Chapter 16

Housing Finance Subsidies

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Housing plays a special role in the social and political dialogue in most societies.[1] It is often the largest single category of household expense, and the housing sector is a large part of the economy. Housing is also a major component in creating stable and healthy communities and a very visible indicator of social conditions. These economic and social characteristics of the housing sector are the reason that almost all societies intervene in housing markets through an array of policies intended to increase housing consumption by various groups. This chapter focuses on one category of government intervention in housing markets—subsidies related to housing finance, that is, the way in which the housing asset is being paid for. Housing finance subsidies can be applied to reduce equity contributions and improve availability and lower cost of debt for construction, sale, and resale of housing in the ownership

1. This chapter uses parts of unpublished materials for a forthcoming book on housing finance subsidies produced by Marja C. Hoek-Smit and Douglas Diamond commissioned under a collaborative agreement between the World Bank Housing Finance Group and the International Housing Finance Program, Wharton School, University of Pennsylvania.

and investment markets. Of all forms of housing subsidies,[2] housing finance subsidies are among the most prevalent policy tools and are currently much discussed in the context of overall reforms of housing finance systems.

The current period of macroeconomic stability, sustained economic growth, and lower interest rates in a growing number of developing and emerging market economies has caused governments to take a look at the existing housing subsidy policies and program, which were often designed during periods of turbulent macroeconomic conditions that prevented the development of financial systems in general and housing finance in particular. Much progress has been made by many governments in improving the conditions for financial sector development[3] and in strengthening the legal infrastructure for housing finance. Some examples include improved land-titling and property registration systems and transferability of titles; greater enforceability of contracts, including foreclosure procedures; and reforms in judicial systems that are frequently strongly biased in favor of the underdog.[4] Such macroeconomic and legal improvements have increased the interest of the private sector in expanding the scale and extent of its mortgage and consumer lending for housing. Current subsidy systems are often not well aligned. These changing circumstances and the expansion of formal housing markets to lower-middle income groups have been disappointing in many countries. In addition, most such subsidies are linked to mortgage finance and are not accessible for low-income households.

Major structural problems in the sector remain in many countries, often because of the large role of government-owned housing finance institu-

2. The universe of possible subsidies is quite large. It includes production subsidies (for example, land and infrastructure, reduced standards), tax subsidies (for example, property tax abatement, mortgage interest deductions), capital expense subsidies (for example, reduced interest rates, investor guarantees), operating expense subsidies (for example, for public rental housing, heat and utility subsidies), and general housing-expense subsidies (for example, housing allowances, up-front cash grants). Price controls are yet another form of housing "subsidy" through regulatory controls.

3. A recent IMF study showed the importance of structural reforms for the financial sector as a whole in terms of benefits for growth and stability, drawing on a large sample of countries (Kose, Prasad, Rogoff, and Wei 2006).

4. Comparative data for European countries compiled by MacLennan, Muellbauer, and Stephens (1999) indicate that asymmetries in market structure, institutions, and tax policies affect the degree of competition in the housing finance system and the related extension of housing finance more than relative income levels and have far-reaching implications on macroeconomic policy. Other studies show that micro-level housing finance policies have a greater impact on (formal) homeownership rates than the income level of countries in their sample (Chiuri and Jappeli 2003).

tions. Central banks and finance ministries are under pressure to commercialize or privatize the many state-supported or state-owned housing finance systems. They are also under pressure to curb the deep institutional and nontransparent subsidies that have often led to unanticipated liabilities to the state in the past and have hindered private market entry into the sector. Structural reforms have proven difficult because of current subsidized housing finance institutions' fear that they will lose their privileges,[5] in addition to the lingering perception by governments (housing ministries, in particular) that the state is more efficient in allocating scarce housing credit to large segments of society. Indeed, the risk that governments will unexpectedly change the rules and regulations to which private lenders have to comply is still a major reason why banks are reluctant to enter. High real interest rates, or lingering volatility in inflation, are generally continuing to limit housing affordability and long-term lending in several countries (for example, Brazil, Turkey, Indonesia). Private lenders are reluctant to expand their lending operations to underserved markets that are considered more risky, because the mechanisms to deal with those risks are inadequate. It is indeed uncommon that households below the 70th or 60th percentile of the income distribution or those employed in the informal sector have access to mortgage finance, and frequently not more than 10 or 20 percent of housing transactions uses finance (Angel 2000). Additionally, constraints in the land market and land-development sector have driven up prices of housing in many countries and contribute to the limited scale of formal housing supply, while demand is growing because of decreasing interest rates, increasing real incomes, and growing urban populations. Without elastic land and housing supply, improvements in housing finance merely generate price effects (Mayo 1993).[6]

Many governments in emerging market and developing economies therefore face a fourfold challenge in expanding housing finance systems downmarket and the related reform of their housing subsidy policy. They have to (1) reform subsidized state housing finance institutions as a prerequisite to

5. This phenomenon has been observed by Rajan and Zingales 2003, for the financial sector in general.
6. The World Bank in its 1993 programmatic shelter paper, "Enabling Housing Markets to Work," undertook the last available comprehensive review of land conversion and servicing multipliers globally (Mayo and Angel 1993). The analysis revealed inefficiencies of the supply processes in much of the developing world.

creating a more competitive and efficient housing finance system, (2) provide institutional incentives (mostly regulatory, but also subsidy incentives) to strengthen the private housing-finance sector and stimulate efficient lending without exposing the state to excessive risk or moral hazard, (3) reform household subsidies to improve their targeting to well-defined segments of the housing market and specific underserved groups of household, and (4) improve real-side institutions and subsidies and regulatory environments to allow expansion of down-market housing supply. These transformations require that consumer subsidies, now flowing through state-owned lending or land development institutions and often implicit and poorly targeted, be rationalized.

This chapter intends to assist that process by providing the context for such broad analyses. It will focus on finance subsidies and only flag the importance of reforms of real side subsidies and regulations. It discusses separately the different subsidies to address constraints in the housing-finance system and subsidies that assist individual households to access finance and pay for better housing. Specific subsidy programs are briefly discussed in boxes in the text and are elaborated in a separate volume on housing finance subsidies by the same authors to be published by the World Bank and the Wharton International Housing Finance Program. The chapter starts out with a discussion of how to frame a subsidy policy.

Where to Start? Linking Housing Problems to Subsidy Policy

Analyzing the Causes of the Housing Problems

Unlike advanced economies whose housing systems and housing finance institutions have evolved gradually over an entire century and whose policy issues usually involve only modest incremental changes in existing systems, emerging market economies also have to deal with fundamental questions such as property rights, public regulations, and structural problems in the housing finance sector, while under political pressure to do something about housing conditions of a large proportion of urban households that are perceived as unacceptable. The multitude and depth of problems can feel overwhelming to policy makers. All too often the response is to embark on ill-advised attempts to adopt practices from other countries that may be inappropriate to solve the housing problems in the country. Another frequent reaction is to request more subsidies for the housing sector, while in reality the subsidies to the housing sector are already high in most emerging market countries, but are hidden and are not allocated efficiently and equitably.

What is needed in many countries is an in-depth, broad-scaled inquiry into the nature, breadth, and causes of their housing problems and a similar wide-ranging review of existing subsidy programs, their depth, and current beneficiary groups and their performance. Based on such diagnostic analysis government can define long-term policy goals and medium- and short-term programmatic actions—a road map—to achieve greater private-sector participation and address housing problems of those population segments that cannot yet be served by market forces, even with government incentives. The complexity of that process makes it necessary to have high-level political and administrative commitment for a multiyear and multifaceted reform program.

Such straightforward exercises would create, within a short time, the general basis for initial housing policy analysis because pertinent housing issues will be out in the open and can be discussed at various levels of government and among government and private-sector agents in the housing market. It will show the gaps in access to formal housing and housing programs for different income and employment groups that may not have been realized by policy makers because of the hidden nature of many subsidies. Examples of countries that have recently implemented such exercises and have followed up through a medium-term strategic plan for the sector are Latvia, South Africa, and Thailand, and several countries have recently engaged in such processes, for example, Brazil, Mexico, Peru, Colombia, Korea, Indonesia, Vietnam, and Morocco.

The outcome of such broad-based housing-sector analysis would ideally be the identification of specific market segments for different types of housing and housing-finance products and their frontiers, that is, the margin beyond which specific demand and supply constraints limit expansion of and access to these markets. The following are the usual broad market segments to which government interventions may most fruitfully be directed and the areas where expansion of opportunities is most likely:

- Middle- and lower-middle-income market segment (typically upward from the 40th or 50th percentile of the income distribution) where household incomes would be adequate to obtain formal moderate-income housing, but most live in unauthorized or substandard formal housing. The frontier for expanding the formal housing market downward for this segment is not so much constrained by low incomes, although that is certainly part of it, but by lack of access to finance related to informal employment, lack of wealth or savings, uncertain collateral because of poor land registration and cadastre systems, alternative types of property rights or neighborhood risk factors, inefficiencies and incompleteness of housing finance markets, and the related lack of appropriate housing products delivered by the market. In some countries, housing-finance-linked subsidy programs allow households at the top of this income bracket to obtain formal-sector new housing. But regulatory constraints on the real side and controls on rental markets often form barriers to expansion of formal housing for the unassisted part of this market segment, and upward mobility out of unauthorized or substandard formal housing is limited.
- Low-income or perceived high-risk segments of the market where households live in substandard housing or substandard neighborhoods with limited access to services. These are typically households below the 40th percentile of the income distribution or households that are considered not creditworthy, such as informally or self-employed households, or households whose collateral is considered inappropriate for lien-based mortgage lending. Housing subsidies for this segment are often limited to selected upgrading programs. Formal housing markets seldom deliver new housing for this segment and the challenge is to provide effective government incentives to bring more households into the formal housing sector. The frontier for expansion of formal, healthful low-income housing is often two-dimensional: 1) the frontier for improvement of existing housing conditions is confined by lack of infrastructure, formally registered property rights, inadequate regulations, and lack of access to consumer or microcredit for home improvement; 2) the frontier for new low-income housing is constrained mostly by a combination of low incomes and a lack of access to appropriate financial instruments,

Table 16.1. Potential Access to Housing Finance in Mexico, 2006

Households in the formal economy	6% have no access to mortgage finance and limited access to microfinance	16% have access to subsidized mortgage finance	25% have access to subsidized and market mortgage finance
Households in the informal economy	24% have no access to mortgage finance and limited access to microfinance	17% have limited access to mortgage finance	12% have access to market mortgage finance
Monthly income	Less than US$420	US$420–840	More than US$840

Source: CONAVI.

and nonfunctioning land markets, regulatory issues, and poor permitting procedures that drive up the price of housing unnecessarily. Microfinance lending, even if it is available, will not be the solution for large-scale development of new housing for this market segment because of its rate structure, but it can play an important role in progressive housing models. Expansion and strengthening of existing credit cooperatives or mutual credit unions may, however, be relevant for the top end of this segment.

The relative proportion of households in each category will differ in each country, and so will the specific causes of the housing problems.[7] Table 16.1 shows a simple assessment of the proportion of households in Mexico that would potentially qualify for a mortgage based on income, available house products, and interest rates for that market niche.

This example shows that 47 percent of households would not be able to access mortgage finance because incomes are too low or insecure, or house prices of "acceptable" collateral or interest rates price households out of the market. Without mortgage-linked subsidies to formal-sector employees that pay into the labor tax funds this figure would be even higher. Yet Mexico is a middle-income country where the mortgage sector is developing rapidly and nominal interest rates have come down to the 10 percent level. It is therefore not surprising that in many emerging market economies with less favorable income and finance-sector conditions 60 to 70 percent of new households

7. For example, in transition economies, the second market segment may not exist or it may be in the form of substandard condominiums or rental units (or mixed rental-ownership buildings) for which it is difficult to attract improvement loans.

Table 16.2. Affordable Loan/House Price Scenario

	Urban household expenditure percentile								
Urban households	*10th*	*20th*	*30th*	*40th*	*50th*	*60th*	*70th*	*80th*	*90th*
Monthly income, based on expenditures *	310	450	351	610	770	840	1,085	1,285	1,775
Borrowing capacity	10%	15%	20%	20%	20%	20%	20%	20%	20%
Monthly payment capacity	31	68	102	122	154	168	217	257	355
Term	2	5	7	15	15	15	15	15	15
Interest rate–nominal	30%	30%	20%	17%	17%	17%	17%	17%	17%
Affordable loan	554	2,086	4,593	7,927	10,006	10,916	14,100	16,699	23,067
Savings effort/down payment	10%	10%	20%	20%	30%	30%	50%	50%	50%
Afford with loan alone	554	2,086	4,593	7,927	10,006	10,916	14,100	16,699	23,067
Afford with down payment	616	2,318	5,742	9,909	14,295	15,594	28,200	33,398	46,134

Source: Author's calculations.
* in U.S. dollars

Box 16.1. Example of Income and Finance Affordability

The stylized "affordability" distribution of a fairly typical emerging market country shown in table 16.2 calculates the house price that households at each income decile can afford if they use either mortgage credit or consumer or microcredit at nominal market rates. At the time this calculation was made, the lowest-priced house in the formal urban housing market in a city approximately 40 km outside one of the main metropolitan areas was $25,000 and could only be afforded by the 75th percentile of the income distribution and only with a 50 percent down payment. Supply of this type of house at a national level was only a tiny fraction of the yearly increase in the number of households in the 70th percentile group alone. As a consequence, only a small part of the requirement for new housing each year can be fulfilled through the construction of standard private-sector-provided houses and the subsequent filtering up of lower-income households (for example, up from the 40th or 50th percentile) into the vacated houses. * This situation puts strong pressure on government to provide high subsidies for middle-income households.

The bottom half of the income distribution has no access to adequate new market-provided housing nor can it finance the purchase of existing housing. Access to credit was minimal for households below the 40th percentile. The country had small upgrading programs and deeply subsidized but small (relative to urban household growth) government-funded new housing programs, and most low-income households have no choice other than to self-construct houses in unauthorized settlements. Several attempts by the federal government to subsidize developers and lenders to construct and finance a $10,000 house, based on the premise that households were to access housing finance to complement these up-front subsidies, were thwarted because lenders would not provide loans to this segment. Such programs ended in providing free houses for the lucky few and no expansion of the lower-income housing market.

* The concept of filtering is used to describe the process by which successively lower-income households move gradually into better-quality existing housing when supply of new housing allows those with relatively higher incomes to move into standard new housing.

coming into the market each year cannot afford to pay for the lowest-cost house produced in the formal sector.

The example in box 16.1 shows a hypothetical housing affordability analysis based on income and different types of debt finance with different loan terms and interest rates for different market segments. In this example, nominal (and, importantly, real) interest rates are much higher, loan terms are shorter, and down-payment requirements are higher than in the Mexico example, and as a consequence housing affordability is lower. Such a gap in affordability cannot possibly be filled by household subsidies in typical emerging market countries.

Successful approaches to expand the frontiers of different housing market segments must deal with critical supply bottlenecks on the real side and in the housing finance sector to create an upward filtering of households into better-quality formal housing appropriate for each income level. While normal market forces will gradually expand these frontiers, well-targeted regulatory or subsidy actions are often necessary to accelerate this process.

Subsidies and Other Types of Government Intervention

So far the concept of a subsidy has been defined loosely. Subsidies are incentives to change behavior either of consumers or lenders and producers of housing to achieve specific goals and objectives (box 16.2). While this is an inclusive definition of subsidies, the focus in this chapter is on two types of subsidy interventions: (i) modifying regulatory or legal policy related to housing finance to shift market activity in certain ways to reach social or eco-

Box 16.2. Defining Subsidies

Subsidies are often perceived as giving or receiving something for free. That 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 U.S. Congress [1969]).

nomic goals, and (ii) expending financial resources (both through budgetary allocation and fiscal policies) or taking risks to support desired behavior or address specific market failures (for example, externalities). For example, a government may establish a liquidity facility to increase the efficiency of certain segments of the mortgage market or to make the mortgage market more attractive relative to other segments of the financial system.

Subsidies can be difficult to identify, however, 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 administration costs are not accounted for, initial capital is provided by government at no cost, or the presence of catastrophic risk being borne by the government is ignored.

Because subsidies can be costly and distorting, they should be a policy of last resort, after or in conjunction with other policy steps that are low cost. Much has been written about the enabling policies required for housing markets to work well (Mayo 1983; Angel 2001).

Some critical measures to improve identified housing problems may not be related to housing directly, but may involve macroeconomic or fiscal measures to improve the stability of the financial system or the overall income distribution. There may be a need for policies to improve the business climate in certain areas or to adjust labor laws to encourage more people to obtain formal-sector employment, which may have a positive impact on housing investments. But other problems require housing or housing finance-sector policies to support the demand side or the supply side of the market. Many potentially important regulatory and institutional improvements in the housing finance sector have been discussed in previous chapters.

In this connection, it is important to emphasize the negative effects of *inappropriate government regulations and institutions* on market outcomes. For example, 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 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.

The challenge for central government is that most such policies and regulations on the real side are in the political realm of local government, which is often under political pressure *not* to allow low-income developments. Furthermore, it often has limited analytical capacities to assess the impact of poor regulations and development procedures. Benefits of reform of non-transparent systems are frequently limited or even negative for local-level parties, which makes it difficult to change such systems. It often requires central-government subsidy incentives for local governments to undertake the necessary enabling policies (see also Mayo 1999).

Paradoxically then, it often takes strong central government incentives to unblock local-level housing markets for lower-income households, whether through sticks (conditional withholding of housing-related subsidies and transfers) or carrots (through capacity building, support to local land and property institutions or subsidies for the development of residential serviced plots for low-income households). The challenge for both local and central government is to make sure that all parts of the supply chain work sequentially for different market segments (for example, improving the supply process for each market segment before finance-system and household subsidies are used to expand demand).

Why Subsidize Housing?

The debate over the efficacy of government interventions in the housing sector is too often clouded by confusion over their objectives. There needs to be clarity about the public purpose of government intervention and the value of achieving various housing goals to society at large. The question of why housing should be subsidized can best be understood by perceiving better housing as a means of achieving higher-level societal goals. Two broad goals are usually involved, explicitly or implicitly, in the political discussions about subsidy intervention in the housing sector. These are the following:

- Improving public health, justice, and fairness
- Improving market efficiency

The first of these reasons for subsidy intervention relates to housing conditions directly and focuses on promoting welfare in society through the housing sector. The second reason focuses on expanding housing opportunities by pricing and allocating costs and risks in the housing and housing-finance sector more optimally, for example, through subsidizing the provision of inputs that are underprovided by private markets and addressing externalities created by market operations. These broad goals need, of course, to be specified in considerable detail. For example, measures to address housing inequality in society may focus particularly on increasing homeownership and, even more specifically, on overcoming constraints faced by first-time homeowners in buying a house. Specific market and household constraints need to be identified that prevent lenders or developers to serve the targeted population group in order to develop an effective package of regulatory and subsidy measures. A framework for such detailing will be discussed for each of the main types of subsidies: (1) subsidies to the housing finance system, (2) subsidies to investors in rental housing, and (3) subsidies to households directly.

Subsidies and the Expansion of Housing Finance Systems

Housing Finance Sector Problems, Causes, and Subsidies

Constraints to the efficient growth of housing finance systems, whether for mortgage or non-collateralized lending, vary widely across countries and among mortgage finance and other types of housing finance.[8] Apart from the broad macro-economic problems discussed above, there are at least three general categories of constraints in the expansion of housing finance systems:

- System imperfections resulting from market-concentration problems or lack of a level playing field among financial institutions, or the exis-

8. Imperfections such as asymmetric information, incompleteness of markets and moral hazard are endemic in housing finance systems and make it necessary to accept that second-best solutions to those assumed by theories of complete and competitive financial-market models are all one can aspire to. Allen and Gale (2001) discuss such trade-offs for financial systems in general.

tence of powerful gatekeepers resisting innovation and new entries into the market.

- Constraints in funding markets to deal with liquidity or interest rate risks, thereby truncating lending options and possibly leading to destabilization of the housing finance system.
- Lending market failures or incompleteness because of lack of credit and property market information, high risk of loss given default because of poor foreclosure systems, lack of mechanisms to deal effectively with credit risk, lack of consumer protection, and high transaction costs of lending prevent suppliers of credit from profitably serving all or a large portion of the housing market.

How can government intervention, and specifically subsidies, help overcome such constraints? There are four general types of subsidies to housing finance systems: (1) subsidies to research, information collection, or education programs; (2) provision of below-market funds for housing loans or insurance schemes; (3) direct government provision or risk sharing in financial intermediation at the retail or secondary market level; and (4) regulatory controls on prices or credit allocations for housing finance.[9]

Specific incentives will of course depend on the existing housing finance system and the quality of the infrastructure in each country, as well as on the type of housing finance system the country is moving toward, for example, a system based on capital market funding through securitization or mortgage bonds, or a predominantly deposit-based system where non-bank financial institutions do not play a major role. Since subsidies are prone to misuse, in particular in the hands of powerful interest groups that control their delivery, the choice of subsidies will also depend to a large degree on their relative advantage to contain misallocation and moral hazard for government.

Table 16.3 gives a summary of the main constraints in the housing finance sector and the types of subsidy that have frequently been applied,

9. By the definition used here, a government intervention to improve the housing finance system is a subsidy even if government is compensated on the basis of some accepted measurement of suitable rate of return, because the intervention lowers the opportunity costs for the lenders, whether these are private or state sponsored. The all-in impact of the subsidies on financial intermediation will, of course, depend on the differential between the rate of compensation to government and the presumed "market" rate to deliver the service.

Table 16.3. Examples of System Subsidies

Housing finance system constraints	*Possible subsidy measures*	*Issues*
1. Market structure and vested interests		
State or incumbent lenders limit new entry, innovation and price competition	• Remove subsidy and other privileges from state lending institutions • Support (short-term) alternative types of lenders, for example, through liquidity funding, capacity building • Increase competition through liberalization of the financial sector and removal of hidden subsidies • *Remove price controls (for example, caps on interest rates for micro loans or mortgage loans)*	• Vested interests resist removal of subsidies • Usually requires additional regulation of such lenders • *Interest rate controls often decrease volume of lending to targeted groups.*
2. Funding constraints and risks *		
Limited or costly equity funding	• *Provide equity capital for (part) state-owned housing lenders, w/o dividend obligations* • Provide equity for non-profit financial institutions that on-lend for social rental housing	• *Partial or full state control can lead to operational inefficiencies, reduced competition and excessive risk-taking.*
Limited access to or high costs of funds for lending	• *Subsidize cost of funds through government credit lines, special tax funds, or debt funds for social rental or ownership housing* • *Tax subsidies for funds channeled to housing finance (for example, bonds, savings)* • Public guarantees for lenders to access funds (public-private partnership) • Cash subsidies to the cost of funding for housing finance • Subsidized cash-flow guarantees for debt funds channeled to housing lenders	• *This class of subsidies is often provided through special government-sponsored institutions, adding to the cost of the subsidies and likely inefficiencies in the marketplace.* • Subsidizing ways to assist private lenders to access debt or capital markets carries less risk (see also below)
Liquidity risk	• Access to (part) government-sponsored liquidity facility (or secondary mortgage market) for all or a certain class of mortgage/microfinance lenders	• May be structured as joint public-private venture limiting government risk or political misuse
Interest rate risk or prepayment risk	• *Shift (part of) funding risks to government-sponsored agency* • Provide cash flow insurance or tax benefits for private mortgage or micro-loan securitizations	• *Combines moral hazard with potentially large government risk. Risk can be decreased if limited to cap on ARMs or other shared-risk arrangements* • Effective if insurance fee reflects real risk to government. Tax benefits are less transparent and should be phased out when market permits.
3. Lending risks and costs (in underserved markets)		
Credit risk or collateral risk for mortgage lending	• Subsidize information collection and research on property and credit markets • Pay for premium of private mortgage insurance (household subsidy) • Pay for borrower education • *Shift (part) credit risk to a (part) state-sponsored entity* • Provide (part) guarantees for social rental housing loans	Additional government actions needed: • Facilitate credit bureau • Allow payroll deduction • Improve foreclosure methods • Use community negotiations in case of defaults • Neighborhood investment plan to mitigate collateral risk Requires private sector to: • Invest in user-friendly servicing system

(continued)

Table 16.3. Examples of System Subsidies *(continued)*

Housing finance system constraints	*Possible subsidy measures*	*Issues*
Credit risk related to construction lending	• Link household subsidies to housing developments to ensure market for housing production • Provide (part) guarantees for construction loands	• *Developer may capture a portion of the subsidy* • *Highly risky; requires safeguards on quality of construction, etc.*
High transaction costs for loan origination and servicing	• Subsidize transaction cost of lenders for selected borrowers through cash payment or compensation for higher interest rate (can also be structured as part of a household subsidy)	Prerequisite: • Improved underwriting and servicing methods

Source: Author's own analysis.
Note: The italicized text indicates subsidies that have often induced high costs to systems or governments and should be avoided at all costs.
* Sovereign and exchange rate risk are not considered in this table.

or may be considered being applied, to overcome the causes or effects of such constraints.

Housing Finance Subsidies, Market Structure, and Vested Interests

When one or a few large lenders with vested interests gain excessive power over the housing finance sector and unduly influence the pricing of loans or types of loan products made available and market segments served, or prevent new entries and innovations, there is likely to be higher than necessary costs of lending and inappropriate limitations on access to loans. These structural and political problems can occur in both public and private sectors.

Public-sector-induced Structural Problems in Housing Finance

Structural and anti-competitiveness problems frequently arise because of the subsidization of specific state-owned institutions or by regulatory or political barriers to entry induced by these institutions.

Many countries have state housing-finance funds or banks, state conduits in the secondary market, state-mortgage insurance companies, or state micro-lending institutions. These institutions were established mostly during times that conditions were not suitable for the participation of the private sector in housing finance, or because the state needed to take on specific functions that would improve market performance. Such institutions usually have tax, funding, or risk-bearing advantages and do not have the same concerns about return on equity (ROE) to the owners as do private institutions. It is difficult for private lenders, insurers, or guarantors to compete in the market segments dominated by such state institutions or programs. They also often hinder innovations in the sector, for example, in the development of risk mitigation measures, since their risk profile is different than that of private new entries. The first priority, and a prerequisite to the creation of a more competitive and effective housing finance system, is the elimination of the (often hidden) subsidies to state housing finance institutions or, alternatively, to provide access to these subsidies by all qualified actors in the sector or reorient these subsidies to leverage private sector participation.

This is not an easy task, particularly when these institutions are the largest sources of funds for housing finance and have powerful constituencies. Many other emerging economies are analyzing or trying out alternative options to dissolve, break up, or change the function of state housing finance institutions (for example, Korea and Peru dismantled their special funds, and Indonesia, Mexico, and to a more limited extent, Brazil and Nigeria are seeking reforms in their state housing finance institutions).

When new public institutions are considered to provide financial intermediation functions that the private sector will not yet find profitable to deliver (for example, mortgage insurance, accessing capital markets), an exit or sunset provision should be included to prevent these institutions from turning into gatekeepers that will dissuade private-sector entry later.

Private-sector-induced Anti-competition Problems in Housing Finance

In some countries, the private housing finance industry itself may engage in anti-competitive behavior (for example, price setting, collusion not to enter in certain submarkets, lobbying to prevent entry by other types of financial institutions into housing finance). There is often a lack of clear rules guiding market conduct and structure (for example, no disclosure standards, competition rules). Government's first priority should be to improve such regulatory measures. Regulators, however, frequently use *price controls and credit allocation requirements* to reach social goals for housing finance under these conditions (for example, ceilings on interest rates, whether for mortgage or micro loans, quotas for lending to special groups or special sectors).[10] This approach can create an undesirable system of hidden subsidies, which may be more costly than the anticompetitive behavior that the regulations are intended to address. Repealing such controls and replacing them with positive subsidy incentives to lower the cost of providing housing finance services to underserved markets generally yields better results.

Housing Finance Subsidies to Alleviate Funding Constraints

In developing and emerging market economies, capital markets are often not well developed or are dominated by government debt. This situation is changing rapidly, however, because of innovations in voluntary savings systems, among other things.

Governments may want to channel a larger share of these longer-term savings into housing, through improvement of the housing finance system, either for the sake of the overall efficiency and stability of the financial system or to serve social goals. For example, even if a country has vibrant primary lending institutions, these 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. If so, interest rates will be higher and more volatile, loan terms will be shorter than they otherwise would be, and appetite for FRMs will be low.

Hypothetically, private investors might create institutional arrangements to best manage these risks. For example, Mexican non-bank financial institutions (SOFOLs) have successfully tapped capital markets to increase their

10. Malaysia has gone one step further and mandated a certain amount of below-market lending to lower-income households, which is partly cross-subsidized from lending to higher-income households. South Africa has also considered mandating lending at lower-income levels, funded by cross-subsidization if necessary.

funding options. For a variety of reasons, however, this is not happening in many countries: investors are often distrustful toward investing in mortgages or mortgage-backed bonds, yield curves on these investments may not be as attractive as for government or other comparable paper, and cash flows are less predictable.

The government could, under these circumstances, support interventions (which are subsidies even if not usually 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 establish a liquidity facility or a secondary market institution or provide cash-flow guarantees or tax incentives for mortgage securities. Such measures are not only important for expanding mortgage lending, but may be particularly relevant for the expansion of microfinance systems when funding through a deposit base is either limited or not an option since most such institutions are non-banks.

The state may also seek to reduce funding constraints and risks not just to improve markets, but for the explicit purpose of reaching social goals. It may 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. These latter institutional subsidies are often accompanied by equity investments and tax write-offs on interest costs, indirectly reducing the cost of rental housing for lower-income groups. Such systems are often put in place with assistance from international development institutions; however, the costs and distortions imbedded in such special non-market funding systems have to be carefully assessed for 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, they are often inefficient in reaching distributional goals because of their often high hidden costs to the financial systems and the economy, as well as poor targeting. Policy makers need to carefully assess alternative ways to reach distributional goals; for example, through transparent household subsidies.

Subsidies to Address Lending Risks and High Transaction Costs

An increasingly accepted subsidy objective for housing finance is to provide incentives to agents in either the primary or secondary markets to expand into sections of the housing finance market that are underserved because of political or practical difficulties in pricing differentially for risks and uncertainties (which often cannot be insured in this type of market) or high transaction costs.

The first priority for government is to improve, jointly with the private sector, the regulations, institutions, and information infrastructure that affect the workings of the mortgage or consumer and micro-lending sectors (for example, appropriate standards, property registration systems and cadastres, information and research on the housing sector, a credit information system and credit bureaus, improved foreclosure methods, reform of usury laws, and improved underwriting and servicing methods by the industry). It may also share some of the lending risks or pay for high origination and servicing costs. Ideally, once the risks in serving these markets are better understood and controlled and the transaction costs are reduced, government can decrease or phase out such support.

Information and Research

Information collection and research is needed for the efficient working 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.

Credit Risks

The most basic lending risk is credit risk and is often the main reason for the reluctance of the private sector to enter underserved markets. Interventions that share the credit risks can improve the overall efficiency and stability of the system, and can also be designed to fulfill social goals.

One proven positive intervention is subsidizing the establishment of a credit information system or a credit bureau. Government can go a step further and support the establishment of private credit insurance, share some risk in a public-private insurance scheme, or even establish its own credit insurance system, though that bears 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; it may cover only part of the risk or take on all of the risk, or it may be designed for long-term mortgage credit or shorter-term microcredit. Government may also consider paying for the mortgage insurance premium for selected households rather than sharing in the credit risk directly. These alternative options are currently debated by SHF in Mexico. A major issue to consider is that, whenever the state takes on risk itself, there may be problems with moral hazard; for example, participants will be prone to commit fraud or take on excessive risks. The design of the administrative and control systems is therefore as equally important as the insurance system itself.

One proven method to decrease credit risk is to educate borrowers before they get 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 United States (Hirad and Zorn 2001) and South Africa (HLGC, personal communication). South Africa's HLGC and Mexico's SOFOLs 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.

If the goal is to expand lending into marginal neighborhoods, a partial mitigation of the credit risk will seldom be sufficient in emerging markets. Much broader infrastructure and institutional support is often required to alleviate neighborhood or condominium risk effects on the value of the collateral.[11]

A special type of credit risk and related subsidies are related to development and construction lending. 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 guarantors, by establishing institutions that guarantee construction quality controls (South Africa), or by taking on (part) of the risk by itself or jointly with private or international development institutions, with the necessary safeguards to protect against moral hazard.

Transaction Costs

The main reason for housing submarkets 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. Colombia used this method successfully and phased it out when lenders had gained experience in servicing more risky markets.

11. The single-most-important barrier to lending in low-income markets is the uncertainty of neighborhood factors that are critical in determining house-value movements. Lenders may require additional equity investments by third parties and agreements on an investment plan by local government before entering into low-income markets or neighborhood improvement ventures. In the United States, the FHA insurance program was effective in stimulating investments in underserved neighborhoods, even without additional community support.

The resistance of mainstream mortgage finance institutions to incur setup costs to reach lower-income, 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 toward 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.

Problems with Subsiding a Housing Finance System

The previous discussion showed in general terms that system subsidies can play an important role in overcoming the inefficiencies or instability of housing finance systems, but it also noted that they have frequently created new problems. These poor outcomes are often the result of poor subsidy design that underestimated the total costs of the subsidy, because such costs were not made transparent or did not take into account the extent or type of private sector response. Overly deep intrusions into the housing finance market have also created strong distortions elsewhere in the growth of the financial system. The key to avoiding this is to have political commitments to remove these interventions over time (which may prove hard to do) or induce markets to eventually take over the functions provided by the subsidy programs.

Probably a bigger source of problems derives from a lack of clarity in the purpose of subsidy. Some housing-finance-system subsidies focus on the improvement of the stability and efficiency of the housing finance system, while others are purposely introduced to seek distributional goals, for example, providing housing finance services at below-market prices to lower the cost of housing (usually through either funding of financial services, direct provision, risk sharing, or regulation). Some aim to do both. Even when intended to simply increase efficiency, many system subsidies serve equity goals through the “back door” when the pricing of original efficiency-oriented subsidies is not adjusted or the subsidy is not phased out when no longer needed to improve the private market. (A good example of this is the implicit government guarantee of the secondary market entities in the United States.) Even the subsidy mechanism is often the same irrespective of the goal. The distinction between market efficiency and equity goals is, therefore, important mostly in the way system interventions are priced, adjusted, and phased out over time when the market can take on the risks and costs covered by the subsidy.

But, if social goals are the primary purpose for initiating subsidies to the housing finance system, the long-term and hidden cost of these types of subsidy and their redistributive effects would need to be compared with alternative subsidies provided directly to households. It will often turn out that both their cost efficiency and equity outcomes are second best to using transparent household subsidies, such as up-front grants in the form of down payments, land grants or savings-linked grants, payment for up-front mortgage insurance premiums, and interest-payment buy-down subsidies.

Subsidies for the Financing of Rental Housing

The Rental Market

A sound rental sector is important for labor mobility and to accommodate those who do not want or are unable to become homeowners (for example, older and young households, or low-income households). The market for rental housing is in some ways more complex than that for home ownership. First, it is a two-level market involving investors and tenants who are different entities. Second, there are different types of investors—private formal and informal landlords, nonprofit or public entities—with very different motivations and constraints and serving different market niches.

Private rental markets provide the bulk of rental housing in most emerging market economies. Little is known about these markets, however, because much of the rental activity is informal, specifically for the lower-income end of the market and in low-income countries. While informal rentals fill an important gap in the housing market, they give tenants little security and the quality of housing is often poor. Reasons for failures or inefficiencies in private rental markets appear to be related to (1) poor taxation and regulatory systems that discourage investment in rental housing,[12] (2) lenders'

12. Tax codes often favor ownership tenure. Preferable tax should be tenure neutral to allow the supply of housing to be driven by preferences.

constraints in dealing with the particular risks of lending to rental investors, and (3) a mismatch between tenant incomes and the cost of providing formal rental housing in the lower-income segments.

The direct provision of public rental housing is, in most countries, limited to civil servants' housing and has proven in most countries to be an inefficient model for the provision of housing to the general public. In some countries, it has been used for a short time to deal with massive low-income housing needs. But, these schemes are mostly phased out when markets are sufficiently developed to take over, and only a small public housing stock is maintained for the lowest income groups. In some countries, particularly in Europe, nonprofit housing associations provide the bulk of "affordable" rental housing. Subsidies to nonprofit institutions whether through finance, production grants, and operational costs have generally been deep. These are for that reason difficult to implement in emerging markets. In addition, the wisdom of high levels of rental supply-side subsidies to accommodate households that would have been able to become homeowners with a similar or lower level of public expenditure can be questioned in the light of the often negative wealth effects for such households. It is critical that objectives for government subsidies to specific segments of the rental sector be spelled out clearly.

Rental Sector Regulations, Taxation, and Subsidies

Rental housing in most emerging market economies is subject to a plethora of regulations and taxes often related to the political sense that tenants need protection from landlords. Rent control laws and rigid tenant protection regulations were introduced in many countries and have resulted in a severe lack of investment in rental housing. Other regulations, such as high building standards for multifamily housing, double value-added tax (VAT), and high taxation of rental income prevent private investors in the low- and middle-income market from formalizing their rental business. They equally prevent institutional investors from entering the market. If the aim is to attract more investors to the formal rental sector and increase supply of rental units, the first requirement is to remove rent control and unduly restrictive regulations and taxes.

It is unlikely, however, that such measures will be sufficient to incentivize the real low-income informal rental market into compliance, at least in countries with a relatively fast-growing low-income urban population (for example, most African countries). The main constraint in the low-income segment remains the mismatch between incomes and the cost of formal rental housing, both investment and operation cost, and enforcement of even relaxed standards may make such markets unfeasible. Also, in this segment landlords are mostly natural persons, often living on the premises or in the neighborhood, and it is customary to have non-written leases and face-to-face relationships between owners and tenants.[13] Conflicts are therefore settled more easily. Nor would formalization of the low-income sector expand the fiscal base since most small-scale landlords do not file income taxes. A rental policy for the low-income sector in such high-urban-growth countries is therefore best focused on the general improvement of urban infrastructure and neighborhood services, which would improve the quality of life of low-income renters more than almost any other government measures.[14] Improved inspection and compliance with basic sanitation and safety codes would make a difference in housing quality as well. In addition, access to microfinance can assist landlords in improving low-income rental housing and sanitation.

For investors interested in the middle- and lower-middle-income rental market (or the low-income market in transition economies) regulatory facilitation and removal of double taxation may be a necessary incentive to enter the formal rental market. It may, however, not be sufficient. Lack of access to finance and the mismatch between incomes and the financing and maintenance costs of formal rental housing may require additional subsidy incentives to reach priority households according to government policy. Government subsidies may have to complement regulatory change. The level of subsidy required will depend to a large degree on the building standards, land market efficiency, and regulatory constraints applied to this sector. For example, in Thailand development and building standards for rental and

13. See Melzer (2006) for South Africa, Hoek-Smit **(1998)** for surveys in Sri Lanka and East and Southern Africa, and Huchzenmeyer (2006) for Kenya (2006).

14. Some middle-income countries have implemented programs for small direct-income transfers to low-income groups, conditioned upon keeping children in the household in school, but not linked to specific types of spending. Housing voucher programs are impossible to administer in these markets.

ownership housing were lowered in the 1980s (for example, unit size of 20 square meters) to allow an increase in affordable housing supply without additional subsidies.

Subsidies to the Rental Sector

If it is a government priority to increase the private or nonprofit supply of middle and lower-middle rental housing or to make it more affordable, there are three broad alternative approaches for subsidization: On the supply side there are (1) investor subsidies and (2) production subsidies. Supply-side subsidies often differ for nonprofit and private investors (for example, non-profit's tax-exempt status make tax subsidies unfeasible) and for different types of private investors (individuals and corporations).[15] A third class of subsidy is the rental allowances to individual households. These demand-side subsidies will be discussed briefly in the section "Housing Finance Subsidies to Households," but they are often not feasible in emerging market economies because of housing market conditions and information requirements. In most industrial nations, formal private or nonprofit rental housing remains unaffordable for low-income households, even with different layers of supply-side subsidies. For this reason, most Western European countries and the United States still require housing allowances to low-income tenants to bridge the affordability gap in such projects.

The main supply-side subsidies that help pay for rental housing are briefly summarized:

Subsidies Linked to Debt Finance

Most rental finance subsidies consist of interest rate subsidies and credit risk guarantees. Debt-related subsidies are of particular importance to social landlords, as they have little own funds to invest, and up-front subsidies are usually small. In the past, many governments developed separate funds to provide below-market finance for social housing, sometimes using below-

15. Subsidized rental housing becomes social rental when the subsidy is accompanied by restrictions attached to that unit.

market interest-rate loans, which hide the true cost of the subsidy and often include other hidden subsidies. For example, in some transition economies, the state provides below-market-rate housing loans by establishing a public fund to promote rental housing construction and purchase. Some examples of such funds are the Housing Fund of Slovenia, the State Fund of Housing Development of the Slovak Republic, and the National Housing Fund in Poland. The United States has special loan funds operating at the state level.

This situation is changing, however, and increasingly Western European countries use market-based funding for social rental housing, made possible by the development and liberalization of the financial sector in the 1980s. France and Austria are now the only countries in the Euro zone that use a state subsidiary to finance the social rented sector.

Private sector lending for social rented housing by commercial banks or specialized lenders poses a number of problems, however: (i) such loans are (very) long term, often more than 30 years, making it difficult to raise matching funds; (ii) in some countries, the LTV ratio of such loans is typically high, since investors want to keep equity low; and (iii) loans are difficult to appraise since the value of the property is often impacted by the fact that it is impossible to evict defaulting tenants, and, in case of foreclosure, the only potential buyers are other social landlords. These factors increase the risk premium. As in Western Europe and the United States, when part of the rent is paid for through individual housing allowances, and the risk is spread over a number of properties, the risk of such loans is often overestimated. Where, however, the loss given default is high, the probability of default is low. An alternative security to the lender for such loans is the future rent stream. Recent loans to housing associations in the United Kingdom were secured by mortgages on social housing properties and cash reserves in favor of the issuer and bond trustee. In the event of nonpayment, the bond trustee will have the right to collect the rents and manage the secured property.

Because of the complex risk profiles of such loans, credit guarantees are sometimes used, at least for private investor loans. Some countries use special types of guarantees offered by the state (Slovakia), local authorities (France), or mutual housing funds (France, United Kingdom, the Netherlands). Such guarantees are frequently underpriced and may have very high future costs to the state, increasing the ultimate subsidy amount.

Subsidies Linked to Equity Investments

Equity subsidies assist social housing investors to decrease debt funding, and therefore lower the repayment burden. Subsidies toward equity can be provided through direct grants or through tax credits for private equity investors in either private-rental or nonprofit-rental housing projects. The U.S. Low-Income Housing Tax Credit (LIHTC) is the most prominent of these programs.

Production Subsidies

Such subsidies can take various forms: (i) the provision of land for free or at a below-market price by the state or local authorities (the cost of which is often not appraised at market value), and (ii) up-front grants for a proportion of the total land and construction cost, tax subsidies such as VAT exemption, or reduced tax rate on construction.

Up-front land or cash grants are the most transparent and are therefore generally preferred over other forms of subsidies to raise equity or reduce debt burdens. The downside of up-front production subsidies is, however, that they can be captured more easily by the builder or the developer, who may not translate these subsidies into lower rents in the future. Debt or certain equity-linked subsidies disbursed over time can be monitored and ended if the investor does not comply with rental agreements.

Operating and Maintenance Subsidies

Operating and maintenance subsidies tend to be avoided, as they consist of long-term commitments that cannot easily be anticipated. Income or property tax rebates or exemptions, VAT on renovation or improvement, VAT on interest payments, taxation of rental income, or depreciation concessions, however, are frequently used mechanisms to alleviate the mismatch between rental income and operating (and debt repayment) costs during the leasing phase.

Tax Subsidies

Tax subsidies feature prominently in the development and leasing phase of private or mixed non-profit-private rental housing. A characteristic of tax subsidies to private landlords is that, in most cases, the depth of the subsidy depends on the income of the beneficiary landlord, either directly through the scale of income taxes (for example, when applied to rental income or capital gains) or indirectly through the value of the property (in the case of property tax, wealth tax, transfer tax on inheritance). For subsidies linked to income taxes, landlords must fall into the taxable income bracket to benefit from the subsidy. As a consequence, most such subsidies will not benefit poorer households and may therefore be socially regressive. Another issue is their lack of transparency, since the size of the subsidy is often not known.[16] Since tax subsidies do not appear on the budget, they are often politically irresistible and difficult to change or eliminate when no longer needed. Furthermore, in emerging economies, tax subsidies on private rental housing may not be attractive because of income tax avoidances and non-written customary leases in the targeted segment of the market.

Rental Voucher Schemes

Rental voucher schemes are in operation in a number of countries (in particular, United States or France; also experimented with in Poland) where eligible low-income tenants receive subsidies in the form of vouchers that must be spent on housing, in particular to pay for the difference between market and contractual rents. The motivation behind subsidizing the demand side is to foster a competitive private-rental market, where in theory the supply would respond to the increased demand the voucher scheme creates. Such schemes may be implemented to accompany any rental deregulation reform. In practice, these schemes have been subject to a number of administrative and fiscal problems, including abuses by ineligible tenants, disincentives to become owners for those who could afford it, and significant fiscal costs in the longer run for the sponsoring public entities.

16. Some programs such as the LIHTC in the United States allocate specific amounts of tax subsidies per year.

Project Finance for Ownership Housing

Several of the subsidies mentioned here for rental multifamily projects can equally be applied to the development of low-income-ownership housing projects by private or nonprofit developers. In several countries, production grants, low-interest loans, and tax credits are part of the broader low-income housing subsidy package for single-tenure or mixed-ownership and rental developments. In fact, most so-called "demand-side" subsidies to beneficiary owners are simply production grants to developers (see the section "Housing Finance Subsidies to Households"). The same concerns about transparency and efficiency of such supply-side subsidies apply as they do for the rental production subsidies, with the main concern being how much of the subsidy is in fact translated into lower housing prices, rather than increasing developer profit or paying for transaction costs.

Public-Private Partnerships for the Provision of Affordable Rental Housing

Delivering affordable rental housing can entail deep subsidies (depending on the country, total subsidies in social-rental housing projects can easily reach 40 or 50 percent of project value). Usually, these subsidies cannot be provided by only one level of government. Indeed, a sound conclusion that has emerged through the years is that the public sector alone cannot solve the housing problems of low-income households.

In most, if not all, countries, subsidies to affordable rental housing and, more generally, rental housing finance involve partnerships between different government levels, as well as between the government and the private sector. Attractive tax and subsidy packages are combined with contributions (for example, in the form of land or equity, or guarantees) from various levels of government. Municipalities often play a pivotal role in those partnerships. First, they are the government level most interested in providing adequate shelter to their constituencies. Second, they are often willing to play the role of investors or providers of guarantees.

In emerging economies, efficient partnerships in the delivery of affordable housing are often difficult to put in place. Brazil presents a good example of difficulties in cooperation through different levels of governments for the provision of affordable housing.[17] Because of the specificities of the relations between the three levels of government, coordination between them has been a challenge both in terms of financial resources and in terms of leadership. As a result, the use of public assets or money to finance affordable housing may be suboptimal from the social point of view, even though it corresponds to the profit-maximizing (or loss-minimizing) behavior of individual partners. This may arise because of accounting incentives (for example, direct spending shows on municipal budgets, whereas land grants do not), inadequate management (for example, it can be optimal to give out a small grant complementing another layer of subsidies rather than making a bigger loan that will not be recovered), or political incentives (pouring small subsidies across already financed or subsidized projects allows individual institutions to claim the delivery of more units).

Making Rental Subsidies Work

In summary, the best policy in situations of scarcity of low-income rental housing and high rents in emerging market economies is comprehensive housing-market deregulation, and, if necessary, the introduction of select production or investor subsidies to stimulate the flow of new housing to the market where a proven gap remains. Such subsidies could be designed to gradually move the formal rental market to lower-income segments. The most efficient and equitable on-budget subsidies are arguably the ones that are linked to private-sector loans, transparently priced (for example, interest buy-downs, credit guarantees), and preferably through multiyear allocations with requirements to maintain "affordable" rent levels. Such subsidies, however, will not benefit informal investors in low-income housing, unless regulatory adjustments make it financially feasible for this sector to be "formalized."

17. Although the Federal Residential Leasing Program, the PAR, can be considered an exception in the sense that it has achieved a reasonable degree of cooperation between municipalities and the main operator of the program, the Federal Housing Bank (CEF).

Housing Finance Subsidies to Households

Household Problems and Subsidies

Household subsidies are intended to increase the willingness and the capacity of beneficiary households to consume better quality housing or to become homeowners through cash or in-kind grants or expanding their ability to obtain a housing loan or the maximum size of that loan.[18]

Individual household subsidies were introduced in many countries as a reaction to the gross misuse and inefficiencies of supply-side subsidies to developers. One of the major advantages of household subsidies is that they can be much more refined in targeting and better monitored than most supply-side subsidies if they are designed as explicit, direct subsidies. They are therefore often preferred when the objective is to improve *fairness and justice* in society through housing. Unfortunately, the political process that ultimately approves such subsidy programs frequently has unclear or multiple goals and confuses targeting. Implementation of household subsidies may also be hampered by lack of detailed information necessary to select targeted beneficiaries and by political interference. As a result, most countries have multiple programs of household subsidies—on-budget and off-budget—that provide vastly different levels of support to households in the same income brackets, while often excluding the most deserving households. Such outcomes are particularly prevalent when subsidies are linked to mortgage finance in countries where most of the population has no access to such finance.

Vaguely defined, household subsidies are sometimes used to improve general housing consumption in society without taking specific goals into account, or to stimulate growth in the construction sector. Such unclear goals give rise to broad-based general subsidies such as tax subsidies for loan repayments or broad interest rate subsidies available to the majority of households with mortgage loans. Expected outcomes of such subsidies are unclear and hard to evaluate. When such subsidies are tax subsidies or do not

18. While household subsidies may use the housing finance system as a distribution channel, if they are subsidizing individual households, and not the system itself, they are treated here as household subsidies.

appear on the budget for other reasons, they are often inefficient, particularly in emerging market economies, and can be extremely inequitable.

A premise of the approach to subsidy design and reform proposed here is that details matter a lot and that the only way to get the details right is to start from a clear definition of housing problems for different segments of the housing sector and specific objectives for a subsidy policy. The usual general goal of household subsidies is either a social equity one involving promoting the housing consumption of certain socially meritorious groups, or a political stability goal involving higher homeownership levels. The constraints faced by households usually differ for the different housing market segments discussed in the section "Linking Housing Problems to Subsidy Policy" above, and household subsidies should be tailored accordingly. Some of those constraints are outlined as follows.

Middle- or lower-middle-income households:

i. Their incomes are too low relative to the cost of housing or the cost of borrowing to obtain a house in the formal market, whether existing or new, rental or ownership, and of a quality considered appropriate given the income level and societal values in their country.
ii. They may have difficulty accessing long-term finance needed to own a formal-sector house because
   a. they cannot save for the down payment while still paying a large proportion of their income for rent (a particular problem for first-time homeowners),
   b. their income may be too variable for carrying a regular housing loan (whether mortgage or non-secured),
   c. they may only be able to afford a house in a neighborhood or building where future house values are highly uncertain (for example, areas subject to redlining) or where property rights are not clear (that is, informal settlements, multifamily units with mixed ownership and rental units, or a weak condominium law), or
   d. they may simply lack experience dealing with financial institutions or home maintenance, or fear long-term housing debt or debt in general.

Low-income households:[19]

- they cannot purchase new (but modest) formal-sector housing because of a combination of inappropriate standards, non-functioning land markets, low incomes, and lack of access to appropriate financial instruments;
- their incomes are too low to improve existing informal-sector housing conditions and they lack access to microcredit, infrastructure, or formally registered property rights;
- they may lack affordable, decent rental options.

The housing markets of different income categories are interrelated. In countries where serious housing problems exist for both lower-middle and low income groups, government interventions focused on low-income housing solutions have proven to be ineffective only since middle-income groups will capture the subsidies meant for low-income households. Equally, when relatively higher-income formal market solutions are stimulated by government interventions, some lower-income households may benefit by upward filtering through the resale market. But, this process will be inadequate to improve the housing conditions of the poor, particularly when urban growth rates are still high.

There are five main types of household subsidies that are frequently used in this context: (1) direct payments, either up front (to lower the loan amount, the closing costs, the down payment, or the insurance premium, or in the form of a capital grant for land) or on a monthly basis; (2) subsidies tied to savings programs; (3) interest rate or interest payment subsidies, including interest subsidies tied to appreciation of the property; (4) tax subsidies tied to mortgage payments or real estate taxation; and (5) payment for education programs or community support activities.

Table 16.4 summarizes households' housing problems and the types of household finance subsidies that might be or have frequently been applied to alleviate them. In the following sections we briefly discuss the different issues that arise in developing subsidies to address each of the constraints. Subsidy

19. The low-income constraints may not exist in transition economies and middle-income countries, where the low-income groups may face constraints similar to those discussed for lower-middle-income households.

Table 16.4. Examples of Housing Finance Subsidies to Households

Household constraints	*Possible subsidy support*	*Issues*
A. Lower-middle-income households that can access formal housing markets		
1. Income constraints relative to house prices or interest rates		
Low income relative to lowest formal-sector house price, cost of finance, or both	• Contribution toward loan amount or cash grant • Partial coverage of monthly payments or interest due (buy-down) • Reduce VAT (often double taxation) • *Interest rate subsidies* • *Tax subsidies for loan repayments*	• *Interest rate subsidies are often insufficient and regressive* • *Tax subsidies are regressive, nontransparent, and mostly ineffective* • *Both involve nontransparent future costs*
2. Lack of access to credit to purchase new or existing housing		
Savings constraints	• Support with closing and titling costs • Contribution toward owner's down payment and equity with or without savings requirement • Payment for mortgage insurance (to raise maximum LTV ratio) • Borrower education • *Soft second loan*	Requires: • Access to savings facilities • Savings programs linked to subsidy programs • *The concept of turning a deferred loan into a grant or a loan is difficult to implement*
Employment volatility	• Blocked deposit available for temporary "missed payments" (insufficient for conditions of chronic high unemployment) • Borrower education	Requires: • Flexible mortgage, line of credit • User-friendly servicing and institutional delivery capacity • Community-support organizations and funds
Lack of property title, maintenance, and housing risk (including condominium or mixed rental and ownership)	• Contribution toward owner's equity (lower LTV) • Community and condominium home-repair fund • Home-maintenance education or service for first-time homeowners and condominium support	• Support for title registration • Community and condominium support organizations are critical for success in risky neighborhoods, buildings • May need improved law on sectional title
Neighborhood risk (major reason for lack of resale finance in low-income neighborhoods)	• Disclosure requirements; consumer protection against discrimination • Local government agreement on investment plan for infrastructure and services in selected neighborhoods	• Involves interventions primarily through legal or government systems, not individual subsidies
B. Low-income households that cannot access mainstream formal markets		
3. Income constraints relative to formal housing options		
Poorly functioning land and finance markets for new formal, low-income housing	• Grants in kind (serviced lots and core house) to household and developer • Support to community-based organizations to assist progressive construction • Cash payment to micro-lenders to assist targeted borrowers with home construction and inspection • Funding "missed payment" accounts • *Interest rate subsidies*	• Government has to provide off-site infrastructure, facilitate permitting process, and set affordable standards • *Subsidies on interest rates in this submarket can prevent its expansion*
Weak incentives for upgrading of informal housing	• Grants (possibly linked to private micro-lending options) for home improvement and expansion to complement upgrading programs	• Requires comprehensive upgrading strategy, including service provision, property registration

Source: Author's own analysis.

mechanisms in italics have proven to be more problematic in relation to their efficiency, equity, or transparency outcomes.

Lower-Middle Income Households

Subsidies to Help Households Pay for Standard Housing

Most household subsidies are used simply to help specific beneficiary groups to increase their housing purchasing power and obtain a house produced in the formal market. Many such subsidies are linked to debt finance, helping households to take on a larger loan than they would otherwise be able to (for example, income tax deductions of interest payments, reductions in interest rates for mortgage loans), or a grant to bring down the loan amount and thus monthly payments. Other such subsidies assist households directly in paying for the acquisition or improvement of their homes without a link to credit. Examples of the latter are cash grants to first-time (formal-sector) home-owners, who are responsible for buying their own home.

If the goal, however, is to improve equity in society in an emerging market economy, the use of household subsidies that are an integral part of a housing loan is seldom optimal or even effective. For example, income tax deductions of interest payments or a broad-based interest rate subsidy for mortgage loans tend to be both regressive and ineffective. These subsidies increase with the amount of the loan and benefit those who can afford larger loans more than those with smaller loans. They typically do not expand the frontier of the formal housing market by much.

Moreover, in some countries where borrowing is primarily displacing use of internal (extended family) sources of finance, borrowed amounts may increase, but not housing consumption. They are also inefficient in other ways. When tax and interest rate subsidies are granted to the middle class as well, their total costs can be extremely high, particularly relative to the benefits. For example, in the United States the income tax losses from the deduction of interest payments on mortgages are equal to 2.7 percent of the federal budget,[20] and Hungary's interest-rate and tax subsidies (if correctly

20. While it may seem small initially, deductions of interest payments from taxes can quickly become very costly when a country industrializes and a larger proportion of its labor force files income tax returns in the higher tax brackets.

calculated) reached about 5 percent of central government consumption. In addition, tax subsidies are not transparent, nor are most interest subsidies; Interest rate subsidies, however, can be structured in such a way that all future costs are recognized in the current year (for example, the buy-down).

- *Up-front grant programs for home-ownership.* Up-front grants are mostly applied toward the down payment of a loan. They use more equitable targeting mechanisms than tax subsidies or interest rate subsidies. For example, the up-front 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 income and prioritizes households on the basis of need. Expenses per household for cash grant programs and housing allowance programs, however, are relatively high if a fairly high minimum housing standard is set for participants and the use of complementary debt finance is low. Both of these problems are the main constraints in the South African up-front subsidy program. These programs are often expensive to administer as well. The transfer efficiency—the effects of the subsidy on the actual production and consumption of houses—is generally considered to be much higher for up-front grant programs, especially compared to interest-rate deductions from income tax, and in particular for moderate-income households. These programs often require additional support to improve access to finance to work efficiently (see examples on system subsidies in table 16.4.

  Up-front grants are on-budget in their entirety and costs are therefore known. This makes them less favored politically. They can be evaluated more readily, however, 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 up-front grants in Costa Rica.

  Another issue with up-front grants is that when housing supply for the targeted market is dependent on the subsidy—that is, when there is no market yet—up-front grants are often provided to developers directly rather then to households to find their own house in the marketplace. They mostly are used as production grants, with all the potential shortcomings of supply-side subsidies.

Subsidies to Increase Access to Mortgage Finance

Another category of subsidies explicitly addresses constraints on accessing credit to become homeowners in the formal sector. Such subsidies are usually more efficient than general household subsidies to increase affordability since they:

- focus explicitly on households "at the margin" who cannot become homeowners without the subsidy and credit,
- leverage households' own resources, and
- provide incentives for the housing finance system to expand down-market.

These advantages, however, assume that the housing market and the housing finance system are reasonably efficient. If this is not the case, such subsidies are merely compensating for the shortcomings of these systems. Interventions to make the housing finance system more efficient should precede or complement household subsidy programs that intend to use the housing finance system.[21] Finding the right combination of household subsidies and subsidies to the housing finance system to expand lending to subsidy beneficiaries is a major challenge in many middle-income countries, including in South Africa and Mexico.

When there is a possibility that lenders will expand their lending to moderate-income households, the key question becomes what types 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—for example, savings constraints, volatility of income or employment, or high

21. Many governments are tempted to do the lending for this "non-qualifying" group, taking all the credit risk themselves. This leads nearly invariably to large loan losses, since governments are poor at collecting on defaulted loans.

collateral risk. These constraints will differ in different developing, emerging, or transition economies and for different submarkets within countries.

- *Savings constraints.* 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, or an up-front premium for mortgage insurance.[22] Direct grants to alleviate this burden and assist in the payment for any or all of those expenses may be an effective way to expand the formal housing sector for households at the margin. Payments for mortgage insurance have several additional benefits; they generally lower the down-payment requirement and make the loan more attractive for the lender. Such up-front grants may be complemented by a required savings program to assist households to save for some of the equity in the house. Such savings programs are most efficient if they are part of an open financial system and do not lock the borrower into a closed system that sets interest rates for savings and lending administratively, and issuance of the loan depends on availability of funds in the system.

  Another, more complex way to lower the savings requirement is to extend a second mortgage loan that may be interest free and will need to be paid back after the first loan is paid off and only if the house has appreciated in value. While a second mortgage loan is potentially a more efficient subsidy than an outright grant, the conditionality of paying it back has been fraught with misunderstandings in the context of housing markets in emerging market economies.[23]

- *Employment and earnings volatility.* In general, self-employed or informally employed borrowers have a higher credit risk even if they qualify for a mortgage or consumer loan on the basis of their

22. Research has shown that the savings constraint is one of the most important deterrents to moderate-income households becoming homeowners (Linneman and Wachter 1989 for the United States). This may not apply in all markets, however. Also, if households have difficulty saving, the best way for government to be of assistance may not necessarily be to replace down payments with subsidies, but to provide better incentives for households to save.
23. For example, Costa Rica was forced to abandon the soft second-loan structure of their up-front subsidy.

expected cash flow from income. In many developing and emerging market economies, the majority of actively employed people work in the informal sector (for example, in Indonesia, this number is 74 percent, in Mexico more than 60 percent; and in most African countries this figure is even higher). It is important for formal housing-market expansion that mechanisms are found to facilitate lending to the most creditworthy 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 this group and price for the risk. They may require higher down payments or a "blocked" savings account that can be accessed when payments will be missed.

This sort of behavior can be supported in several ways. One type of transparent and up-front subsidy that could be applied for this type of borrower is a contribution to such a blocked deposit account. Such "payment insurance" scheme may also be usefully applied to consumer lending for housing that may be more appropriate for this group. Another subsidy that has proven particularly effective is supporting borrower education.

- *Housing and neighborhood risk*. There is another constraint facing moderate-income households in obtaining a loan that has to do with the housing collateral. The risk that the value of the collateral *decreases* over time and will be insufficient to pay the loan balance in case the loan defaults is considered greater in low- and moderate-income neighborhoods, and lenders are less likely to make loans in such areas. This type of credit constraint affects resale markets in such areas and becomes a vicious cycle. For example, when few loans are made, there is a weaker resale market and more fragmentary house-value information, resulting in higher defaults and costs to assess properties and thus even fewer loans.

  Mortgage insurance may be used to cover credit risk, but household subsidies may be necessary to decrease this type of collateral risk and to attract lenders and insurers to these markets. Subsidizing a larger part of the equity of the house is one way of increasing the lenders' comfort level. This may, however, be expensive. It has proven to be beneficial to complement insurance programs with subsidies for home-maintenance education of first-time homeowners, and, in cases of condominium ownership, support to set up a repair fund for the initial years and a condominium or neighborhood organization. These types of subsidies are in between system subsidies and household subsidies. Local governments play an important role in maintaining neighborhood value as well.

Low-Income Households: Subsidies When Housing Supply Markets Do Not Work

In low-income countries or lower-middle-income countries with highly skewed income distributions, a large proportion of households cannot aspire to solve their housing problems through formal housing markets. Incomes are simply too low relative to prices of serviced land and a standard formal house. Incremental construction is often not permitted nor is it profitable for private developers to produce core housing. In addition, appropriate types of debt finance are not available. Government has to play a more direct role to increase general housing consumption for the low-income segment in order to address concerns of public health and inequity in society. Improving land registration systems, regulations for subdivisions, planning and construction, and permitting procedures are the first things government has to do, in particular local government, to expand formal construction and attract private developers to this market. Subsidies are almost always necessary also, however.

- *Grants in the form of serviced land with or without a core house*. Such grants can be disbursed either to households or, more likely, to developers. Households can then use their own resources, including debt finance, to complete the house over time.

- *Home-improvement grants as a complement to upgrading schemes, including for rental extensions*[24] *of the house*. Such grants can be applied independent from debt finance and can therefore reach households that do not qualify for a loan, not even for microcredit, or in situations where microfinance is not yet available. Short- to medium-term microfinance loans, however, are now provided by private microfinance institutions in many countries, albeit not always for housing or at a scale relevant to address housing problems. These lenders may have to be assisted to develop housing credit products and reach scale. System subsidies in the form of liquidity support or technical assistance may help this sector to expand. If transaction costs are too high for micro-lenders to participate in this market, subsidies in the form of a fixed amount per household to defray the cost of guiding and supervising housing loan disbursement and recovery may be considered. Alternatively, financing "missed payments" accounts may be appropriate. Frequently, however, subsidies provided through government microfinance lenders, or donor assistance to nonprofit or private micro-lenders, are in the form of subsidized interest rates or internally cross-subsidized housing loans, making them affordable to the poor. Such subsidies limit the overall number of loans that can be made and have the additional disadvantage of preventing a strong private microfinance sector from developing.

Another role for government is to encourage the establishment of community-based support systems to acquire building materials in bulk, provide some quality control, and assist in the development of community savings and counseling programs to help households that are currently not good credit risks to become so.

24. 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 prohibitively expensive.

Conclusions

The liberalization and development of financial systems has deeply touched the housing finance sector in many emerging market economies and has created a momentum for reform in many countries. A growing demand for urban middle- and lower-income housing has fueled the urgency for the expansion of housing finance systems. One area of critical rethinking, and a frequent bottleneck in system expansion, is the system of housing finance subsidies. These are by far the most prevalent housing subsidies across all countries, but they are frequently not recognized as such. Many finance subsidies have had a negative impact on the development of housing finance markets and have a mixed record in reaching social goals. Indeed, goals and specific objectives are often not well defined. This situation leads to poor subsidy design.

Policy makers need to develop a strategic plan with a winning combination of incentives for mortgage systems and for households that are creditworthy and could access a mortgage with the right incentives—*moving mortgage credit down-market*. Even if finance is available, however, it is often the case that the land regulatory system makes it unprofitable or unfeasible for private developers to serve middle-income markets. Another part of this plan is to assist low-income households in accessing serviced land with core housing provisions or provide title and services to existing residential areas and strengthen the private and nonprofit microfinance sector (including the savings side) to expand household ability to expand their house over time—*moving savings facilities and non-collateralized credit upmarket and to scale*. When credit strategies work, *household subsidies* can decrease and be shifted to improved neighborhood and infrastructure services. Only then will the housing assets of lower-income people become "live assets."

This chapter has provided a framework to assist in such analyses. It made the point that only when systems work well for the majority of people can household subsidies be efficiently applied. It gave an overview of the broad categories of subsidy interventions and delivery mechanisms for each category of subsidy. There are, no doubt, many more variants one could choose to include. The aim is, however, to discuss the most prevalent "old generation" housing-finance subsidies and the gradual reforms and alternatives that may be considered in the current context of growing awareness of the need for transparency in financial markets, sound risk management in financial institutions, and the need to redress growing housing inequities in many emerging and advanced economies.

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Michael Lea has over 26 years of financial services experience, including more than 18 years of international experience in 30 countries spanning six continents. He has provided advice on the creation of market-based housing-finance institutions, products, and systems as a consultant to international development agencies, government-sponsored enterprises, trade groups, regulatory agencies, and major private-sector financial institutions in Europe, the United States, and emerging markets.

Dr. Lea has held a number of key positions with influential housing finance institutions. He has served as executive vice president for global markets at

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Dr. Lea is an internationally known authority on housing and mortgage finance. He has published over 70 articles and book chapters, organized several conferences, and made numerous presentations to government agencies, multilateral institutions, trade groups, and academic and professional organizations. He has taught at Cornell University; the University of California, San Diego; San Diego State University; and the Wharton International Housing Finance Program at the University of Pennsylvania. He received his Ph.D. in economics from the University of North Carolina, Chapel Hill.

Bertrand Renaud is an internationally known expert with extensive experience in housing and housing finance issues in emerging and advanced markets. He has worked in some 40 countries that cover the full range of housing and development from the most basic stage to the most advanced system. He began his professional career as a specialist of urban development in Asia. He then joined the team of four experts who wrote the seminal urban strategy paper for the World Bank when that institution began focusing on urban development issues. In the early 1980s, he was appointed the first head of urban affairs at the Organisation for Economic Co-operation and Development (OECD) when industrial countries were confronted with the need to comprehensively rethink their urban policies. Upon his return to the World Bank, Dr. Renaud promoted housing finance activities as a key component of the urban agenda. He became advisor in the Financial Development Department of the World Bank when financial sector development became a core component of the development agenda in the early 1990s. There, he has provided policy advice to governments on strategic, operational, and technical issues of financial reforms for over a decade. He has also actively participated in or reviewed major World Bank operations. Dr. Renaud continues to advise government institutions and private groups in various part of the world.

Dr. Renaud's work has often taken place in periods of important changes in national housing systems when governments wanted to evaluate their options in terms of legal and regulatory infrastructure, institutions, and instruments, as well as their economic and social impacts. He led the first World Bank mission to China on urban reforms in 1988. His work on Russia's urban reform options was internationally recognized with the award of the 1995 Donald Robertson Memorial Prize in the United Kingdom. Throughout his career, he has maintained a continuing interest in Asia urban development. Dr. Renaud has taught and done research in major universities in Asia, the United States, and Europe, including the Massachusetts Institute of Technology, Hong Kong University, and Seoul National University. He has published extensively. His recent books include *Markets at Work: The Dynamics of the Residential Real Estate Market in Hong Kong* (HKU Press, 1997) and *Asia's Financial Crisis and the Role of Real Estate* (M.E. Sharpe, 2000). One of his latest articles appears in *Asset Price Bubbles* (MIT Press, 2003).

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Claude Taffin holds degrees from Ecole Polytechnique and Ecole Nationale de la Statistique et de l'Administration Economique (France).

"This volume could not be more timely. The debacle of the U.S. subprime mortgage market is distorting the discussion around housing finance in emerging markets. To cut through the maze, this book offers insights around all the building blocks of a housing finance system—including mortgage securitization—and guides the reader through the different policy options available in each case and the most common mistakes policy makers must avoid…Having been actively involved in this topic as a policymaker in the past, I can say this book would have made our options more clear, our thinking more focused, and our decision-making faster, if we could have had this publication at that time."

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The Housing Finance Program of the World Bank Financial and Private Sector Development Vice Presidency helps emerging market countries develop market-based systems and appropriate government policies to expand access to homeownership to larger populations. The Program also advises governments on how to strengthen the market infrastructure for housing finance, the risk management capability of lending systems, the efficiency of subsidy schemes, and the adequacy of regulatory and supervisory frameworks.

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