Scaling up housing microfinance: a guide to practice

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A housing-microfinance (HMF) product now forms part of the repertoire of the bulk of major microfinance institutions (MFIs) in emerging countries. Some "popular" finance institutions (eg cooperatives, credit unions etc.) and a few home-finance institutions also offer HMF credits. Key governments - including those of Colombia and Mexico - are currently making a concerted effort to develop HMF as a crucial ingredient to their housing and urban development strategy.

Thus, housing microfinance has "arrived" as an important product for some types of finance institutions - mainly MFIs - and has gained increasing attention from public and private organizations. However, HMF lending currently covers only a miniscule fraction of the immense effective demand of low/moderate-income households for this product. Scaling up HMF to a size relevant to national shelter and settlement problems - the next step in the evolution of this practice - represents a key challenge.

This article broadly summarizes the recently published book, *Housing Microfinance; A Guide to Practice* (which the author of this article co-edited), and joins material from other sources in order to examine the challenge of scaling up. This article's sections parallel the organization of this manuscript - whose chapters are summarized here - and examine the following topics:[1]

1. The importance of housing microfinance: (a) in reaching low-income households in emerging countries - over half of the world's population - who are largely unserved by formal-sector home finance; and (b) to the business strategy of different types of financial institutions.
2. The characteristics and design of housing microfinance products in emerging countries, including terms, underwriting, construction supervision/ technical assistance, guarantees and collateral, and - most critically - servicing.
3. The potential for application of housing microfinance in the US
4. Taking HMF to scale so that it becomes relevant to governments and to solving national shelter and settlement problems. While the microfinance industry has largely taken the lead in pioneering HMF, greater involvement of dedicated home-finance institutions can play an important role in ramping up, and represents an opportunity for home-finance institutions to provide a range of financial services to the low/moderate-income household majority. Although HMF lies at the intersection of mortgage finance and Microenterprise finance, it is a distinct product, and its evolution likely to take a somewhat different course.

I. The Importance of Housing Microfinance[2]

Housing microfinance holds fundamental importance from two perspectives (see Bruce Ferguson – Chapter Two, "The Key Importance of Housing Microfinance"). First, it can help meet the effective demand for shelter and settlement finance of low-income households in emerging countries. Second, HMF can contribute to the business-development strategy of financial institutions that have low/moderate-income households as their target clientele, particularly microfinance institutions.

Critical function of HMF in low-income shelter and settlement

Only a minority of households - typically, less than twenty-five percent - can afford to purchase the least expensive developer-built unit with a traditional mortgage because of entrenched, inter-connected factors omnipresent in emerging countries:

- Real interest rates of 10% per annum and more
- Unavailability of long-term funding on domestic markets in emerging countries, which creates interest-rate risk for mortgage lending and greatly limits the supply of mortgage money
- Expensive and costly formal-sector systems including those for registry of property rights, land-use development,

[1] The author of this piece co-edited the book with Franck Daphnis. The book carries a publication date of 2004 (Kumarian Press, Bloomfield, CN). However, as the field of housing microfinance has developed rapidly, additional material has been included here to document this evolution.

[2] This section bases its argument on the "Foreword" by Robert P. Christen, Chapter 1 - "Housing Microfinance; Toward a Definition" by Franck Daphnis, and Chapter 2 - "The Key Importance of Housing Microfinance" by Bruce Ferguson.

and property transfer taxes, which push most low-moderate-income families into the informal sector

- Poorly functioning rental markets that frequently make this form of property tenure – which is the norm for low-income households in advanced industrialized countries - undesirable and/or unavailable in many emerging countries
- The instability of household income – especially from the informal-sector – that makes assuming long-term debt risky for most low/moderate-income families
- The drawbacks of many affordable housing projects that often poorly fit the needs of low/moderate-income families, joined with the decline in the fiscal capacity of most governments to fund the subsidies necessary for these projects

As a result, most of the low/moderate-income household majority neither qualify for nor want a long-term mortgage loan to purchase a developer-built unit. Instead, these families access a wide range of other types of finance (savings, pension funds, credit at very high rates from informal lenders and employers, savings club, remittances etc.) for the gradual construction of their unit over 5 to 15 years - a process called "progressive housing." Hence, roughly 70% of housing investment in emerging countries - even dynamic economies such as that of Mexico - occurs progressively.[3]

In principle, small loans at market rates for relatively short-terms - that is, housing microfinance - best fit both the progressive housing process used by the low/moderate-income majority, and the structural characteristics of financial and property markets in emerging countries (See Ferguson - Chapter 2 - "The Key Importance of Housing Microfinance"). Thus, housing microfinance represents the best product for a wide range of low/moderate-income housing "solutions" (as the phases of the progressive housing process are called) including:

- Purchase of a lot
- Home improvement and additions
- Construction of a small unit on a lot already owned by the family

Housing microfinance also serves as a key ingredient in making low/moderate-income housing projects of the public and private sector work, as HMF can fund:

- The purchase and tenure regularization of a lot
- The construction of a small unit on a lot provided by a sites and services project or low-income land developer
- The improvement of the household's unit in slum upgrading projects, which typically provide basic public services (water, sanitation, drainage) and rationalize the road structure
- Expansion of the core progressive unit provided by government-assisted privately-developed social housing projects - the main form of new housing construction in many countries (much of Latin America, for example)
- The gap between a public subsidy plus the household's down payment and the purchase price of the unit in "direct-demand subsidy programs" - the recommended form of subvention for low/moderate-income housing production programs in emerging countries

Franck Daphnis (Chapter 1 - "Housing Microfinance: Towards a Definition") broadly defines housing microfinance and the characteristics of the product necessary to meet the effective demand for shelter finance of low-income families. Essentially, housing microfinance lies at the intersection of mortgage finance and microfinance. As such, it represents an intermediate step in interest rate, term, form of collateral/ guarantee, and other respects between these two practices. Table 1 (Page 5) compares these three mechanisms (Section II examines these and other characteristics of HMF from the perspective of product design).

HMF products broadly fall into two categories: "linked" and "stand-alone" HMF services (Daphnis, Chapter 1).

"Linked" vs. "Stand-Alone" HMF Products

Many MFIs, especially in Asia, require that households either limit access of HMF to their existing microenterprise customers or save for a period of time in order to qualify for an HMF loan. Grameen Bank, SEWA Bank, and CARD use HMF products with both of these links. These links, in effect, serve to strengthen the relationship between the customer and the financial institution - a key feature of low-income lending, in general - that - in effect - credit enhances the loan.

The first type of link housing loans uses HMF as a reward for faithful payment on a series of microenterprise loans. Some microfinance institutions have also used a prior microcredit requirement for HMF as a business strategy to gradually add a housing product by leveraging its known customer base. Once these MFIs gain experience with HMF, some drop this pre-requisite for eligibility for the HMF credit, and lend to the public at large.

The second type of widely used link involves prior savings. The microfinance industry puts great emphasis on savings mobilization and products as the key to credit of all types, not just for housing but also for other financial services. Many MFIs require deposits of amounts approximating the future debt service into an account for six to eighteen months. From a housing-finance perspective, this strategy - in effect - recapitulates the contract-savings schemes used in Western Europe (German Bausparkasen and British Building Societies) since the nineteenth

[3] The sale of construction materials in emerging countries gives one indication of this reality. Cement producers in Mexico note that they make 70% of all sales in small amounts at retail – rather than wholesale to developers and construction companies. The gap between annual new household formation and yearly formal-sector production – which is typically 40% to 80% of new household formation - gives another indication of the scale of progressive housing investment.

Table 1 – Comparison of Housing Microfinance, Mortgage Financing and Microenterprise Finance

	Mortgage Financing	Microenterprise Finance	Housing Microfinance
Borrower	Middle- and upper- income households	Low- and moderate-income households	Low- and moderate-income households
Originator	Savings and loan associations and, sometimes, commercial banks	Credit unions, NGOs, cooperatives, regulated and non-regulated microfinancial institutions, micro banks	Credit unions, regulated and non-regulated microfinancial institutions, micro banks, cooperatives, some savings and loan associations, land developers and building suppliers
Use of loan funds	Typically, purchase of a new, commercially developed single-family unit	Working capital, equipment and stock for the microenterprise, and household economy, in general	The stages in the progressive construction of housing–purchase of land, improvement, expansion, construction of a bas0ic unit etc.
Saving requirements and importance	Typically 10% to 30% of unit's value; sometimes, contract savings	Often, savings are required in order to qualify for the loan	Often, savings are required in order to qualify for the loan
Underwriting	Evaluation of individual household income, and of property title and value. Mortgage payments must not exceed 25% of household income.	Evaluation of individual creditworthiness, family's net worth, and household income	Evaluation of individual's income and creditworthiness. Payments must not exceed 25% of household income
Amount	One-time loan of $10,000 and above.	A series of loans of $50 to $500	From one to three credits of $250 to $7,000 (average of $1,000 to $2,500)
Interest rate	Inflation plus a margin of 8% to 15% per year.[4]	Inflation plus a margin of 15% to 45%; average of 36% per year	Inflation plus a margin of 15% to 45%; average of 36% per year
Term	15-30 years None	Less than 1 year	1 – 8 years, average of 2 to 3 years
Collateral	Mortgage	Personal guaranties, goods, co-signers	Personal guaranties, goods, co-signers
Collection	In charge of collection department, based in the process of foreclosure of the mortgage	In charge of the credit officer, that is compensated on the basis of its portfolio, and that visits each of its 360 borrowers (average) monthly	In charge of the credit officer, that is compensated on the basis of its portfolio, and that visits each of its 360 borrowers (average) monthly

[4] Depending on the liquidity and level of competence of the financing industry and the macro-economic risk of the country

century to mobilize resources for housing finance, lower credit risk, and enhance the effective return of the financial institution (through providing a low-cost source of funding).

MFIs, banks, and NGOs deliver "stand-alone" housing microfinance services when they offer HMF credits to the public at large independent of other financial products. In this case, the institution lends without a prior history of credit or of savings with the provider. Stand-alone products facilitate loan originations and ramping up volume. However, they also require methods to replace the "linked" strategies that so effectively reduce credit risk.

Role of HMF in business strategy of finance and non-finance institutions

Another fundamental reason for the importance of housing microfinance involves its role in the business strategy of financial institutions. In particular, the existence of a rich network of microfinance institutions gives HMF much greater appeal and feasibility today compared with twenty years ago (MFIs). The emergence over the last two decades of an industry that makes small loans at market rates to low-income households on a financially sustainable basis has appropriately been called the "microfinance revolution." Currently, the portfolio of microfinance loans in emerging countries totals an estimated US $25 billion. The foreword to the book by Robert P. Christen, a key figure in microfinance, focuses on the role of HMF in the business strategy of MFIs.

Christen argues that HMF "presents the micro-finance credit industry with one of its most dramatic challenges." On the one hand, HMF represents a huge new market "quite attractive" to MFIs. For example, one market study in three cities on the Mexican border with the US found an effective demand for housing microfinance of four times that for microenterprise finance. In addition, the larger amounts and longer terms of HMF relative to microenterprise finance can help MFIs earn more stable income and diversify their risk.

On the other hand, HMF presents challenges for MFIs. In particular, the incentives for repayment of microenterprise loans - the traditional product of MFIs - may differ from that of housing microfinance loans. The strongest pressure to repay a traditional microcredit, Christen notes, comes from the ability of a lender to cut the borrower off from future access to credit. In developed financial systems, enforcing this sanction occurs largely through credit bureaus and credit ratings. In the early stages of development of a microlending market, pioneer MFIs hold a virtual monopoly, and the incentive to repay consists mainly of their ability to cut off access to further loans. Microentrepreneur borrowers typically depend on MFIs for a continuing stream of small working capital, equipment, or other type of loans. Hence, the ability of the MFI to cut off access works well. In effect, microfinance lending is a "relationship" business that counts heavily on various types of ties between the lender and the borrower, mainly the availability of a continuing stream of small credits, but also other products such as savings.

Once a competitive microlending market evolves and many other MFIs offer such credits, however, borrowers have more options for obtaining loans. Unless MFIs share information about their risky clients, the repayment incentive for the industry as a whole weakens.

HMF raises similar repayment issues in two senses for MFIs. First, if the HMF credit is a "stand-alone" product - the microfinance institution may have no previous relationships with the borrower. Second, many HMF borrowers may need only one, relatively large (from the perspective of microenterprise lending) HMF credit rather than a sequence of quite small loans. In this likely circumstance, the lender has no ability to cut off access to future home credit. Foreclosing on a mortgage if one is taken - typically represents an unattractive option for a series of reasons (discussed in Section II of this article).

In practice, however, solid microfinance lenders have achieved excellent repayment on their HMF portfolios, by applying the same methods used on other microcredits, particularly vigorous and creative servicing methods (as detailed in the next section). Indeed, many MFIs have discovered that their clients repay HMF loans better than their traditional microenterprise credits. This good credit performance parallels the performance of owned-occupied housing loans as the most secure part of the assets of financial institutions and the ballast of the financial systems of advanced industrialized countries.

Thus, microfinance lenders - including NGOs, credit unions, microfinance commercial banks, cooperatives and other popular finance institutions - have largely pioneered HMF. Particularly in contested markets, HMF represents not only a profit centre but a means for cross-selling other products such as savings, remittance services, and other types of credit for these popular finance institutions.

Intriguingly, other types of financial and non-financial institutions have increasingly discovered the low-income home finance market. Mutual La Paz - one of the largest originators of mortgage loans in Bolivia - extended a line of credit to an NGO located in El Alto for a number of years to make HMF loans, and finally decided to enter this business directly. This transition from funding non-depository institutions to direct provision of loans represents a natural entry point for commercial banks and home-finance institutions to low/moderate-income home finance markets.

In El Salvador, an industry of 200 low-income land developers has accounted for the subdivision of 40% of the country's residential lots over the last decade. Many of the largest of these low-income land developers - such as Argoz - extend small credits (around US $1,000) to lot purchasers in order to build small starter units on their new land. In Mexico, Elektra, a large electrical appliance chain, has formed a bank, Group Azteca, that aggressively pursues low/moderate-income consumer finance including building material packages for starter homes.

The opportunities to cross-sell HMF not

only with other financial products but also with the inputs to residential development (eg building lots, construction materials) suggests that this product may develop through strategic business alliances between lenders and land development/building materials firms, not only microfinance and home-finance institutions.

II. Product Design and Characteristics[5]

Product design is a "proximate exercise that balances client demand with the institutional and financial requirements of the lender" (See Daphnis - Chapter 5 - "Elements of Product Design").

The first step in product design involves a market assessment (See Mayada Bayadas, Chapter 4 - "Market Assessment for Housing Microfinance"). The categories of questions to be asked in the household surveys of such a market assessment include: (a) basic information on household income and expenses; (b) business income and cost information for microentreprenuers; (c) conditions and amount of existing informal and formal debt; (d) potential demand for microloans as regards loan size and type, collateral, interest, term; (e) savings; (f) bank and non-bank financial services used by the household; (g) condition of home and including number of people in house, type of home, roof type, kitchen, bathroom, rooms, improvements performed over past five years; and (h) need and potential for home improvement and other real estate investment. The survey method should involve standard sample selection, stratified by client group and geographic area.

Considerable care must be taken in the design of the household survey and analysis of information. For example, HMF lenders have found that families consistently over-state housing needs and understate income. Only questions that ask for specific information on affordable monthly payments and that narrow the types of housing interventions to those affordable to the client group generate useful data for product design.

The market analysis results in estimates of the potential effective demand for various HMF products and, joined with other data, the client's capacity to repay. In general, HMF lenders use affordability ratios similar to those of traditional mortgage finance; housing payments should be no more than 20% to 30% of monthly income, and housing plus other debt payments should be less than 40% of income.

Once the HMF lender has established a range for clients' estimated capacity to pay, the next step involves determining acceptable loans terms, notably the repayment period. Current practice in HMF involves terms ranging from one to ten years, with a two to five year median. Repayment period - often more than payment amount - largely drives credit risk. The windfalls and wipeouts of life in emerging countries means that low/moderate-income households can commit to make regular monthly payments (or weekly or bi-weekly payments, in some cases) only for limited periods, typically far shorter than the term of traditional mortgage finance (ten to 30 years), and strongly resist taking long-term loans. The lower and more informal the household's income, the shorter the repayment period that the family can afford. These short periods – typically two to five years – decrease the ability of households to borrow the large sums necessary for financing a complete house upfront at once. Most low/moderate-income families deal with the unaffordability of financing a complete unit upfront long-term by building their homes progressively over many years and by financing this construction through a series of small loans (i.e. HMF) and from other sources (gifts, remittances, savings clubs, pension funds and worked-related social benefit funds etc.).[6] Thus, the size of the construction and the type of end housing solution produced represent an additional variable in the financial affordability equation for HMF lending.

With the term established, the lender then prices the HMF product. A simplified pricing formula used in microfinance illustrates the process and the issues involved (Daphnis):

$$R = \frac{AE + LL + CF + K - II}{1 - LL}$$

Where[7], as a share of average outstanding portfolio,….:

R = Annualized effective rate of return
AE = Administrative expenses
LL = Loan loss rate
CF = Cost of funds
K = Desired capitalization rate
II = Investment income

[5] This section summarizes the following chapters of the book (Daphnis and Ferguson, eds): (a) Alejandro Escobar and Sally Role Merrill -Chapter 3 – Housing Microfinance – the State of the Practice; (b) Mayada Baydas – Chapter 4 – Market Assessment for Housing Microfinance; (c) Franck Daphnis – Chapter 5 – Elements of Product Design for Housing Microfinance; (d) Kimberly Tilock – Chapter 6 – Construction Assistance and Housing Microfinance; (e) Irene Vance – Chapter 7 – Land and Collateral Issues: The Asset Dimension of Housing Microfinance.

[6] Thus, "housing" for the low/moderate-income majority in emerging countries is an on-going process that cycles through a wide range of steps – lot purchase or invasion, construction of a basic unit, improvement, addition, legal upgrading of rights to the property, improvement of basic services to the neighborhood. In contrast, "housing" for upper middle class of these countries and for most households in advanced industrialized countries consists of a relatively costly product delivered upfront by a sophisticated network of formal-sector institutions (secondary and primary lenders, infrastructure companies, title systems and companies, developers etc.) with this large investment financed long-term. For a discussion of the importance of progressive housing, see Ferguson, Bruce and Jesus Navarrete, "New Approaches to Progressive Housing in Latin America; a Key to Habitat Programs and Policy", in *Habitat International*, London, Pergamon Press, March 2003.

[7] Omitting investment income, "or", for simplicity's sake.

Putting microfinance industry benchmarks (for example, for Latin America) for these variables into this equation results in an annual effective return of around 27% per annum in real terms - see Table 2. As scale, efficiency, and competition in HMF grow, this return and, as a result, interest rates will tend to decline, as they have in countries such as Peru and Bolivia.

Table 2 - Cost, and Estimated and Actual Effective Return for Microfinance in Latin America[8]

Costs (as a percent of average portfolio) and annual return	Value
Administrative expenses (AE)	18.8%
Loan loss provisions (LL)	2.2%
Cost of funds (CF)	4.5%
Capitalization rate (K)	10%[9]
Est. Return = $\frac{(AE + LL + CF + K) - LL}{1 - LL}$	34.1% per year
Actual annual return	36.6% per year
Actual real annual return (less inflation)	27.8% per year

Whether this level of effective return - 27% per annum on average - is low or high depends on one's standard of comparison. Informal lenders - the typical alternative to HMF for low-income households - charge rates of 100%+ per annum. Low-income households pay substantial amounts - on average, 22% per annum - simply to save money (taking into account the charges of financial institutions and organized savings schemes, and the transaction costs of saving such as the saver's transportation and time to make deposits and withdrawals)

Not surprisingly, the real effective return (around 27% on average) necessary to lend small sums to low-income households substantially exceeds that necessary to lend relatively large sums to upper-middle class households secured by a mortgage (i.e. traditional mortgage finance), which typically ranges from 8% to 15% per annum in emerging countries. Hence, many governments hold the perception that microfinance and housing microfinance rates are "high." This perception - which represents a challenge to the spread of microfinance, in general, and to housing microfinance, in particular - is dealt with further in the concluding section of this article.

A new aspect of product design from a microenterprise perspective but one highly familiar to home lenders involves construction assistance (See Kimberly Tilock, Chapter 6 - Construction Assistance and Housing Microfinance). Many HMFs offer construction technical assistance as an integral part of their mission. Many others do not, and subscribe to the MFI industry motto that "money is fungible", and view construction technical assistance ("ta") as an unnecessary cost. Indeed, the evidence to date indicates that construction ta has no impact on loan repayment.

Construction technical assistance, however, carries a number of potential benefits. It can help clients set the dimension of their building and improve the end product. In particular, construction ta can help poor families to focus on improvements that form part of a long-term home upgrade plan rather than the cheapest, most available fix. The reputation of the HMF lender may also depend, to some extent, on the quality of the end product - the house. A highly visible, poorly constructed house could impact the lender negatively. For these reasons, HMF programs funded by the public sector and those of some international donors (eg USAID, Swedish SIDA) typically include construction assistance.

The types of construction assistance include: (a) pre-loan help in construction design, budget development, and client education; and (b) post-loan inspections of the work and help in getting construction materials (eg negotiated discounts with building suppliers). A few MFI lenders (eg Godo Credit Union in Suriname and Grameen Bank in Bangladesh) package their finance with a particular core house product (provided by recommended third parties), thereby ensuring that the household gets a satisfactory home. HMF lenders use various means to secure the staff and human resources for construction ta, including: (a) train loan officers in basic construction budgeting and design; (b) train construction specialists as loan officers; (c) maintain construction specialists in addition to loan officers; and (d) require that households get plans and estimates and other construction ta services from a list of recommended third parties.

A final and crucial factor in HMF product design consists of guarantees and collateral (see Irene Vance; Chapter 5 - "Land and Collateral Issues"). Typically, mortgage liens make little sense for loans of modest amounts. Part of the lack of utility derives from the high cost, barriers to, and – hence - reduced scope for fee-simple title. The high on-going costs of full legal title (high registration fees[10], real property transfer taxes, higher costs of formally-provided basic services, property taxes etc.) and, hence, the ability to secure a mortgage

[8] Source for all figures except capitalization rate: *MicroBanking Bulletin*, Washington, D.C. This publication surveys major microfinance finance institutions worldwide to develop these and other benchmarks. These benchmarks represent averages for over 100 MFIs in for Latin America. However, those for other world regions are very similar, differing generally by less than 1%.

[9] The capitalization rate was estimated by this author.

[10] For example, registering new title costs 4% to 7% of the purchase price in most Mexican states.

frequently far exceed the benefits (the ability to get long-term mortgage finance, which most low/moderate-income households neither qualify for nor want, and somewhat greater security of tenancy). Because of the high costs of formal property title, many households return to informality when they re-sell their property after title regularization programs temporarily formalize them. In addition, many low/moderate-income families settle on marginal and environmentally high-risk areas, often through invasion or purchase of a lot in a clandestine subdivision.

Hence, low/moderate-income households often prefer to hold various forms of para-legal title that provide secure tenure (although not fee simple ownership) for many reasons. The share of informal housing is increasing in some fast-growing emerging countries and the supply of full legal title available, in principle, for mortgage finance is declining.

When a mortgage is taken, its execution is often highly problematic because of: (a) thin to non-existent resale markets for low/moderate-income property; (b) the high costs and long lead times of the foreclosure process - which fails to operate because of legal complexities and the reluctance of police and other authorities to enforce these laws; and (c) the political sensitivity of foreclosing on low-income families. For these and other reasons, it typically makes little sense to require a mortgage for property loans of less than US $4,000, although larger loans can warrant such property liens.

Nonetheless, secure tenure remains quite important for HMF. A household has secure tenure when protected from involuntary removal from the land or residence. Households that lose rights and access to their property are much less likely to repay loans used to purchase, improve, or expand their homes. Land and property experts increasingly recognize secure tenure - as opposed to full legal title - as an achievable goal on which to based urban development policy and private sector products (Payne[11]). Many forms of secure tenure exist. The great variety stems from both traditional forms of property and innovative ones. Many Indonesian households hold traditional rights to property ("adat") rather than the Western ones imported by the Dutch during the colonial era. In Porto Alegre and Recife, Brazil, municipal governments have applied a newly created form of tenure - the "Concession of Real Right to Use" - to provide security for households in regularized urban slums. Rather than register tenure in the public registry, it gives protection from eviction and rights to use for periods of 30 to 50 years. Similarly, in Hyderbad, the "Slum Networking Program" grants residents ten-year licenses to their land. Residents of the informally settled areas of Caracas - which constitute around 60% of residential zones - register "supplemental title" with local municipalities. This para-legal method provides secure tenure but not full legal title.

Instead of mortgage liens, HMF lenders typically join a series of other forms of collateral and guarantees to secure credits. These include: (a) co-signers and other personal guarantees by third parties, who must have the same or superior repayment capacity as the borrower; (b) chattel mortgages; (c) obligatory savings, often for six to 18 months before receiving the loan; (c) assignment of future income (wages); (d) joint liability of a group for the individual's loan ("solidarity groups"); and (e) other assets (eg life insurance policies and pension funds).

Despite the value of conservative lending terms and security/collateral mechanisms, however, assertive servicing methods hold primary importance for the performance of microfinance and HMF portfolios. MFIs typically assign their loan officers lead responsibility for collecting on loans that they have helped originate and remunerate them largely on the basis of loan performance. On average, MFI loan officers manage a portfolio of 360 microcredits, visit each of these borrowers regularly, and visit every borrower that falls into arrears on the day after the loan becomes late. This intensive door-to-door collection and accompanying pre-judicial procedures (eg contacting co-signers etc.) has proved the key to maintaining healthy portfolios in the microfinance industry. On average, microfinance institutions provision 2.2% for loan loss.

Equally critical, these servicing methods - as other techniques used by microfinance lenders - are low cost, and represent a proportionally modest share of the modest monthly loan payment that low/moderate-income families can afford. The cost of collecting and processing one loan payment for MFIs typically averages less than US $5, compared to that of $7 to $8 in the US (even with the immense economies of scale and highly-automated methods typical of US servicing), and $10 to $15[12] for many mortgage lenders in middle-income emerging countries such as Mexico.

Illustration of HMF Product Design; MiBanco in Peru

The experience of Mibanco in Peru with HMF illustrates the product-design and start-up process. MiBanco is a relatively large microfinance institution for Latin America with loan assets in excess of US $120 million. In mid-2000, Mibanco added a housing product, Micasa, in the form of a loan for improvement, expansion, sub-division, rebuilding or replacement of existing housing. After 12 months, MiCasa had 3,000 clients. Four years later as of May 2004, MiBanco had 12,100 housing clients. MiCasa is making a return on the MiCasa loan portfolio of 7% to 9% per annum, resulting in a return on equity of over 20%. Although quite profitable, MiBanco considers its housing product just as important as a tool for cross-selling other services to its clients, including consumer loans and savings products.

Loan size ranges from US $250 to $4,000, with an average of around $1,100. Typically, MiCasa borrowers get a series of short-term

11 See Payne, Geoffrey (ed). 2002. Land, Rights & Innovation. ITDG Publishing. London.

12 For example, it costs SOFOLES in Mexico around $15 to collect and process each mortgage payment.

Table 3 - Characteristics of MiCasa loan terms, origination, and servicing

Characteristic	Description
Eligible uses	Improvement, expansion, subdivision, rebuilding or replacement of an existing dwelling
Interest rate per annum	45% in Peruvian soles
Funding rate per annum	8% in Peruvian soles on demand deposits
Term	Up to five years; average of two years
Collateral/security	7% of loans secured by a mortgage; the remainder mainly join co-signers and other security
Amount	\$250 to \$5,000, with an average of \$1,100. Typically, borrowers get a series of these loans for their home construction, with lower interest rates and larger amounts on each sequel credit
Loans per loan officer	Each loan officer manages 350 to 400 microcredits, has the responsibility for loan approval, visits each borrower monthly, and gets paid on a commission basis largely based on loan repayment.
Loan methods and technology	Credit scoring, approval in three days for first loan, payment over the Internet

loans for building and improving their home – each somewhat larger and at a somewhat lower interest rate than the last one. On average, interest rates are currently 45% in the Peruvian currency ("soles") – down from 55% a year ago due to competition and increased efficiency (discussed in Section IV below), while MiBanco accesses funds in domestic currency at 8% (with inflation running at around 4%) to fund these HMF credits.

MiBanco takes a mortgage lien on only about 7% of these loans (the larger ones) and secures the remainder with co-signers and other forms of guarantees and collateral. Loan terms are as long as five years, but many households prefer to pay off sooner and the average loan goes for two years. One-month arrears are 1.8%, and non-payment is zero as low-income families are, generally, extremely conservative about preserving their home. Ninety percent of borrowers make less than US \$250 per month, and about half are women.

With 29 agencies located mostly in Lima, MiBanco uses a sales force of 450 loan officers, who typically manage a portfolio of around 350-400 microloans each. The loan officer has the responsibility of approving the loan, is expected to visit each borrower regularly and immediately when the borrower has a repayment problem, and gets paid largely on a commission basis dependent on loan performance. Loan methods include credit scoring, payment over the Internet, one disbursement for each credit, and loan approval for a housing credit typically takes three days.

III. Is Housing Microfinance relevant for the US and other advanced industrialized countries?[13]

With the growth of HMF in emerging countries, interest has arisen in the relevance of this practice in the United States and other advanced, industrialized countries.

Prima face, the US housing and finance markets present a strikingly different context (See Kenneth Temkin with Bruce Ferguson, Chapter 8 - "The Context for Housing Microfinance in the US".) The US enjoys extremely efficient capital markets with immense pools of long-term savings, while most emerging countries have little to none. Competition drives lenders into new market niches in the US, while oligopolies and shortage of capital tend to result in little to no credit in emerging countries for many markets and, in particular, for limited long-term mortgage credit (with only short-term funding available). Real interest rates are relatively low in the US (3% to 5% per annum) compared to emerging countries (8% to 15% per annum).

These advantages have allowed US mortgage lending to undergo a "quiet revolution" over the last fifteen years by reaching a substantially greater share of low/moderate-income households, and increasing homeownership from 64% in 1993 to 67.5% in 2000. Lending in low-income neighborhoods and to minorities registered substantial increases than far outpaced those to mainstream communities and while households.

Although the favorable finance terms (in

[13] This section summarizes the following book chapters: (a) Chapter 8 - Kenneth Temkin with Bruce Ferguson – The Context for Housing Microfinance in the United States; (b) Chapter 9 – Kil Huh and Lopa Purohit Kolluri, The Market for Housing Microfinance in the United States; (c) Chapter 10 – Bruce Ferguson and Michael Marez, Expand Entry level Housing: A Key Lesson from Developing Countries for the United States; and (d) Chapter 11 – Sohini Sarkar and Katharine W. McKee, The Future of Housing Microfinance in the United States.

particular, low interest rates) of much of the 1990s played a role, changes in the US mortgage finance system also contributed to this success. Federal legislation (CRA and FHEFSSA) put pressure on first-tier lenders and Government-Sponsored Entities (Fannie Mae, Freddie Mac, Federal Home Loan Banks) in the secondary market to serve lower-income and minority borrowers. In turn, these financial institutions have made their underwriting standards more flexible and created new mortgage products to meet this challenge. Automation (credit scoring and automated underwriting) has helped reduce costs.

Thus, the US mortgage system has reached down market without HMF. However, subprime mortgage lending to low/moderate-income families increased at much faster rates during the same period than mainstream lending. A substantial share of these subprime loans carry abusive legal and/or financial terms. The rapid growth and large unsatisfied demand represented by subprime lending is one indication that further innovation - perhaps products such as HMF - may have a place in the US market.

Kil Huh and Lopa Kolluri (Chapter 9 - “The Market for Housing Microfinance in the US”) broadly survey this potential. They make the case that HMF may have usefulness for three market niches: rehabilitation, progressive housing, and rental housing. Few lenders are willing to offer rehab loans in low/moderate-income communities, while 14% of low-income households live in overcrowded or structurally inadequate units. Particularly along the US border with Mexico, progressive housing may offer a means of increasing homeownership and HMF - modified to US realities - could play a corresponding role. Finally, two-thirds of rental units are owned by “mom and pop” landlords, which could benefit from HMF.

Bruce Ferguson and Michael Marez (Chapter 10 - “Expand Entry-Level Housing: A Key Lesson from Developing Countries for the US”) investigate more fully the use of HMF in improving informal subdivisions (colonias) along the US border with Mexico and how to move beyond the traditional approaches to affordable housing that have worked in the past but have increasingly less relevance to the future of US homeownership. Recent increases in US homeownership have come largely from improved financing (relatively low interest rates joined and more flexible underwriting) joined with the entry of women into the workplace that has helped prop up household income. However, these advantages have reached their limit. Meanwhile, as in Western Europe, the cost of US housing has risen rapidly, far outstripping real household incomes. The ratio of median house price to household income has risen from 2 in the 1950s to over 3 by 2001. Regionally and in some cities, spiraling costs have already reduced already-low homeownership rates (from 1970 to 2000, homeownership declined from 49.2% to 47.9% in Los Angeles, 36.3% to 34.7% in New York, and 51.4% to 49.0% in San Francisco). A deteriorating income distribution contributes fundamentally to these housing problems. Average after-tax real income fell for the bottom three quintiles of the population from 1977 to 1999, and absolute poverty levels have increased since 2000. In contrast to many other advanced industrialized countries - whose population is stagnant or growing slowly - US population is projected to virtually double from 281,000,000 in 2000 to 550,000,000 in 2050, due to higher rates of native-born fertility and immigration. While need has grown, the involvement of the federal government and the real level of subsidies available for affordable housing has plummeted since the large-scale production programs of the 1970s, and continues to decline.

In the current context, the US approach to affordable housing over the last thirty years - large per-unit subsidies for a small number of units produced by a complicated, time-consuming delivery system - has less relevance. Instead, the approach of many emerging countries such as Mexico - massive production of much less costly entry-level new units - has greater applicability. However, although the US development industry produced entry-level units on a massive scale during the two decades after World War II, the American housing-production system is now headed in the other direction - much larger and more costly units unaffordable to most of the bottom three quintiles of the population. Different types of housing (both physical and legal tenure) and methods of housing production and accompanying financial innovation - perhaps HMF - are necessary to deal with the challenges of US affordable housing in this new situation.

The problem and possible solutions for affordable housing along the US border with Mexico offer a case in point. A substantial population (600,000 to a million depending on definition) now live in informal subdivisions created without basic services (i.e. no water, sanitation or roads) largely in the 26 counties in Texas, Arizona, New Mexico, and - to a lesser extent - California, along the border with Mexico. These “colonias” bear many similarities to Latin American informal subdivisions widespread - for example -throughout Mexico, and arise from the same basic conditions: a large and rapidly-growing low-income population (40% are low-income in many US counties along the Border) joined with negligible production of housing affordable for this group. Housing microfinance - adapted to US conditions - offers a logical instrument for improving these existing colonias. The production of core expandable units (i.e. a small unit programmed to be expanded vertically and horizontally to triple the original size, which is a housing product widely supported by government and produced by the private-sector in much of Latin America) would offer a means for homeownership for many low-income households that would otherwise move to colonias and for massive production. Such units cost around US $40,000 and would be affordable to a household earning 1.5 minimum wages (i.e. one spouse working full time and one spouse working half time.

Sohini Sarkar and Kate McKee (Chapter 11 - “The Future of Housing Microfinance in the United States”) examine how “the mainstream housing finance system in the US fails to address the needs of a large section of the population.” One sign is the development of a “dual mortgage delivery system" (for prime and subprime markets) in which "new types of lending organizations provide distinctly different mortgage products to lower-income markets than those commonly offered in higher-income markets." Rehabilitation, in particular, has great potential as a housing solution adapted to the needs of lower-income households and, possibly, for HMF in the US $623 billion is needed in rehab needed nationwide. The rental housing stock, one-third of which dates to before 1950 and the bulk of which is owned by small landlords could benefit greatly from the availability of an HMF product. The creation of accessory units in existing homes offers the lowest cost form of new housing production and could also be financed, in part, by HMF. Small credits to would-be renters for first-month's rent and security deposits may also be an HMF niche.

The design of an HMF product in the US would reflect different economic and social conditions. As opposed to $300 to $5,000 in emerging countries, the loan size would be $5,000 to $15,000 in the US Eligible uses for the funds would include not only construction work but also the finance of sums (first-month's rent, security deposit) necessary to access other public and private sources of housing finance and for housing solutions. Compulsory savings could play a useful role in qualifying households, as it does for MFIs in emerging countries. Underwriting standards would be more flexible and creative than those currently used for the affordable housing products of mainstream primary and secondary mortgage lenders. Technical assistance could include not just help with construction planning and budgeting, but also homeownership and credit counseling. Thus, HMF appears to have "a tangible niche" in the US housing finance system.

IV. Taking HMF to a scale relevant to government policy and to solving national shelter and settlement problems[14]

As the previous sections of this article document, HMF has become quite relevant to the microfinance industry in emerging countries over the last five years. However, this practice must vastly increase in scale to serve a significant share of effective demand of low/moderate-income households and to become relevant to government policy and to improving national shelter and settlement conditions.

Mohini Malhotra (Chapter 12 - "Taking Housing Microfinance to Scale; Advice for Governments and Donors") investigates this topic. This chapter makes a number of broad recommendations to government policy makers and donors, which are selectively expanded on below:

- Macroeconomic stability and sound financial sector policy remain important preconditions for the development of sustainable financial institutions, and financial products of all sorts, including HMF.

- Avoid premature and inappropriate regulation, especially caps on interest rates. As calculated in Section II above, the effective return necessary to make microfinance work averages around 27% in real terms. This level compares very favorably to the rates (typically 100%+) of alternative informal credit (i.e. local moneylenders) available to most low/moderate-income households. However, governments are likely to compare the HMF rate to that for large long-term mortgage loans to the middle-class and above - a very different business and, hence, a highly inappropriate contrast. Some governments - such as that of Colombia via a decision of its Supreme Court - have fallen into the temptation to place ceilings on all "housing" interest rates, a measure which tends to cripple the development of home credit for low/moderate-income families.

- Recognize that progressive building is the paradigm for how low-income and many moderate-income people get housing, and set policies and regulations in accordance. Developers and financial institutions with a strong economic interest in providing large complete units as "social housing" frequently have a strong influence on government policy and programs. This small constellation of powerful actors often favors a focus on creation of secondary mortgage markets and strengthening of title registration programs and foreclosure laws. These are worthwhile goals. In order to reach the low/moderate-income majority, however government must also pay attention to the mechanisms necessary to strengthen and guide progressive housing - such as housing microfinance.

- Do not subsidize interest rates to the poor, as this will constrain shelter finance provision. The evolution of HMF is likely to differ strongly from that of microenterprise finance in this respect. The microenterprise finance industry grew out of and has entirely replaced highly subsidized programs for integrated rural development and soft agricultural credit. In contrast, housing subsidies of some sort are highly unlikely to disappear all together. Although fiscal constraints have resulted in scaling back of housing subsidies in many advanced industrialized as well as emerging countries over the last twenty years, virtually no government has left this business completely. Portable homeownership vouchers - often called "direct demand subsidies" internationally - are the most financially transparent form of subvention and, in principle, the easiest to join with credit finance. The structure of direct demand subsidy programs aimed at moderate and middle-income families depends on leveraging this homeownership voucher

[14] This concluding section summarizes Chapter 12, Mohini Malhotra - "Taking Housing Microfinance to Scale; Advice for Governments and Donors", and adds information on MiBanco's HMF product based on interviews with Jesus Ferryra, the manager of the MiCasa product at MiBanco.

with a market-rate loan and the household's down payment. In principle, direct demand subsidies could complement HMF, also, for low-cost solutions. In practice, microfinance lenders - who are strongly averse to dealing with subsidies of any type given this industry's struggle to replace subsidies with credit - may prove a barrier (along with other technical problems) to joining HMF with subsidies.

- Select a few financial institutions with proven track record with which to partner and demonstrate the feasibility and profitability of HMF. As Section II makes clear, HMF is a quite different business from that of mortgage finance to the middle class, requiring different terms, underwriting, servicing, marketing, and collateral/guarantees. It is also different - although less so - from microenterprise finance. Disseminating HMF means, in effect, teaching financial institutions this new business. Starting with a few strong institutions to demonstrate success is arguably the best strategy.

- Similarly, provide funds not only for providing medium-term liquidity to on-lend, but also for capacity building of these key institutions so that they can learn the HMF business

- Promote research into best practice and dissemination. HMF is still a recent phenomenon and research into best practice is critical. As a hybrid between "housing", "housing finance", and "microfinance", however, HMF tends to fall in between the boxes of the organization charts of both donors and governments. As a result, it is currently difficult to organize and conduct good research on this topic. The optimal research team for HMF would join low/moderate-income housing experts with financial specialists (with expertise in both mortgage and microfinance). No donor or government so far, however, has institutionalized such cooperation.

While this advice for donors and governments is important, the most lessons address the concerns of individual financial institutions engaged in HMF. Here, MiBanco's most recent innovations aimed at ramping up its HMF product provide useful insights.

Over the last year, MiBanco's HMF product (MiCasa) has undergone three important changes that throw light on how HMF can reach scale. First, interest rates have declined substantially over the last year (from 55% to 45% per annum in Peruvian soles) and are set to decline further. When MiBanco launched its HMF product in 2000 until last year, this MFI enjoyed considerable market power. No other financial institutions were aggressively competing in its geographic areas for microcredit, in general, and none for HMF, in particular. With middle and upper-income lending markets largely saturated and the profitability of lending to the low/moderate-income majority demonstrated, however, one of the largest Peruvian commercial banks is opening microfinance branches nearby many of MiBanco's branches. MiBanco has had to drop rates and increase efficiency on its products to compete. In turn, these improvements broaden the effective demand for its HMF product.

Second, MiBanco has established strategic business alliances to market HMF with a variety of building-materials suppliers. In essence, MiBanco finances the purchase by households of the products of these suppliers at competitive rates. These companies include the largest cement producer in Peru, a roof manufacturer, an association of lumber suppliers and carpenters, and hardware stores. These alliances are likely to evolve into financing packages of building materials and labor, and potentially represent a quantitative leap in the ability of MiBanco to expand its HMF products.

Third, MiBanco has begun to issue debt on capital markets to fund the expansion of its portfolio. So far, this MFI bank has issued US $25 million over the last 18 months (in corporate debt secured by its balance sheet), with more issues planned. Buyers of this debt include local pension funds, insurance companies, and commercial banks.

Hence, the experience of MiCasa suggests three additional lessons for ramping up HMF: (a) improve efficiency and achieve more competitive interest rates; while programs can help teach the business of HMF, only heightened competition spurred by new entrants into the market is likely to lower interest rates on a sustainable basis; caps on interest rates, however, are likely to abort the establishment of an HMF market and hamper the increased competition and efficiency necessary to eventually bring down interest rates; (b) form strategic alliances with building materials suppliers and other firms involved in residential development in order to cross-sell HMF credit; and (c) diversify funding to local capital markets; in this respect, on-balance corporate debt or revenue bond are perhaps most useful in accessing funding because of the small amounts, relatively short term, and diversity of HMF loans, while securitization may be less appropriate.