02	Fiscal Year 2002/03	Fiscal Year 2003/04
Paid-up Capital	3,94,92,500/-	3,94,92,500/-	4,66,40,000/-	4,79,18,000/-	4,80,94,000/-
Gross Deposit	25,41,32,260/56	26,55,23,603/68	30,86,22,846/46	32,90,62,124/07	35,97,48,770/18
Gross Loan	22,61,53,446/77	27,85,53,113/80	31,04,63,095/10	31,59,10,100/95	35,07,57,405/23
Gross Income	4,46,37,766/59	5,25,77,899/71	5,70,75,149/13	5,98,17,228/89	6,47,24,833/05
Gross Expenditure	3,78,85,250/78	4,12,23,609/29	4,38,98,784/12	4,63,79,887/98	4,26,05,470/71
Net Profit (Before Income Tax)	67,52,515/81	1,13,54,290/42	1,13,76,365/01	1,34,38,140/91	2,21,19,362/34
Paid Income Tax	41,19,672/26	28,61,807/06	44,57,840/90	39,44,371/02	68,14,684/60
Net Profit (After Income Tax)	53,32,843/55	84,92,483/36	87,18,524/11	94,93,769/89	1,53,04,677/74
Per Share Income	13.50	21.50	18.69	19.81	31.82
Dividend Distribution (In Percent)	10	13	14	15	18

Source: NHDFC

tried to provide housing loans on the basis of collateral, usually land, with a higher interest rate and shorter maturity. This scheme could not last long, for three main reasons: the gpvernment's absence of long-term financial policy and inability to comprehend the full import of housing in the national economy, as well as the bank's own bitter experiences in the loan repayment collection.

The Housing Finance System in the Philippines[bm]

Introduction

The Philippines faces serious problems with regard to the extent and quality of its housing stock. Demand for affordable housing units continues to grow in response to demographic expansion and larger household sizes, in both urban and rural areas. However, affordability poses a challenge in view of low incomes, inadequate supply of suitable homes and limited access to home financing facilities. The following major factors lie behind the Philippines' shelter problem: housing need, housing affordability, home-ownership and land tenure, provision of basic services to urban households, type of housing materials, and geographic mismatches between housing needs and stocks. Housing needs for the period 1987-1992 were estimated at 3.4 million units – 1.8 million units for rural and 1.6 million for urban areas.

Housing affordability remains a problem due to relatively low household incomes, with a national monthly average of 2,960 pesos (PHP) (or USD 110). In 1988, the average monthly family income was PHP 4,420 (USD 164) for urban and PHP 2,072 (USD 77) for rural areas. The amount available for housing was estimated on the basis of the current expenditure for housing, rent or its equivalent, plus savings, and stood at an average PHP 740 (USD 27) monthly, or 23 per cent of monthly income. This is affordable only to households belonging to the top 50 per cent of families on the income ladder. Therefore, housing remains beyond the reach of a sizeable portion of the Filipino population.

Home-ownership and security of tenure remain a problem in urban areas, where only 64 per cent of households own their homes; in Metro Manila, the proportion is 58 per cent. Moreover, 22 per cent of Metro Manila households have no tenure over the land on which their houses are built.

An Integrated Housing Delivery System

Between 1981 and 1985, the Filipino government launched a 'total systems approach' to the financing, production and regulation of housing. An interacting network of housing agencies was established and maintained to fulfil six main specific functions: funds generation, mortgage purchases, mortgage guarantees, regulations, and social housing,. This sharper government focus on housing sector development resulted in a significant increase in overall housing production.

The housing-finance system put in place in the Philippines integrated savings, secondary mortgage trading and credit insurance. This crucial component of housing delivery was undertaken jointly by three government agencies: the

Home Development Mutual Fund (HDMF), the National Home Mortgage Finance Corporation (NHMFC), and the Home Financing Corporation (HFC). The scheme made home loans accessible to low- and middle-income groups, channelling savings into PHP 6.2 billion (USD 229.6 million) worth of long-term mortgage funds between 1981 and 1985. In addition, the system generated PHP 1.2 billion (USD 44.4 million) in construction loans and PHP 2.0 billion (USD 74.1 million) in long-term mortgages from the private banking system through HFC and during the same period.

The Housing Finance System

In keeping with the objectives of the 1986 Revised National Shelter Programme, the Filipino housing finance system focuses on lower income groups and a more equitable distribution of loans.

Housing finance is a joint undertaking by three agencies in the Philippines: NHMFC, the Home Insurance Guaranty Corporation (HIGC) and HDMF.

NHMFC's role is mobilise available long-term funds (the bulk of which emanates from the Social Security System (SSS), the Government Service Insurance System (GSIS) and HDMF) to purchase mortgages originated by both private and public institutions under the Unified Home-lending Programme (UHLP).

NHMFC administers UHLP, which integrates the respective housing loan programmes of SSS, GSIS and HDMF. UHLP is funded entirely from borrowings from these three institutions. It was designed to operate on a self-sustaining basis, with a cross-subsidy mechanism where the highest income class pays three per cent more than the average, enabling the lowest income class to pay three per cent less. UHLP interest rates are considered to be more socially equitable. The three institutions behind UHLP funding in turn get a guaranteed 10.5 per cent yield, which is sufficiently attractive for them to provide abundant funding for housing purposes. As adjusted in 1991, UHLP loan packages and interest rates were as follows: loans up to PHP 150,000 (USD 5,556): nine per cent interest rate; over PHP 150,000 to P225,000 (USD 8,333): 12 per cent; and over PHP 225,000 to HP P375,000 (USD 13,889): 16 per cent.

A facility for those employed/income-earning individuals who are not members of SSS, GSIS or HDMF has also been launched and made an integral part of UHLP. Through this so-called "Social Mortgage Window", the benefits of home-ownership are made available to the widest possible spectrum of citizens. Non-members of the three funding institutions may avail themselves of loans up to PHP120,000 (USD 4,444) for house and lot, and up to PHP 45,000 (USD 1,667) for home lots.

Through the Home Insurance Guaranty Corporation (HIGC), the Filipino housing finance system also provides two types of guarantee: (a) developmental guarantees extend to developmental/construction loans by banks to private developers undertaking housing projects; and (b) retail guarantees on individual home-buyers' loans.

These guarantees make commercial funds available to developers and home-buyers thanks to the tax incentives granted to the lender and the substitution of government credit for the borrower's own. This is how HIGC-guaranteed mortgages are turned into government debt and are, therefore, classified as risk-free. This makes it easier for banks to roll over their funds, thereby generating a more active market.

The Home Development Mutual Fund

The Filipino Home Development Mutual Fund (HDMF) was developed and launched as a provident savings system for housing finance. It was created to meet the need for a financial institution to mobilise savings with the government propelling the system through decreed employer counterparts. At the same time, the Fund addresses the urgent need for affordable financing to help solve the housing problem.

HDMF is mandated to administer Provident Fund contributions of member-employees and employers; to channel into housing loans for members any funds that are surplus to provident benefits; and to develop savings schemes for home acquisition for private and government employees.

In its efforts to address the country's two interrelated pressing needs – savings and housing – HDMF has effectively mobilised domestic savings for long-term housing finance. On the provident aspect, HDMF grants short-term provident loans under a multipurpose loan programme that is tied with members' total accumulated Fund contributions.

Since inception, HDMF has remained in the primary business of housing, which contributes the bulk of its investment portfolio. As one of the key agencies in the Filipino housing finance system, HDMF's traditional role was that of providing end-user financing. The Fund opted to transcend this role in order to address more critical housing problems, which are such that no one agency can be expected to provide all the necessary solutions.

In order to complement UHLP, HDMF has launched the so-called Expanded Housing Loan Programme (EHLP), which operates under more liberal guidelines for housing loans. The loan purposes covered by the Programme include house construction and/or acquisition, lot purchase, home improvement, refinancing of an existing loan, and redemption of a foreclosed property.

The critical need for increased social housing for the lowest 30 per cent segment of the Filipino population has pushed HDMF to become involved in direct housing production. It has been doing so through the Social Housing Developmental Loan Programme (SHDLP) and the Group Land Acquisition and Development Programme (GLAD), which provide financial assistance for land acquisition and/or site development for social housing projects.

HDMF makes loans at 12 per cent interest for development of low-income houses priced between PHP 120,000 (USD 4,444) and 150,000 (USD 5,556). For developments above this range, the HDMF lends to banks at 13 per cent and they on-lend the funds at 18 per cent as they bear the credit risk.

Regular Mortgages

Regular mortgages consist mainly of housing loans under UHLP; the complementary individual programmes of the three funding institutions, such as EHLP of HDMF, are also covered through the Social Mortgage Window of the NHMFC.

Regular mortgage take-outs totalled 106,468 between 1987 and 1990, with an average annual growth rate of 33.87 per cent. Total financial assistance aggregated to PHP 15,259 million (USD 565 million) over the four-year period.

In line with the Filipino government's policy of implementing a continuing programme for social housing, the Abot-Kaya Pabahay Fund was established in 1990 under Republic Act Nº 6846. This Fund amounts to PHP 2.5 billion (USD 92.3 million) and was to be built up over a five-year period through annual appropriations of PHP 500 million (USD 71.4 million) from the national government. The rationale is to provide amortisation support, expedite land development for social housing through development financing for developers of low-cost housing projects, and to establish a strong guarantee system for the funding agencies involved in housing.

Development Loans

The Social Housing Developmental Loan Programme seeks to address the dearth in the production of low-income housing despite availability of funds for low-income mortgages. The Programme extends low-interest loans to public and private developers and landowners, in a bid to encourage them to produce affordable housing for low-income families.

From 1988 to 1990, a total 31,665 housing units were completed by both public and private developers with the assistance of NHMFC and HDMF. This amounted to PHP 2.1 million (USD 77,800) in developmental financing.

The Filipino government also encouraged private financial institutions to extend construction loans through the HIGC Development Guarantee Programme, which covered 16,866 units from 1988 to 1990.

Community Mortgage Programmes

The Filipino Community Mortgage Programme (CMP) was set up to enable urban poor communities to acquire land, develop infrastructures and build or improve their homes. CMP loans enable community-based organizations to acquire and develop land on behalf of members, issue individual land titles and provide individual loans for housing construction or improvement – all under the concept of community ownership. The primary objective of the programme is to help residents in blighted areas to gain ownership of the lots they occupy, or to relocate to another area, and eventually improve their neighbourhood and homes to the extent of their financial abilities. Under the scheme, residents can only obtain a loan if they are supported by an NGO or a government agency[bn]. The CMP was launched in 1988 and is administered by NHMFC. Community-based organizations or co-operatives apply for CMP loans through the National Housing Mortgage and Finance Corporation (NHMFC).

CMP addresses the problem of security of land tenure for the landless urban poor in three distinct stages. The first stage allows for land acquisition by the community; the second stage provides financing for the 'horizontal' development of the acquired property and the individual titling of lands; and the final stage involves home improvement or house construction.

CMP is totally funded by budget appropriations from the Filipino Treasury. However, Treasury funds are not always released on time. In 2002, CMP was still overdue the remaining balance of its 1999, 2000 and 2001 budget allocations, and the one for 2002 was reduced to PHP 300 million (USD 60 million). In effect, CMP allows slum dwellers to legalise their status without requiring them to provide collateral. By 2001, CMP had helped 114,911 poor households in 854 communities to secure rights to housing and tenure. On average, it has assisted about 9,000 households a year[bo]. CMP has achieved the highest collection efficiency rate of all government housing loan programmes. The average loan amount was USD 665 per household[bp].

Thanks to its inherent advantages CMP is widely recognised, capturing the interest not just of government spheres but also

of a number of local authorities as well as community-based and non-governmental organizations (NGOs). However, its potential as a major government programme remains untapped. To date, a substantial volume of community projects are still under process. NHMFC has opted to exercise prudence over loan volumes in view of various factors, which suggests that institutional strengthening is in order if the quality of the CMP portfolio is to be maintained. Although CMP provides loans to an average 9,000 households a year, it is far from solving the low-income housing problem on its own, due to the fast-growing numbers of poor households in need of homes. Furthermore, the lowest income households cannot access CMP. The poorest 20 percent segment can only access informal finance. The low-income groups between the 20th and 50th income percentiles can afford CMP loans, and median- and high-income segments can resort to formal housing finance (see Table 10.4).

Strengthening the Filipino Housing Finance System through Integration

Despite the presence of well-developed and specialized institutions in the country, housing finance in the Philippines has not yet been fully integrated into the overall financial system.

Table 10.4 Income Groups and Housing Financing Schemes[bq]

Income Group	Cumulative % Of Population	Ave. Annual Income	Ave. Annual Housing Expend.	Housing Delivery Mechanism	Financing Scheme
<10,000	0.5	7,902	799	Informal Market	Informal credit/ Self-financing
10,000- 19,000	3.9	16,107	1,536	Informal Market	Informal credit/ Self-financing
20,000-29,000	11.9	25,330	2,091	Informal Market	Informal credit/ Self-financing
30,000- 39,000	22.3	35,063	2,864	Informal/ formal market	Informal credit/ self-fin/CMP
40,000- 49,000	32.3	44,881	3,863	Informal/ formal market	Informal credit/ self-fin/CMP
50,000- 59,000	40.5	54,854	4,971	Informal/ formal market	Informal credit/ self-fin/CMP
60,000- 79,000	53.4	69,492	6,822	Formal market	Private formal lenders/CMP*/ /SSS/GSIS/ HDMF
80,000- 99,000	62.3	89,429	9,435	Formal market	Private formal lenders/CMP*/ SSS/GSIS/ HDMF
100,000-149,999	76.9	122,409	15,194	Formal market	Private formal lenders/SSS/ GSIS/HDMF
150,000-249,000	90.0	191,141	22,208	Formal market	Private formal lenders/SSS/ GSIS/HDMF
250,000-499,000	97.5	330,041	51,937	Formal market	Private formal lenders/SSS/ GSIS/HDMF
500,000 and over	100.0	996,047	134,273	Formal market	Private formal lenders/ SSS/ GSIS/HDMF

The preceding discussion focused on the government's housing programmes and housing-finance system, as this is treated separately from the types of financing provided by private commercial banks. These private institutions offer financial assistance under more stringent terms and higher interest rates, as determined by open-market competition. Consequently, these institutions respond to the financial needs of those in the middle- and upper-income brackets with higher affordability levels for housing.

In the Philippines, there is absolutely no competition between government housing-finance institutions and private commercial banks, all of which offer their own housing and real estate loan programmes. The two categories service two totally different markets. The government provides much-needed support for the housing needs of the less privileged groups through increased budget allocations, loan amortization support and interest-rate subsidy schemes.

However, efforts to integrate housing finance schemes into the national financial system are gradually being undertaken by way of enhancing the acceptability of mortgage-backed instruments in the Filipino capital market.

On its own, it may be said that the government's housing finance system has achieved some degree of integration. UHLP itself integrates the housing programmes of various housing finance institutions and establishes vital links with private developers and originating banks.

As one of the housing finance institutions, HDMF has been continuously working towards integrating the government machinery into the national financial system. Given its unique and distinct capacity in mobilizing household savings for long-term housing finance, the Fund brings together both government and private-sector resources to meet the needs of its members, who represent an entire cross-section of the population. HDMF has expanded its reach nationwide with fully decentralized operations. Through its various provident and housing-loan programmes, the Fund brings together members, employers, originating banks, private developers, non-government organizations (NGOs) and even local government units (LGUs).

HDMF has, likewise, invested in mortgage-backed instruments through aggregate purchases of some PHP 120 million (USD 4.44 million) worth of contract-to-sell receivables from private developers at discounted rates. The ultimate objective here is for the Fund to on-sell these mortgage-backed securities to other private financial institutions at reasonable rates of return; these efforts should, ultimately, result in active trading of mortgage-backed instruments on the open market, thereby further increasing the degree of integration of housing finance into the national capital market.

However, the market for mortgage-backed investment instruments is still in its infancy in the Philippines. These instruments have not yet gained the full confidence of either institutional or individual investors due to several factors. One perceived reason is the failure of NHMF's secondary mortgage market system (SMMS), which adverse economic and political developments back in 1983 have not allowed to develop. Although a revised NSP has reactivated the SMMS through UHLP, transactions are limited to the home mortgages of the funding agencies. This is why investors remain wary of these mortgage instruments; another reason could be that the rates of return on mortgage-backed securities pale in comparison with other risks and higher yields.

Once acceptability of mortgage-backed securities as viable investment instruments is established, the Filipino housing finance system can be assured of readily available funding. More institutions may be lured into purchasing mortgages once the mechanism that makes this market liquid proves to be sound and profitable. The free flow of funds recycled into the system can only mean more financing for housing production.

Conclusions

Integration of the housing-finance system into the Filipino national financial system will undoubtedly strengthen its capability to generate more funds for housing production. However, full integration can only be achieved if a country's economic and business climate remains favourable and interest rates are stable. Unfortunately, this is not the case in the Philippines where consumer prices continue to fluctuate and the inflation rate, now averaging 17 per cent, is very much off-course by comparison with the other member countries of the Association of South-East Asian Nations (ASEAN).

Given the objectives of the Filipino government's housing programme and its focus on the low-income segment of the population, it may be difficult to achieve full integration. Continued government support by way of legislation, budget appropriations and interest subsidies for housing dictates the current interplay of forces in the housing-finance system. If the government's housing finance programme is to be fully integrated, its interest rates should reflect those opn the open market. However, market rates for housing finance are beyond the reach of the poorest 30 per cent of the Filipino population.

Against this background, only partial integration can be sought at the moment. This is what HDMF has been doing, in line with its mandate and the policy objectives of the National Shelter Programme. The Fund recognises the significance of establishing a viable market mechanism which would bring liquidity to secondary home mortgages

and recycle them into the general system in order to generate increased financing for home acquisition.

Therefore, while HDMF continues to implement its provident benefit and housing loan programmes for members, it is taking gradual steps to integrate housing finance into the overall financial system through investment in mortgage-backed securities. Eventually, the Fund hopes to establish a viable market mechanism which would stimulate open market trading of mortgage instruments, thereby paving the way for its fuller integration into the Filipino capital market.

References

w UN-HABITAT (2005), Towards Poverty Eradication Goal: Structure and Infrastructure of Microfinance and Microcredit Industry in Eastern Africa, Nairobi: UN-HABITAT

x De Soto H. (2000) The Mystery of Capital, New York: Basic Books

y De Soto H. (2000) The Mystery of Capital, New York: Basic Books

z Institute for Housing Studies (IHS) (1998) Renting – Its Place in the Housing Market of Developing Countries, Rotterdam: IHS

aa GMG (2005) Lack of Property Rights for Women Hampers MDGs, Gender, Media and Governance, e-newsletter, No. 003, June 7, 2005

ab Qvist E (1995) Women's Access, Control and Tenure of Land, Property and Settlement, Paper presented at the International Workshop on Women's Access, Control and Tenure of Land, Property and Settlements, Gavle, Sweden

ac Boumphrey R., Dickie P., and Tukuafu S. (2005) Instill Credit Culture in State-owned Banks – Experience from Lao, ADB

ad Boumphrey R., Dickie P., and Tukuafu S. (2005) Instill Credit Culture in State-owned Banks – Experience from Lao, ADB

ae GoT & UN-HABITAT (2003) Re-establishing Effective Housing Finance Mechanisms in Tanzania: The Potentials and the Bottlenecks, UN-HABITAT

af Luoto J., McIntosh C. & Wydick B (2004) Credit Information Systems in Less-Developed Countries, paper presented at a seminar at Princeton University.

ag Freedman P L (2004) Designing Loan Guarantees to Spur Growth in Developing Countries, USAID

ah Based on data from World Bank database 2005

ai Freedman P L (2004) Designing Loan Guarantees to Spur Growth in Developing Countries, USAID

aj Ferguson B (2004) The Key Importance of Housing Microfinance, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

ak Freedman P L (2004) Designing Loan Guarantees to Spur Growth in Developing Countries, USAID

al Collard S. & Kempson E (2005) Affordable Credit, the Policy Press

am Daphnis F (2004) "Housing Microfinance: Towards a Definition", in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

an Ibid.

ao Robinson M S (2001) The Microfinance Revolution, Washington DC: World Bank

ap Daphnis F (2004) "Housing Microfinance: Towards a Definition", in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

aq Ibid.

ar Ibid.

as Robinson M S (2001) The Microfinance Revolution, Washington DC: World Bank

at Healey J (ed.) (2000) World Aid and Foreign Debt, Issues in Society, vol. 134, pp1-38

au World Revolution (2005) The State of the World, http://www.worldrevolution.org/projects/globalissuesoverview/overview2/briefdevelopment.htm (accessed 15 August 2005)

av Ibid.

aw Robinson M S (2001) The Microfinance Revolution, Washington DC: World Bank

ax Ibid.

ay CGAP (2001) Helping to Build a Microfinance Industry, http://www.cgap.org/docs/Brochure_helpingtobuild.pdf (accessed 15 August 2005)

az Robinson M S (2001) The Microfinance Revolution, Washington DC: World Bank

ba CHF International (2005) Practical Guide for Housing Microfinance in Morocco, Silver Spring, MD: CHF International

bb Daley-Harris S (2004) State of Microcredit Summit Campaign Report 2004, Washington DC: The Microcredit Summit Campaign

bc CUDS (2000) Housing Microfinance Initiatives, Harvard University

bd Ferguson B (2004) The Key Importance of Housing Microfinance, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

be Klinkhamer M (2000) Microfinance Housing Products and Experience with Land Title as Collateral, GHIF

bf Escobar A & Merrill S R (2004) Housing Microfinance: The State of the Practice, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

bg Escobar A & Merrill S R (2004) Housing Microfinance: The State of the Practice, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

bh ACCION (undated) Assisting Commercial Banks to Start Microfinance Programme, Boston: ACCION International

bi Goodwin-Groen R (1998) The Role of Commercial Banks in Microfinance: Asia and Pacific Region, Brisbane: BWTP

bj Escobar A & Merrill S R (2004) Housing Microfinance: The State of the Practice, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

bk Dichter T (1999) NGOs in Microfinance, University of British Columbia

bl UN-HABITAT (2004) Community-based Housing Credit Arrangements in Low Income Housing: Assessment of Potentials and Impacts, Nairobi: UN-HABITAT

bm Ibid.

bn Cities Alliance (2003) The Enabling Environment for Housing Finance in Kenya, CIVIS, No. 4

bo UN-HABITAT (2004) Community-based Housing Credit Arrangements in Low Income Housing: Assessment of Potentials and Impacts, Nairobi: UN-HABITAT

bp Ibid.

bq Ibid.

br Domingo M (1998) Formal and Informal Financial Services Available to the Urban Poor of Phnom Penh, in UN-HABITAT and Community Development Programmeme for Asia (eds) Urban Community-based Financial Services in Asia, Nairobi: UN-HABITAT

bs Boonyabancha S (2000) Cambodia: The Urban Poor Development Fund, Conventry: Homeless International

bt Housing Microfinance Case Study: HILP and Condominium Loans in Romania, http://www.coop.org/housing/activities/housing-practitioners/part-2-chapt1-romania.pdf#search=%22CHF%20housing%20microfinance%22, accessed 25 August 2006

bu Ibid.

bv Goldberg M & Motta M (2003) Microfinance for Housing: the Mexico Case, Journal of Microfinance, 5 (1), 51-76

bw Ibid.

bx Fehr D & Hishigsuren G (2004) Raising Capital for Microfinance: Sources of Funding and Opportunities for Equity Financing, Working Paper, Southern New Hampshire University

by Ibid.

bz Escobar A & Merrill S R (2004) Housing Microfinance: The State of the Practice, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

ca Tulchin D (2004) Positioning Microfinance Institutions for the Capital Markets, Social Enterprise Associates

cb Ruth Mcleod (2001) “Experiences of Linking Community-Based Housing Finance to Formal Finance Mechanisms,” presentation to Homeless International, March 28, 2001

cc Ruth Mcleod (2001) “Experiences of Linking Community-Based Housing Finance to Formal Finance Mechanisms,” presentation to Homeless International, March 28, 2001

cd CGAP (2004) Housing Microfinance, Donor Information Resource Centre, www.cgapdirect.org (accessed 19 August 2005)

ce Escobar A & Merrill S R (2004) Housing Microfinance: The State of the Practice, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

cf Daphnis F (2004) Elements of Product Design for Housing Microfinance, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

cg Escobar A & Merrill S R (2004) Housing Microfinance: The State of the Practice, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

ch Daphnis F (2004) Elements of Product Design for Housing Microfinance, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

ci Escobar A & Merrill S R (2004) Housing Microfinance: The State of the Practice, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

cj Almeyda G & Branch B A (1998) Microfinance in Guatemala: the Case of Creidt Unions, Madison: World Council Information Center

ck Daphnis F (2004) Elements of Product Design for Housing Microfinance, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

cl Escobar A & Merrill S R (2004) Housing Microfinance: The State of the Practice, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

cm CGAP (2004) Housing Microfinance, Donor Information Resource Centre, www.cgapdirect.org (accessed 19 August 2005)

cn Daphnis F (2004) Elements of Product Design for Housing Microfinance, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

co Almeyda G & Branch B A (1998) Microfinance in Guatemala: the Case of Creidt Unions, Madison: World Council Information Center

cp Vance I (2004) Land and Collateral Issues, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

cq Ibid.

cr Daphnis F (2004) Elements of Product Design for Housing Microfinance, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

cs Vance I (2004) Land and Collateral Issues, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

ct Daphnis F (2004) Elements of Product Design for Housing Microfinance, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

cu CHF International (2005) Practical Guide for Housing Microfinance in Morocco, Sliver Spring USA: CHF International

cv Escobar A & Merrill S R (2004) Housing Microfinance: The State of the Practice, in Daphnis F & Ferguson B (eds.) Housing Microfinance: A Guide to Practice, Bloomfield: Kumarian Press

cw Merrill S (2004) Housing Microfinance: State of the Practice, the Urban Institute

cx Cities Alliance (2005) FUNHAVI’s Housing Microfinance Programme in Mexico, Washington DC: Cities Alliance

cy Ibid.

cz USAID (2004) PRIDE/Finance: Linking an African Microfinance Institution to a Formal US Banking Structure, News Stories, http://www.usaid.gov/gn/nrm/news/microfinance/article_long.htm

da Ibid.

db Ibid.

dc Cities Alliance (2002) The Enabling Environment for Housing Microfinance in Kenya, Washington DC: Cities Alliance

dd Miller J (2003) Benchmarking Latin American Microfinance, Washington DC: Microfinance Information Exchange

de Sharma A (2005) Developing Sustainable Microfinance Systems, ADB, www.unescap.org/drpad/publication/fin_2206/part5.pdf (accessed on 2 September 2005)

df Operating and Financial Reviews, http://www.dflcaribbean.com/OpFinReview.pdf (accessed on 31 August 2005)

dg Okpala D & Zhang X Q (2005) The Role of Microcredit in Affordable Housing for Low Income Households, in UN-HABITAT (ed.) Towards the Poverty Eradication Goal: The Structure and Infrastructure of the Microfinance

and Microcredit Industry in Eastern Africa, Nairobi: UN-HABITAT

dh Ibid.

di BRBD (1997) Comparative Study on Credit Delivery Cost for Rural Poor Projects, http://www.alternative-finance.org.uk/cgi-bin/summary.pl?id=18&sourcelang=E&view=html (accessed on 31 August 2005)

dj Ibid.

dk Okpala D & Zhang X Q (2005) The Role of Microcredit in Affordable Housing for Low Income Households, in UN-HABITAT (ed.) Towards the Poverty Eradication Goal: The Structure and Infrastructure of the Microfinance and Microcredit Industry in Eastern Africa, Nairobi: UN-HABITAT

dl Fernando N A (2004) Microfinance Outreach to the Poorest, ADB Finance for the Poor, Vol. 5 No. 1

dm Sharma A (2005) Developing Sustainable Microfinance Systems, ADB, www.unescap.org/drpad/publication/fin_2206/part5.pdf (accessed on 2 September 2005)

dn Okpala D & Zhang X Q (2005) The Role of Microcredit in Affordable Housing for Low Income Households, in UN-HABITAT (ed.) Towards the Poverty Eradication Goal: The Structure and Infrastructure of the Microfinance and Microcredit Industry in Eastern Africa, Nairobi: UN-HABITAT

do Landaeta G (1994) Strategies for Low-income Housing, Sweden: Lund University

dp San Luis Obispo County Housing Trust Fund, Permanently Affordable Housing, http://www.slochtf.org/housing-models.htm (accessed on 10 September 2005)

dq CNHED (2004) A Study of Limited Equity Co-operatives in the District of Columbia, <http://www.cnhed.org/image/123800_c_sU127242_s_i189945/Coop%20Study%20PDF.pdf> (accessed on 12 September 2005)

dr Ibid.

ds Lopez Community Land Trust, LCLT Affordable Housing Programme, http://www.lopezclt.org/affordable_housing/model.html (accessed on 12 September 2005)

dt Peterson T (1996) Community Land Trusts: An Introduction, http://www.plannersweb.com/articles/pet112.html (accessed on 11 September 2005)

du Lopez Community Land Trust, LCLT Affordable Housing Programme, http://www.lopezclt.org/affordable_housing/model.html (accessed on 12 September 2005)

a Ibid.

b Ibid.

c Ibid.

d This section is based on Zhang, X Q (1998) Privatisation: A Study of Housing Policy in Urban China, New York: Nova Science Publishers

e Editorial committee (ed.), China Real Estate (Beijing: New Times Press, 1992) (in Chinese)

f Data from Kunming Housing Co-operative Headquarters

g Editorial Committee (ed.), China Reform : Real Estate (Dalian: Dalian Press, 1992), 80 (in Chinese)

h Editorial Department (ed.), Shanghai Housing, Shanghai: Shanghai Science Popularisation Press, 1993 (in Chinese); Editorial Board, China Reform : Real Estate (Dalian: Dalian Press, 1992) (in Chinese)

i Editorial Committee (ed.), China Real Estate passim

j Gatabaki-Kamau R (1985) Co-operative Housing Development in Kenya, Nairobi: University of Nairobi

k Ibid.

l Ibid.

m Ibid.

n Ibid.

o This section is based on Zhang, X Q (1998) Privatisation: A Study of Housing Policy in Urban China, New York: Nova Science Publishers

p Editorial Committee (ed.), Modern China Urban Construction, Beijing: China Social Science Press, 1990 (in Chinese)

q Z. F. Cheng, State Urban Construction General Bureau's Vice Director Cheng Zhong Fong's Speech in National Urban Employees and Residents' Housing Building Experience Conference, 1/12/1980 (in Chinese)

r China's United Workers Union & State Urban Construction General Bureau, Report of 'Public Building with Citizen's Financial Contribution' and Citizen's Building with Public Support', D214:1980 (in Chinese)

s Brown C V & P M Jackson (1996) Public Sector Economics, 4th edition, Oxford: Blackwell

t Dunkerley H B (ed.) (1983) Urban Land Policy: Issues and Opportunities, Oxford: Oxford University Press

u Harsman B & Quigley J M (eds.) (1991) Housing Markets and Housing Institutions: An International Comparison, Boston: Kluwer Academic Publishers

v Brown C V & P M Jackson (1996) passim

w Zhang X Q (2000) High Rise and High Density Compact Urban Form – the Development of Hong Kong, in Jenks M & Burgess R (eds.) Compact Cities: Sustainable Urban Forms for Developing Countries, London: Spon Press

x Castells M, Goh L, Kwok R Y W (1990) The Shek Kip Mei Syndrome, London: Pion

y Howenstine E J (1986) The Consumer housing subsidy approach versus producer housing subsidies, Cities, 24-40

z Monetary Authority of Singapore (2005) Public Finance and Monetary Statistics, http://www.singstat.gov.sg/keystats/economy.html#pubfin (accessed 20 September 2005)

aa Housing & Development Board (2005) Housing Financing, http://www.hdb.gov.sg/hdbvsf/eampu100.nsf/0/Home_Financing.html?open&doc=Financial_Scheme_Mortgage_Loan.htm&topmenu=0 (accessed on 16 September 2005)

ab Tan S Y (1998) Private Ownership of Public Housing in Singapore, Singapore: Times Academic Press

ac Wong G K M & Zhang X Q (2003) Government Intervention and Impact on the Housing Market in Singapore, Journal of Comparative Asian Development, 2 (1), 115-132

ad Alford R (2003) What Are the Origins of Freddie Mac and Fannie Mae? Http://hnn.us/articles/1849.html (accessed 23 January 2006)

ae Ibid

af AFQs on Fannie Mae and Freddie Mac, http://www.annaly.com/ie/ffmfaq.html/ (accessed 23 January 2006)

ag White L J (2004) Fannie Mae, Freddie Mac, and Housing Finance, Policy Analysis, No. 528, October 2004

ah Ibid

ai US Congressional Budget Office (2001) Federal Subsidies and the Housing GSEs, http://www.cbo.gov/showdoc.cfm?index=28418sequence=2/ (accessed 23 January 2006)

aj Ibid

ak Assisted Housing: Fannie Mae, Freddie Mac and the Affordable Housing Goals, http://www.nlihc.org/news/5199.htm (accessed 24 January 2006)
al Utt R D (2005) Time to Reform Fannie Mae and Freddie Mac, Backgrounder, No. 1861, June 20
am Ibid
an Manchester P B (2002) Goal Performance and Characteristics of Mortgages Purchased by Fannie Mae and Freddie Mac 1998-2000, working paper No. HF-015, USA Department of Housing and Urban Development
ao Ibid
ap Utt R D (2005) Time to Reform Fannie Mae and Freddie Mac, Backgrounder, No. 1861, June 20
aq Ibid
ar This case is based on Piyatissa S W Bulankulame, E Dias & M E Joachim (1978) City of Colombo, Sri Lanka: The Integration of Squaters into the Mainstream of Urban Life, in United Nations, The Role of Housing in Promoting Social Integration, New York: United Nations
as Conditions in Colombo's Shanties Highlight Sri Lanka's Housing Crisis, http://www.wsws.org/articles/2000/sep2000/sri-s21.shtml (accessed 6 February 2006)
at Homeless International (2005) Community Savings Financing Human Settlements, http://www.homeless-international.org/standard_1.asp?category=3&id=2028&id=2007&id=263
(accessed on 16 September 2005)
au UN-HABITAT (1989) Mobilisation of Financial Resources for Low-Income Groups, Nairobi: UN-HABITAT
av CPF Board (2005) CPF Interest Rate, http://www.cpf.gov.sg/cpf_info/goto.asp?page=News/PressRel/N_15Aug2005.asp (accessed on 20 September 2005)
aw CPF Board (2005) CPF Statistics, http://www.cpf.gov.sg/cpf_info/News/Statistics/2005-q2n.asp (accessed on 20 September 2005)
ax UN-HABITAT (1989) passim
ay UN-HABITAT (1987) Global Report on Human Settlements, Oxford: Oxford University Press
az Ibid
ba Lea, M J & Renaud B (1995) Contractual Savings for Housing: How Suitable Are They for Transitional Economies?, Policy Research Working Paper, Washington DC: World Bank
bb Ibid
bc Ibid
bd Ibid
be UN-HABITAT (1987) passim; UN-HABITAT (1989) passim
bf UN-HABITAT (1989) passim
bg Ibid
bh Current Economy Profile of Turkey, <http://www.photius.com/countries/turkey/economy/index.html> (accessed on 20 September 2005)
bi Zhang X Q (2000) The Restructuring of the Housing Finance System in Urban China, Cities, 17 (5), pp.339-348
bj Ibid
bk Joint Center for Housing Studies of Harvard University (2004) The State of Mexico's Housing – 2004
bl Murai T (2004) The Foundation of the Mexicon Welfare State and Social Security Reform in the 1990s, The Developing Economics, XLII, pp. 262-87
bm Babatz G (2006) Mexico, paper presented at the Conference on Housing Finance in Emerging Markets, Washington DC, 15-17 March 2006
bn Joint Center for Housing Studies of Harvard University (2004) passim
bo Ibid
bp Babatz G (2006) passim
bq UN-HABITAT (1989) passim
br US Congressional Budget Office (1982) The Mortgage Subsidy Bond Tax Act of 1980: Experience under the Permanent Rules, Staff Working Paper
bs Ibid.
bt Ibid
bu Ibid
bv Ibid
bw Ibid
bx Ibid
by Ibid
bz Government Housing Bank Annual Report 2004
ca Ibid
cb Government Housing Bank of Thailand, http://www.reic.or.th/about/eng/about_ghb.asp (accessed 3 February 2006)
cc Government Housing Bank of Thailand, http://www.nird.org.in/clic/govt_house.html (accessed 3 February 2006)
cd Government Housing Bank in Thailand, http://www.ghb.co.th/eng/rate/rate_Deposit_eng.htm (accessed 2 February 2006)
ce Government Housing Bank of Thailand, http://www.nird.org.in/clic/govt_house.html (accessed 5 February 2006)
cf Ibid.
cg Prachuabmoh K (2006) Experience of the Government Housing Bank of Thailand, paper presented at the Conference on Housing Finance in Emerging Markets, Washington DC, 15-17 March 2006
ch Akuffo A (2006) HFC's Pioneeing Role and Future Mortgage Market Expansion in Ghana, paper presented at the Conference on Housing Finance in Emerging Markets, Washington DC, 15-17 March 2006
ci Ibid.
cj Ibid.
ck Ibid.
cl Ibid.
cm This is based on Office of the Deputy Prime Minister (updated) Rent to Mortgage Housing, London: Office of the Deputy Prime Minister
cn This is based on Levy J S & Purnell K (undated), Case Study: the Community Development Trust, Community Development Investment Review
co Most of this section is contributed by Thierry Naudin
cp Rojas E (1995) The IDB in Low-cost Housing: The First Three Decades, IDB
cq Ibid.
cr Ibid.
cs Ibid.
ct Ibid.
cu Ibid.
cv Ibid.
cw This case is based on ADB (1999) Project Performance Audit Report on the Low Income Housing Development Project in the Republic of the Fiji Islands, ADB

a World Bank (1998) Project Appraisal Document on Low Income Housing Project in Algeria, Washington DC: World Bank
b Treasury Board & Public Works and Government Services Canada (1997) Guide on Revolving Funds, http://www.tbs-sct.gc.ca/ accessed 3 February 2005
c ILO (1998) Revolving Loan and Guarantee Funds, <http://www.ilo.org/> accessed 3 February 2005
d National Development Council (1998), Revolving Loan Fund Handbook, State of California Department of Housing and Community Development
e Ibid.
f UN-HABITAT (1991), The Management of Revolving Funds for House Improvement Loans, Nairobi: UN-HABITAT
g Ibid.
h Ibid.
i Ibid.
j Ibid.
k Ibid.
l Ibid.
m OECDD (2004) Safe Drinking Water in Oregon, February 2004
n Ibid.
o Ibid.
p Ibid.
q Fabozzi, F J & Choudhry M (eds.) (2004) The Handbook of European Structured Financial Products, Hoboken, New Jersey: John Wiley & Sons
r Fabozzi F J, Ramsey C & Marz M (eds.) (2000), The Handbook of Non-agency Mortgage-Backed Securities, New Hope, Pennsylvania: Frank J Fabozzi Associates
s Fabozzi, F J & Choudhry M (eds.) (2004) passim
t Steinmetz T C (2002) The Mortgage Kit, Chicago: Dearborn Trade Publishing
u Fabozzi F J (ed.) (2001) The Handbook of Fixed Income Securities, New York: McGraw-Hill Professional
v Fabozzi F J, Ramsey C & Marz M (eds.) (2000) passim
w McCrea B (2005) Home Buyer's Question and Answer Book, New York: American Management Association
x Capone C A (2000) Credit Risk, Capital, and Federal Housing Administration Mortgage Insurance, Journal of Housing Research, Vol. 11, No. 2
y Ventolo W L & Tamper R (2002) Mastering Real Estate Maths, Chicago: Dearborn Real Estate Education
z Steinmetz T C (2002) passim
aa Ibid.
ab O'Hara S & Lewis N D (2003) The Complete Idiot's Guide to Buying and Selling a Home, Indianapolis: Alpha Books
ac Weiss M B (2003) Condos, Co-Ops & Townhomes, Chicago: Dearborn Trade Publishing
ad Pacione M (ed.) (2002) City: Critical Concepts in the Social Science, London: Routledge
ae Capone C A (2000) passim
af HUD – FHA Will Cut the Cost of Mortgage Insurance, news released by HUD Secretary Andrew Cuomo, October 30, 2000, Mortgage Bankers Association
ag Guide to Single-family Home Mortgage Insurance, USA Department of Housing and Urban Development
ah Ventolo W L & Tamper R (2002) passim
ai Floyd C & Allen M T (2002) Real Estate Principles, Chicago: Dearborn Real Estate Education
aj Ventolo W L & Tamper R (2002) passim
ak Mortgage Insurance & Securitization, http://www.cmhc-schl.gc.ca/en/moinin/moinle/moinle_012.cfm (accessed 25 January 2006)
al Ibid.)
am Fabozzi F J, Ramsey C & Marz M (eds.) (2000) passim
an Fabozzi F J & Ramsey C (1999) Collateralized Mortgage Obligations: Structure and Analysis, New Hope, Pennsylvania: Frank J Fabozzi
ao Stone, C A & Zissu A (2005) The Securitization Markets Handbook: Issuing and Investing in Mortgage and Asset-backed Securities, Princeton NJ: Bloomberg Press
ap Fabozzi F J, Ramsey C & Marz M (eds.) (2000) passim
aq Ibid.
ar Fabozzi, F J & Choudhry M (eds.) (2004) passim
as Lush M & Sirota D (2003) California Real Estate Finance, Chicago: Dearborn Real Estate Education
at Ibid.
au Ibid.
av Ibid.
aw Ibid.
ax The case is based on ADB (2003) Operations Manual, Manila: ADB
ay DCA (2002) Programming Policy, Washington DC: DCA
az Fabozzi, F J & Choudhry M (eds.) (2004) passim
ba Kimber A (2004) Credit Risk: From Transaction to Portfolio Management, Oxford: Elsevier
bb Kravitt J H P (ed.) (2004) Securitization of Financial Assets, New York: Aspen Publishers
bc Kimber A (2004) passim
bd Ibid.
be Ibid.
bf Ibid.
bg Garner D R, Owen R R, Conway R P (1994) The Ernst & Young Guide to Financing for Growth, Hoboken, New Jersey: John Wiley & Sons
bh Kimber A (2004) passim
bi English J W, Hicks B, Hrasky S & Gyles N (2003) Personal Financial Management, Crows Nest, Australia: Allen & Unwin
bj Fabozzi F J (ed.) (2001) passim
bk This section is based on UN-HABITAT publication
bl This section is based on UN-HABITAT publication and http://www.nhdfcl.com/Current%20company's%20status.htm
bm Ibid.
bn Community Mortgage Programme, http://www.unescap.org/rural/bestprac/mortgage.htm (accessed 17 April 2006)
bo Yu, S. O. (2005) Documentation of the Experience of the Homeless People's Federation of Philippines, UN-HABITAT
bp Porio E (2005) Affordable Housing in the Philippines, Slums and Housing, http://www.id21.org/publications/infrastructure%20highlights.pdf (accessed 17 April 2006)
bq Yu, S. O. (2005) passim