

Subsidizing Housing Finance for the Poor

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Paper prepared for Development Initiatives Group

July 2008

1. Why Subsidize Housing Finance? ¹

Nearly all governments intervene in housing finance markets, primarily for social and political reasons. The availability of debt finance for housing is a critical component of a housing system. Housing is one of the largest investments in an economy, often the most significant parts of a household budget, and a key barometer of social well-being. When societies urbanize and real incomes increase, housing expectations and standards also increase. But standard housing is expensive relative to household incomes or investor resources, and the degree of access to long and medium-term financing to pay for a house over time is especially important unless the state assumes that responsibility or pays for the housing asset directly. Lack of an efficient system of housing finance that includes existing and unfinished houses impedes low- and moderate-income housing markets in particular. Without access to debt finance, whether long or medium-term, households have to finance their homes from savings or family support. They must build their homes over long periods or settle for a lower quality structure, often extra-legal, which often translates to inadequate access to clean water, sanitation and community services.

In addition, the absence of ready buyers means that households will not be able to sell their homes at prices that permit them to recover their investments. This inability to sell hinders their mobility and has a negative effect on the quality of urban neighborhoods and hence the fiscal situation of cities, which limits service provision in low-income areas. This creates a vicious cycle in many countries that perpetuates informal settlements and overcrowding. As a consequence, providing access to medium-term, fairly priced debt, at a minimum, is both privately and politically urgent. As such, housing finance is often more prone to government intervention than are other types of finance.

The blanket assumption of the necessity of government intervention, however, can lead to extremely inefficient forms of subsidy intervention, based on a vague notion that housing is a “merit good”.² Unfortunately, this is the case in many countries as housing subsidies are often delivered through politically appealing programs that please the “housing sector lobby”, but carry little relevance to any identifiable social housing goals.

For example, governments often subsidize *mortgage rates through taxes or through special financial institutions funded with labor taxes or put caps on interest rates* for mortgage or

¹ Used here in the broad sense of paying for the housing asset, and not just debt financing.

² A merit good is a good more valuable to society as a whole than individuals alone. Education, as a further example, is often considered a merit good. It assumes positive externalities to the extent that the optimal level is reached only through subsidies.

housing micro-lending simply to make loans “more affordable” to the population in general. However, in most developing countries few low-income households qualify for mortgage loans and therefore such subsidies do not help those who need them. Furthermore, subsidized mortgage loans issued through special public lenders to address the affordability problem in the short term often have the effect of limiting the participation of private lenders even under more favorable market circumstances. Subsidized lenders therefore ultimately often limit access to finance. Similarly, caps on interest rates, or other such general “affordability” measures, often shrink rather than expand access to finance, since lenders will simply not enter into these markets. In other words, such broad and general housing finance subsidies that apply to large parts of society often increase housing inequities and do not expand access to finance. Yet, since the ultimate costs of such subsidies are often concealed (through taxation or special lines of credit, or by having the private sector bear the subsidy), they are difficult to change, certainly in the presence of powerful lobby groups.

Despite arguments against the above “affordability” measures, contrary arguments can also be made. Proponents often ask why citizens should be required to pay taxes in order to subsidize housing either for all or, more commonly, for a subset of society. Why, they continue, should they subsidize housing or housing finance rather than income in general if the goal is to assist the very poor? Such an argument is discussed in Santiago Levy’s (2008) insightful assessment of Mexico’s direct income transfer program for the poor --*Progresa-Oportunidades*-- in the context of the complex web of social programs for formal and informal sector workers, including housing programs.³ Levy argues that many of the existing social programs, including the mortgage subsidy program for formal workers, have contradictory objectives and have a negative impact on the welfare of the poor and on overall labor productivity. On the other hand, the direct cash transfer program, conditioned upon school enrollment and regular health checks of the children in beneficiary households, appears to have an unmistakable positive impact on households’ well being.⁴

This, by extension, begs the question of whether a country could simply increase its cash transfers to the poor on the condition that a household use such monies to improve its housing situation. Advocates of housing vouchers would argue in favor of such an approach. They maintain that such income transfers afford maximum choice to households: they are efficient and transparent and can be targeted to the most deserving segments of society. Moreover, they do not distort the housing or housing finance system itself.

Such an argument is based on the perception that substandard housing stems from a lack of income which can be solved by income transfers. This, however, gives rise to the question of where the poor in developing countries are to find adequate housing, even if armed with a housing voucher. If rental accommodation is sought, will the rental market respond to increases in demand and produce sufficient quality rental housing in the formal (or informal) sector? Who would be the landlords and how would they finance their housing investments? If the subsidy

³ Progresa is a poverty reduction program aimed at poor households with children. It conditions its transfers. Similar direct cash transfer programs have been implemented in 33 countries and appear to have a positive impact on the well-being of households and the health and education of children. These transfers are, of course, complemented by the excellent public education and health systems in Mexico to which access is guaranteed for all.

⁴ Levy does not focus specifically on housing subsidies or improvements of housing conditions.

would apply to ownership housing, would it have to be sizable enough to help households buy a house in the formal market and pay for part of their monthly finance payments? Moreover, who would provide the poor with a housing loan?

In other words, the application of an *income transfer* system--earmarked or conditioned upon increased housing consumption--would require that the segment of the housing market to which such vouchers are targeted works fairly efficiently. The housing sector in most developing countries is, however, constrained by incomplete housing finance markets and inefficient land markets for low- and middle-income groups. Even if finance is available, the regulatory system often makes it unprofitable or unfeasible for private developers to operate even in middle-income markets.⁵

These arguments demonstrate that policymakers need to be very clear on the various housing problems a housing subsidy policy has to address and the specific goals and objectives it needs to achieve in order to design effective subsidy programs. Three broad goals are usually involved, explicitly or implicitly, in political discussions about subsidy intervention in the housing sector:⁶

1. **Improving public health.**
2. **Improving justice and fairness in society**, i.e. redistributing income.
3. **Overcoming inefficiencies in the housing or mortgage market** that cannot be solved through regulation.

The first two of these reasons for subsidy intervention relate to sanitation and housing conditions directly and focus on promoting welfare in society through the housing sector. The third reason focuses on expanding housing opportunities by pricing and allocating costs and risks in the housing and housing finance sector more optimally, through, for example, subsidizing the provision of inputs that are underprovided by private markets and addressing externalities created by market operations.

Critically, these broad goals need to be specified in considerable detail. Specific market and household constraints that prevent lenders and/or developers from serving different segments of the population need to be identified in order to develop an effective package of regulatory and subsidy measures that can address such bottlenecks.

This paper will provide a framework for such detailing. It begins with a discussion of a fairly typical segmentation of the housing market in developing countries, including differential access to housing finance. It will give a brief explanation of how to look at subsidies and provide criteria for sound subsidy design. The bulk of the paper will then analyze, for each market

⁵ See Hoek-Smit, 2006b

⁶ There are various other reasons cited in favor of subsidies such as influencing economic and political stability (a rationale commonly used to support home-ownership), and stimulating economic growth (generally used to support various countercyclical assistance to the construction sector). These are less convincing reasons to support housing subsidies and may be achieved more effectively by other means.

segment, the two main types of subsidy incentives: i) subsidies to address the constraints in the housing finance system, and ii) subsidies to assist individual households directly.

2. Who are the Housing Poor and What Are the Frontiers in the Market Where Subsidy Policy Should Focus?

2.1 Segmenting the Underserved Housing Market

It is common to find that up to two-thirds of the urban population in developing countries lives in inadequate housing. The reason for these prevailing statistics is not simply relative low income levels, although that is part of the problem, but informality. In order to design an effective housing and subsidy policy, we need to be clear about the components of housing affordability and the specific problems associated with accessing finance and housing for different household groups in each country. Based on several broad-scale inquiries by the author and others into the nature, breadth and causes of the housing problems in several developing countries, a summary of main issues ensues:

- **The level of household income, its distribution and the stability and sources of income.** In many developing countries, incomes are extremely low relative to the cost of basic housing packages. At the same time, informal employment is high (e.g., over 70 percent in Indonesia; over 40 percent in Mexico), limiting access to formal sector housing.
- **Access to and cost of debt finance; availability of savings.** Finance dramatically expands affordability, but access to finance and savings options are extremely limited. Housing finance markets, both for mortgages and micro-finance, are inefficient and incomplete in most developing countries. In addition, access to mortgage finance is constrained by the following factors:
 - Type of collateral. Often, only a small fraction of urban households hold a registered title to their property. Without title, access to long-term debt finance is limited.
 - Neighborhood quality and risk. Lenders do not invest long-term in neighborhoods without services, crime prevention systems, etc. that may impede the stability of housing values.

No more than 25 percent of households in most developing countries would potentially qualify for a mortgage loan. Access to unsecured housing loans based on pension-savings and micro-finance for housing, while rapidly expanding⁷, is still extremely limited and difficult to quantify⁸. The reasons for the low utilization of alternative credit for housing are not just the limited supply of credit but also customers' unease in taking out credit for housing, since housing does not generate income (except in the case of rental rooms).

⁷ Fay and Wellstein, 2005.

⁸ Porteous, 2006.

Access to financial services in general is very low according to various studies using the “Financial Diaries of the Poor” methodology.⁹

- **Cost of housing.** Several factors drive the price of housing, which, sadly, are related all too frequently to poorly designed policies and inadequate government management of the urban sector.¹⁰ Real price increases in building materials, linked to current commodity price increases are another major factor (e.g., between January and June 2008 cement and steel prices increased by 26 percent in Egypt, with an immediate effect on housing affordability).
 - Land management. Land, both public and private, is often available but its timely release to the market is constrained by poor local and central government procedures and lack of collaboration between land owning ministries, among various factors.
 - Building or subdivision standards and the costs of getting permits are too high relative to incomes and thus prevent new formal sector housing from being constructed for all required market segments.

The culmination of these factors in different countries leads to the evolution of specific market segments for the demand of different types of housing and housing finance products. For example, a segmentation of the Mexican low-income housing market cannot simply be based on income levels. Housing affordability differs markedly between formally and informally employed workers. Formally employed low income workers with incomes as low as two minimum wages can access subsidized mortgage loans from the special housing fund, while an informally employed worker can only access a non-subsidized mortgage loan from the private sector, which requires an income of approximately four to five minimum wages. Moreover, fewer informally employed workers qualify for a loan. Indeed, the proportion of informally employed workers with a mortgage loan below the- four minimum wage income bracket is only a fraction of the proportion of workers in the same income group who are formally employed. The parameters of access to finance are therefore different for these segments, and different subsidy policy approaches must be developed for each segment to increase its access to finance.

The following tables reflect the need for comprehensive government programs, both for subsidies and the regulatory environment, that assist in the expansion of access to housing and housing finance for varying income brackets within both the informal and formal sectors across multiple countries'. Fig. 1 below illustrates the disparity between access to finance for the formal economy and informal economy within the same income bracket.

⁹ Rutherford, undated; Collins, 2006.

¹⁰ Hoek-Smit, 2006b.

Fig. 1 Potential Access to Housing Finance in Mexico (2006)¹¹

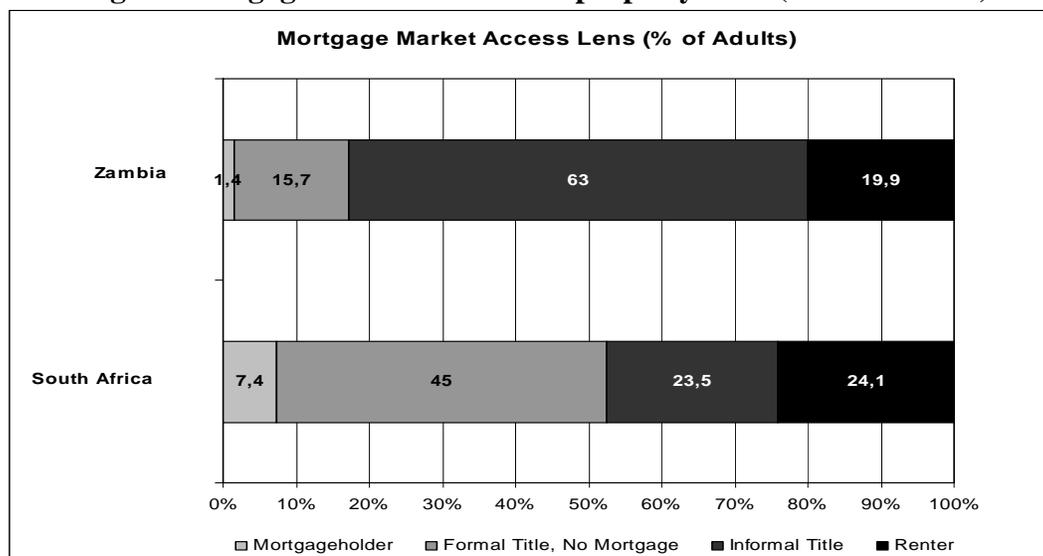
Households in the Formal Economy	6% no access to mortgage fin limited access to microfinance	16% access to subsidized mortgage finance	25% access to subsidized + market mortgage finance
Households in the Informal Economy	24% no access to mortgage fin limited access to microfinance	17% limited access to mortgage finance	12% access to market mortgage finance
Monthly income	Less than \$420	\$420 - \$840	More than \$840

¹¹ Source: Conavi

Box 1 Limits to Mortgage Finance in Zambia and South Africa

Another example of the importance of understanding the relevant segmentation of the market is detailed by Porteous (2006) where he shows data from the Finscope surveys in South Africa and Zambia from 2006, correlating tenure and access to mortgage lending. Zambia, with a much larger proportion of people with informal property rights to the land, has a much lower probability of expanding access to housing for the low-income groups through the mortgage sector frontier than would South Africa, where such a strategy may be more successful.

Fig.2 Mortgage market access and property titles (Porteous 2006)



Source and definitions: SA: FinScope, 2004. Q refers to relevant question number in SA database; Current mortgage holder: Q49; Ownership status: Q48a,b,c
Zambia: FinScope Zambia 2006, data extracted by Christian Keulder of FinScope

Meltzer (2007) using a different methodology calculated the proportion of households that would potentially have access to mortgage lending in South Africa by income, age and some other criteria. She estimates that close to 10% of households would potentially have access to mortgages given the current credit-linked subsidy program and private sector commitment. Combined with the 20% of households that are upper income and already qualify just under a third of South African households have access to mortgages today.

2.2 Identifying Frontiers for Market Expansion

For the purpose of outlining a subsidy policy, we can distinguish the following classifications of the most typical *market segments and their frontiers*, i.e. *the margin beyond which specific demand and supply constraints limit expansion of and access to these markets*.

1. **Upper income housing market** segment --typically above the 75th percentile of the income distribution-- where households can obtain diverse housing products provided through the formal housing and housing finance market.

The frontier of this market segment may be related to issues of limited availability of land or finance for housing caused by macro-economic conditions or market inefficiencies.

2. ***The middle- and lower-middle-income market segment*** consists typically of the 75th to 50th percentile in the income distribution. Household incomes would be adequate to obtain formal moderate-income housing, but most people in this group live in unauthorized or substandard formal housing.

The frontier for expanding the formal housing market downwards to include this segment is not so much constrained by low-incomes, though that is certainly part of it, as by lack of access to finance and lack of appropriate housing products offered by the market. Limited access to finance, related to the lack of appropriate housing products offered by the market, is linked to a) informal employment, b) lack of wealth or savings, c) uncertain collateral due to poor land registration and cadastre systems, d) alternative types of property rights or neighborhood risk factors, e) inefficiencies and incompleteness of housing finance markets and, importantly, f) lack of appropriate housing products offered in the market. In some countries, mortgage or pension-backed finance-linked subsidy programs enable households at the top of this income bracket to obtain new formal sector housing. Nonetheless, real- side regulatory constraints on new ownership housing and controls on rental markets often form barriers to expansion of formal housing for the unassisted part of this market segment. Upward mobility out of unauthorized or substandard formal housing is limited.

3. ***The low-income market segment*** consists of those below the 50th percentile of the income distribution and/or informally or self-employed households where households live in sub-standard housing or substandard neighborhoods with limited access to services. Few people in the rural segment of this market have any relationship with the financial sector. Formal housing markets seldom deliver new housing for this segment and are unlikely to do so for the medium term. Housing subsidies are often limited to selected upgrading programs.

The frontier for expansion of formal, quality low-income housing is often two-dimensional:

- i) the frontier for improvement of existing housing conditions is confined by lack of infrastructure and formally registered property rights, while lack of access to micro-credit limits investment;
- ii) the frontier for new low-income housing is constrained mostly by a combination of regulatory issues, non-functioning land markets, low incomes, and lack of access to appropriate non-secured and micro-housing finance instruments.

Government interventions may most fruitfully be directed towards these frontiers where expansion of opportunities is most likely. For example, rather than try to expand mortgage lending for all underserved households, government efforts are better targeted to the current limits of the market, whether these are mortgage market limits or household limits, in order to

provide precisely-targeted assistance to expand the market downwards. Similarly, efforts to expand access to non-mortgage loans should differentiate the specific frontiers where assistance can unleash maximum expansion. Again, this may involve assistance to credit systems or to households directly. Detailed approaches will be discussed in Sections 4 and 5.

The challenge of the housing and subsidy policy in developing countries is to move the mortgage frontier down-market and expand its scale, while addressing the land and infrastructure issues that keep developers out of this market segment. At the same time, the private sector and government need to collaborate to scale up the use of non-mortgage housing finance products for those ineligible for mortgages, both for upgrading and new low-income housing.

3. A Word on Subsidy Design and Evaluation

Before we discuss specific subsidy programs to expand access to housing for the poor, it is useful to provide a brief overview of some important features of subsidy design.

3.1 Subsidies and other Types of Government Interventions

A subsidy is an incentive to change the behavior of lenders, producers or consumers in regards to housing in order to achieve specific goals and objectives (see Box 2). While this is an inclusive definition of a subsidy, the focus in this paper is on two broad types of subsidy interventions: (i) modifying regulatory or legal policy related to housing finance in order to shift market activity to reach social or economic goals, and (ii) expending financial resources both through budgetary allocation and fiscal policies. For example, the government may establish a liquidity facility for micro-lenders engaged in housing finance to increase the efficiency of that part of the housing finance market. It may, separately or in combination with the liquidity facility, provide a capital grant in the form of serviced land to households to set into motion progressive development of housing.

Box 2 Defining Subsidies

Subsidies are often perceived as giving or receiving something for free. Such a notion is misleading. From a broad perspective, **“a subsidy is an incentive provided by government to enable and persuade a certain class of producers or consumers to do something they would not otherwise do, by lowering the opportunity cost or otherwise increasing the potential benefit of doing so”** (adapted from the US Congress [1969]).

Subsidies can be difficult to identify because of the hidden nature of some subsidies, particularly in the housing finance sector. For example, the creation of a government mortgage insurance program ostensibly run on full market principles may imbed deep subsidies either because administrative costs are not accounted for, initial capital is provided by government at no cost, or by ignoring the presence of catastrophic risk being borne by the government.

Because subsidies can be costly and distorting, they should be a policy of last resort, after, or in conjunction, with other policy steps which are low cost.¹²

With such a connection, it is important to emphasize the negative effects of *inappropriate government regulations and institutions* on market outcomes. We have already mentioned, for example, the unnecessarily strict building, planning and subdivision standards; poor property rights and registration systems; excessive government involvement in the urban land or housing finance sectors; rent control; and other policy or regulatory bottlenecks which may frustrate the efforts of the market to serve all portions of the population. The highest priority for government action under these circumstances is to remove or adjust such institutional and regulatory bottlenecks before any subsidies are considered that compensate for poor market outcomes.

3.2 Criteria for Designing and Evaluating Subsidies

Four evaluation criteria are most frequently used to assess subsidy programs: the economic criteria of efficiency at the micro- and macro level, the market effects of subsidies, distributional issues and fairness, and the public accounting principle of transparency.

- **Efficiency** is about maximizing outputs for a given measure of inputs, i.e. using subsidy resources in such a way that net benefits to both recipients of subsidies and society are maximized relative to opportunity costs. Types of efficiency are:
 - i) *Production efficiency* measures whether the cost of the subsidy can be reduced without affecting the outcome of the subsidy, for example, by using the private sector rather than government in implementation.
 - ii) *Administrative efficiency* measures the cost burden to implement subsidy programs, which, in some instances, is higher than the subsidy itself, especially if new organizations have to be set up.
 - iii) *Consumption or transfer efficiency* measures how the recipient values the unit or its improvement compared to its market valuation. Another way to measure consumption efficiency is to assess whether the subsidy merely replaces the recipients' own housing investment or expenditure, i.e., whether it really serves households at the margin.
- **Market effects of subsidies** All housing subsidies alter markets to some degree in the process of changing incentives. Sometimes the subsidies are designed to explicitly improve the operation of housing markets while other times equity or other goals are paramount. Nonetheless, even subsidy programs focused on equity concerns need to be designed with a view to the market context in which they operate. In practice this means that, where possible, subsidy programs should adhere to the following precepts:
 - i) Use market principles such as competition in their design and leave a portion of the risk with private entities or households;
 - ii) Use market mechanisms such as auctions rather than non-transparent government allocation systems for subsidy funds;

¹² Much has been written about the enabling policies required for housing markets to work well (Mayo, 1983; Angel 2001).

- iii) Use existing, reputable market or NGO actors rather than government entities to implement programs; and
- iv) Avoid setting up separate circuits of publicly-owned businesses that will make it difficult for private actors to enter that part of the market in the future. (If this is not a choice, subsidy programs should include an exit strategy to allow private entities to take over the specific function in future).

These issues will be discussed at some length in Section 4 for housing finance subsidies.

- **Distributional issues and fairness** relate to concerns of whether outcomes within and across programs improve or worsen income or housing inequalities in society. Many mortgage finance-linked subsidies exacerbate housing inequities when they serve as the main housing subsidy program in a country. But even direct demand subsidies may make those who are above an income threshold to qualify for the subsidy often worse off than those who receive a subsidy.
- **Transparency** of subsidies measures if the real cost of the subsidy is made explicit. Many subsidies, implicit or hidden, are not accounted for in the government budget which hampers efficient design and adjustment. If costs cannot be shown in the budget, as is the case for fiscal subsidies (e.g., tax benefits, tax funds used for housing) and implicit government guarantees for mortgage lending, the budget office of the government needs to make the costs and risks of the subsidy explicit each year.¹³ Such calculations entail estimating foregone tax revenues¹⁴; recognizing the risks of non-repayment of loans from special funds and the liability this poses for the actuarial soundness of these funds; and estimating different risk scenarios including catastrophic or systemic risk for government guarantee programs.¹⁵
- **Program Adjustment and Exit Strategies** need to be spelled out from the onset of a program. As the GDP, income distributions and demographic profiles of countries change, and as housing markets develop and the financial and mortgage sectors deepen, housing subsidy policies need to change. Indeed, few conditions that require housing subsidies are permanent or cumulative and many are of a transitory nature. Yet, most subsidy programs lack a plan that calls for their regular evaluation and adjustment over time. Programs frequently remain in place long after they have fulfilled their objectives or are shown to be ineffective.

Having an adjustment or exit strategy is particularly relevant for subsidies funded by international development agencies, most of which have a fixed funding period. Project

¹³ The IMF and the EU have published transparency rules related to government subsidies. These are as yet not widely implemented or enforced, however.

¹⁴ Such calculations are more complex than merely compiling the total tax deductions, since the tax program itself may affect the consumers' decision to become home-owners and may induce households to take out larger loans (see Sinai and Gyourko, 2004).

¹⁵ For example, implicit government guarantees to the housing finance sector in Brazil have cost the government as much as 6% percent of GDP.

design, however, seldom includes plans for the gradual take-over of the subsidy commitment or function. Section 5 gives some examples of project related micro lending programs.

The use of these core criteria, even if applied only conceptually or with simple measurements, can improve subsidy design and reform greatly.

4. Subsidies to Expand Mortgage Finance Down-Market

Any pro-poor housing subsidy policy in developing countries has to include measures to make sure that as many underserved households will be able to buy a house in the private formal housing market as possible. Even the cheapest house in the market will require access to upfront and fairly long-term finance. In most countries, the frontier for access to mortgage finance has to be expanded down-market with some urgency. This also requires that developer finance is available. No government can solve the housing problems if the broad middle income group cannot house itself. This may, initially, require some government support. However, in the end, most government resources for housing should be utilized to benefit the truly disadvantaged for whom housing markets will not serve for a long time to come.

What is involved? The market frontier was defined in Section 2 as *the margin beyond which specific demand and supply constraints limit expansion of and access to mortgage markets*. These margins cannot be moved by relaxing lending standards or putting caps on interest rates, since that would jeopardize the healthy development of the industry. Rather, government and industry have to develop a package of incentives to overcome specific supply and demand constraints.

However, in order to develop successful government interventions in the housing market, *the exact reasons for market inefficiencies must be understood*¹⁶. Designing new subsidy incentives with the objective of improving market efficiency is complex precisely because it is just as easy for such interventions to create negative future effects on markets.¹⁷ Their design, adjustment and/or phasing out, therefore, must be undertaken with great care.

The focus here is on market and household constraints impeding the opening up of markets to middle and lower-middle income groups, rather than on measures to improve the efficiency of the system as a whole, although the two are related¹⁸

4.1 Mortgage Market Constraints and Subsidies

4.1.1 Overview

¹⁶ Calomiris, 1994; Mayo, 1999

¹⁷ For example, Calomiris, 1994, explicitly includes subsidy measures to address market failures related to the negative impact of wealth inequities, information asymmetry, etc. Other authors maintain that subsidies cannot improve market efficiency because of the unavoidable, deadweight loss they imbue (the inefficiency that a subsidy creates as people allocate resources according to the subsidy incentives rather than the true costs and benefits of the goods and services they buy and sell).

¹⁸ For a treatment of subsidies to address the latter see Hoek-Smit and Diamond, forthcoming 2008.

Constraints to the efficient growth of housing finance systems vary widely across countries.¹⁹ The issues that are critical for the expansion of the *lower-middle income market* are those related to credit risk management and the cost of doing business in that segment relative to the smaller loan sizes. Additionally, the lack of long-term sources of funds makes it difficult specifically for non-bank financial institutions to enter mortgage markets, and for more stable fixed rate lending products to be used. Addressing those issues goes a long way toward opening access to lower income households. These constraints and possible ways to alleviate them are summarized in Table 2. The absolute interest rates also matter but will not be dealt with here.

Table 1: Possible System Subsidies to Expand Mortgage Finance Down-Market

<i>Housing Finance</i>		
<i>System Constraints</i>	<i>Possible Subsidy Measures</i>	<i>Issues</i>
1. Access to Longer-Term Funds*		
Limited access to funds for lending (medium term) or to liquefy the loan book	<ul style="list-style-type: none"> Public guarantees for lenders to access funds (public/private partnership) Access to partially government-sponsored liquidity facility for all or a certain class of mortgage lenders Subsidized cash-flow guarantees for debt funds channeled to housing lenders 	<ul style="list-style-type: none"> Carries relatively low risk (see also below) A liquidity window can be structured as a joint public/private venture to limit government risk exposure or political misuse
2. Lending Risks and Costs in Underserved Markets		
Credit risk / collateral risk for mortgage lending	<ul style="list-style-type: none"> Subsidize information collection and research on property and credit markets Pay private mortgage insurance premium (overlap with household subsidies) Pay for borrower education <u>Shift (part of the) credit risk to a (partially) state-sponsored entity</u> Provide (partial) guarantees for social rental housing loans 	<p>Additional government action needed:</p> <ul style="list-style-type: none"> Credit bureaus Regulations allowing payroll deductions Property information systems Improved foreclosure methods Community negotiations in case of default Neighborhood investment plans to mitigate neighborhood risk (see below) <p>Requires: private lenders to invest in user-friendly servicing system</p> <ul style="list-style-type: none"> <u>May be risky; requires safeguards on quality of construction, etc.</u>

¹⁹ Imperfections such as asymmetric information, incompleteness of markets and moral hazard are endemic in housing finance systems. This means that second best solutions to those assumed by theories of complete and competitive financial market models are all one can hope for. Allen and Gale 2001 discuss such trade offs for financial systems in general.

Credit risk related to construction lending	<ul style="list-style-type: none"> • <u>Provide (partial) guarantees for construction loans</u> 	
High transaction costs for loan origination and servicing	<ul style="list-style-type: none"> • Subsidize lenders' transaction costs for selected borrowers through cash payment or compensation for higher interest rate (can also be structured as part of a household subsidy) 	Prerequisite: <ul style="list-style-type: none"> • Improved underwriting and servicing methods (see also under credit risk)

* Interest rate risk, sovereign and exchange rate risk are not considered in this table.

4.1.2 Subsidies to Alleviate Funding Constraints

Even if a country has vibrant primary lending institutions, they may be limited in scale by lack of stable funding, or the system as a whole may not have appropriate markets for managing funding risks such as liquidity risk, interest rate risk, and prepayment risk. Such factors cause interest rates to be higher and more volatile, loan terms shorter than they otherwise would be, and appetite low for fixed rate mortgages. At the same time, lower-middle income households often prefer fixed rate mortgages even if the rates would be higher on a fixed rate loan²⁰.

The government could, under these circumstances, support interventions (which are subsidies even if not usually and explicitly called that) to *improve access to capital markets and hence increase funding options and manage the risks related to long-term lending*. For example it may:

- Support a (public-private) liquidity facility
- Provide cash-flow guarantees or temporary tax incentives for mortgage securities.

Such measures are particularly important for expanding mortgage lending by finance companies where funding through a deposit base is not an option. At the same time such lenders are often more innovative in developing systems to reach informally employed borrowers and are less hesitant to underwrite and extend loans for existing properties.

Successful examples of government supported liquidity facilities in emerging market economies are *Cagamas* in Malaysia, *Sociedad Hipotecaria Federal* in Mexico, and, although only recently established, the Egyptian Mortgage Refinance Company in Egypt. The former two organizations are examined in Box 3 and Box 4, below. For such institutions to work, offerings and operating conditions must be attuned to local market conditions and needs. Often government or external equity investments or guarantees are used to enhance their own respective standings in the market place.

²⁰ For example, see Struyk 2008 on Indonesia.

Box 3 Mexico's Liquidity Facility*Sociedad Hipotecaria Federal (SHF)*, a government funded entity was tasked with stimulating the upfront household subsidies for those households not covered by the housing funds (see Section 2). It supported the creation and growth of private non-bank lenders called SOFOLES which successfully started mortgage lending when the banks dropped out of that market after the country's 1994 financial crisis. SHF provides liquidity funding for SOFOLES focused on moderate income housing loans, complemented by an upfront subsidy for qualifying borrowers. It also provides interest rate swaps indexed on minimum wage movements. SHF was instrumental in developing the secondary market for mortgages and larger SOFOLES can now access capital markets directly, mostly through structured finance arrangements. The institution is still the secondary lender of last resort. This function has expanded as a result of the recent upheavals in the capital markets for mortgage securities and while SHF's liquidity lending was to be phased out in 2009, it is now allowed to continue that function indefinitely. The danger with this open-ended brief is that it may crowd out private funding once the market for mortgage securities resumes. SHF still administers the mortgage linked subsidy program and has expanded its offerings to micro-lenders for private housing finance sector.

Box 4 Malaysia's Cagamas

The central bank of Malaysia, Bank Negara, organized the establishment of a centralized liquidity facility, *Cagamas*, in 1986. Bank Negara retains only a 20% ownership share, but is prominent in its governance. The company does not have an explicit government guarantee, but is seen to be implicitly guaranteed by virtue of its close ties to Bank Negara.

Cagamas was created in order to address two immediate problems. Macroeconomic shocks had created a liquidity shortage for the banking sector. Moreover, the banks were mandated to hold a significant share of their portfolio in residential mortgages. In addition, the national treasury operated a subsidized mortgage lending window for civil servants and it wanted to be able to rebuild its liquidity also.

Since it first started operations in 1987, *Cagamas* has grown into a major source for the funding for mortgage loans in Malaysia, recently providing 15-30% of total funding. Banks and other lenders (including non-bank finance companies) are able to borrow at either fixed or floating rates for terms of three, five, or seven years. However, the bulk of the borrowing is for three years at a fixed rate, despite the fact that the standard loans terms are for 15 years or more at a floating rate. This situation reveals how *Cagamas* loans, and liquidity facility financing in general, are viewed as not so much medium-term funding for housing loans but rather as an asset-liability management (ALM) tool for the entire portfolio, that happens to use mortgages as collateral. As in the case of Mexico, the capital markets are now well developed and banks no longer require *Cagamas* to deal with portfolio risks on their mortgages. *Cagamas*, rather than being phased out, is seeking other intermediation activities.

(*Hoek-Smit and Diamond, 2008*)

Some lessons. A liquidity facility, SMF, recently established by the government of Indonesia has so far not been successful in contributing to the growth of the mortgage sector. It was only allowed to make loans for a maximum term of three years and there were issues with double taxation of its products. This made its offerings unattractive for lenders. It did not receive explicit government or outside guarantees. Moreover, banks are liquid and did not need the products that the SMF could offer. Now that most of the constraining operating conditions of SMF have been changed, mortgage companies may be interested in expanding into mortgage lending and refinancing their loans with SMF. The lesson drawn from these examples is that there must be a clearly identified market or public need for such a facility and its offerings must be attuned to those specific needs.

Another issue is that the state may seek to reduce funding constraints not just to improve markets but for the explicit purpose of *reaching social goals*. In developing countries, where the primary market is very small, several governments provide subsidized equity funding, lines of credit, or other funding advantages to state-owned, primary market lenders with the explicit purpose of providing below-market loans to specific categories of borrowers or investors in *social or private moderate income rental or ownership housing*. However, *the costs and distortions imbedded in such special non-market funding systems have to be carefully assessed on their long-term impact on the sector. They often do more damage than good*. Since such subsidies were not originally designed to serve equity purposes often carry high hidden costs to the financial systems and the economy, and target poorly, they are often inefficient in reaching lower-middle income groups. Therefore, policymakers need to carefully assess alternative ways to reach distributional goals, such as through transparent household subsidies

4.1.3 Subsidies to Address Mortgage Credit Risk

Credit risk is perceived to be the most critical deterrent of mortgage market expansion in developing countries and is due to a lack of credit and property market information, high risk of loss given default because of poor foreclosure systems, and lack of mechanisms to deal effectively with credit risk. In particular, more risky borrowers, such as those informally employed or living in risky neighborhoods or multi-family housing, seldom qualify for mortgage loans. These constitute a large proportion of middle income households. Tools to assess the risk do not exist and risk-based approval procedures are difficult to implement for political or practical reasons.

An increasingly accepted subsidy objective is to support mechanisms to alleviate or share the credit risk, which can open up mortgage markets to hitherto underserved segments of the market. The questions to be asked here are under what conditions does it make sense for a state to intervene in improving credit information, or provide credit insurance or guarantees and why does the private sector not invest in those instruments? This happens successfully in a number of countries, and the case for state intervention must include rationales for why the private sector does not address this activity currently or at an optimal price. *Ideally, once the credit risks in serving these markets are better understood and controlled and the transaction costs are reduced, government can decrease or phase out such support.*

The *first priority for government in this connection is to improve, jointly with the private sector, the regulations, institutions and information infrastructure* that affect the workings of the mortgage sector (e.g., appropriate standards, property registration systems and cadastres, information and research on the housing sector, improved foreclosure methods, and improved underwriting and servicing methods by the industry). Only then does it make sense to subsidize credit risk mitigation. Some of the most successful subsidy interventions to control credit risk are as follows:

- **Provide incentives for the establishment of a credit information system or a credit bureau.** In most countries, the private sector sees the benefit of pooling together credit information without support from government or only with supportive regulation. In other countries, the private sector is reluctant to do so, particularly if the market is dominated by a big lender. Government may need to play the role of facilitator and subsidize the cost of establishing a comprehensive credit information system jointly with the private sector. For example, the government of Thailand has launched such an initiative through the Government Housing Bank. It reports that it has assisted banks in qualifying households that would be difficult to underwrite before.
- **Subsidize credit insurance.** Government can support private mortgage insurance, share some risk in a public/private insurance scheme, or even establish a government credit insurance system, though the latter presents higher moral hazard risks.

The type of credit insurance program will differ depending on the mix of goals set by government. For example, insurance may be “market-priced” or “below-market priced”; it may be universal or applied to targeted households, such as on the informally employed. It may cover only part of the risk or take on all of the risk; it may be designed for long-term mortgage credit or shorter-term. Government may also consider *paying for the mortgage insurance premium* for selected households rather than sharing in the credit risk directly. A major issue to consider is that, whenever the state takes on risk itself, there may be problems with moral hazard, i.e. that *participant lenders will be more likely to commit fraud or take on excessive risks*. The design of the administrative and control systems is therefore as important as the insurance system itself.

Two examples of government participation in mortgage insurance or guarantee schemes are given in Boxes 4 and 5. The government of Lithuania provided minimal and transparent support for the establishment of a private mortgage insurance system.

Box 5 Lithuania Mortgage Insurance

The government of Lithuania set up a mortgage insurance scheme, effective July 2000. The rationale was to encourage private lenders to offer loans with longer terms and higher LTVs. The Lithuanian Mortgage Insurance Company (LMIC) was created as a fully government-owned company, but operating on commercial principles and in 2001 the official guarantee of the government was withdrawn.²¹ A state subsidy that paid for half of the insurance premium of qualifying first-time homebuyers was set to be eliminated as well. The LMIC is a good example of a state setting up a mortgage insurance scheme in the absence of a private one with the intent to run it on a commercial basis and remove the explicit government guarantee within a set time but subsidize access through a subsidy to households on a targeted basis. The ultimate subsidy to this entity is, therefore, small and limited to the initial capital and was phased out within a few years.

Source: Diamond, 2002

The government of Morocco operates a government guarantee scheme that is deeply subsidized with the specific purpose of opening the private mortgage market to informally employed borrowers.

Box 6 The Case of Morocco's FOGARIM Guarantee Program

In 2004, the Moroccan Government launched its Cities without Slums program (*Villes sans Bidonvilles* (VSB)) with the intent to eliminate all slums by 2010. The nationwide VSB program aimed at providing accommodation to the approximate 212,000 households living in urban slums across the country by 2010. Initial efforts focused on physical solutions but VSB soon discovered that most households could not pay for the new housing or serviced plots that were offered. Access to housing loans was required to make the housing solutions affordable to lower-income groups. Three main reforms were made: a) establishment of mortgage guarantee funds; b) extension of micro-finance services to housing; and c) establishment of contractual savings schemes for housing.²

As part of the housing reforms, the government introduced FOGARIM, a mortgage guarantee fund. Its objective is to give banks the security they require in order to lend to households with irregular or informal sources of income. For this, the banks are guaranteed 70 percent of the principal balance in case of default after a nine month period. Guarantee payments come from a fund managed by the CCG (*Caisse Centrale de Garantie*), a public agency under the purview of the Ministry of Finance and Privatization. The fund (USD 25 million) receives its allocation from the Housing Solidarity Fund (FSH) which, in turn, is replenished from a dedicated tax on cement. The FSH is under the purview of the Ministry of Housing and Urban Planning and is dedicated to finance social housing programs and the eradication of slums. FOGARIM's initial capitalization amounted to USD 23 million with a commitment from the Ministry to release two more payments of USD 23 million in 2006 and 2008.²

Partly as a result of reduced risk through the FOGARIM guarantee, banks reduced the interest rate of mortgage loans from 7% in 2004 to 5% in March 2008, for a maximum term of 25 years as compared to the maximum of seven years in the past⁴. The maximum monthly household income for loan eligibility is USD 375, and the maximum loan amount is USD 25,000. Final loan payments must be made before the borrower turns 60 years old.¹

²¹ An odd aspect of the situation is that insured loans, even the ones made when the LMIC was backed by a state guarantee, require the same full capital reserves as uninsured loans. This discourages use of the insurance.

The FOGARIM program experienced a slow start, attributed to the lack of marketing of the product to banks and low-income populations. By May 2005, only 660 credits had been guaranteed.² However, it ultimately caught on and led to a significant increase in the number of housing loans being made by banks to this target population with considerable competition on interest rates and services. As of April 2008, the number of loans guaranteed was 34,600, with a mean size of USD 18,260 and USD 700 million guarantees committed.³

Despite its success, there have been several issues with the implementation of the FOGARIM guarantee. The maximum monthly payment amount is low relative to the average house price under the program. Moreover, the age limitation requires every beneficiary over 35 to take out a shorter term loan and hence higher monthly payments. The eligibility requirements are not always enforced and there is evidence of subsidy misallocation. The 70 percent guarantee seems to be a disincentive for banks to conduct adequate due diligence on potential beneficiary households. Yet another issue is the use of FOGARIM-guaranteed credits for the acquisition of parcels of land rather than for complete housing units for which they are intended. A credit education program will be undertaken by the MHU in collaboration with the participating banks, in order to disseminate information about the program and stimulate demand by those low-income beneficiaries of the VSB program that are supposed to acquire new housing units.²

Adjustments to the eligibility criteria are required in procedures to minimize leakage and control corruption. Also, government may consider gradual downward adjustment of the level of guarantee from the generous 70% now that the market has gained experience with this population group.¹

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- **Provide borrower education.** One proven method to decrease credit risk is to educate the borrower before he or she gets a loan, not just on the rights and duties of borrowing, but also in home-maintenance. Government can subsidize such education. The effectiveness of this method has been shown in the U.S.²² and by the Housing Loan Guarantee Company of South Africa and the SOFOLES in Mexico. Both institutions have proven as well that user-friendly servicing systems that pay immediate and personal attention when a borrower misses a payment are critical to reduce losses when a default occurs.
- **Reduce collateral risk through investment in neighborhood services and infrastructure.** If the goal is to expand lending into marginal neighborhoods, a partial mitigation of the credit risk will seldom be sufficient in emerging markets. One of the most important barriers to

²² Hiram and Zorn, 2001

lending in low-income markets is the uncertainty of neighborhood factors that are critical in determining house-value movements. *Much broader infrastructure and institutional support is often required to alleviate neighborhood or condominium risk effects on the value of the collateral.* Lenders may require agreements on an investment plan by local government before entering into low-income markets. In the U.S., the FHA insurance program was effective in stimulating investments in underserved neighborhoods, even without additional community support.

4.1.4 Subsidizing Transaction Costs.

The main reason for housing sub-markets being underserved by lenders, aside from credit risk, is related to costs relative to profit of certain customer segments or loan products. Household income verification may be more cumbersome because of a larger proportion of self-employed households in those markets; loans are smaller and therefore the origination fee is either inadequate for the lender or excessive for the borrower; and servicing of loans is costly relative to the size of the loan. Government may decide to compensate lenders directly for these higher transaction costs to bring financial institutions into those markets, at least for an initial period. Ecuador used this method successfully in the 1990s and phased it out when lenders had gained experience in servicing more risky markets.

The resistance of mainstream mortgage finance institutions to incur set-up costs to reach lower-income and higher-risk customers, even with subsidies, has led to the conclusion that *it may be more cost effective to target this type of government support towards community-based or smaller mutual housing finance institutions.* These lenders already have better information systems in place to deal with less conventional customers since they work at the community level. In addition, their package of housing loan products is often more suitable for this type of customer, i.e. it frequently includes non-collateralized shorter term loans for home-improvement purposes.

4.1.5 Investing in Information and Research

Information collection and research is needed for the efficient functioning of the housing market, but is often not gathered if any one private entity cannot capture the benefits. Examples of such useful “public good” data and research topics include comprehensive property information, consolidated credit information across financial institutions (for use in credit scoring or development of mortgage default insurance or securitization markets), research in standardization of mortgage procedures, new credit instruments, reasons for default, default trends and the scale of and reasons for losses after default occurs, trends in house prices, and so on. The rewards from developing expertise within the industry on housing and housing finance issues are extremely high, given the huge amount of resources that most governments and societies invest in the housing sector.

4.1.6 Guaranteeing Development and Construction Finance

A special type of credit risk is related to *development and construction lending for lower-middle-income housing.* This type of short-term lending is relatively risky because of the frequent construction delays, difficulty in enforcing quality controls, uncertain collateral value of

unfinished construction projects, and sensitivity to macroeconomic cycles or risks in the sale and transfer process to end users. Lenders are often reluctant to make such loans and will only do so with special guarantees. Government may develop special measures to overcome this constraint for construction of socially-important housing, perhaps by paying for *guarantees* offered through private or non-profit insurers (Egypt), by establishing institutions that *guarantee construction quality* (South Africa), or by *taking on part of the risk* by itself or jointly with international development institutions, with the necessary safeguards to protect against moral hazard.

4.2 Household Subsidies to Expand Access to Mortgages

Incentives to the mortgage system may be necessary but not sufficient for these markets to expand. Often a complementary subsidy to households on the margin of the mortgage market is necessary to include underserved households. The use of mortgages leverages households' own contributions by requiring that the household takes out a maximum affordable mortgage loan and saves for a down-payment they can afford. Lower subsidy amounts are required than would otherwise be the case. If such subsidies are applied not just to potential owners of new houses but also of existing houses (which are generally lower priced), an even lower income group will be reached and greater mobility will result in the broad middle income market. Such household subsidies should be adjusted over time to reach increasingly lower income groups and larger numbers of informally employed.

4.2.1 Types of household constraints

When there is a possibility that lenders will expand their lending to moderate income households, the key question becomes what type(s) of subsidy will be most effective in making households with acceptable credit records good borrowers. This choice depends critically on the analysis of specific constraints faced by moderate income households in acquiring a loan:

- i) Income constraints relative to the house prices in the formal market
- ii) Savings constraints
- iii) Volatility or informality of income or employment

These constraints will vary in different developing, emerging or transition economies and for different sub-markets within countries. For example, in Egypt, households are typically aided by family members to collect the large down-payment and upfront cost of obtaining a mortgage, but require support for the monthly payments on a loan because of the discrepancy between incomes and house prices and prevailing interest rates. In countries in Latin America where family savings are not so easily available, the hardest part of becoming a homeowner is saving for a down-payment while still paying for rental accommodation. The design of subsidies to support households at the margin of the mortgage market should reflect such varied household conditions.

- **Subsidies to alleviate income constraints.** Several types of subsidies address the discrepancy between required monthly payments and income levels of potential beneficiaries.

- **Interest rate subsidy.** In the past, the most common mortgage-linked subsidy provided a below market interest rate on the loan. However, such subsidies were nearly always provided by government lenders or by closed lending institutions with non-market based sources of funds. It is difficult to predict the actual value of an interest subsidy since market rates will shift and, with them, the depth of the subsidy. It is also costly to access capital markets on the basis of a subsidized loan portfolio. Subsidy systems based on subsidized interest rates remain limited because of limited funding. These types of subsidies are quite inefficient in other ways as well. They are provided for the entire life of the loan, while few households require a subsidy for that long; they are therefore expensive in present value (PV) terms relative to other subsidies and hinder prepayment.
- **Transparent Interest Payment or Monthly Payment Buy-downs.** As an alternative to interest rate subsidies, the state can offer private sector lenders assistance that directly reduces the interest and/or monthly payment on a market-rate housing loan. Such a subsidy is sometimes called a “buy down”, reflecting the fact that the state is paying the lender to reduce the cost of the loan. An example would be the following: if the market rate charged by private lenders is, say, 15%, the state offers to pay 5% towards this amount, thus reducing the effective rate paid by beneficiaries to 10%. A key factor determining the cost to the state of such a subsidy is that most such buy-downs are phased out over the initial years of the loan, under the assumption that inflation or normal growth in incomes will permit the borrower to bear a greater burden. When the present value of the total buy-down value is calculated and the money deposited in an escrow account in the bank, such subsidies are completely transparent as well.

Borrowers appreciate such subsidies because they can fully understand the impact on their housing options. Lenders like them because they expand the size of their average loan and the number of borrowers, although the administrative complexity of certain schemes can be a deterrent to use by some private lenders. Finance ministries like them because the cost of the subsidy can be calculated transparently and put on the budget for the full commitment or on a yearly basis.

Box 7 Jordan's Interest Buy-down Subsidy

The Hashemite Kingdom of Jordan had used a number of programs for housing production or government-sponsored lending prior to 2000, but all involved non-transparent budgeting and relatively ineffective targeting. In 2000, the government decided to replace these with a new interest rate subsidy that would be transparently funded and allocated and utilize private sector distribution channels.

The subsidy that it opted to utilize is a 5% reduction from the market rate set by a private lender, applicable for the entire term of the loan (typically 20 years, but with high rates of prepayment). Initially, market interest rates were about 15% but have drifted down since 2000, leaving the net effective mortgage rate at about 10%. This was still above the rate of return on investment options for cash savings, and thus did not elicit negative arbitrage in the financial sector. The subsidy could have been more efficient if it were phased out over, for example, the first five years of the loan.

The full present value of the future payments is budgeted out of the corpus of a special fund. The number of subsidies allocated each year is designed to permit the fund to sustain itself indefinitely (depending on the course of real interest rates). In addition, there are binding limitations on income and house prices, and a transparent point system for allocating access to the limited number of subsidy contracts funded each year. The loan can be used for the acquisition of a house or flat, improvements, or the acquisition of a plot for self-construction. The actual average size loan under the program has been only JD 6,000 (about USD 8,400).

Source: Diamond et.al, 1999

- **Grants towards the loan amount or house price will** lower the total loan burden and decrease monthly payments. Such grants can also be provided in the form of a capital subsidy on serviced land or the cost of the house in general, which will lower the debt burden of households, and increase the equity in the house, providing the lender with confidence. Down-payment requirements, i.e. savings requirements, generally stay in place.

For example, Egypt is working towards a combination of monthly payment buy-downs and a (declining) subsidy on the land to developers. Land markets are too volatile for the cost of land to be priced into the housing package for the lower-middle income groups.

At the same time, by linking the package of subsidies to the maximum loan amount that households can afford, household contributions are leveraged and overall subsidies per household are lower than would be without tapping into mortgage markets.

- **Subsidies to alleviate savings constraint.** Studies in several countries have shown that the main hurdle for expanding moderate income homeownership is for households to save enough money to pay for the *down-payment, title and closing costs and /or an upfront premium for mortgage insurance*. Upfront grants can be applied differently:
 - **Grants towards the down-payment** assist in the payment for any or all of those expenses and may be an effective way to expand the formal housing sector for households at the margin. Such a down-payment subsidy should never substitute for all household savings as households should always hold some equity in the house.

- **Payments for mortgage insurance** have several additional benefits: they generally lower the down-payment requirement and make the loan more attractive to the lender.
- **Upfront grants complemented by a required savings program** assist households to save for some of the equity in the house. Savings programs can assist the lender to assess whether the borrower can handle a regular payment schedule. They should preferably be for a set number of months and for a certain amount. These programs are most efficient if they do not lock the borrower and lender into a closed system whereby interest rates for savings and lending are set administratively or whereby loans are issued based on the availability of funds in the system. An example of this latter type of subsidy is the German Bauspar system which has been imported in several transition economies.
- **Soft-second mortgages** are another, more complex way to lower the savings requirement. A second mortgage loan that may be interest free and will need to be paid back after the first loan is paid off and extended only if the house has appreciated in value. While potentially a more efficient subsidy than an outright grant, the conditionality of paying back such loans has been fraught with misunderstandings in the context of housing markets in emerging market economies.²³

Box 8 Chile's Upfront Grant Subsidy

In 1978, Chile possessed a fairly developed commercial banking system, social security and pension fund, and capital market. The government believed that given the proper regulatory and macroeconomic environment, the housing sector could function as a tool to stimulate economic development, alleviate economic recession, and improve poor and equitable housing conditions. Thus, it created a transparent national housing cash grant / voucher program for first-time homeowners to use for partial down payments on loans from private lenders for new homes built by the private sector. A maximum house value was set as well as a progressive subsidy amount based on a point system. This ensured that of the 20% of eligible applicants selected each year, low-income households received the largest grants in proportion to their loan size and that more needy households and those who had saved more would be given priority. In 1990, new construction rose above the rate of new household formation and the program was revised to include existing houses.

While the program worked well for the lower-middle income market and above, demand-side incentives were insufficient to compel private lenders and developers to move into the low-income segment. Even for the lower middle income segment, the *Banco del Estado*, the largest state bank, continued to hold the largest market share. In 1980, government began contracting out construction of low-income unfinished units on cheap land far from city centers, providing loans directly to beneficiaries. Beneficiaries disliked both the housing products and the locations which was manifested in high levels of abandonment, and poor loan repayment. In 2002, major revisions were made and moderate-income lending was left to the banking sector (mostly the *Banco del Estado*). The lowest income brackets that could not save or carry debt were provided with a very basic house and households that could save little and could not carry debt were provided with an unfinished structure worth less than USD 7500 which they had to finish themselves. Additionally, the government provided a maximum USD 3800 upfront cash grant and incentives to lenders to serve households that could afford a loan for a maximum house price of USD 15,000 in the form of loan servicing compensation and partial credit risk guarantees. While middle-income beneficiaries were allowed to select from new and used houses, low-income households' choices were limited to new government houses.

²³ For example, Costa Rica was forced to abandon the soft-second loan structure of their upfront subsidy.

Repeated efforts to make the program work for low-income groups have yielded poor results and have moved to a supply-side approach. The low-income bracket still does not have access to appropriate credit mechanisms and because the subsidy cannot be applied to existing housing, the top of this income bracket cannot begin to filter upwards.

Source: Ruprah and Marcano, 2007; Hoek-Smit and Diamond, 2008; Pardo 2001; Rojas, 1999.

- **Subsidies to deal with employment and earnings uncertainty.** In general, self-employed or informally employed borrowers carry a higher credit risk even if they would qualify for a mortgage or consumer loan on the basis of their expected cash flow from income. In many developing countries, the majority of actively employed people work in the informal sector (see Section 2). It is important for formal housing market expansion that mechanisms are found to facilitate mortgage lending to the most credit worthy households in this group.

The private market can accommodate this situation to some extent. Lenders may develop flexible mortgage instruments and servicing systems to accommodate such customers. They may do research on their portfolios to gain a better understanding of the risk profile of the informally employed and price differentially for different risk profiles. They may require further higher down-payments.

Examples of subsidies that can further encourage such private sector innovations are.

- **Contribution to a blocked escrow account** that can be accessed when payments are missed. It is a transparent and upfront subsidy that can be handed over to the borrower if money is left in the account after a set period of time. Such a “payment insurance” scheme may also be usefully applied to consumer lending for housing which may be more appropriate for the low-income part of this group.
- **Payment for a specialized mortgage insurance program** (see Box 5 on FOGARIM)
- **Borrower education** has proven particularly effective for this type of client.

4.2.2 Evaluation and adjustment

Most recommended types of subsidies use an upfront budgetary allocation disbursed in full in the initial budget year, including the monthly payment buy-down. These upfront subsidies use *more equitable* targeting mechanisms than tax subsidies or broad interest rate subsidies. For example, the upfront cash grant subsidy system in Chile, while open to roughly two-thirds of all households, uses a point system for the allocation of subsidies that causes the subsidy to decrease with higher incomes and prioritizes households on the basis of need. The *consumer or transfer efficiency* – the effects of the subsidy on the actual production and consumption of houses – is generally considered to be much higher for upfront grant programs, especially relative to the broad general subsidy schemes discussed in Section 1 (interest-rate deductions from income tax and broad interest rate subsidies). However, *expenses per household* for cash grant programs are relatively high if a fairly high minimum housing standard is set for participants and the use of complementary debt finance is low. For example, the budget expense of the Chilean upfront grant subsidy was approximately four to five percent in 2002/2003. Also, these subsidies often

require additional support to improve access to finance in order to work efficiently (see examples above on system subsidies). Lastly, these programs are often *expensive to administer*.

Because the costs of upfront grants are known, they are less politically favorable. However, they can be evaluated more readily and are in general more frequently adjusted. This also means that they are more readily phased out, for example, when donor funding is stopped or the budget needs tightening. Such was the fate of upfront grants in Costa Rica which were stopped when the country ran a budget deficit. It takes a long time to regain private sector confidence in a program when it is prone to a stop-and-go policy.

Another issue with upfront grants is that when housing supply for the targeted market is dependent on the subsidy -- i.e., when there is no market yet -- upfront grants are often provided to developers directly rather than to households to find their own house in the marketplace. They mostly are used as production grants, which in most cases are not transferred to the customer by way of lower prices.

5. Subsidies to Improve Housing Quality through Increased Access to Non-Secured Loans and Micro-Loans for Housing

5.1 A Closer Look at Market Segments

While mortgage markets are critical in solving the housing problems of the broad middle and lower-middle income groups, they will not solve the housing problems of the poor in low income countries or lower-middle income countries with highly skewed income distributions for some time to come. A large proportion of households (often at least fifty percent of newly formed households) cannot aspire to solve their housing problems through formal housing markets. Incomes are simply too low relative to prices of serviced land and standard formal housing. Incremental construction is often not permitted and it is not considered profitable for private developers to produce core housing. In addition, appropriate types of debt finance are not available. Informal housing and crowding in the existing stock are the only solutions.

Government must play a more direct role to increase general housing consumption for this low-income segment in order to address concerns of public health and inequity in society. The question many policy makers are grappling with is what that support should be.

- **From a public health perspective**, government ought to spread its support to all households living in unhealthy conditions. Slum upgrading should, therefore, feature prominently in any government's subsidy package. The cost of infrastructure improvements can at most be recovered through user fees on services and, ultimately, on the expansion of taxes if property registration is streamlined. The improvement of the houses in upgrading areas is paid for mostly by the residents themselves from savings and informal credit channels or through community-based housing funds (see below).
- **From the perspective of expanding new formal housing solutions**, at least for the top income group of this market segment, government's role is critical mostly in the many different aspects of land management and improving the functioning of land markets.

Making rural land available for urban development in a timely manner, improving land registration systems, adjusting regulations for subdivision, planning and construction, and facilitating permitting procedures are the first things government, in particular local government, must do to expand formal construction and attract private developers to this market. Subsidies are always necessary though. Nonetheless, what should be subsidized and how a household's own resources can be leveraged remains in question.

Often governments subsidize the entire new house package for this income segment since savings and incomes are too low to pay for the house and credit options are not available (e.g., South Africa, Mexico, Brazil, Egypt and Chile all subsidize between seventy to ninety percent of the total low-income housing costs). Such deep subsidies limit the scale of government programs and create inequities since only a fraction of deserving households will receive a subsidy. "Give away" houses are also often undervalued by the beneficiaries and are often "sold" for a fraction of the replacement costs. In addition, since the subsidy is so deep, it will often make beneficiary households better off than those who have higher incomes but who do not qualify.²⁴ Allowing incremental construction and supporting mechanisms to increase access to housing finance will leverage households' own contributions and will alleviate the burden on government somewhat. This latter component is critical and often requires government subsidies.

5.2. Types of Housing Micro-Finance Systems

5.2.1 Alternative Housing Finance Products and Lenders

Fay and Wellenstein (2005) contend that the scale of micro-credit for housing is growing as a percentage of total micro-credit, but that it is still extremely small. It is difficult to quantify micro-finance for housing since specific housing micro-finance products are often not distinguished from other consumer or micro-enterprise loans. Several studies indicate that roughly 25 to 30 percent of micro-enterprise credit ends up being used for housing improvements.²⁵ The fact that housing expenditures by the poor in low income countries are substantial (six to ten percent of total household expenditures²⁶) demonstrates that poor people can and do spend on housing.

The types of products offered under the general rubric of "alternative housing finance" vary widely as do the financial institutions that make housing micro-finance loans. Some products are suitable for the financing of new incremental low-income housing, while the bulk of the products can only finance home-improvement. Some are subsidized while others are priced at market rates. Examples of products and lenders include:

- i) **Non-mortgage housing loans secured by pension or life insurance savings and pay-roll deductions** can be medium to long-term and of sufficient scale to finance new housing or substantial improvement of existing housing. In South Africa, such products account for roughly 25 to 30 percent of the

²⁴ See Rust for South Africa, 2008.

²⁵ Hoek-Smit, 2006

²⁶ Surveys conducted by the author

housing loans made by commercial banks to low-middle income groups.²⁷ These loans are roughly double the size of unsecured housing loans, but only one-sixth the size of mortgage loans to the same broad income group.

- ii) **Consumer loans for house improvement, incremental home construction or individual service connections to the house** made by banks or non-bank micro-finance lenders are smaller and with a shorter term than the secured loans. Unlike microfinance loans for entrepreneurial activities, housing microfinance loans are not “secured” by future income from the investment. In markets that are not yet competitive, such loans command very high interest rates. For example, Mexico’s commercial micro-lenders charge well over 50 percent for such loans, while in competitive markets such as Indonesia, interest rates on similar loans can be half that.
- iii) **Small micro-loans made by NGOs or specialized MFIs** are typically small and short term and more often “secured” by community-based support systems or third party guarantees. The limited funding base of many of the NGO-type institutions restricts the expansion into housing lending.
- iv) **Home loans made by project-based NGO and government sponsored credit schemes** are yet another category. These loans are often heavily subsidized, generally perform poorly and frequently the institutions fold when physical project implementation (whether for new housing or upgrading) is complete. In many cases, such institutions have proven more costly in administrative outlays than an outright household grant (See Box 8 on one such scheme in Indonesia).
- v) **Loans made by community (rotating) savings and loan schemes** are small and unpredictable in the timing of issuance. These schemes are often not dependent on subsidies and are rather sustainable for that reason. They can only be used for limited home-improvement purposes though.

As these examples show, a wide range of financial institutions, from commercial banks to non-bank commercial micro-finance institutions and NGOs, or informal groups, offer alternative housing finance products. The latter three types of lenders are typically funded by soft money, at least in the start-up phase, and receive various other types of support from international development institutions. The foregoing discussion of lessons learned sheds light on what we have learned from different subsidy approaches.

5.2.2 Some lessons from past subsidy approaches

Unfortunately, no comprehensive study of subsidy interventions in micro-finance-for-housing-systems has been conducted. Only sporadic assessments are available. For example, Murray and Rosenberg²⁸ reviewed *donor funded community-managed loan funds* over the last 15 years. They assessed which type of institutions worked and proved sustainable and found that only two forms appear viable. The first are savings-based groups not supported by external loan funding though these have a limited application for scaled up housing lending. The second are self-help groups that start with savings and then leverage bank funding (as CBO or NGO clients do).

²⁷ Access Housing, June 2008.

²⁸ CGAP, 2006

They conclude that “where loans are financed by early injection of external funds from donors or governments, community-managed loan funds (CMLF) appear to fail so consistently that this model of microfinance support is never a prudent gamble”.²⁹ As Porteous (2006) concludes, “Rapid scaling up of community shelter loans funds through external funding is not an easy answer to the challenge of extending the reach of housing finance.”

Similarly, housing project-linked lending schemes are frequently not run on commercial terms, depend overly on volunteers or government staff rather than on finance professionals and fold when project finance ceases. A much stronger model is to integrate commercially-based, possibly competing and voluntary housing finance schemes into commercially-based housing projects that can continue operating the loan portfolios after projects end.³⁰

Box 9 The Co-BILD Program, Indonesia

In 1969, Indonesia set up the Kampung Improvement Project (KIP) as a measure to provide in-situ improvements to infrastructure and housing. KIP was supported entirely by funds from local governments in Indonesia until 1974 when it came under the support of the World Bank. In 1979, KIP was established by the government as a national policy. By 1982, when the World Bank support ended, close to five million people had been helped. KIP continued to evolve as part of the government’s efforts to create more sustainable projects with the latest KIP introduced in 2000. Despite these efforts, Indonesia’s low-income sector continued to face housing problems due to the lack of economic incentives to sustain projects. A 2001 UNCHS report identified the need to improve two key areas of market failure in the sector: (i) finance of supply-side interventions (project finance) to provide shelter products appropriate to the poor, and (ii) finance of demand-side interventions (end finance) to enable the poor to save for and buy improved shelter.¹

Learning from this, in 2001, Indonesia introduced Co-BILD (Community-Based Initiatives for Housing and Local Development), a UNCHS-executed project, funded by the Netherlands Government through UNDP. Co-BILD aimed to lower the costs of housing provision through incrementally built, sequentially financed housing and community-based initiatives (collective acquisition and development of land and infrastructure).

The project mechanism consisted of decentralized revolving funds loaned to low-income groups based on market rates in 12 participating cities. Loan funds were disbursed to all boards comprised of representatives from civic society, including NGOs, CBOs, academics, professionals and local government. The boards, in turn, disbursed the loans to neighborhood groups who would then implement their housing projects.⁴ The loans used a market-rate interest to provide short (up to two year) loans to eligible households to purchase land and build new or improve existing houses in either their present or new locations. Upon successful repayment of the loan (USD 250 average, over a two-year period), the household would be guaranteed a series of up to three subsequent loans. The loan repayments would then be used by the city institution to advance loans to other community members, and subsequently to other community groups.³

Almost 70 percent of the five million in project funds were disbursed as loans for the improvement of almost 5,000 houses, construction of 215 new houses and the purchase of more than 2,800 plots of land. The revolving funds grew by USD 554,120 in the two years of operation through 9,607 community-managed loans.

29 CGAP, 2006, p.1

30 (Hoek-Smit, 2002

Although it was successful, Co-BILD lasted for less than three years. It ended in July 2003 when project funding ceased and the technical support for the project was eliminated. Had it been integrated in one or several of Indonesia's experienced micro-finance banks, it might have continued to thrive.

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5. Hoek-Smit, Marja; *Implementing Indonesia's New Housing Policy: The Way Forward*, June 2002).

5.3 Subsidies to Housing Micro-finance Systems

5.3.1 Which Constraints do Housing Micro-Finance Systems Face?

The main constraints from an initial review of experiences with housing micro-finance (MFH) appear, not surprisingly, to be related to:

- i) their limited funding base and difficulty to access funds;
- ii) increased credit risk in moving towards an unsecured but medium-term housing lending product;
- iii) high transaction costs that increase interest rates; and
- iv) lack of information on their potential market and client base.

To look at how subsidies from government or development institutions address these constraints as well as what lessons we have learned from the insights of earlier subsidy inputs from HMF systems, we focus on three broad areas where subsidy support appears to be useful:

- i) Subsidy support to address specific funding constraints and lending market incompleteness in order to improve the efficiency and scale of HMF;
- ii) Subsidies to strengthen and prepare communities to interface with commercially-operated lending institutions for housing, through supporting savings schemes, property registration efforts, and expansion of infrastructure; and
- iii) Subsidies to support research on this large potential market.

In addition, subsidies should, where possible, increase competition in the market place for such loans. Put another way, inputs should assist in reaching a broader spectrum of lenders.

5.3.2 Supporting Transformations from MFH NGOs into Banks

The non-bank model of many NGO-type MF institutions does not allow these institutions to accept deposits from the public. Their funding base remains, therefore, weak and small in scale. There is continuous need to find soft loans or loan guarantees to access commercial loans. In turn, such soft loans come with donor demands to “subsidize” lending to the poor. This is a vicious circle. These institutions are also limited in the type of financial services they can offer. The lack of a solid funding base has created the current trend of non-bank and NGO-type micro-finance institutions transforming into banks. These transformations are specifically relevant for the expansion of the housing loan portfolio which requires longer term and larger loans. They open up the lending portfolio not just to scale delivery of micro-loans for housing, but allows for expansion into small mortgage loans and housing loans secured by other types of collateral as evidenced by the cases of MiBanco in Peru (Box 9) and Bancosol in Columbia (Box 10).

This process requires, however, strong technical assistance from banking experts, which is expensive. The new institutions also require equity investment by donors and initial funding for lending operations, as well as investments in operational systems. Subsidies are nearly always required to make such transformations successful.

Such subsidies are seldom provided by the government. Rather, governments typically play a supportive role by providing the necessary regulations. Most subsidies are provided by international development institutions and intermediary finance institutions like ACCION International which, in turn, receive some support or cross subsidization of technical assistance activities from a variety of international donors. The type of support required is detailed in the cases of MiBanco and Bancosol below.

Box 10 The Case of Mibanco, Peru: converting NGO's to commercial lending institutions

MiBanco is Peru's leading microfinance bank and began as *Acción Comunitaria del Perú* (ACP) Investment and Development, a non-profit organization. ACP was started by a group of Peruvian business people along with ACCION International to provide development opportunities for low income Peruvians. It grew rapidly after the reestablishment of macroeconomic stability in the mid-1990s, and effective technical assistance provided by ACCION International. By 1997, it needed more funds to sustain its growth but, as an NGO, did not have access to capital markets. To remove these hurdles, ACP sought to transform its legal status. Its first option was to become a *financiera*, a regulated finance company which required a minimum capital of USD 3.0 million. Another option was to become a type of regulated financial institution known as a small business and microenterprise development institution (EPDYME), using a new law created in 1994 to encourage the transformation of NGOs into EDPYMEs. ACP explored this possibility further in a feasibility study and in 1996 its proposal to become an EDPYME was approved by the Office of the Banking Superintendent.

In 1996, the Peruvian government set up a committee of microfinance experts (with technical assistance from IADB) to explore the possibility of setting up a bank to serve micro-entrepreneurs. In 1997, ACCION International was enlisted to set up a microenterprise bank. ACCION required that the new bank have no government ownership and be owned wholly by the private sector, and chose ACP to be transformed into this bank. ACCION International and ACP jointly submitted a concept paper to the presidential committee. In addition, ACP prepared a feasibility study on its intended transformation into a

commercial bank which the Office of the Banking Superintendent approved in November 1997. On May 4, 1998, Mibanco opened its doors to the public as a microfinance commercial bank.

ACP's entire portfolio (more than USD12 million) was transferred to Mibanco. Mibanco paid USD 1 million to ACP for access to its client base and took over administration for all ACP client loans. Most ACP loans were repaid within five months because of their short terms. All new loans were approved under Mibanco as the new microfinance institution.³ ACP became the majority owner of Mibanco (60% equity stake) in addition to ProFund (19.68%), the ACCION Gateway Fund(7%), and two commercial banks: Banco Wiese Sudameris, and Banco de Credito del Perú. The total initial equity capital added up to of USD 14million.

Mibanco is still a bank owned largely by social investors. It was required to ensure that the donated funds remained in a "like institution" even though most of the grants had expired by 1990. As of February 2008, when Mibanco announced its plans for an IPO, ACP remained the majority shareholder.

In 2000, Mibanco launched Micasa, a low-income housing finance program. Micasa's primarily borrowers are Mibanco's base of microenterprise clients whose credit profile is known. Borrowers use household assets to secure loans. Micasa developed an innovative housing product for occupants of informal housing areas who received a title to their property as part of the upgrading program. Households can obtain a five year loan for USD 1,000 to connect their homes to the main infrastructure services provided as part of the upgrading efforts. The program is in high demand. Mibanco is looking at opportunities to add to its value chain by partnering with building material suppliers to offer better prices to Micasa clients making improvements to their homes. In 2006, Mibanco had more than 300,000 clients with over USD1,630 million in its portfolio.

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Box 11 The Case of BancoSol, Bolivia

BancoSol, Bolivia's largest commercial bank and successful microcredit institution, was created out of the *Fundacion para la Promocion y el Desarrollo de la Microempresa* (PRODEM or, in English, the Foundation for the Promotion and Development of Micro-enterprise), a successful NGO set up in 1984 to provide capital to small-scale commercial activities. PRODEM was started with the seed capital and leadership of a group of Bolivian entrepreneurs and technical support from ACCION International. In 1984, with additional capital from USAID, the Calmeadow Foundation, the Bolivian Emergency Social Fund and the private sector, PRODEM began operations. Although successful, PRODEM could not expand enough to cope with the demand for financial services because as an NGO, it had limited donor capital available and regulations prevented access to local savings. As a result, a commercial bank that became Banco Solidario S.A. was established in 1992.

The conversion process involved four phases covering two years from 1989 to 1990. It was supported by ACCION in partnership with Calmeadow and PRODEM's board. The primary conversion challenges

included raising capital for the high loan requirements established after the banking crisis, creating awareness that the poor could benefit from market interest rates, and developing a savings program.² The first phase involved the creation of COBANCO (*Comite Promotor del Banco para la Microempresa*), a planning entity to obtain local commitment and initiate discussions with the government. In the second and third phases, a feasibility study was conducted, equity was raised and the legal and technical requirements for chartering the bank were fulfilled. The fourth phase involved the transfer of staff and portfolio from PRODEM to the bank.¹

PRODEM transferred its loan portfolio to BancoSol in exchange for ownership shares in the bank. As a result, Bancosol began with a large start-up subsidy (nearly half of its paid-in equity capital to be used for its lending portfolio) and a pre-existing client-base of almost 15,000. BancoSol assumed the liability for a USAID loan to PRODEM worth USD 850,000 and another from the Bolivian Social Emergency Fund. PRODEM used its portfolio to actually purchase over 41 percent of the bank's stock. Private Bolivian businesses bought 30 percent of the equity shares while international donors and NGOs bought the remaining shares.²

In 1992, BancoSol, the country's first fully commercial microfinance institution, opened its doors. Calmeadow had a position on the board of the bank along with the other investors. PRODEM became the largest shareholder in the bank it created and worked as an arm of BancoSol, providing technical assistance and support. It developed credit programs in rural areas leaving the urban sites to BancoSol. PRODEM continued to operate in the non-profitable offices of the bank until it reached financial stability and could be sold to BancoSol. Currently, PRODEM owns only 30 percent of BancoSol's shares; the balance is held by Profund, the Inter-American Investment Corporation, and several local investors.

In its initial stage, BancoSol had to deal with management issues, its lack of experience in capturing savings and defining an appropriate governance structure. The technical support it received from ACCION and others was critical. Its loan sizes have now increased to offset increasing costs of funds. By reducing operating expenses as a proportion of productive assets, BancoSol's portfolio efficiency has increased. BancoSol currently has 120,000 borrowers of which 55% are microcredit clients and 13% are *mortgage* borrowers; 170,000 depositors, 29% of which belong to the microfinance market. It is one of Bolivia's most successful banks, leading the way for other institutions to begin serving the microfinance sector.³

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5.3.3 Supporting Access to Loan Funds

For MFH institutions without the option of transforming into a public, the scale of operations is often limited by lack of access to medium-term funds. As discussed above in regards to the mortgage market, the establishment of a liquidity facility or fund can assist such institutions to move into medium-term lending for housing.

One such example is the *liquidity facility established by the Government of Mexico's Sociedad Hipotecaria Federal (SHF)* which provides funds to MF institutions to make loans for home-

improvements. The rate is risk-priced but is well below what such institutions would pay in the market. Through such funding, non-bank MFH lenders can expand the term of their micro-loans for housing and in some cases can make small mortgage loans for new housing. International funding agencies are another frequent source for subsidies to the funding base of HMF lenders either through provision of *soft loans directly or low cost loan guarantees*. When done prudently, these types of subsidies can be effective. However, in the long run, HMF lenders need to become independent of such subsidies in order to be sustainable.

5.3.4 Addressing Credit Risk

Guarantees or insurance. When HMF lenders consider moving into medium-term lending for housing, they may be exposed to greater credit risk than they are comfortable taking on. Similar credit guarantee or insurance schemes to the ones discussed above for mortgage lending may provide a possible incentive. However, when HMF loans are non-secured, it may be difficult to find an insurer, apart from government, to take on such a guarantee product. Additional guarantees by development agencies may overcome private market concerns (see FOGARIM example in Box 5).

Missed payment account. An alternative subsidy product that has been used by some NGOs is a grant for an amount equivalent to a certain number of monthly payments (for example: six) which is placed in an escrow account, possibly in addition to a household's own savings. The lender can access the account if a payment is missed. After a number of years of good payment, the remainder of the subsidy can be "returned" to the borrower who may use it for home-improvement. Such a subsidy is a hybrid between a household and lender subsidy and has been successfully applied in some countries (e.g. Indonesia, although it was not sustained after the project came to an end).

Consumer education and assistance. As for mortgage lending, educating the consumer/borrower in payment obligations and procedures goes a long way toward improving credit quality. It is the bread and butter of micro-finance institutions. Such expenditures can be and often are covered by donor subsidies. There is no evidence, however, that broader support for incremental house construction provides better housing outcomes or repayments and would, therefore, generally not be worthy of internal subsidization by HMF lenders or donor support.³¹

5.3.5 Alleviating High Transaction Costs

Another constraint faced by HMF lenders is the often high expenses in originating and servicing small loans. While electronic payments are used increasingly, most payments are still made through human intermediaries. Governments may subsidize the creation of common payment platforms to be used by a broad group of micro-lenders. The facilitation of such a platform is under consideration by the government of Mexico.

In the same context, government support for research of the sector will help the industry to fine-tune its offerings and systems.

³¹ Porteous, 2006.

Taken together, such subsidy incentives would go a long way to strengthen the institutional base of alternative housing finance lending operations, whether private commercial banks or non-profit institutions. More importantly, they may expand the scale of alternative housing lending to be more compatible with the enormous need for housing loans and do so in a prudent way. Of course, the package of incentives has to be assessed in the specific context in each country and be phased out when no longer necessary.

5.4 Household Subsidies for the Poor

In the past, household subsidies linked to micro-credit were provided mostly through below-market interest rates where lenders had access to cheap funds from government or international agencies. Such subsidies create distortions in the marketplace and are generally not advisable. Even if subsidies linked to micro-loans do not distort interest rates directly, they should be considered with great caution. They often do more harm than good.

For example, SHF in Mexico has started to provide small grants attached to home-improvement loans to borrowers. While it has disbursed more than 80,000 such subsidies since it started in 2007, the program has only been utilized by two micro-finance lenders. It is utilized mostly to soften the very high interest rate charges in the micro-finance market in Mexico (current rates are approximately seventy percent flat). Most well-established HMF lenders do not want to be associated with the subsidy program because it will create distortions in their portfolio and for fear of political and social backlash or government interference, given the high interest rates. The program gives the two lenders, therefore, a temporary advantage and may attract some new lenders into the housing microfinance business. Nonetheless, its impact on increasing competition, and hence lower interest rates, is entirely unclear. The program has not been evaluated but warrants close scrutiny since it is one of the few programs that links upfront household subsidies to micro-credit for housing. SHF's strategy of supporting HMF growth through liquidity support has a better chance to bring in more actors and hence put pressure on rates.

Subsidies to pay for new house construction or for home improvement should rather be provided separately from the finance and in monetary form or as direct transfers-in-kind.

Grants in the form of serviced land with or without a core house. Subsidies should address the market failure that plagues this part of the housing sector most- that land markets do not work for the poor and developers are unable to develop low-cost housing profitably. A grant in the form of a serviced lot is still one of the most effective ways to allow low-income households to pay for housing. Households can then use their own resources, including debt finance (hence the emphasis on subsidies to stimulate the housing finance system), to complete the house over time. For reasons of transparency the market value of the serviced plot has to be included in the total subsidy amount.

Home-improvement grants as a complement to upgrading schemes or to improve low-income housing generally including for *rental extensions*³² of the house. Such grants should

³² Rental housing for low-income households in low-income countries is best delivered through private, small scale investors who build additional rooms or floors. Formal sector built rental housing requires deep subsidies linked to finance, land and construction and can be forbiddingly expensive.

be applied independently from debt finance in order to reach households that do not qualify for a loan, not even for micro-credit, or in situations where microfinance is not yet available.

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Box 12 Mexico's Piso Firma Program

Mexico implemented a small but successful grant program over several years that allowed beneficiaries to build a cement floor in their houses, irrespective of where the house was located. An evaluation, using an experimental design with control groups, showed the positive impact of the program on households' wellbeing.³³ Unfortunately, the implementation procedures were not included in the study.

Grants to NGOs to establish community-based support systems. Such community-based support systems have been successful in lowering construction costs by buying building materials in bulk, providing quality control to house construction and lobbying local authorities for services and their maintenance. Community support systems can help in the development of community savings programs and counseling programs to assist households which are currently not good credit risks to become so. Government support to select intermediary institutions with a proven track records may assist in bringing these community-based programs to scale and improving their efficiency.

6. Conclusions

A growing demand for urban middle- and lower-income housing has fueled the urgency to expand housing finance systems. One area of critical rethinking, and a frequent bottleneck in system expansion, is housing finance subsidies. These are by far the most prevalent housing subsidies in all countries, although they are not generally recognized as such. Many financial subsidies have had a negative impact on the development of housing finance markets, and their impact on social goals is mixed.

Policy makers need to develop a strategic plan to develop a winning combination of incentives to increase access to **mortgage credit and to expand access to savings and non-collateralized credit options for those who would not qualify for mortgage loans.** That requires

However, even if finance is potentially available, it is often the case that the land regulatory system makes it unprofitable or unfeasible for private developers to serve middle- and low-income markets. So while this paper has focused on access to finance, it acknowledges that the housing problem cannot be solved without expanded access to registered and serviced land.

This paper has provided a framework for the development of housing finance subsidies, but is not meant to be complete. It intends to assist policymakers in the difficult task of diagnosing the most serious problems in the housing sector, translating these problems into clear policy objectives for different market segments and developing a plan of action for the gradual implementation of regulatory reform and subsidy actions to reach those objectives.

³³ Gertler, et.al. for the World Bank, 2006

Ironically, part of this process, and sometimes the most difficult task of all, is the elimination or reform of *existing* housing finance subsidies, due to the number of vested interests. However, existing subsidies often act to increase housing inequality, and even income inequality, while doing little to increase overall housing consumption or production. They may further strongly undermine the maximum unsubsidized development of the housing finance market. This is the reason why any subsidy policy or program, no matter how seemingly well designed, needs to be subject to research and review on a regular basis.

The second major challenge for national governments is how to induce local governments to implement policies to expand housing development suitable for lower-income households. Few countries have been successful in doing so. National governments may make access to housing subsidies conditional upon regulatory changes and improvements in land right and registration systems. Another approach may be the training of local governments in housing and land market analyses to improve their understanding of the consequences of poor regulatory systems and the lack of new legal low-income housing construction.

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