Process, Policy, and Public-Private Partnerships in Housing inDeveloping Countries: What Can the United tates Learn?

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"Housing"—A Verb or a Noun?

When comparing the processes of homeownership between emerging (low- and moderate-income) countries and high-income industrialized countries (such as the United States), one finds striking contrasts. In emerging countries, the low- and moderate-income majority build their own homes incrementally over a period of 5 to 15 years, largely without the support of formal-sector private and public institutions. Thus, the term *housing* in developing countries is used as a verb because households must actively perform most of the tasks to gain access to land and construct adequate shelter during a long time period. In the United States, households buy a complete new or existing home and have access to a wide range of mortgage lenders, infrastructure providers, and others. The term *housing* has become a noun in high-income industrialized countries because it is a product delivered mainly by a sophisticated network of private firms and public institutions.

This fundamental contrast causes considerable misunderstanding and often contributes to poor programs and policies in emerging countries, whose governments often act as if the process of obtaining low-/moderate-income housing is the same as that in high-income countries, and as that in the small middle to upper class in their own countries. However, the "product" paradigm of the United States. also has its limits that constrain the thinking of planners, home finance institutions, and builders to grapple with the challenges of housing in the new millennium.

This article (a) describes the context and process of housing in developing countries, (b) outlines the state-of-the-art of housing policy and profiles three successful public-private partnerships in developing countries, and (c) suggests some implications for housing in the United States.

The Process of Housing in Developing Countries and Housing Policy

The Process of Housing in Developing Countries

Many developing countries lack social safety nets of all kinds. Hence, low- and moderate-income households—which constitute the great majority in these countries—live in a world of few windfalls and many wipeouts from job and income changes, disease, and other events. In this environment, a home of one's own represents a precious refuge. Indeed, surveys of low- and moderate-income households often show that housing ranks above education and health services as a priority. Thus households in developing countries value homeownership more than households in advanced industrialized countries.

However, acquiring access to a home and to the components that comprise housing and housing policy—land and property rights, building materials, basic services, regulations, subsidies, and credit—are extraordinarily difficult for most households in emerging countries (Angel, 2000). Poor land records and dysfunctional legal systems typically cloud ownership rights for a large number of households. The lack of property taxes and highly fragmented or highly concentrated land ownership patterns provide poor incentives for land development. For these and other reasons, assembling land for large-scale subdivision development on the urban fringe, the area of most rapid urban development in advanced countries, proves highly problematic. The cost of urban land typically rises much faster than inflation in fast-growing cities of emerging countries. The building materials industry frequently suffers from cartelization and inefficient production methods that result in high prices. Provision of water, roads, drainage, and electricity occurs at a low-level equilibrium. Government usually provides poor, incomplete service, and households refuse to pay a substantial share of these infrastructure costs. This vicious circle greatly limits the capacity of infrastructure departments and companies to extend their services to new areas and improve their services in existing areas. National agencies—rather than local governments—often set high building and subdivision standards, attempt to regulate local land use, and impose transfer and other taxes on real estate and mortgage transactions as easy means of raising revenue. Regardless of the level of regulation, a labyrinth of norms and formal and informal charges often impede the land development and building process and contribute to forcing a large portion of households into the informal sector.

The greatest bottleneck, however, often occurs with accessing credit. Widespread access to long-term, competitively priced mortgages has revolutionized housing in high-income industrialized countries over the past 60 years. An overwhelming share of households in these countries has now acquired homes with market-rate mortgages from private-sector financial institutions. The reality of mortgage finance is the opposite in developing countries. Only a small minority of households—typically less than 20 percent of the population—obtain a mortgage to finance their homes. Many of these mortgages receive substantial subsidies from government in one form or another. Once these subsidies are taken into account, the private-sector mortgage market in which market-rate intermediation occurs often is extremely small (often less than 5 percent of new household formation) or missing entirely. This continues to be the case in large, dynamic middle-income countries such as Brazil and Mexico. As a result, less than 20 percent of families worldwide use market-rate institutional finance to fund homeownership.

Various factors lie behind the low levels of mortgage finance in emerging countries. Much of the blame often is attributed to inflation. High and explosive inflation destroyed the existing mortgage finance systems of many countries in the 1980s, including most of Latin America. The restructuring of public deficits and debts has contributed to the stabilizing of inflation and interest rates in most countries. This macro-financial stability provides the opportunity for reconstruction of mortgage finance systems.

Equally fundamental, however, is the fact that in most developing countries, only a minority of households can afford debt service on the least expensive contractor-built unit available. In Bolivia, Colombia, Suriname, and Venezuela, 60 to 80 percent of households in these countries lack the income to qualify for a loan for the least expensive contractor-built unit available. The limited competition among financial institutions and access to their long-term funds contributes directly to this problem. Partly as a result, financial institutions provide only credit for the purchase of a new, commercially built home to their best middle- and upper-income customers. Virtually no credit is available for purchasing existing units, home improvement, refinance, or equity loans in most emerging countries.

The share of households that typically access mortgage finance, however, is much less than the affordability calculations suggest. This is because other central

characteristics of mortgage finance poorly suit much of the low- and moderate-income majority. Mortgages require regular payments for a long time period, full legal title to property, and highly standardized documentation of creditworthiness and steady income. Often low- and moderate-income households in developing countries cannot fulfill any of these requirements. Their incomes fluctuate greatly, they often have only an informal proof of title (sales receipt, property tax payment receipts, and so on) rather than full legal title, and their creditworthiness and income is frequently informal and thus difficult to document. From the perspective of households, a long-term mortgage obligation represents a dangerous, unwanted burden in the uncertain, highly volatile environment in which they live.

Overall, the difficulty of accessing these inputs to housing results in a much different approach to housing for the low / moderate majority of developing countries than that of high-income industrialized countries. These households build their own homes over a 5- to 15-year period rather than purchase a complete unit. Thus, housing in developing countries is quintessentially "progressive." Eighty percent of the world's families house themselves by building their homes gradually over 5 to 15 years without mortgage finance. As John Turner (1972) put it in his early works on upgrading in Latin American cities such as *Freedom to Build*, housing in emerging countries is a verb more than a noun. Families house themselves gradually, rather than purchase a house constructed up front by a builder or developer for purchase.

Usually, low- and moderate-income families seeking homeownership start with acquiring land through one of a variety of means, including squatting or the purchase of a lot in an informal subdivision. Particularly when the threat of expulsion exists, households build small, makeshift, temporary dwellings to vouchsafe the property. Family or friends live in the dwelling, gradually adding space and increasing quality. When the lot is small, households usually add another story, ideally on a flat cement roof. If the lot is sizeable, they expand outward. As the community becomes established, residents band together to pressure government to provide them basic services. In the meantime, households usually obtain some of these services through clandestine connections to electricity and water lines.

The consolidation of the individual unit and low- / moderate-income neighborhoods—the bulk of the urban area of developing country cities—requires collective action. A single nuclear family must draw on the help of extended family, friends, colleagues, and neighborhoods so they can secure a lot and acquire resources

(money and labor) to build a house gradually. Similarly, one household can have little impact on the decisions of government to provide the services (roads, water, sanitation, drainage, electricity, schools, health clinics, police, and so on) necessary for consolidation of the neighborhood, while an organized group can. Because of these strong incentives, having more access to shelter, and being able to settle into homes in developing countries, stimulates civil society and collective action.

Once a household has made progress in consolidating their home and neighborhood, the family seldom sells the unit, and family members typically live the remainder of their lives in one house and pass it down to the next generation. Households only encumber this tremendously valuable asset with considerable reluctance, and only for short terms. They prefer to build their homes gradually, as they save up their money, or with a series of small, short-term loans, without the risks of a large, long-term mortgage. Such small loans are usually available only from informal sources at very high rates. However, their short term, modest absolute payments, and the flexibility provided by the informal lender in rescheduling payments because of sickness, job loss, and other temporary setbacks, better suit the household than would a larger, long-term mortgage. Rental markets are developed poorly because of legal impediments (rent control, great difficulty of eviction) in addition to lack of debt finance. For many reasons, owned-occupied housing has tremendous use value in emerging countries but is less of an economic asset than in the fluid markets of high-income industrialized countries.

The difficulties of renting, the tremendous use value of owning one's home, and the incremental building process join to create high rates of owner-occupancy in developing countries. Owner-occupancy involves some sort of housing solution along the continuum from a makeshift temporary unit without services with to a complete consolidated unit. Many developing countries have owner occupancy rates that are substantially greater than those of most advanced countries. The rate of owner occupancy in Bangladesh (85 percent), Nicaragua (85 percent), Mexico (79 percent overall, 85 percent in major cities), and many other developing countries exceeds 75 percent. In contrast, owner-occupancy rates in the United States and Canada now have reached all-time highs of 67 to 69 percent.[1]

A few governments and developers are learning to support this incremental building process. The government programs that best serve low-/moderate-income households provide a mixture of credit, technical assistance, and modest targeted subsidies in the

form of upfront grants for a wide range of housing solutions that mimic the stages of the progressive housing process. These solutions include a vacant lot with services, improvements, additions, and replacement of a deteriorated existing structure with a new core unit (on a lot the household already owns). Government programs also increasingly use community groups and Nongovernmental Organizations (NGOs) to organize demand. This task involves assisting households with applying to programs, saving required downpayments, contributing labor to the construction of their units and communal infrastructure, and maintaining this infrastructure.

Private builders are increasingly taking a similar approach in serving a moderate- and middle-income clientele. The better developers construct expandable units and support their homebuyers with technical assistance (construction plans, advice) by upgrading with the option of contracting the private firm for future home additions.

More typically, however, developing country governments and the private sector confuse "housing" with the norm for advanced countries and for the middle and upper classes of their own countries—a complete, contractor-built unit purchased up front by the household. Even here, however, there have been some advances. Twenty years ago, governments typically built relatively large (60 to 100 square meters), complete units. Now many government production programs build "starter units" that range from 15 to 45 square meters that low-/moderate-income households are expected to purchase and expand. For example, in Mexico, the average two-room starter house for low-/moderate-income households ranges from 30 to 45 square meters and sells for US $12,000–$15,000 with substantial subsidies from the government conveyed in below-market interest rates on loans for 80 percent of this amount. Densities are much higher than in the United States, which range from 12 to 14 units per acre and have10 percent of land area set aside for community facilities such as including schools and parks. Even the purchase of such starter units, however, requires large subsidies and results in low population coverage of government housing programs.

Housing Policy

These systemic bottlenecks greatly raise costs and drive land and housing into the informal sector. However, few governments of developing countries think of housing in such systemic terms and attempt to attack the bottlenecks that strangle the sector. In other words, they rarely develop housing policies or aim programs toward improving the housing system. Instead, in an attempt to solve the problems created by

a poor housing system, governments usually create expensive subsidy mechanisms and try large-scale production to compensate for the lack of private-sector development.

In Latin America, for example, the bulk of countries have, at one time or another, established a tax (sometimes disguised as a pension fund[2]) of 2 to 5 percent of all salaries to fund below-market loans for social housing. Such systems represent a substantial drag on the national economy, distort financial markets and crowd private nonsubsidized home lending, produce high-cost and high-subsidy housing, and channel most of the units to moderate- and middle-income families rather than low-income households. The small group of large developers and financial institutions that finance and build the units under such schemes capture a substantial portion of the subsidy and are, in effect, major sub-rosa clients.

Some Latin American and Caribbean countries wisely have eliminated these salary-tax housing schemes. They continue to thrive in Jamaica (National Housing Trust), Mexico (INFONAVIT and FOVISSTE), Venezuela (Ley de Politica Habitacional), and elsewhere in the sense of raising and channeling large amounts of money to housing. However, these schemes' vices result in a fatal flaw that eventually tends to turn public opinion and government against them, even where they are well entrenched, resulting in low population coverage. In Venezuela, only 1 in 12 households that has contributed under this country's salary-tax funded housing program receives a unit (under the Ley de Politica Habitacional). In Mexico, a government-assisted unit has reached only one household in nine contributors (under INFONAVIT).

A more effective approach to housing depends, foremost, on a strategy—that is, a housing policy that attacks the bottlenecks in the housing system, raising costs and reducing the number of households that can use it, driving them into the informal sector. Such a policy is comprised of six categories—credit, subsidies, land and property rights, basic services, regulations, and institutions (Angel, 2000). Table 1 profiles issues, suggested useful interventions, and technical assistance in these six areas.

Table 1. Housing Policy and Related Interventions in Developing Countries

Policy Category	Intervention – Investment	Intervention – Technical Assistance
1. Property Rights and land	a. Regularization of tenure. Can be supported by direct subsidies or debt finance. b. Cadasters. In Guatemala, the government buys the land and transfers the lot with title to the household (at a price).	a. Regularization of tenure. Strengthening the land registrar and training of the judiciary, in Guatemala. In Guayaquil, the municipality has an office of regularization that streamlines title. b. Cadasters. Outsource to companies specialized in this activity.
2. Housing Finance	a. Secondary markets. Wholesale funds via a liquidity facility. Example: FOVI in Mexico. b. Microfinance. Equity capitalization of selected MFIs, global liquidity in a central ministry, etc. A DR bank recognized for its microfinance record has asked for a housing microfinance loan. c. Mortgage insurance / guarantees. Funding a reserve to cover a portion of the credit risk of mortgage lending / microfinance.	a. Secondary markets. Standardize mortgage instrument and process, establish criteria and compliance system for originators, etc. b. Microfinance. Introducing practices of microcredit to traditional mortgage lenders and strengthening MFIs. c. Mortgage insurance / guarantees. TA to apex housing finance institutions on mortgage insurance.
3. Subsidies	a. Direct demand subsidies. Fund upfront, portable grant to households, with or without debt finance. b. Supply-side subsidies. Rehab of historical centers. c. Rehab and privatization of public housing.	a. Direct demand subsidies. TA for beneficiary selection system, market assessment, relieving supply-side bottlenecks. b. Supply-side subsidies. French company in Quito uses subsidy to rehab historic central city multiunit buildings. c. Public housing privatization. TA for bid process, condominium law, and O&M.

Table 1. Housing Policy and Related Interventions in Developing Countries (continued)

Policy Category	Intervention – Investment	Intervention – Technical Assistance
4. Residential infrastructure	a. Upgrading. National programs of urban upgrading. Finance of services, legalization, and improvements—sometimes joined with other social programs. b. Serviced sites. In Guyana, divestment of public land plus funding of starter infrastructure (water, roads, drainage). c. Macroblocks, and delegation of development to for-profits and nonprofits.	a. Upgrading. Community planning, design, participation in design and execution. b. Serviced sites. Community involvement, especially in maintenance. c. TA in land-use and environmental site assessment and planning, and transportation.
5. Regulatory regime		a. Streamlining of development approval process. b. Reform of subdivision and building codes. c. Reductions / elimination of real estate transfer taxes, rent control, and other supply side bottlenecks. d. Reform of banking supervision of mortgage lenders.
6. Institutional reform		a. Shift government from direct development and / or direct financing to enabling of housing (funding subsidies, regulation, oversee institutions, etc. b. Create institution to oversee the key enabling functions of housing sector. Information and data collection, and monitoring of housing sector.

Note: Although no published regression analysis has been conducted, the poorer countries with the least developed markets and institutions appear to have the highest rates. Household contributions to these funds, however, remain uncorrected for inflation because of the steep below-market interest rate subsidies in the housing loans financed by the fund. Hence, after a few years, the real value of the pension typically erodes greatly.

Implementing such a strategy involves establishing new policies that facilitate markets in these six areas (World Bank, 1993). However, although critical in the long run, policy changes often do not result in many housing solutions in the short run. Hence, housing programs are essential in relieving pent-up demand, whereas policies take hold, involve government by actively working through the difficulties that cause poor housing performance, and redress intractable aspects of market failure not amenable to policy change. The best housing programs join public-sector funding and / or guidance with private-sector operation. The next section profiles three such public-private partnerships.

Housing Public-Private Partnerships in Developing Countries

Traditional housing programs in developing countries have produced complete units that are highly subsidized, high-cost solutions. Subsidies have gone largely to professional and middle-class households through political influence despite a rhetoric that supposedly targets low-income families. Given limited resources, these high per-unit costs and subsidies have resulted in low production and low population coverage relative to housing demand. Typically, these programs have transferred subsidies in the form of fixed, below-market interest rates to developers and financial institutions (often public housing banks)—that have absorbed a substantial part of them. These low-interest loans have crowded out market-rate lending, have caused the amount of the subsidy to vary and (thus make it difficult for households to understand and government to budget), and only indirectly reached families (demand). In the traditional and worst variant of these programs, government builds housing directly, chooses the households based on political criteria, and makes below-market loans directly to households to finance their purchase—on which many families renege. In more recent versions, the government funds the private sector to build these units and channels loans through a private-sector financial institution, which then originates below-market interest rate loans to developers and to households.

In contrast, housing programs well suited to developing countries join limited public subsidies to households (demand) with private production and market-rate finance of low-cost, progressive solutions that allow vastly expanding population coverage. This section briefly profiles three public-private partnerships that meet these criteria: (a) direct demand subsidy programs, (b) microfinance of housing, and (c) low-income land development.

Direct Demand Subsidy Programs

Direct demand subsidy programs first arose in Chile in 1976 in reaction to the country's salary-tax funded housing program, which shared all the vices of traditional housing programs. In essence, direct demand subsidy programs deliver an upfront grant to households rather than a below-market interest rate mortgage. Households complement this subsidy with their own equity contribution (downpayment if for purchase) and, in the Chilean model, a market-rate mortgage to finance their housing solution.

Well-designed direct demand subsidy programs have three fundamental characteristics essential to achieving substantial advance over traditional housing programs. First, the government facilitates the private sector to build rather than constructing housing itself. The private sector here includes larger developers, small contractors, NGOs, and households. Second, these programs target benefits progressively to low- and moderate-income households through a beneficiary selection system. Chile uses a national point system that gives more points for greater need (lower income, larger family size, poorer existing shelter) and greater effort (more downpayment, longer period of saving this downpayment, and longer time in the queue for application to the program) to select households transparently. Low-income households should receive a greater amount in subsidy than moderate-income households (holding constant the type of unit). Third, the subsidy is portable. Thus households should have the freedom to choose how to use the subsidy within program parameters—the type of unit, the location, the particular developer or contractor, and so on. Portability is critical because it allows the household to satisfy its housing preferences and creates competition among suppliers (especially developers and contractors), which lowers the price of the housing solution, increases the share of the subsidy ultimately received by the household, and reduces the share absorbed by suppliers such as developers and financial institutions.

Direct-demand subsidies have spread from Chile to many countries in Latin America, including Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Panama, Paraguay, Uruguay, and Venezuela. The Inter-American Development Bank has had a key role in supporting the establishment of direct-demand programs in many of these Latin American countries. Independently, other developing countries, including Indonesia and South Africa, have adopted similar mechanisms. Despite the inevitable

problems in their execution, direct-demand programs have substantially advanced traditional programs in many countries. Largely because of its direct-demand program, Chile has produced more units of formal-sector housing than the number of new households formed since 1991. Land invasions and the creation of new informal settlement—which still plague developing countries—no longer occur in Chile.

In some respects, however, Costa Rica has succeeded even more. This country initiated its direct demand subsidy program in 1987. Authorities largely copied the structure of the Chilean program. From 1988 to 1995, Costa Rica succeeded in producing housing for 15 percent of the population of the country largely due to the direct-demand subsidy program. Costa Rica has done particularly in well in reaching low-income households through using a number of highly sophisticated housing NGOs not only to organize demand but to act as the developer of new subdivisions.

The Costa Rican Direct Demand Subsidy Program

Costa Rica, population of 3.3 million, has 786,600 housing units, of which approximately 100,000 are informal. . . . Authorities estimate the housing deficit at 164,000. . . . The direct-demand subsidy program started in 1987. . . . The authorities largely copied the structure of Chile's direct demand subsidy program. . . . The financial structure of the program consists of: (a) a voucher (the direct demand subsidy), which declines as household income increases; approximately 80 voucher amounts exist, geared to small variations in household income; (b) a mortgage loan given by an "authorized entity," including government banks, NGOs, cooperative federations, and Savings and loans; these entities have authority to choose beneficiaries, deliver the direct subsidy, and extend a loan to complement the direct subsidy and the household's downpayment, and the government housing bank (BANHVI) then buys the Authorized Entities' social housing portfolio at lower than market rates; and (c) a downpayment. . . . Households earning up to one minimum salary (approximately US $170) need not make a downpayment. . . . At first, however, the idea was that the direct demand subsidy could be recaptured from the household on subsequent sale—similar to the concept of a soft second mortgage used in U.S. affordable housing practice. However, the president of the country in the early 1990s turned this soft second into a grant.

The process works largely through the authorized entity. . . . Households go to the authorized entities and ask them how much they can afford to pay for a housing solution. . . . The authorized entity specifies the maximum price of the solution, the loan amount, and the required downpayment to the family. . . . The household then looks for a housing solution with this maximum price and knows the downpayment that it must save. . . . The authorized entity then sells the loan to BAHNVI at a discount. . . . The largest voucher, which goes to the lowest income households, has a value of approximately US $4,000.

Products eligible to be bought with the voucher include construction on lots already owned by the family (50.7 percent); purchase of a lot and construction of a unit on this lot (30.7 percent), purchase of an existing new unit (17.2 percent), and improvement (1.2 percent). . . . Recently, the program has allowed purchase of lots.

In contrast to Chile and most other countries that have adopted direct demand subsidies, the program in Costa Rica has succeeded in reaching low-income groups. . . . The main reason is that a group of sophisticated NGOs experienced in housing development—a rarity for developing countries—has become the main developer under the program instead of for-profit developers. . . . At first, many for-profit developers used the direct subsidy program as well. Since 1994, for-profit developers have largely stopped using the program, mainly because of increased risk from political and economic sources. . . . NGOs have largely stepped in to fill this gap. . . . Some NGOs help households construct a unit on an existing lot by providing technical assistance. . . . Other NGOs that are authorized entities assemble groups of their members, extend the credit, and develop the unit (through contracting for-profit construction firms). . . . The NGOs that are authorized entities are highly successful. . . . These NGO authorized entities even issue bonds to raise money on public markets for housing finance.

The program has proved stable until recently, delivering a significant number of direct subsidies each year since its inception in 1987 through the mid-1990s. . . . The total number delivered from 1988 through 1998 (93,049) represents 13 percent of households in the country . . . . Government funding also proved regular, although below mandated

Although direct demand subsidies represents an advance over traditional supply side programs, experience has made clear two critical drawbacks. First, these programs have performed well in reaching moderate-income households but have had difficulty reaching low-income households (with the exception of Costa Rica). This is because private-sector developers and financial institutions still often lack interest in serving low-income households even with a subsidy sufficiently large to make these solutions affordable to low-income families. This targeting problem could be reduced by: (a) expanding the types of housing solutions eligible for these programs from new core units (the major focus of most of these programs) to the wide range of solutions suited to progressive housing (serviced site, rehab, expansion purchase rehab, replacement of a unit on a lot already owned by the family, etc.); and (b) building an institutional infrastructure of housing NGOs that can organize low-income demand and undertake low-income land and housing development. The latest generation of direct demand subsidy program is pursuing both these avenues. The second problem of direct demand subsidy problems is more intractable. Although the subsidy amount is typically somewhat less than that of traditional housing programs, the amount of subsidy required to make direct demand programs work is too large to make these programs financially sustainable for many countries and, hence, results in insufficient population coverage.

The financial sustainability of the Chilean and Costa Rican direct demand subsidy programs display an interesting contrast. During the period of Chile's direct demand subsidy program (1976 to present), high, sustained national economic growth rates (averaging more than 5 percent per year for more than two decades) and efficient administration have helped national government afford the substantial cost of this subsidy program. Although the Costa Rican economy performed reasonably well in the 1990s, the direct demand subsidy program has been extremely difficult for national government to maintain. Since the mid-1990s, Costa Rica has steadily reduced the real amount invested in this program and has resorted to creative financing that has caused operational problems for the system. Costa Rica better represents the norm of developing countries than Chile.

Thus, for most countries, direct-demand subsidy programs must be a transition to less subsidy intensive and more market solutions. Direct demand subsidy programs should be established with a time limit and with an exit strategy within a set of broader reforms and other programs that move toward housing markets. The two

public-private partnerships discussed below are three such market-oriented options that can be adopted in tandem with direct demand subsidy programs.

Microfinance of Housing

In contrast to traditional mortgage finance, the microfinance of housing well suits much of the low-/moderate-income majority of developing countries. For the purposes of this paper, the term *the microfinance of housing* refers to small loans to low-/moderate-income households, typically for self-help home improvement and expansion, but also for new construction of basic core units. Best practice in housing microfinance involves loans at unsubsidized interest rates and short terms relative to traditional mortgage finance.

Housing microfinance lies at the intersection of microenterprise finance and mortgage finance. It shares characteristics with both but also demonstrates some important differences. For example, the amount (US $300 to $5,000) and the length (2 to 10 years) of housing microfinance loans are typically much less than those of mortgage finance ($10,000 and more for 15 to 30 years) but greater than those of microenterprise credits ($100 to $1,500 for 3 to 18 months). As microenterprise finance, many housing microfinance programs work with paralegal titles and income from self-employment—the typical security that low-/moderate-income households can offer. In contrast, mortgage finance typically requires a mortgage lien and formal-sector employment.

Various studies have identified more than 40 such programs in Asia, Africa, the Middle East, and Latin America and the Caribbean. NGOs operate many of these programs. The Habitat International Coalition, the main umbrella group for NGOs working on housing issues, has several hundred members, many of whom operate some sort of microlending program. In addition, many for-profit private-sector entities, including financial institutions, informal land developers, and building materials suppliers, make such loans to their clients as part of their business. Indeed, if given the chance, low-/moderate-income households tend to invent some form of housing microfinance (such as savings clubs) to fund their shelter needs. Thus housing microfinance currently encompasses an extraordinary spectrum of practices that run the gamut from profit-making operations to heavy subsidization. For the purposes of this paper, the term *housing microfinance* will be used to refer to best practice; that is, operations that are financially sustainable.

Microfinance holds promise from a housing perspective for three reasons. First, it well fits the incremental building process used by the low-/moderate-income majority. Most microlending occurs for land purchase, home improvement, and expansion—in effect, for the major phases of the incremental building process. Some loans result in the construction of a starter unit, which also is a phase in the incremental building process. NGOs and, increasingly, financial institutions, originate these loans.

The small number of these loans makes their debt service affordable to low- and moderate-income households. In contrast, the payments on the much greater loan amount necessary for a complete unit vastly exceed their capacity to pay. The short terms of microfinance also well suit these households' situations. Low- and moderate-income families resist incurring financial obligations for the long periods typical of traditional mortgage finance (15 to 30 years) because of the instability of their income. Many low- and moderate-income households do not want the burden of long-term payments, even if they can qualify for a loan.
Second, microfinance helps solve two main difficulties encountered by traditional mortgage finance in developing countries: (1) the mismatch of the terms of liabilities with that of assets, and (2) a highly limited market. Deeply rooted characteristics of the economies of many emerging countries such as macroeconomic instability, fluctuating inflation, and, as a result, foreign exchange risk, combine to raise real interest rates and shrink the terms of the liabilities available to financial institutions. Typically, lenders fund their loans very short term with liabilities of a maximum of 1 to 3 years. Hence, lenders engage in serious term mismatch when they make traditional mortgage loans of 15 to 30 years. This term mismatch often goes unmonitored by financial institutions and represents a hidden, potentially explosive problem for many.[3] The uneven experience of countries with alternative mortgage instruments represents, in part, a special case of the problems associated with term risk.[4]

In contrast, housing microcredit—whether for self-help home improvement and expansion or for new construction of basic core units—often has much shorter terms. These short-term assets better fit the short-term liabilities available in developing countries and substantially reduce, but do not eliminate, the risks of term mismatch

Because it is affordable and well suits the needs of low-/moderate-income households, housing microfinance also can greatly expand the market for home lending beyond the upper middle class. For example, Ecuador, population of 12

million, has an untapped effective demand for housing microcredit conservatively estimated at US $1.2 billion.[5] In comparison, Ecuador's entire stock of private-sector credit totaled US $3.8 billion in 1998. The large potential loan volume of housing microlending makes this practice particularly useful as a basis for financial institutions and the financial sector.

Third, housing microfinance can have a critical role in reducing and better targeting housing subsidies. Direct demand subsidy programs, for example, encounter the problem of lack of private-sector debt finance. Because traditional mortgage financing ill suits the low-/moderate-income clients of these programs,—even with the debt service and loan-to-value ratio reduced by the subsidy amount—financial institutions often refuse to lend to them. Hence, many low-income households have difficulty completing the financial package necessary for funding their units.

Thus direct-demand subsidy programs often must use stop-gap measures with many drawbacks to attempt to put the debt-finance piece in place. In Chile, where direct-demand subsidy programs began, the government now lends directly to low-income households with the predictable result that many do not pay back the loan. Sometimes, as in the Inter-American Development Bank housing pilot program in Venezuela, the direct-demand subsidy is increased to remove the need for debt finance. However, this strategy results in higher subsidies and lower coverage—the same problem as many traditional programs. Microfinance potentially adds the critical debt-finance piece, for low-income households, that is either missing or precarious in most direct-demand housing subsidy programs.[6]

The experience of SEWA Bank in India illustrates these virtues of housing microfinance (see box 2 for details). SEWA has lent small amounts (averaging approximately US $400 per loan) to more than 37,000 households at market interest rates. The repayment rate is excellent; 96 percent of loans are current, whereas the overwhelming portion of the remaining 4 percent occurs because of temporary emergencies. Approximately two-thirds of households use these small loans for home improvement, and one-third uses them for new construction on a lot they already own. Although earning profits, SEWA has broken the vicious circle—debt at astronomical interest rates and dependence of poor households on middlemen and traders for housing credit—and made a critical contribution to the viability of the household economy of many families.

A Case of Microfinance of Housing in India: SEWA BANK

SEWA was established in Ahmedabad, India, in December 1971 and was registered as a trade union in April 1972. Its capital needs led it to the establishment of the largest cooperative entity in India. In 1974, the Shri Mahila, SEWA, Sahakari Bank came to existence by way of small deposits (US$ 0.23) from 4,000 self-employed women, totaling most of the bank's initial working capital of US $1,382. From 1974 to 1997, the credit fund was supplied by depositor's savings. During 1998 and 1999, SEWA received US $1.3 million from the two apex housing institutions, HUDCO and HDFC, at 10-percent interest for housing and infrastructure finance. By mid-1998, SEWA Bank had awarded a cumulative total of 31,783 loans of which 37 percent were housing loans amounting to US$ 9.2 million—averaging US $412 per loan.

Housing Loan History. SEWA Bank first ventured into the field of housing loans in 1976, 2 years after its inception, by making loans to 3 women for US $35 each. In 1981, only 9 housing loans were extended, but by 1986, the number had climbed to 322 loans, totaling US $50,239. In 1992, the board of SEWA Union determined that housing loan activities needed more specialization and SEWA housing services was established with the goal of improving housing for its members. In 1994, the new entity was officially registered as Gujarat Mahila Housing SEWA Trust. By 1997 the number of loans jumped to 1,712, totaling US $706, 812. By 1998 the number of housing loans had leapt again to 12,000, totaling US $3.45 million. Today, more than one-third of SEWA Bank's loans portfolio is invested in housing, and, over the recent years, housing loans have steadily increased in proportion to the total portfolio.

Loan Mechanisms. Under My Own Home Scheme, participants save a fixed amount of money every month and contribute this amount toward buying a home. Prior to obtaining housing loans SEWA members lived in dirt-floor shacks constructed of cardboard or scrap materials. With SEWA housing loans, they incrementally transformed their shacks into permanent brick dwellings, plastered interior walls, tiled floors, and/or installed windows for light and ventilation.

Requirements. To be eligible, the borrower must begin by opening a bank account and save for a minimum of 1 year. Next, an application is evaluated based on the demonstrated savings pattern, the household income, and the depositor's employment/business. The final criterion in the evaluation process is a recommendation from the area leader indicating the community's endorsement of the member. Two guarantors must co-sign the loan application. The bank also uses the borrower's previous year savings to secure the loan. No title is required for these credits. However, SEWA insists that the housing loans be only in a woman's name, because experience has demonstrated women's superior repayment record. Once the loan is approved, the bank disburses the loan by making direct payments to material suppliers or depositing the funds in installments through the borrower account.

Interest Rate, Repayment Period, and Performance. SEWA Bank charges an interest rate of 13.5 percent on funds. There are no subsidies or grants. The bank borrows and lends at market rates. Housing loans must be repaid over a period of 60 months. Nevertheless, many borrowers have chosen to pay off their loans over a shorter term than contracted. In 1998, 96 percent of the total was current. The great bulk of the remaining 4 percent, however, were not defaults, but rather short-term arrears due to pregnancy or illness.

Thus, microfinance of housing has tremendous potential. However, a number of important challenges must be overcome for expansion of this practice beyond the current pilot projects in many countries to scale. Perhaps most important is the institutional challenge—creating the capacity and systems in traditional home lenders, microenterprise finance institutions, NGOs, and other organizations necessary to extend such credits profitably. International donors, national governments, and others have only just begun to support this work and much creative effort lies ahead.

Low-Income Land Development

In addition to targeted subsidies and credit, land is critical to low-/moderate-income homeownership. Securing a lot starts the progressive housing process. The remainder of the process depends critically on success in accessing land. Evidence suggests that when the first waves of rural to urban migration hit many developing country cities in the 1950s through the 1970s, gaining access to land was easier than it is currently. Many underused or vacant sites with relatively good access to the city center (and, hence, to jobs) were still available to invade or subdivide illegally and sell at low prices. Many governments—both national and local—still owned large amounts of public land that they typically divested to households at symbolic prices.

As cities have become larger and denser, land markets tightened in the 1980s and 1990s. Real land prices have risen greatly in real terms in many cities. Serviced lots now account for a substantially higher share of the total development cost of housing in the dense metropolises of developing countries than they did in the past. Typically, serviced lots have represented 10 to 30 percent of the total development cost of housing units in many cities of developing countries. In contrast, a small lot costs a minimum of US $7,000 in the Federal District of Mexico, whereas the cost of constructing a basic unit (30–40 square meters) is approximately the same amount. Hence, land here has risen to approximately one-half the total development cost!

In addition, many, although not all, governments[7] have run out of their original stock of suitable public land for urban development near many cities in developing countries. Hence, they must purchase land or deliver increasingly large subsidies for social housing development.

High standards and slow, cumbersome development approval processes have reduced land supply and contributed to raising land costs. Various studies (see

Ferguson and Summer (1994) for Indonesia) have shown that government regulations and formal and informal charges (that is, bribes) in developing countries raise the end cost of residential land substantially (often as much as doubling it). This conclusion should come as no surprise to scholars and practitioners of land development in the United States with its ample body of literature on the impact of development regulations on housing costs. However, the idea that government regulations that are poorly conceived and implemented will increase the end-cost of private-sector housing and that streamlining such regulations can reduce its cost and help private development go downmarket is a new and unfamiliar idea in many developing countries.

Many governments in developing countries have reduced standards and streamlined the regulations but only for public-sector agencies that develop land and housing. Indeed, public-sector developers are frequently exempt from regulation by other parts of government. For example, government development agencies in Jamaica can declare an area a social housing district and thus avoid the standards and regulations under the Town and Country Planning Act.[8] However, only a few countries have taken seriously the idea that reducing standards and streamlining regulation for the private sector can make a big difference.

El Salvador, however, is a striking exception to this rule that demonstrates the enormous positive impact of reducing land-development standards and streamlining regulations. The Government of El Salvador (GOS) undertook wholesale reform of the legal and institutional structure of land development, cadasters, and the property register. A new Law for Urban Development and Construction and a new Regulation for Subdivisions reduced the standards for land development and allowed progressive development of infrastructure rather than requiring the construction of all basic infrastructure (road, water, sanitation, drainage, electricity) prior to official approval as previously had been the norm for most developing countries. A new Registry for Property greatly streamlined the process for legalizing property rights. A third measure created the Institute for Liberty and Progress with the mission of legalizing low-income settlements quickly and inexpensively. Finally, the government approved a series of regulations to speed and simplify the approval of subdivision plans and grant amnesty to existing clandestine subdivisions. Overall, these laws reduced the minimum size of lots to 100 square meters and allowed for communal standpipes for potable water, individual sanitation (no sewers), surface drainage,

and no electricity, (the minimum suited for health and safety in the Salvadorean context). Subdivision approval is valid for 1 year.

These changes have stimulated low-income development that now accounts for more than one-third of all new lots and housing solutions in the country each year. More than 200 low-income development firms have produced lots at a rate far above new household formation since 1996 and have rapidly expanded the developed areas of El Salvador's medium and large cities. For example, in 1996 and 1997, land developers produced 15,000 and 22,000 lots, respectively, whereas only 10,000 and 12,700 houses, respectively, were built on these lots. The three largest development firms produce approximately 10,500 lots per year, although they sell only approximately 3,000, or less that 30 percent, of them.[9] Thus, the production of lots has outstripped the construction of houses and the effective demand for these low-cost lots. Not surprisingly, the real price of these lots had fallen roughly 20 percent from its peak in 1994 to the end of 1996. In great contrast to the illegal subdivisions of previous years, municipal planning authorities have reviewed and approved these subdivisions for their impact on the environment and urban development. Only 10 percent of subdivisions now occur outside the planning process.

Prior to 1980, civil war in the countryside led to a rapid increase in the urban population that went largely unattended by land and housing development. With the approval of these new laws, the developed area of medium and large Salvadoran cities expanded by an estimated 30 to 50 percent in the 1990s.

Low-income development firms typically form partnerships with the original owners of these lots by providing the minimum package of basic infrastructure required by the law. Thus the development firm need invest very little. The development firm then takes back financing on these lots for 8 to 12 years and charges purchasing household rates of interest comparable to those available on private-sector mortgages, approximately 12–13 percent per annum. (Note: Inflation in El Salvador is currently 1 to 2 percent per annum.) The price of a 200-square-meter lot varies between US $200 and US $2,500, depending on distance from a city's center, and averages approximately US $1,000—an amount affordable by low-/moderate-income households in El Salvador who typically earn US $1,200 to US $3,500 annually. The low-income developer retains the title to the lot until the last payment, then transfers it to the household. This lease/purchase arrangement has considerable advantages for the buyer as well as the seller/developer. If the buyer falls behind on payments, he

or she can sell the existing interest in the lot to another household easily rather than default on payments and have the property repossessed. Approximately 30 of buyers do indeed sell their lots to other households before they finish paying on their loan, whereas 70 percent complete the process. For the seller / development firm, retaining title substantially re-enforces the security of its loan.

Although competition is rising, the profit levels for well run land development firms remain good, partly because of the small amount of capital necessary to invest in each project. In addition, these firms customarily develop their subdivisions in stages by holding a portion of the tract for sale after settlement of the first stage has driven up land values.

In summary, the experience of low-income land development in El Salvador contrasts dramatically with that of most emerging countries. GOS made dramatic changes in the law to lower standards to the minimum necessary for health and safety and greatly streamlined the subdivision and titling process, stimulating a private-sector low-income land development industry. In most countries, governments maintain high standards, a convoluted process by which bureaucracy slows land development, and private firms have difficulty developing for even middle-income households. In El Salvador, lots accessible to cities are plentiful and reasonably priced, production has far outstripped demand and production of houses, and real land prices are falling. In most developing countries, few urban lots are available, production is far less than new household formation, and real land prices are rising quickly.

What Can the United States Learn?

The progressive approach to housing in developing countries contrasts strongly with that of the United States and other advanced countries. Most fundamentally, the U.S. homeownership paradigm is a commercially built, complete unit instead of a progressive home built gradually over many years. Increasingly, only well-off families can buy such a newly constructed unit. Less prosperous households buy used housing, which often has filtered down from its original higher income owners to these less affluent new purchasers.[10] Instead of owning the same house for life—the pattern most typical of developing countries—U.S. households move and sell their units every 7 years on average.

The much greater breadth, development, and stability of the financial sector in the United States, joined with the development of housing secondary markets, allows types and an extent of housing finance unimaginable in emerging countries. Finance is available for rental housing development, home construction, home improvement, accessing equity for other purposes, and, now, taking more equity out of a home than actually exists! Even low-income households can finance well more than 90 percent of a new home (providing they have the downpayment and are creditworthy). In comparison, the maximum loan-to-value ratio is 80 percent or below for the top one-third of the income distribution that can qualify for a traditional mortgage loan in developing countries.

Thus the U.S. homeownership paradigm has strong advantages. The size and amenities of U.S. homes have rapidly grown and substantially exceed those of other high-income industrialized countries, let alone those of emerging countries. Housing is the principal economic asset of most U.S. households, despite the stock market boom of the 1990s. Mortgage loans form a critical asset of the financial system and housing construction is an important sector in the national economy.

However, the exclusive focus of the U.S. housing model on large, complete solutions has disadvantages, which fall hardest on low- and moderate-income families, but also affect the broader quality of life. Many low- and moderate-income families must spend a high portion of their income on housing (typically, 35 to 50 percent) in international perspective because of the ample investment required to purchase or to rent a relatively large, complete unit. Homeownership rates remain below those of many developing countries largely because U.S. households lack the option of progressive housing.

In addition, the low densities resulting from such very high standards devour land and exacerbate sprawl. Planning professionals familiar with housing in Mexico that have had the experience of working in developing countries make it clear that in the United States there is a widespread ‘disposable’ attitude toward essential resources like housing and land.” Finally, U.S. household savings rates are at historic lows and household debt at historic highs, partly, it has been argued, as a result of overconsumption in housing.

Given these drawbacks, expandable housing—the norm in developing countries—seems an idea worth exploring by U.S. housing professionals. The pay-as-you-go

small starter home, which can be expanded as needs and means change, could enable the low-/moderate-income households to defer financially burdensome housing costs until a time when their family financial resources and employment circumstances are more favorable. Such starter units with carefully designed expansions, landscaping, and fencing would result in greater densities in urban areas, less consumption of land, and less sprawl while preserving quality of life.[11] Progressive housing also would give these households greater flexibility to match their income with their housing preferences.

The greater flexibility of progressive housing has particular appeal with the change in the U.S. family structure. Until 20 years ago, the two-parent nuclear family with children predominated. The majority of U.S. households are now nontraditional. The numbers and share of low-/moderate-income households for which progressive housing represents the best option also are likely to increase with immigration and globalization.

The greatest change necessary for progressive housing in the United States would be a new acceptance by local governments of smaller units, greater lot coverage, shorter setbacks, and automatic approval of preplanned expansion of units and construction of new infill units (Lowry and Ferguson, 1992). Increasing the flexibility of local subdivision and building standards will require leadership at the State and national levels because many local jurisdictions have little incentive to make these reforms. Such leadership, however, has been in short supply despite the many studies confirming that exclusionary zoning, high standards, and other inflexible development regulations substantially raise housing prices and drive developers upmarket. It is ironic that a low-income country such as El Salvador has the political will to take changes that assist a large part of the low-/moderate-income population to afford homeownership, and the United States generally does not.

With such creativity and change, a much greater share of U.S. households could enter the housing market as owners rather than as renters. In addition, many moderate- and middle-income households would gain a greater ability to match their income and changing needs arising from the life cycle and from the increasing pace of social and economic transformation to their housing.

Endnotes

[1] Although no published regression analysis has been conducted, the poorer countries with the least developed markets and institutions appear to have the highest rates.

[2] Household contributions to these funds, however, remain uncorrected for inflation because of the steep below-market interest rate subsidies in the housing loans financed by the fund. Hence, after a few years, the real value of the pension typically erodes greatly.

[3] The regulatory authorities of financial institutions in many countries are only beginning to require GAP analysis of this mismatch. The difficulty here is that norms that restrict maturity transformation also confine the provision of long-term credit, affecting business investment.

[4] Financial institutions in some countries have sought to expand their market through using alternative mortgage instruments—such as double-indexed (to a salary and an inflation index) mortgages and price-level adjusted mortgages. Although these instruments often function for a time, fluctuating macroeconomic conditions can disrupt them and explode the balance sheets of financial institutions. Colombia developed an impressive mortgage market through using a price-level adjusted mortgage while inflation was relatively stable (20–25 percent per annum from 1978 to 1998). A recent spike in inflation and macroeconomic crisis has contributed to destroying the balance sheets of many of these Savings and Loans (Corporaciones de Ahorro y Prestamo), and greatly shrunk the mortgage market.

Mexico has used a double-indexed mortgage that, in principle, indexes payments to household income (the principal owed to inflation) and adjusts the term of the loan to reconcile the two (with any remaining principal forgiven after a maximum term of 30 years). With the crisis of 1994 resulting in the radical devaluation of the peso, borrowers ended up having a substantial amount of their principal forgiven, causing great problems for financial institutions. Commercial Banks, which had come to dominate home lending, experienced arrears rates of 30 percent in the mid-1990s and retreated from this type of lending.

In contrast, the shorter terms of microfinance of housing reduce the damage to an institution's net worth from abrupt changes in inflation and interest rates.

[5] If one-half of the households for which microlending is most useful—the middle third of the income range (a total of 403,000 households representing one-sixth of total households)—in a country with a population of 12 million (such as Ecuador)

received a microloan of US $3,000 (the cost of a large extension or a small self-help built starter unit in Ecuador), loan volume would total US $1.2 billion. Microlending also is appropriate and the only alternative for most households in the bottom third of the income distribution, although a smaller share of these poorer households could be expected to be in a position to borrow.

[6] Housing microfinance also has great appeal from the perspective of microenterprise lenders. First, microenterprise lenders already extend credit de facto for housing. Fundamentally, microfinance supports the household economy of microentrepreneurs. The home typically provides the physical plant for business. Although loans are ostensibly for the enterprise, households also often spend funds on emergencies and ongoing household needs such as housing improvements. Many microenterprise loan programs find that approximately 20 percent of their lending goes de facto for housing. Thus, housing microcredit potentially represents a huge new market for microfinance programs. In countries where the microcredit business has become crowded, such as in Bolivia and El Salvador, MFIs already are diversifying into housing loans.

[7] The sparsely populated countries of the Caribbean, such as Guyana and Suriname, are examples of countries in which the government still has substantial land reserves near or in major urban areas. In more densely populated countries with larger cities and longer experience of urbanization, governments typically have exhausted their original stock of land and must purchase tracts directly or subsidize their purchase for social housing development.

[8] However, public agencies that develop land and housing in Jamaica customarily submit their plans to local and national regulators for nonbinding review as a courtesy.

[9] A few of these land development firms now have gone out of business because of great competition relative to the demand for their product.

[10] In developing countries, the lack of new housing production and supply constraints often forces the existing housing to filter up from lower-income to higher-income households. The main filtering down occurs in central city tenements with deterioration of the neighborhood and its housing stock.

[11] For example, the typical middle-class unit provided by private-sector developers in Mexico ranges from 80 to 140 square meters. The better middle-income developers in Mexico and other Latin American countries support the purchasers of their progressive homes with technical assistance (construction plans, advice) in upgrading and with the option of contracting the private firm for future expansion.

Densities are six to eight units per acre. If local jurisdictions were to allow this, the United States would undertake similar developments for low- and moderate-income households.

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