Promoting Private Sector Participation in Low-Income Housing Finance

Diagnosis and Policy Recommendations for Latin America and the Caribbean

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Contents

Acronyms

BHN	Banco Hipotecario Nacional
BANHVI	Banco Hipotecario de la Vivienda
CEPAL	Comisión Económica para la América Latina y el Caribe UN Economic Commission for Latin America and the Caribbean
FDIC	Federal Deposit Insurance Corporation
FHA	Federal Housing Administration
GDP	Gross Domestic Product
GNP	Gross National Product
IFC	International Finance Corporation
MBS	Mortgage Backed Securities
MIF	Multilateral Investment Fund
MIGA	Multilateral Investment Guarantee Agency
MLA	Multilateral Lending Agencies
NGO	Non Governmental Organization
OECD	Organization for Economic Cooperation and Development
OPIC	Overseas Private Investment Corporation
ROE	Return on Equity
SHF	Sociedad Hipotecaria Federal
SIUBEN	Sistema Único de Beneficiarios
SOFOLES	Sociedades Financieras de Objeto Limitado
USAID US	Agency for International Development
UVR	Unidad de Valor Real
VAT	Value Added Tax

Introduction

The population of Latin America is poorly housed; although average housing indicators for the region are not far from world middle-income countries with 220 houses per 1,000 inhabitants, they mask wider differences among segments of the population. Out of the estimated 127 million households in the year 2005 in Latin America and the Caribbean, at least 50 million faced housing problems, with more than half of them doubling up with other families and the rest living in deficient housing units. Today the region's housing sector faces a double challenge: to provide housing for families facing housing problems, which requires the construction of at least 30 million new units and improvements to 20 million existing homes, and to produce sufficient homes for the nearly 3 million newly forming households each year. Unfortunately, Latin American economies have proven incapable of handling this challenge; at best the formal sector of the economy has produced only 30% of the units needed for existing households and, with few exceptions, are producing only a slightly higher percentage of the houses needed for newly forming households.[1] Furthermore, formal construction and financing operations are mostly limited to satisfy the needs of high and middle-income families.

Many factors contribute to this state of affairs, including the historic sluggish growth of the Latin American economies that affects the growth of the population's income, a situation worsened by a persistent unequal distribution of income. Cross country data indicates that housing conditions improve as development levels increase[2]; however problems related to the housing sector have a significant bearing on a country's housing situation. For example, some countries have high incomes, yet still experience deficient housing conditions, a situation mostly explained by poor housing policies and misguided public housing programs.[3] Escalating urban land costs explain the poor performance of the housing sector in some countries.

In spite of the significant contribution of the housing sector to wealth accumulation and growing home-ownership rates in Latin America,[4] formal mortgage financing plays a small part in the process in most countries, ranging from less than 2% of GNP in Brazil to almost 30% in Panama.[5] These figures sharply contrast those in Europe and the United States, which are 49% and 71% of GNP respectively. In most countries, mortgages comprise less than a

[1] The informal sector accounts for the majority of the difference. The informal production of houses is the result of a varied set of strategies pursued by the population to secure a shelter, ranging from the rightful owner of a lot erecting a house outside municipal supervision to vast invasions of public lands by organized groups, with all solutions involving the energy and ingenuity of the families with little or no help from the formal sector of society. At the individual level, informally produced houses are permanently incomplete and provide only a portion of the services of a finished house. The pervasiveness of such housing structures has created the prevailing physical image of the Latin American city of the turn of the century, a vast array of informal settlements with varying degrees of consolidation surrounding pockets of formal residential neighbourhoods and business districts.

[2] Angel, S. 2002 *Housing Policy Matters*, New York, Sage Publications.

[3] The United Nations Economic Commission for Latin America and the Caribbean (ECLAC), 2000. *Consensos Urbanos. Aportes del Plan de Acción Regional de América Latina y el Caribe sobre Asentamientos Humanos*. Santiago, Chile

[4] The home is the main economic asset of most families. In the United States, home equity makes up approximately 43 percent of middle class wealth (households with net worth of $100,000 to $250,000), with less than 15 percent invested in the stock market. In well-functioning capital markets, homeowners utilize home equity for different purposes, including home improvement projects and education.

[5] In developed countries, housing construction accounts for about 5 to 10 percent of GDP. In countries such as Chile and Ecuador, public spending on housing has been instrumental in reviving the economy, due to the direct and significant impact of expanded housing production on employment. A discussion of the economic relevance of the housing sector can be found in *Housing Policy Matters,* S. Angel, 2002, New York: Sage, Chapter 1.

25% of all lending instruments, while the corresponding figure in the United States is over 80%. The underdevelopment of this financing tool in the region can be attributed in part to the overall risks involved in mortgage lending and the lack of medium and long-term benchmarks to effectively price mortgages in most countries.

Almost half of the Latin American population lives on an income of less that two dollars a day, while their sources of income, which come mostly from informal activities, are sporadic and difficult to document; this generates a large *credit risk* for mortgage lenders in Latin America.[6] Many experts in the region agree that the most significant factor preventing an increased participation of mortgage financing is the *collateral risk,* originating from the hurdles encountered by lenders in executing guarantees. In cases of loan defaults, the legal protection granted to homeowners, complex repossession procedures, and judiciary inefficiencies complicate the recuperation of the loans, which can take between one and three years to complete and consumes between one fourth and one third of the value of the debt.[7]

Macroeconomic instability has been endemic in Latin America and the source of two significant risks associated to the low development of mortgage financing: *interest rate risk* and *term mismatch risk*. Fluctuating interest rates are a serious impediment for households on a fixed income in qualifying for mortgage-based loan. Families are not supposed to spend more than 30% of their monthly income, thus lenders are reluctant to offer loans to these families since during macroeconomic turmoil, real salaries tend to decrease and they cannot absorb the shocks of interest rates hikes. Macroeconomic instability also introduces term mismatch risk for lenders as volatility discourages long-term savings, which forces lenders to fund long-term loans with short-term deposits. Recently, the governments of several countries in the region have chosen a prudent and consistent fiscal discipline and introduced solid government debt management policies that encourage local currency financing and local capital market development. Due to these developments, as well as compliance with the Basel II Accords, banks are having better opportunities for long-term financing of primary and secondary mortgage lending for housing.

Greater development of the financial markets must be accompanied by reforms on land titling and registration systems and improvements in the mechanisms to execute guarantees that mitigate the *collateral risk* faced by lenders, a significant barrier to expand the role of mortgage financing in improving housing conditions in the region. Also lenders need to diversify their lending products to cater to larger segments of the population (for instance, expand micro financing for home improvement and incremental construction) and develop efficient methods to document incomes and constitute guarantees.

The present document explores viable solutions to mitigate the impact of two of the four risks discussed above that are preventing private lenders from expanding their involvement in housing finance in selected countries of Latin America and the Caribbean: commercial and collateral risk. The analysis adopts the investors' points of view and concerns the following countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Trinidad and Tobago, Uruguay, and Venezuela. It is based on available housing diagnostics and studies in the region, and complemented with information gathered by the consultants from public sources and correspondence with appropriate regulators and national statistical offices. This analysis provides basis for the policy and program recommendations to support a more effective, nonbiased housing financing framework in Latin America and the Caribbean

[6] However, many of these families devote a significant portion of their income to obtaining a home, building the dwellings by themselves or with community help, with little or no access to financing.

[7] Galindo, A. and Lora, E. 2004. Housing Finance in Latin American: Time to Build a Better Market. IDEA (4) May-August. Inter-American Development Bank, Research Department. Washington, D.C.

Lending for Housing in Latin America: A Regional Overview

Housing Sector Outcomes and Housing Needs

In Latin America, home ownership averaged 75% in 2004; however, these figures are misleading as the definition of a "home" often includes informal dwellings and mere shelters, which generally provide a small portion of the services offered by a full house that complies with all land use and construction standards. Housing needs are extensive in the countries reviewed in this document; however, comparisons are difficult as each country has specific definitions of housing needs. The most widely used are: comparisons of housing stock to household numbers and assessments of housing stock quality, in terms of access to potable water and sewerage, roads, and street lighting, and on the basis of the durability of the materials used in the floor, roof, and walls. Commonly, housing needs are divided into "quantitative" needs, defined as the number of extra dwellings needed to house all households in an individual house, and "qualitative" needs, which identify the number of dwellings in need of improvement in a given country or city. The origins of housing deficiencies have common features across the region such as: migratory movements from rural areas; increasing housing demand in cities due to population growth; lack of adequate infrastructure provision; and the inability of governments to provide efficient responses to such deficiencies by facilitating residential land access to all households, supporting incremental house construction, legalizing informal settlements, and granting direct subsidies. Table 1.1 displays the evolution of the housing needs for certain countries, highlighting, when appropriate, the qualitative and quantitative problems.

Quantitative and qualitative housing needs require different policy solutions. Quantitative needs are primarily the result of demographic growth, urbanization, and insufficient housing supply due to a poor performance of the housing sector or the government's incapacity to fill the gaps between supply and demand. Challenges in improving the performance of the housing sector vary from country to country and include: macroeconomic performance (high inflation, volatility); the development attained by the financial sector; deficiencies in the housing policy environment; and the ineffective use of public resources.

Concerning housing policy, the experiences of many countries lead to a similar conclusion: government programs that build and distribute finished houses to low-income households supply a limited number of quality homes to a few lucky families, while leaving the majority of households unassisted. Even low-standard site-and-services programs, which were created to expand the coverage of governmental housing programs, have proven incapable of reaching all needy families. Government-sponsored housing finance mechanisms, which use resources from labor taxes to subsidize loans, are unsustainable and often mistargeted (many times missing those families that are most in need of the subsidies.) New approaches to housing policy focus on facilitating the functioning of housing markets, fundamentally land, financing, and construction materials.

The qualitative deficit is worsened by poor maintenance of the existing housing stock, along with low construction quality and a growing number of houses built incrementally. Most low-income households live in informal settlements and work in the informal sector with little or no access to formal credit to buy a complete house or upgrade their existing dwelling; thus they seek incremental housing solutions, relying on their own savings and/or microfinance institutions. In order to cut costs, these families rely on self-help, community assistance or informal contractors to build their houses. This type of self-construction often fails to meet minimum safety requirements for construction as the materials used are low quality and dwellings are often built in locations lacking basic infrastructure such as electricity, water, sanitation, or transportation. Housing policies should focus on improving the quality of the existing housing stock since these homes may be used for several generations.

Table 1.1 LAC Housing Needs

Country	Quantitative	Qualitative	Total	Percent of total households
Argentina	900,000	1,700,000	2,600,000	26
Belize	192,840	240,000	432,840	
Bolivia	103,600	It was estimated to affect 61% of the households	N/A	61
Brazil	N/A	N/A	6,660,000	16.1
Chile	206,546	336,996	543,542	13.9
Colombia	1,834,613	2,054,639	3,889,252	26
Costa Rica	28,855	146,378	170,223	13
Dominican Republic	66,000	534,000	600,000	42
El Salvador	50,400	579,600	630,000	37
Guatemala	576,000	611,495	1,187,495	
Honduras	300,000	430,000	730,000	54
Mexico	2,500,000	1,800,000	4,300,000	
Nicaragua	500,000	250,000	750,000	72
Panama	192,840	…	192,840	25
Peru	1,190,000 – 1,890,000	510,000 – 810,000	1,700,000 – 2,700,000	20
Trinidad and Tobago	48,115	N/A	48,115	N/A
Uruguay	80,000	N/A	80,000	N/A
Venezuela	1,800,000	1,100,000	2,900,000	56

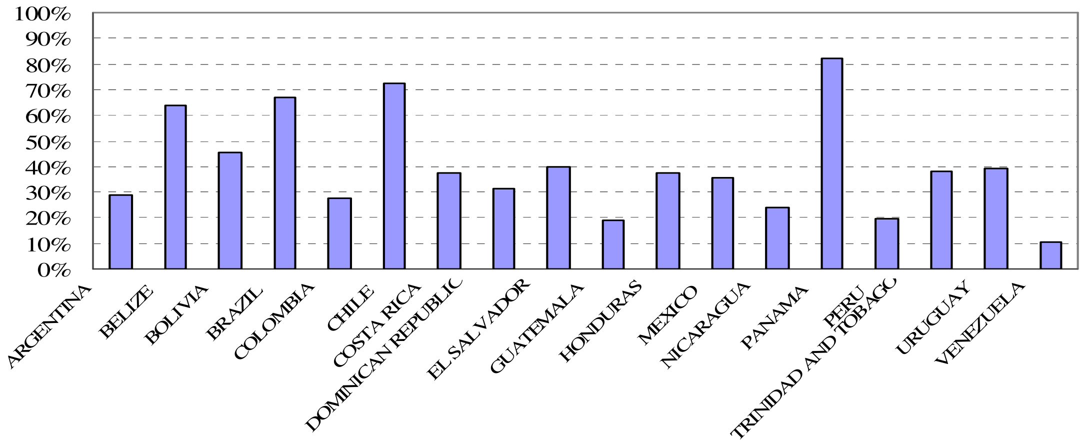
Note: Data taken from different publications; they are the latest data available and % of total households was not always provided in the publication, thus it was calculated by Cohen and Co.
Source: http://www.titularizadora.com/esp/Titularizacion/Documentos/DocumentoCompletoLatinoamerica.pdf , National Housing Ministries and National Statistical Offices.

Numerous governments recognize the need to mobilize the resources and resourcefulness of the private sector (including household savings and sweat equity). They try to induce private entrepreneurs and civil society organizations to handle housing production and financing for all population segments, using what is known as the "*enabling markets approach*" (see also Chapter 2). In addition, they recognize the need to have a stable regulatory framework to develop mortgage housing financing, which most countries reviewed in this study have lacked. Policy makers need to acknowledge that it is difficult to attract private financing (local or foreign) to the housing sector, as investors or lenders look at their housing investment returns (mortgage financing) under risk scenarios that place a premium on a stable framework. A suitable housing policy framework places the State in the role of facilitator and enabler of housing markets addressing various aspects that inhibit lenders in offering mortgage financing such as: stable macroeconomic policies; more efficient foreclosure legislation; stricter requirements for quality and safety of low income housing construction; more competitive and innovative construction and housing development industries; a reliable concession legislation to allow privatization of public infrastructure providers (water, electricity, transport); and reforms in the banking and financial sector.

The Banking and Financial System

The banking and financial systems in Latin America and the Caribbean offer many opportunities for improvement and expansion. The ratio between total credit and GDP (Table 1.2 and Figure 1.2) as a measure of the banks' penetration into the economy is generally around 30%-40% (even lower in countries such as Guatemala), with the exception of Belize, Brazil, Chile, and Panama, where the ratio is greater than 60%. The results in these countries confirm the upside potential in developing credit activities. The ratio of non-performing loans to total credit decreased from 2002 to 2005, even in problematic countries such as Bolivia, Argentina, Guatemala, and Honduras, indicating the positive effect of the banks' new credit policies and the need for further developments.

Figure 1.2 Domestic Credit /GDP Ratio (2004)



Source: CEPAL.

Table 1.2 Domestic Credit/GDP Ratio (in percents)

	2000	2001	2002	2003	2004
Argentina	32.8	32.9	41.5	34.5	29.1
Belize	45.6	50.7	51.4	57.2	63.8
Bolivia	61.3	58.6	55.1	52.6	45.4
Brazil	65.5	66.4	64.7	64.4	67.0
Colombia	23.5	25.4	27.2	27.3	27.6
Chile	66.6	68.9	70.8	72.2	72.4
Costa Rica	24.3	28.0	32.0	34.2	37.4
Dominican Republic	33.1	35.4	38.6	41.3	31.3
El Salvador	40.4	42.6	38.5	38.2	39.7
Guatemala	19.8	19.6	18.7	18.5	19.2
Honduras	33.4	35.3	35.6	36.3	37.7
Mexico	37.0	37.5	36.6	36.6	35.5
Nicaragua	29.3	24.3	19.3	21.3	23.8
Panama	95.3	99.1	92.8	86.2	82.4
Peru	27.1	26.4	25.0	22.3	19.4
Trinidad and Tobago	46.4	47.3	49.5	43.6	38.0
Uruguay	53.7	55.7	68.5	54.5	39.2
Venezuela	11.8	12.6	11.5	10.0	10.5

Source: CEPAL

This overall improvement is also assessable by examining the return on equity (ROE) of the banking system in Table 1.3, while Tables 1.4, 1.5 and 1.6 further exemplify the increased soundness of the Latin America banking system. As of December 2005, the adequacy of regulatory capital to risk weighted assets in Latin America was averaging about 16%, a figure similar to banks in emerging European countries and higher than in countries such as Japan, Australia, and the United States (Table 1.4). At the same time, the ratios of non-performing loans to total loans continued to decrease in most countries, except Brazil and Honduras. As of March 2006 the ratio of non-performing loans to total loans continued this trend, aside from Bolivia, Colombia, Ecuador, and Dominican Republic, which experienced slight increases. This data compares favorably to some emerging European countries (Table 1.5), as well as with the average LAC 18 countries, but still lags behind major industrial countries. Banks' provisions to non-performing loans are more than adequate in the countries studied, except for Bolivia, Nicaragua, Uruguay, and Peru (Table 1.6).

Table 1.3 ROE of Banking System in Selected LAC

Bank Return on Equity (in percents)	2001	2002	2003	2004	2005	2006
Argentina	-0.2	-59.2	-22.7	-4.2	7.1	14.0
Belize	…	…	…	…	…	…
Bolivia	-4.1	0.6	2.7	-1.2	4.2	9.5
Brazil	-1.2	21.8	17.0	18.8	22.8	24.5
Chile	17.7	14.4	16.7	16.7	17.9	19.2
Colombia	1.1	9.6	16.9	23.2	22.5	25.9
Costa Rica	18.7	17.1	19.5	20.7	25.0	…
Dominican Republic	21.5	23.1	-0.1	21.3	19.6	18.3
El Salvador	10.7	12.2	11.5	10.9	11.8	13.3
Guatemala	…	…	…	…	…	…
Honduras	8.4	8.2	11.8	14.9	…	…
Mexico	8.6	-10.4	14.2	13.0	19.5	19.0
Nicaragua	28.7	23.9	29.2	34.9	29.5	…
Panama	…	…	16.9	16.7	15.7	18.5
Peru	4.3	14.3	7.7	19.4	24.3	…
Trinidad and Tobago	…	…	…	…	…	…
Uruguay	…	…	…	…	…	…
Venezuela	20.3	35.6	44.0	45.2	32.6	27.4
Average LAC 18	10.3	8.6	13.2	17.9	19.4	19.0
Average Emerging Europe*	6.6	8.6	13.3	15.0	16.5	15.2
Australia	20.1	20.2	24.2	22.8	25.5	…
Canada	13.9	9.3	14.7	16.7	14.9	…
Japan	-12.7	-17.9	-2.9	4.3	12.6	…
United States	13.0	14.1	15.0	13.2	12.7	13.1

Source: IMF Global Financial Stability Report, 2006.

Table 1.4 Bank Regulatory Capital to Risk-Weighted Assets (in percents)

	2001	2002	2003	2004	2005	2006
Argentina	…	…	…	…	…	…
Belize	…	…	…	…	…	…
Bolivia	14.3	16.1	15.3	14.9	14.6	14.5
Brazil	14.8	16.6	18.9	17.3	17.4	…
Chile	12.7	14.0	14.1	13.6	13.0	13.2
Colombia	13.0	12.6	13.1	13.8	13.5	14.2
Costa Rica	15.1	15.8	16.5	18.1	15.9	…
Dominican Republic	11.8	12.0	8.9	12.9	12.5	13.6
El Salvador	11.8	12.2	12.8	13.4	13.5	13.5
Guatemala	…	…	…	…	…	…
Honduras	12.7	12.9	13.0	14.5	14.6	…
Mexico	13.9	15.5	14.2	14.1	14.3	16.0
Nicaragua	16.4	18.0	14.2	14.3	14.6	…
Panama	14.0	17.1	17.6	17.8	16.3	17.2
Peru	12.8	12.5	13.3	14.0	12.0	13.4
Trinidad and Tobago	…	…	…	…	…	…
Uruguay	…	…	…	28.9	30.7	…
Venezuela	17.7	20.5	25.1	19.2	15.5	15.4
Average LAC 18	13.9	15.1	15.2	16.2	15.6	14.6
Average Western Europe	11.91	12.16	13.05	13.04	12.84	…
Average Emerging Europe	19.4	19.1	18.7	17.5	16.2	16.5
Australia	10.4	9.6	10.0	10.4	10.3	…
Canada	12.3	12.4	13.4	13.3	12.9	13.0
Japan	10.8	9.4	11.1	11.6	…	…

United States	12.9	13.0	13.0	13.2	13.0	13.1

Source: IMF Global Financial Stability Report 2006

Table 1.5 Bank Non-Performing Loans to Total Loans (in percents)

	2001	2002	2003	2004	2005	2006
Argentina	13.1	18.1	17.7	10.7	5.2	4.7
Belize	…	…	…	…	…	…
Bolivia	16.2	17.6	16.7	14.0	11.2	12.1
Brazil	5.6	4.8	4.8	3.8	4.4	…
Chile	1.6	1.8	1.6	1.2	0.9	0.9
Colombia	9.7	8.7	6.8	3.3	2.7	3.0
Costa Rica	2.4	3.2	1.7	2.0	1.5	…
Dominican Republic	2.6	4.9	8.7	7.3	5.9	6.5
El Salvador	4.3	15.8	12.3	12.0	12.0	…
Guatemala	…	…	…	…	…	…
Honduras	11.4	11.3	8.7	6.4	6.6	…
Mexico	5.1	4.6	3.2	2.5	1.8	1.7
Nicaragua	9.3	12.6	12.7	9.3	8.0	…
Panama	2.8	3.5	2.7	1.8	1.8	1.7
Peru	9.0	7.6	5.8	3.7	2.1	2.1
Trinidad and Tobago	…	…	…	…	…	…
Uruguay	12.4	37.2	9.4	3.8	2.7	1.7
Venezuela	7.0	9.2	7.7	2.8	1.2	1.4
Average LAC 18	7.5	10.7	8.0	5.4	4.5	3.6
Average Western Europe	2.5	2.5	2.4	2.1	2	…
Average Emerging Europe	9.4	8.1	7.7	6.9	5.7	5.0
Australia	0.6	0.4	0.3	0.2	0.2	…
Canada	1.5	1.6	1.2	0.7	0.5	…
Japan	8.4	7.2	5.2	2.9	1.8	…
United States	1.3	1.4	1.1	0.8	0.7	0.7

Source: IMF Global Financial Stability Report, 2006.

Table 1.6 Bank Provisions to Non-Performing Loans (in percents)

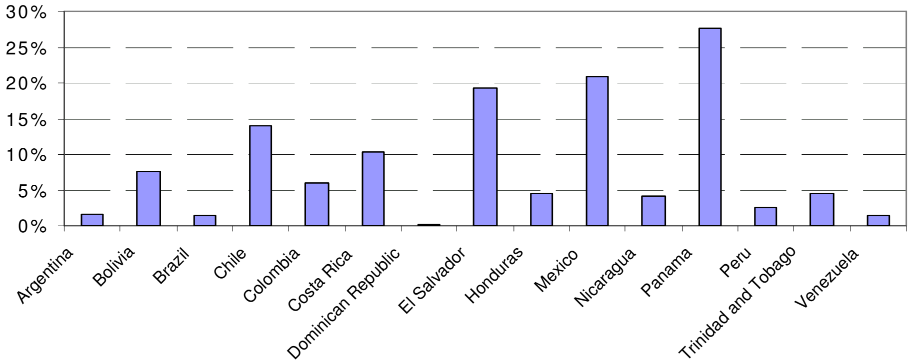
	2001	2002	2003	2004	2005	2006
Argentina	66.4	73.8	79.2	102.9	124.6	128.5
Belize	…	…	…	…	…	…
Bolivia	63.7	63.7	74.0	84.3	81.1	76.9
Brazil	126.6	143.6	144.6	162.1	145.4	…
Chile	146.5	128.1	130.8	165.5	177.6	180.8
Colombia	77.5	86.5	98.5	149.2	167.3	150.6
Costa Rica	113.2	102.6	145.9	122.6	153.0	…
Dominican Republic	143.6	70.7	66.9	110.8	127.6	112.1
El Salvador	103.4	115.1	129.8	129.8	130.0	127.2
Guatemala	…	…	…	…	…	…
Honduras	27.2	38.7	38.2	64.6	…	…
Mexico	123.8	138.1	167.1	201.8	232.1	…
Nicaragua	37.6	42.9	36.2	44.2	48.7	…
Panama	87.9	136.8	135.6	149.3	108.9	…
Peru	63.1	69.3	67.2	68.5	68.4	…
Trinidad and Tobago	…	…	…	…	…	…
Uruguay	49.9	55.0	66.1	56.2	50.8	…
Venezuela	92.4	97.9	103.7	130.2	196.3	181.8
Average LAC 18	88.2	90.9	98.9	116.1	129.4	136.8
Average Western Europe	76.2	73.2	76.7	81.3	...	...
Average Emerging Europe*	60.5	63.5	68.6	75.7	77.5	87.8
Australia	107.1	106.2	131.8	182.9	198.4	…
Canada	44.0	41.1	43.5	47.7	51.8	…
Japan	31.8	36.1	43.6	48.7	…	…
United States	128.8	123.7	140.4	168.1	155.0	159.8

Source: IMF Global Financial Stability Report, 2006.

Financial Sector and Mortgage Based Lending for Housing

Figure 1.3 and Table 1.7 summarize the mortgage portfolio on GDP ratio as of December 2004 and 2005, with Panama reporting a much higher figure than the other countries analyzed. Figure 1.4 shows the ratio of mortgage financing to total credit as of December 2004 for selected countries; Mexico leads the others with a 27% ratio, while the majority of the other countries report between 10 and 20%. The low development of mortgage financing in Brazil and Venezuela is striking, while in terms of mortgage portfolio value Chile and Mexico are the leaders. Intermediation margins in 2005 remained uneven, as shown in Table 1.8, which reflects the risk perception in the business, as well as notably inefficient banking services in some countries, preventing sound competition in the long run.

Figure 1.3 Mortgage Portfolio /GDP Ratio 2005 (in percents)



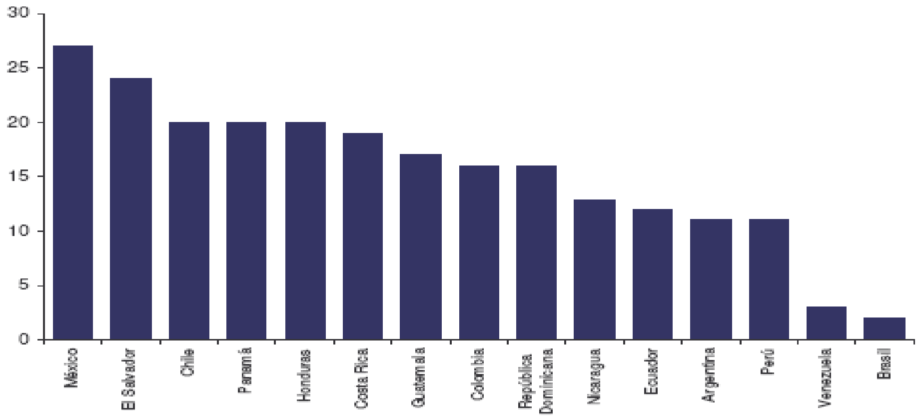
Source: Cohen and CO.

Table 1.7 Mortgage Portfolio

	Mortgage Credit Ratio Portfolio/GDP		Mortgage Credit Portfolio/Total Credit
	2004	2005	2005
Argentina	1.4%	1.7%	12.31%
Belize	…	…	…
Bolivia	…	7.7%	22.3%
Brazil	0.3%	1.4%	4.8%
Chile	12%	14%	20%
Colombia	5%	6%	26%
Costa Rica	5.7%	10.3%	27.4
Dominican Republic	1.5%	0.16%	…
El Salvador	10%	19.2%	22%
Guatemala	…	…	17% (2004)
Honduras	8.1%	4.6%	12.6% (2003)
Mexico	11.1%	21%	27% (2004)
Nicaragua	3.2%	4.2%	13.4%
Panama	27%	27.7%	21.1%
Peru	2.6%	2.5%	12%
Trinidad and Tobago	N/A	4.5%	15.5%
Uruguay	…	…	…
Venezuela	0.2%	1.4%	17.7%
US	…	71.2%	…
UK	…	80%	…
Spain	…	52.6%	…
EU15	…	48.9%	…
EU25	…	47.5%	…

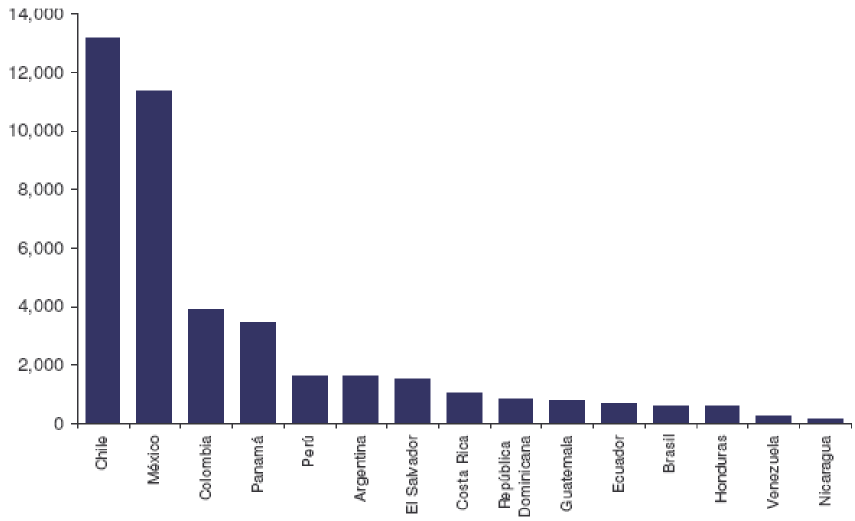
Source: 2004, Titularizadora Colombiana; 2005 Cohen and CO, DANE and European Mortgage Federation.

Figure 1.4 Mortgage Credit/Credit Portfolio



Source: Titularizadora Colombiana, 2005.

Figure 1.5 Mortgage Portfolio Value in US$ (2004)



Source: Titularizadora Colombiana, 2005.

As several of the countries reviewed have had high records of inflation and currency devaluation in recent years, the mortgage products offered by the banks are dollar denominated or indexed to the dollar (dollarized); otherwise they are expressed in special unit of account to incorporate inflation or currency devaluation. While these instruments protect the lenders, they are not appropriate for low and middle-income borrowers whose income is not indexed. Mechanisms are needed to protect the borrowers' real capacity to service their loans, such as those being put into place in Mexico (SHF) or Colombia with the UVR system. Government supported insurance programs, such as those in Chile and Peru, are also beneficial, as the borrowers and lenders share the service costs.

Table 1.8. Lending to Deposit Rate Spread Evolution in Selected LAC Countries (1995-2005)

	1995	1997	1999	2001	2003	200 5
Argentina						
Interest Rate: Deposit Rate, (% p.a.)	12	7	8	16	10	4
Interest Rate: Lending Rate, (% p.a.)	18	9	11	28	19	6
Spread %	**6**	**2**	**3**	**12**	**9**	**2**
Belize						
Interest Rate: Deposit Rate, (% p.a.)	9	9	8	6	7	8
Interest Rate: Lending Rate, (% p.a.)	16	16	16	15	14	14
Spread %	**7**	**7**	**8**	**9**	**7**	**6**
Bolivia						
Interest Rate: Deposit Rate, (% p.a.)	19	15	12	10	11	5
Interest Rate: Lending Rate, (% p.a.)	51	50	35	20	18	17
Spread %	**32**	**35**	**23**	**10**	**7**	**12**
Brazil						
Interest Rate: Deposit Rate, (% p.a.)	52	24	26	18	22	18
Interest Rate: Lending Rate, (% p.a.)		78	80	58	67	55
Spread %		**54**	**54**	**40**	**45**	**37**
Chile						
Interest Rate: Deposit Rate, (% p.a.)	14	12	9	6	3	4
Interest Rate: Lending Rate, (% p.a.)	18	16	13	12	6	7
Spread %	**4**	**4**	**4**	**6**	**3**	**3**
Colombia						
Interest Rate: Deposit Rate, (% p.a.)	32	24	21	12	8	7
Interest Rate: Lending Rate, (% p.a.)	43	34	26	21	15	15
Spread %	**11**	**10**	**5**	**9**	**7**	**8**
Costa Rica						
Interest Rate: Deposit Rate, (% p.a.)	24	13	14	12	10	10
Interest Rate: Lending Rate, (% p.a.)	37	22	26	24	26	25
Spread %	**13**	**9**	**12**	**12**	**16**	**15**
Dominican Republic						
Interest Rate: Deposit Rate, (% p.a.)	15	13	16	16	20	14
Interest Rate: Lending Rate, (% p.a.)	31	21	25	24	31	24
Spread %	**16**	**8**	**9**	**8**	**11**	**10**
El Salvador						
Interest Rate: Deposit Rate, (% p.a.)	14	12	11			
Interest Rate: Lending Rate, (% p.a.)	19	16	15			
Spread %	**5**	**4**	**4**			
Guatemala						
Interest Rate: Deposit Rate, (% p.a.)	8	6	8	9	5	4
Interest Rate: Lending Rate, (% p.a.)	21	19	20	19	15	13
Spread %	**13**	**13**	**12**	**10**	**10**	**9**
Honduras						
Interest Rate: Deposit Rate, (% p.a.)	12	21	20	14	11	11
Interest Rate: Lending Rate, (% p.a.)	27	32	30	24	21	19
Spread %	**15**	**11**	**10**	**10**	**10**	**8**

Mexico						
Interest Rate: Deposit Rate, (% p.a.)	40	16	12	6	3	3
Interest Rate: Lending Rate, (% p.a.)	59	22	24	13	7	10
Spread %	**19**	**6**	**12**	**7**	**4**	**7**
Nicaragua						
Interest Rate: Deposit Rate, (% p.a.)	11	12	12	12	6	4
Interest Rate: Lending Rate, (% p.a.)	20	21	18	19	16	12
Spread %	**9**	**9**	**6**	**7**	**10**	**8**
Panama						
Interest Rate: Deposit Rate, (% p.a.)	7	7	7	7	4	3
Interest Rate: Lending Rate, (% p.a.)	11	11	10	11	10	9
Spread %	**4**	**4**	**3**	**4**	**6**	**6**
Peru						
Interest Rate: Deposit Rate, (% p.a.)	16	15	16	10	4	3
Interest Rate: Lending Rate, (% p.a.)	27	30	31	20	14	15
Spread %	**11**	**15**	**15**	**10**	**10**	**12**
Trinidad and Tobago						
Interest Rate: Deposit Rate, (% p.a.)		7	9	8	3	2
Interest Rate: Lending Rate, (% p.a.)	15	15	17	16	11	9
Spread %		**8**	**8**	**8**	**8**	**7**
Uruguay						
Interest Rate: Deposit Rate, (% p.a.)	58	30	21	22	30	3
Interest Rate: Lending Rate, (% p.a.)	93	67	50	49	59	14
Spread %	**35**	**37**	**29**	**27**	**29**	**11**
Venezuela						
Interest Rate: Deposit Rate, (% p.a.)	25	15	21	16	17	12
Interest Rate: Lending Rate, (% p.a.)	40	24	32	22	25	17
Spread %	**15**	**9**	**11**	**6**	**8**	**5**

Source: International Monetary Fund (IMF), International Financial Statistics.

In most countries reviewed, middle and middle-high income households have access to mortgage financing under similar bank requirements such as: 25% minimum down payment or prior savings; a loan to value ratio of 75-80%: and a monthly mortgage payment restricted to 25-30% of monthly household income. Certain countries, such as Chile, Panama, Peru and Colombia, have implemented an additional security measure through which the legislation allows the employer to withhold the mortgage payment from the employee's weekly or monthly salary payment. Some banks require insurance coverage against fire and other damages and/or life insurance for the head of the household. Loans are generally indexed to a hard currency or granted through units of accounts (Chile, Uruguay, Peru, Colombia, and Mexico), whose exchange rate are determined daily by the central banks, reflecting the domestic currency devaluation or domestic inflation rates. The indexation mechanism has been working well in countries under high inflationary pressures; yet often the debt indexation was not linked to the domestic wage evolution, creating further strain on the borrowers during financial crisis. Colombia, Peru, and Mexico have confronted this issue by using indexation models that incorporate wage increases in the indexation formula. Mortgage loans are generally granted at fixed interest rates; however floating rates are more common now, giving more flexibility to the mortgage structures.

Mortgage financing in Latin America is hindered by the difficulty of assessing the creditworthiness of borrowers, especially those with low earnings working in the informal sector. Commercial banks study the track record of the borrower often without adequate information. Risk bureaus of the central banks, banking supervisory agencies, and private bureaus often exist in the countries reviewed, but in some countries (Guatemala, Honduras, Venezuela, Nicaragua, and Mexico), there is a need for further development in this area. World Bank tables show the percentage of coverage by public credit registries and private bureaus (Table 1.9). The credit bureaus alone are not yet sufficient to address borrowers' creditworthiness. Credit assessment depends on a reliable source of information, as well as the commercial banks' capacity to set up appropriate internal procedures to address the problem (as is, for instance, the approach taken by Banco Azteca in Mexico, in which bank officers develop a cooperative relationship with the borrower in order to offer more suitable loans). Moreover, micro credit organizations should be strengthened in order to tailor the loans to fit borrowers' needs and financial capabilities.

Table 1.9 Credit Information Sharing (2006)

	Public Credit Registry Coverage (% adults)	Private Bureau Coverage (% adults)
Argentina	22.1	95.0
Belize	…	…
Bolivia	10.3	24.6
Brazil	9.6	53.6
Chile	45.7	22.1
Colombia	…	31.7
Costa Rica	34.8	4.5
Dominican Republic	19.2	34.6
El Salvador	17.3	78.8
Guatemala	…	9.9
Honduras	11.2	18.7
Mexico	…	49.4
Nicaragua	8.1	…
Panama	…	40.2
Peru	30.2	27.8
Trinidad and Tobago	…	…
Uruguay	5.5	80.0
Venezuela	16.8	…
OECD	8.4	60.8
US	0.0	100
UK	0.0	86.1

Source: http://www.doingbusiness.org/methodology/GettingCredit.aspx.

With the exception of Chile, Costa Rica, and Peru, the percentage of adult coverage in public registries is low; yet this weakness is often compensated by a stronger coverage from private credit bureaus. In order for banks to go down market, credit registries must be strengthened. Registries should be easily available for consultation, informing borrowers that their non-performing loans will be recorded and affect their creditworthiness. In terms of timing, the mortgage approval procedure differs from bank to bank, but in terms of procedures and documentation, it generally follows a pattern similar to mortgage financing standards in other parts of the world.

Banks must assess the borrower's financial capabilities along with their eligibility for housing subsidies, as well as perform property valuation and verification of ownership records in the public registries; these tasks that are both time-consuming and costly. Property surveyors are not always reliable, forcing banks to perform additional valuation, while real estate brokerage, legal, notary fees, stamp duty and registration fees increase mortgage transaction costs. Cumbersome procedures and costs involved in registering a property are illustrated in World Bank data in the "Doing Business" database (see Table 1.10).

Table 1.10 Registering Property (2006)

	Procedures (numbers)	Time (days)	Cost (% property value)
LAC Region	6.6	77.4	6.0
Argentina	5	44	8.3
Belize	8	60	5.0
Bolivia	7	92	5.0
Brazil	14	47	4.0
Chile	6	31	1.3
Colombia	7	23	3.5
Costa Rica	6	21	3.5
Dominican Republic	8	57	9.5
El Salvador	6	33	3.6
Guatemala	5	37	1.1
Honduras	7	36	5.8
México	5	74	5.2
Nicaragua	8	124	3.5
Panama	7	44	2.4
Peru	5	33	3.3
Trinidad and Tobago	8	162	7.0
Uruguay	8	66	7.1
Venezuela	8	47	2.1
OECD	4.7	31.8	4.3
US	4	12	0.5
UK	2	21	4.1

Source: www.doingbusiness.org, 2006

The average number of steps to register a property in the region is 6.6, which take an average of 77.4 days and have a cost of approximately 6% of the property value. In OECD countries, this procedure takes an average of 4.7 steps and 32 days, with an average cost of 4.3% of the property value. The process is faster and less expensive in the US and the UK.

Information on property ownership and cadastral registration is a prerequisite to any mortgage financing, thus access should be easy and accurate. It has been suggested, particularly in Chile, to introduce title insurance to accelerate the decision making process in approving mortgage loans (Table 1.11). Electronic procedures should be enhanced in all countries of the region; in the US and Europe credit approval for a mortgage can be processed in 48 hours and often via Internet. This standardization of procedures and the reduction in overhead expenses in mortgage applications decreases transaction costs, which in turn increases the competitiveness of the sector and benefits the borrowers.

Table 1.11 Worldwide Mortgage Insurance Costs

Country	Insurance Charge	Cost (percentage of mortgage value)
Canada	Single upfront payment	2-3.75%
U.S.A	Monthly fee	4.8%
New Zealand	Single upfront payment	0.5% to 2%
Puerto Rico	Single upfront payment	2.2% to 4.2%
Israel	Single upfront payment	3% to 4%

Source: Fundamenta 3, Camara Chilena de la Construcción, August 2002.

Countries should replicate policies adopted in Chile, Mexico, and Peru to reduce transaction costs both in granting and recovering loans. In Peru, the government extends guarantees to commercial banks for full credit recovery following a court decision and the auction of the asset, which does not entirely recover the loan value. In Mexico, SHF covers up to 20% of the credit recovery of the SOFOLES.

Refinancing and Capital Markets

While procedures to grant loans are similar, bank refinancing processes differ. In well-organized countries, such as Chile, Panama, Peru, and Colombia, private banks rely on second tier banks to refinance their loan portfolio, while institutional developments, such as pension systems and capital markets reforms, have also played a role. Some mortgage activities are funded by the state budget and/or through mandatory portfolio constraints on commercial bank liabilities by which a certain percentage of their deposits must be invested in housing-related government bonds or assets. In the short term, these procedures are usually beneficial, but distort the market in the long run; at some point, banks tend to exit the housing market, reducing competitiveness. Often neither government agencies nor banks can effectively recover credits after being lenient in their initial credit assessment, which often creates cases of insolvency and puts burdens on state budgets.

Two types of reforms have allowed banks to compete and go down market. General banking reforms (*banco multiple*) have been enacted in several countries (Chile, Brazil, Peru, Colombia, and Panama), allowing banks to compete on a whole range of financial services. Barriers between mortgage and commercial lending have been removed, and banks have introduced innovative housing finance products, often with the assistance of foreign banks. New real estate leasing instruments are available, including upgrading the portfolio of the financial system while tailoring loans to the borrowers' repayment capabilities. Similar reforms should be encouraged in countries where a wide separation exists between mortgage and commercial banks, or between short and long term lending institutions. In Colombia, Chile, Peru, and Mexico the establishment of the multiple bank legislation has opened the market to more competitive banking services.

The second major institutional reform, pioneered in Chile, has allowed pension funds and insurance companies to invest part of their reserve in long-term assets, such as mortgage-baked securities or guaranteed loans from commercial or mortgage banks. This allows banks to offer long term financing with little of no maturity mismatch in their balance sheets. Securitization techniques have been introduced to refinance and tap the capital market for longer-term funds. Progress in Chile, Brazil, Peru, Colombia, and above all, Mexico, highlight the potential of securitization; pension systems in Latin America have enough assets to support this type of bank refinancing (Table 1.12). In addition, current legislation using *fidecomiso,* or trusts, provides lenders reassurance in terms of bankruptcy remoteness risk for mortgage security holders and supplements the special purpose vehicles. In order to give more depth to the securitization market, monoline insurers, such as Ambac in Mexico, are looking to wrap insurance coverage with mortgage financing, thus giving an AAA rating to the securitized issue.

Table 1.12 Pension system: Funds under Management (US$ million)

Latin America	Jun. 2006	Dec. 2005	Dec. 2004	Dec. 2003	Dec. 2002	Dec. 2001
Argentina	24,310	22,416	18,238	15,947	11,409	20,786
Bolivia	2,119	2,060	1,716	1,485	1,144	936
Colombia	14,029	16,019	11,075	7,326	5,482	4,955
Costa Rica	850	711	476	304	138	21
Chile	75,594	74,756	60,799	49,691	35,515	35,461
El Salvador	3,081	2,902	2,148	1,572	1,097	800
Mexico	57,417	55,386	43,033	35,844	31,748	27,146
Panama	516	508	493	469	451	…
Peru	11,315	9,526	7,844	6,341	4,527	3,622
Dominican Republic	512	371	188	34	…	…
Uruguay	2,314	2,153	1,678	1,232	893	1,045

Source: FIAP International Federation of Pension Funds

All constraints for a well functioning primary mortgage market must be removed, which is also a prerequisite for the development of a secondary mortgage market, a refinancing market access through securitization, second tier mortgage banks, and capital markets. Banks should implement efficient methods to assess the financed assets, which requires: checking the registration of the properties in public cadastral registries; reviewing ownership track records; regularizing land titles properly; and confirming that the property is free of land ownership disputes. In several countries, government banks or public institutions have been used as second tier banks for refinancing mortgage loans; however, the outcomes have not always been positive in terms of credit assessment and recovery. Moreover, in cases such as Panama BHN and Costa Rica BANHVI, where these institutions were the primary suppliers of housing subsidies and government mortgage loans, the inefficient credit management distorted the subsidies market through hidden subsidies shadowed by delinquent payments.

Several authors advocate the need to create a secondary mortgage market and a link between national mortgage markets and national and international capital markets[8]; this is a constructive suggestion as interest rates are lowered in a more efficient mortgage market, encouraging more borrowers to enter. In order to attract foreign or domestic long-term investors, primary markets must function properly and appropriate legislation for asset securitization should be in place. An appropriate legislation allows for bankruptcy remote vehicles, which may require reforming the country's bankruptcy law; contract standardization; servicing vehicles; and taxation of the securitized bond issued by the refinancing vehicle, allowing this investment class securities to be used as a legal reserve requirement or *repos* with the monetary or securities authorities. As shown in this document, countries such as Chile, Argentina, Colombia, Peru, and Mexico have succeeded with such legislation. Other countries, such as Panama and Costa Rica are still lagging yet reacting nevertheless, while others rely on larger markets (for instance Mexico relies on the US market).

The development of a local capital market for mortgage-backed securities could be enhanced by the existence of a long-term market for government securities. In the countries reviewed, most government securities are issued in indexed units of accounts, and, in more stable countries, in non-indexed local currencies.

Securitization

The development of the securitization market in Latin America is still in progress. According to Standard & Poor's, who has rated several securitization issues in Latin America, there

[8] Gonzales Arrieta Gerardo M. *Mortgage Loans and Access to Low- Income Households in Latin America*. CEPAL Review, April 2005.

were three main stages in the development process. The first stage relates to cross border transactions denominated in foreign currency, with a focus on future flows of export receivables and/or financial products (credit cards). Originators needed access to foreign currency and securitization transactions were seen as a mitigation of sovereign risk. The second stage was embedded in the structural reforms introduced by countries such as Chile, Mexico and Peru, which opened the local capital markets to investments from pension funds; as a result, local asset backed securities developed in Argentina, Chile, Mexico, and Brazil. The portfolio of securitized assets included residential mortgages, consumer loans, auto loans, trade receivables, and others. The local pension systems are large enough to absorb the growth of securitized assets, particularly in the mortgage sector (Table1.12).

Moving to the second stage in the development of the securitization market required improving the standardization of mortgages and promotion of local institutional investors. Incentives to enhance the growth of this market were also needed, such as tax exemption on interest of mortgage-backed securities and/or their acceptance as *repos* with the central banks, as was done in Chile, Peru and Colombia. While securitization eliminates mismatch risk from a bank's balance sheet, it shifts credit risk to the investor's balance sheet; when borrowers default on mortgage payments, the investors' portfolios suffer. In the United States traded mortgages are federally insured through the Federal Housing Administration (FHA); Latin American countries could benefit from similar coverage (see *Box 1.1*).

Box 1.1 Federal Housing Administration

The Federal Housing Administration, generally known as "FHA," provides mortgage insurance on loans made by FHA-approved lenders throughout the United States and its territories. FHA insures mortgages on single family and multifamily homes, including manufactured homes and hospitals. It is the largest insurer of mortgages in the world, insuring over 34 million properties since its inception in 1934.

Loans must meet certain requirements established by FHA to qualify for insurance. When approved, FHA lenders bear less risk because the Federal Housing Administration pays a claim in the event of a homeowner's default. Unlike conventional loans that adhere to strict underwriting guidelines, FHA-insured loans require very little initial cash investment and offer more flexibility in calculating household income and payment ratios. The cost of the mortgage insurance is passed to the homeowner and typically included in the monthly payment; in most cases, this cost drops off after five years or when the remaining balance on the loan is 78 percent of the value of the property, whichever is longer.

FHA is the only government agency in the US that operates entirely from self-generated income and has no cost to the taxpayers. The proceeds paid by the homeowners are captured in an account that is used to operate the program. The Federal Housing Administration stimulates the US economy through home and community development, thus benefiting local communities through employment opportunities, building suppliers, tax bases, schools, and other revenue sources.

The third development stage is the progression from local to international investors in local currency. This passage is not straightforward, as investors face currency risk as well as a sovereign risk. In theory the former could be mitigated through swap transactions; however there is little or no swap market for most local currencies, which limits them to short-term maturity. Multilateral financial agencies are reliable counterparties in difficult long-term swap transactions, as was the case of Metrofinanciera in Mexico (See *Box 1.2).*

For countries with lower investment ratings, investors may require credit enhancement to mitigate the default risk; multilateral financial agencies can cover risks with appropriate products, such as IFC's swap for Mexican Peso or the MIGA's enhancement of medical equipment securitization in Brazil. To reduce the exchange rate risk, countries can implement a currency peg with the dollar or euro, but during severe economic crisis, governments may abandon their commitment to such a peg, which happened in Argentina in 2001.

The third stage of securitization requires mitigating currency and sovereign risks, as well as reducing transaction costs. Standardized documentation and servicing procedures are also beneficial. In addition, partial credit guarantees or first loss guarantees underwritten by state housing agencies help develop a cross-border market for those assets. This stage also calls for the strengthening of securitization legislations and the enactment of new laws when appropriate.

Box 1.2 Metrofinanciera

The Inter-American Development Bank has issued $105 million in partial credit guarantees for Mexican mortgage lender Metrofinanciera to issue at least $800 million in mortgage-backed securities (MBS) for the construction of up to 25,000 new homes. Up to $55 million in partial credit guarantees will help Metrofinanciera to finance a mortgage warehouse facility of $175 million from a commercial bank to originate and accumulate mortgage pools prior to securitization. Furthermore, an MBS guarantee facility of up to $50 million will provide partial credit guarantees for the issuance of Metrofinanciera-originated MBS in the Mexican capital market. According to the IDB the program is expected to promote the development and standardization of Mexico's market for MBS, which can be an attractive alternative investment for Mexican pension funds. Additionally, it will help Metrofinanciera move away from public sector funding by tapping the private credit markets. So far, most of the funding has come from the state-owned Sociedad Hipotecaria Federal, but Metrofinanciera plans to switch entirely to capital markets over the next few years.

Overcollaterization and monoline insurance coverage are credit-enhancing mechanisms applicable to securitizing asset-backed portfolio. In the former, more assets are collateralized then needed, at least initially. Overcollateralization relies on the quality of the portfolio and its statistical default rates and allows a credit rating boost with a reduction of the interest rate on the securitized asset. Monoline insurance companies are specialized AAA insurance vehicles covering a single set of products. By wrapping the security issue with a monoline insurer, the investor base increases and interest rates decrease due to a higher rating. International monoline insurers such as MBIA, ANBAC, and FSA cover a variety of assets from credit cards receivables to mortgages. Due to currency and sovereign risk, monoline insurers have been unwilling to cover Latin American local currency markets for international investors, with the exception of Anbac in Mexico. Cross border securitization has been restricted to foreign currency receivables. To allow cross border mortgage securitization, a regional monoline insurance company sponsored by a multilateral financial institution and top Latin American insurance groups is needed, which would enable local securitization issues to acquire AAA or investment grade status and distribute them to international investors.

The creation of a secondary mortgage market requires reforms to enable local or international institutional investors to invest in long-term assets, such as mortgage-backed securities. Chile is the benchmark in this field; housing finance expanded when pension funds and insurance companies were allowed to be invested in long-term assets, matching their long-term liabilities. Hence, mismatching by local banks has been minimized, reducing the banks' balance sheet risks and lowering mortgage-lending rates. Mexico has also advanced into the secondary mortgage market through SHF and the Sofoles non-bank intermediaries, with SHF acting as a second tier bank and guarantor for the Sofoles.

Migrants' Remittances

In analyzing the source of funds that enable commercial banks to access inexpensive financing or refinancing, it is important to address the issue of workers remittances. Remittances are a large and growing source of financing due to the very large share of immigrants from Latin American countries working in North America and Europe. Workers remittances flow in Latin America and the Caribbean is the fastest growing remittance market in the world, amounting to US$23 billion in 2001, reaching over US$47 billion in 2005. At these rates, remittances could amount to nearly US$500 billion in the period 2001-2010 (Table 1.13 and Figure 1.6). Countries such as Mexico, Guatemala, Honduras, Peru, Ecuador, and Brazil are the front-runners in this respect. Remittances recipients often come from the lowest income layers of the population; according to the Multilateral Investment Fund (MIF)[9] about half of the remittance recipients

[9] Multilateral Investment Fund: http://www.iadb.org/mif/remittances/

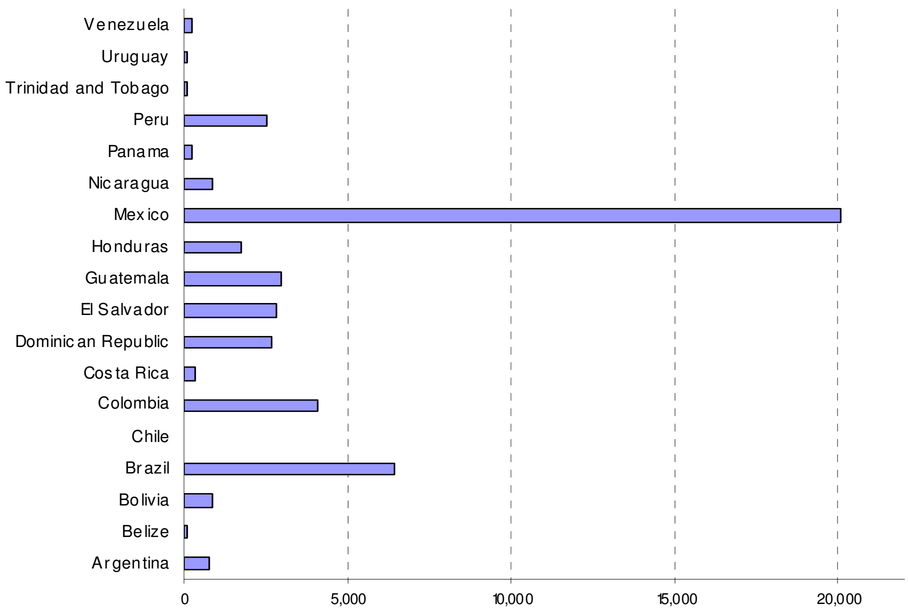
earn between US$250 and $500 a month and have little or no access to the credit market. The recipients often use the remittances for incremental housing construction, thus linking remittances with mortgage financing could help enhance the living conditions of this portion of the population.

Table 1.13. Remittances to LAC Countries (2005)

Countries	Remittances (US$ million)
Argentina	780
Belize	81
Bolivia	860
Brazil	6,411
Chile	…
Colombia	4,126
Costa Rica	362
Dominican Republic	2,682
El Salvador	2,830
Guatemala	2,993
Honduras	1,763
Mexico	20,034
Nicaragua	850
Panama	254
Peru	2,495
Trinidad and Tobago	97
Uruguay	110
Venezuela	272

Source: IADB, MIF

Figure 1.6. Remittances to LAC in 2005 (in million dollars)



Source: IADB, MIF

About 70% of remittances are transferred through specialized entities such as Western Union and Money Gram, while bank wires are rarely used. Transaction costs remain high, although decreasing from an average of 15% of the transaction value in 2000 to 7% in 2005. The goal of international organizations such as the Multilateral Investment Fund (MIF) is to channel remittances through banks, creating a link to the microfinance institutions in the recipient country. Progress in this area includes: the Spanish Credit Union program in favor of Banco Solidario in Ecuador; the venture capital fund for returning entrepreneurs from Japan into Brazil (Brazilian Remittance Fund) in partnership with Banco do Brasil; the availability of seed capital in the Mexican regions of Guerrero, Oaxaca, and Michoacan; and the increasingly efficient mortgage system in Mexico, through Sociedad Hipotecaria Federal.

Remittance flows can be used for housing financing in various ways:

(i) Incremental housing construction and expansion;
(ii) Linking remittances flows to mortgages for low-income population, giving the applicants more credibility for more flexible, larger loans; and
(iii) To lower commercial banking fees through remittance securitization.

Securitization of remittances flows is a safe investment tool (Table 1.14); in an analysis of over 40 transactions in Mexico, Brazil, El Salvador, and Peru, there was no evidence of default. Box 1.3 summarizes the recent securitization transactions, as well as the *Banco Industrial* first securitization in Guatemala; for a comprehensive review of the legal aspects of securitization in Latin America, the interested reader should visit the website www.securitization.net.

Box 1. 3 Securitization by Banco Industrial Guatemala

In 2005, Banco Industrial, S.A. of Guatemala issued a US$200 million Diversified Payment Rights securitization. The securitization was the first transaction of its kind to be completed out of Guatemala. The notes are secured by the future flow of incoming dollar remittances in the form of MT payment riders and check remittances. The whole transaction was more than two times oversubscribed.

The transaction, structured by Wachovia Securities, was issued in two tranches. The Series 2005-1 floating-rate Notes due 2012 total US$125 million. Timely payment of certain accrued interest and scheduled principal for Series 2005-1 notes will be guaranteed by XL Capital Assurance Inc. Standard & Poor's, Moody's, and Fitch rate the Series 2005-1 notes AAA. The Series 2005-2 floating-rate notes due in 2010 total US$75 million and are rated BBB by Standard & Poor's, Baa2 by Moody's and BBB by Fitch. This series was almost three times oversubscribed.

Banco Industrial (BI), founded in 1968, is the largest bank in Guatemala, with a market share of 20% in terms of assets, loans, equity, foreign exchange operations, and deposits. BI consolidates an offshore bank, a finance company, and a credit card issuer. BI is the only bank in Guatemala to be rated by Standard & Poor's (BB- LT local currency), Moody's (Baa2 LT local currency), and Fitch Ratings (BB- LT local currency). In 2005, Euro money named Bunco Industrial the "Best Bank of the Year" in Guatemala for the second consecutive year.

Wachovia Securities is the trade name for the corporate, investment banking, capital markets, and securities research businesses of Wachovia Corporation and its subsidiaries, including Wachovia Capital Markets, LLC (WCM) and Wachovia Securities International Limited. Wachovia Securities is also the trade name for the retail brokerage businesses of WCM's affiliates, Wachovia Securities, LLC, Wachovia Securities Financial Networks, LLC, Wexford Clearing, LLC, and First Clearing, LLC.

XL Capital Assurance Inc. (XLCA), rated AAA by Moody's Investors Service, Standard & Poor's Ratings Services, and Fitch Ratings, is a full-service monoline financial guarantee company focusing on consumer and commercial asset securitization, structured investment products, global infrastructure, power & utilities, future flow securitization, deposit insurance, whole business securitization, and U.S. public finance. XLCA is an indirect, wholly owned subsidiary of XL Capital Ltd (NYSE: XL), which, through its operating subsidiaries, is a leading provider of insurance and reinsurance coverage and financial products and services to industrial, commercial, and professional service firms, insurance companies, and other enterprises on a worldwide basis.

Table 1.14 Remittances Securitization Transactions

Remittances Securitization Transactions without Default as of 2006		
Originator (# of deals)	**Country**	**Size (US$ million)**
Banamex (4)	Mexico	871
Banorte (2)	Mexico	400
Bital (1)	Mexico	100
Remesas (2)	Mexico	200
Banco do Brasil (6)	Brazil	1,360
Santander Banespa (1)	Brazil	400
Itau (6)	Brazil	810
Bradescu (3)	Brazil	500
Unibanco (6)	Brazil	1,151
Agricola (2)	El Salvador	160
Cuscatlan (5)	El Salvador	350
Salvadoreno (1)	El Salvador	100
Banco del Credito (1)	Peru	100
Total: 40 remittances securitizations		**US$6.5 billion**

Source: Fitch Ratings.

Microcredit

Microcredit institutions actively supplement formal credit for low-income households (Table 1.15); such organizations exist in many countries focusing mostly on the promotion of economic activities and financing consumption. Access to microcredit facilities is a priority for the economic development of most low-income households, thus there has been a growing tendency to channel international cooperation funds through such entities. Portfolios of microcredit are primarily focused on trade and commerce, with little involvement in housing finance.

Microcredit financing for housing is not a substitute for mortgage financing, but it is an important tool in incremental housing construction. As shown in Table 1.16, as of December 2005, the main microfinance institutions in Central America has reached about 700,000 people. The average size of the loans provided by these institutions range from US$576 in Guatemala to over US$3,000 in Costa Rica. The maturity composition of such institutions is mostly concentrated in the 6-12 month period, with only 29% of the portfolio having maturities longer than 24 months (Table 1.18).

Table 1.15 Microcredit Market Coverage and Market Potential

Country	Estimated Market Size (Wesley 2001)	Market Being Covered 2004	Coverage %
Bolivia	681,160	379,713	55.7%
Chile	603,590	168,799	28.0%
El Salvador	333,590	89,427	26.8%
Paraguay	493,660	82,658	16.7%
Peru	3,433,095	899,196	26.2%
Colombia	3,250,900	442,109	13.6%
Mexico	5,136,950	347,874	6.8%
Dom. Republic	696,090	70,602	10.1%
Honduras	445,590	17,356	3.9%
Venezuela	1,623,635	13,368	0.8%
Guatemala	710,855	42,491	6.0%
Total	**17,409,115**	**2,553,593**	**14.7%**

Source: Accion, 2004.

The portfolio compositions of the main microfinance companies in Central America demonstrate that as of December 2005 the share of housing finance to total credit was limited: 18.9 % in Guatemala, 27.6% in El Salvador, and 4.7%, 10.6%, and 0.6% in Honduras, Nicaragua and Costa Rica respectively (Table 1.17). Total loans to housing amounted to over US$51 million, representing 14% of the total credit portfolio of Central American microfinance institutions. Such institutions are scattered throughout the region, thus close to their potential clients, creating potential for improvements in overall efficiency; total operating costs of FENOCOAC [10] in Guatemala were 6% of their assets in 2005, compared to 33% in the Redmif[11] portfolio. A key concern is that few institutions meet the criteria of sustainability, which is understood as having mechanisms in place to protect their funds from inflationary erosion, cover their operating costs, and generate sufficient profits to assure further development.

Moreover, the weak financial position of microfinance institutions prevents them from funding themselves on the domestic market, creating a dependence on funding from international cooperation flows. In countries such as Costa Rica, El Salvador, and Guatemala, there is no noticeable shift towards improved sustainability, the result of a greater competition among microfinance providers, competition from local commercial banks offering more suitable, innovative products, and an increasing penetration of foreign banks. Compared to the sixties and seventies, in which the scene was dominated by public sector development banks and later by NGOs, today there is a more significant drive towards competing with regular financial institutions, in terms of their sustainability, quality of their credit portfolio, and adequacy of collaterals, etc. In some countries, a legislative framework has been enacted to regulate the activities of the unregulated financial institutions.

[10] FENOCOAC, Federacion Nacional de Cooperativas y Ahorro y Credito is a micro finance institution in Guatemala, which coordinates 27 different cooperatives and has a network that includes 144 service points. Www.fenocoac.com.gt/home.html

[11] REDMIF, Red De Instituciones de Microfinanzas de Guatemala is a micro finance institution that coordinates the activities of 22 organizations and has a network of more than 155 agencies accross the country. Www.redimif.org

Table 1.16 Microcredit Key Players in LAC region

Institution	Country	Outstanding Microloans (US$ 000)	Number of Clients	Average Loan US$ (1)
Compartamos	Mexico	102,034	309,637	330
Mibanco *	Peru	111,966	92,236	1,214
BancoSol *	Bolivia	103,888	91,805	1,132
Banco Procredit/Caja Los Andes	Bolivia	116,579	84,887	1,373
Calpia/Banco Procredit	El Salvador	128,277	81,229	1,579
Banco Solidario (2)	Ecuador	114,342	60,385[2]	959
Prodem	Bolivia	108,560	67,933	1,598
CMAC Piura	Peru	113,699	64,698	1,757
CMAC Arequipa *	Peru	90,300	63,368	1,425
Confia / Banco Procredit	Nicaragua	86,495	56,618	1,528
Edpyme Edificar *	Peru	60,537	54,858	1,104

Source: Accion internacional (dic 2004) http://www.accion.org/file_download.asp?f=21.
(1) Note: estimated as the outstanding loans divided by number of clients.
(2) Note: reflects Banco Solidario's microloan clients and portfolio.

Table 1.17 Portfolio Allocation per Economic Activity in Central America

Portfolio Allocation per Economic Activity as of December 2005 (US$ thousand)									
National Network	N° IMF	Agricultural and Forestry	Commerce	Services	Small Industries	Housing	Consumption	Other	Total
REDIMIF	19	5,941.3	46,693.2	4.882,8	10,773.4	16,586.1	1,860.9	914.9	87,612.4
		6.8%	53.3%	5.6%	12.3%	18.9%	2.1%	1.0%	100.0%
ASOMI	9	2,551.6	20,115.3	4,002.1	2,717.9	16,004.3	12,446.8	166.9	58,004.9
		4.4%	34.7%	6.9%	4.7%	27.6%	21.5%	0.3%	100.0%
REDMICROH	21	2,713.0	36,254.1	7,279.0	2,419.2	2,492.9	408.9	1,984.0	53,551.1
		5.1%	67.7%	13.6%	4.5%	4.7%	0.8%	3.7%	100.0%
ASOMIF	21	47,464.3	50,629.3	8,776.2	6,291.8	15,850.2	15,862.9	4,371.0	149,245.7
		31.8%	33.9%	5.9%	4.2%	10.6%	10.6%	2.9%	100.0%
REDCOM	13	2,732.7	6,182.5	4,852.6	1,078.2	115.3	135.3	5,223.4	20,320.0
		13.4%	30.4%	23.9%	5.3%	0.6%	0.7%	25.7%	100.0%
TOTAL	83	61,402.8	159,874.4	29,792.8	23,240.5	51,048.7	30,714.7	12,660.2	368,734.2
		16.7%	43.4%	8.1%	6.3%	13.8%	8.3%	3.4%	100.0%

Source: Red Centroamericana de Microfinanzas (REDCAMIF), www.redcamif.org

Table 1.18 Portfolio Allocation per Maturity in Central America

Portfolio Allocation per Maturity as of December 2005 (US$ thousand)							
National Network	N° IMF	Up to 6 Months	7-12 Months	13-18 Months	19-24 Months	> 24 Months	Total
REDIMIF	19	9,764.3	30,191.2	12.388.8	7,997.3	27,270.9	87,612.5
		11.1%	34.5%	14.1%	9.1%	31.1%	100.0%
ASOMI	9	5,283.3	7,758.5	2,874.4	3,694.8	38,396.8	58,004.9
		9.1%	13.4%	5.0%	6.4%	66.2%	100.0%
REDMICROH	21	15,179.0	13,960.1	5,147.9	6,343.0	10,416.3	51,046.2
		29.7%	27.3%	10.1%	12.4%	20.4%	100.0%
ASOMIF	21	19.265,7	44,094.9	29,446.0	19,614.3	26,824.8	149,245.7
		12.9%	29.5%	19.7%	19.8%	18.0%	100.0%
REDCOM	14	13,775.5	1,761.8	1,109.9	1,042.3	3,157.4	20,827.0
		66.0%	8.5%	5.3%	5.0%	15.2%	100.0%
TOTAL	84	63,247.8	97,766.5	50,964.1	48,691.7	106,066.1	366,736.2
		17.2%	26.7%	13.9%	13.3%	28.9%	100.0%

Source: Red Centroamericana de Microfinanzas (REDCAMIF).

Housing Policies and Institutions
Impacts on Lender's Risks

Housing Policies

Several governments, realizing their inability to provide adequate shelter for all households through traditional supply-side policies and programs, and acknowledging the need to mobilize the resourcefulness of the private sector (including household savings and sweat equity), are inducing private entrepreneurs and civil society organizations to handle housing production and financing for all segments of the population. Under the "*enabling markets approach,*" governments direct their efforts to improve relevant market operations and correct market failures through effective regulations and taxes, the provision of infrastructure and services, and targeted subsidies.[12] The payoff of unleashing the potential of individuals, communities, developers, investors and entrepreneurs to finance, build, sell and improve houses is significant. For instance, in Panama, a country with low inflation, low interest rates, and a strong financial sector, 70 percent of households (including those earning a minimum salary equivalent to approximately US$250 per month) have access to formal sector loans and low-cost homes developed by the private sector.

The approach pioneered by Chile and Costa Rica, and later adopted by other countries (Colombia, Ecuador, Guatemala, Peru and Panama), involves the restructuring of traditional relations between the state, the private sector, and the community with respect to housing. Under the enabling approach, the key task for the public sector is to help improve the performance of the private sector, which is achievable by removing unnecessary regulations and the governments' direct role in the low-cost housing system, improving the land titling and registration regime, eliminating obstacles for executing guarantees, and eliminating rental regulations. For instance, the revision of land subdivision regulations facilitates the private production of affordable land with minimum amenities that can later be upgraded.[13] If these interventions prove to be insufficient, the government can help develop the systems of mortgage financing and microfinancing for home construction and improvements, as well as issue one-off capital subsidies to low-income families, enabling them to purchase finished homes constructed by private entrepreneurs. These measures mitigate some of the risks that impede the development of mortgage financing. Direct one-off subsidies decrease credit risk by reducing the financing to an amount affordable for families in different income brackets. Improved title and registration regimes partially reduce the risks confronted by lenders in executing the guarantee. The success of this approach mainly depends on the private sector's willingness to go down market in house production and financing, catering to the needs of low and low-middle income households. Therefore, a positive outcome depends not only on housing policies and related reforms, but also on a stable macroeconomic situation, which is essential in reducing interest rates and eliminating term mismatch risk, as well as fostering the availability of long-term financing in local currency.[14]

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[12] The United Nations originally proposed this approach in 1998 in the publication: *A Global Shelter Strategy towards the Year 2000,* Nairobi, 1998, United Nations Centre for Human Settlements. The World Bank adopted this approach in the early 1990s through the policy: *Housing: Enabling Markets to Work Housing Policy Paper*, Washington, D.C. 1993. Shortly thereafter the Inter-American Development Bank published: *Operational Guidelines for Housing, Washington,* D.C., 1995 (Publication SOC-111).

[13] For a definition and assessment of the various institutional and mechanical elements constituting a land management system that have a significant impact on the functioning of land markets, see: Farvacque, C. and McAuslan, P. 1992. "Reforming Urban Land Policies and Institutions in Developing Countries," UMP 5, Washington, D.C.: The World Bank. http://www.unhabitat.org/programmes/ump/documents/UMP5.pdf.

[14] This has been demonstrated in Chile, where reforms to the social security system and the development of financial markets have boosted private housing financing; see Pardo, C. 1998,

The housing policy reforms that focus on market-oriented solutions (direct subsidies for the poor, enhancing savings and complementary mortgage loans) have been relatively successful for middle or middle-high income households. However, low or low-middle income households find it difficult to save and qualify for loans as they are employed mostly in the informal sector and their creditworthiness is almost impossible to assess. In Chile, as well as other countries surveyed, these households have relied on fully subsidized basic housing and assistance in incrementally building and expanding their homes through microcredit and technical assistance. Financing incremental building of houses may come from direct non-refundable government subsidies (as in Chile), but usually comes from construction kits purchased through government financing or subsidies (for example Banco de Materiales in Peru). Eligibility for microcredit financing often depends on the household's prior savings and proven repayment capacity. Most of the families living in slums or in irregular housing do not understand or trust the financial products offered by the banks and microcredit institutions. Moreover, they are not educated in a culture of credit, nor do they understand how to use their properties to access the mortgage market for home improvements and personal or business development financing.

A comprehensive housing policy must include direct public support for the poor in obtaining adequate housing and for the development of an institutional and legal framework that will allow the finance sector to go down market. Successful programs include:

- Chile: *Vivienda Dinamica sin Deuda*, grants to provide low-income households with a core house designed for incremental expansion;
- Colombia: VIS program;[15]
- Costa Rica: SIUBEN program, which distributes subsidies to the poor;
- El Salvador: joint programs with NGO's and site development for progressive building;
- Mexico: reforms towards a market housing model in addition to Fonhapo programs for progressive buildings;
- Panama: effective building material and tax based subsidies; and
- Peru: Techo Proprio program, Mibarrio program, and De Soto titling program.

Other countries are still experiencing allocative efficiency and efficacy issues in housing programs because of the poor results of direct house construction programs, the involvement of too many institutions, or poor administration overall and resource loss.

In order to access mortgage markets, households must be able to save; these resources are complemented by a direct subsidy by the government to make the loans affordable. ABC is a well-known acronym for *Ahorro, Bonos y Credito,* (savings, subsidy and loan) the three tools involved in obtaining housing finance for low–middle and middle-income households. Borrowers must prove their capacity to maintain a certain level of monthly savings (*ahorro*), to be used eventually towards a down payment. The next step is to obtain the subsidy (*bonos*), which depends on the income level of the applicant and often the value of the property. In the final step (*credito*), the balance due for the house can be financed through a mortgage loan.

While relatively simple, particularly when savings, vouchers, and the mortgage are processed by the same lending agency, this system becomes problematic when applied to low-income borrowers who work primarily in the informal sector; these families usually keep their savings in cash rather than in a bank account making it difficult to determine their capacity to save. As applied in Chile, the only way these families obtain basic housing is through direct subsidies, alone or combined with savings.

Housing Sector Institutions

All countries with less than 25% of the population living in inadequate housing have a housing ministry or equivalent institution fully dedicated to housing issues. In Argentina, Chile, Colombia, Costa Rica, Mexico, Panama,

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"Housing Finance in Chile. The Experience of Primary, Secondary Mortgage Financing," Sustainable Development Department. Best Practices Series Nº IFM-123. Washington, D.C.: IDB.

[15] *Vivienda de Interes Social* (VIS) is the framework for the housing policy in Colombia. A detailed description can be found in the Colombia country profile.

Trinidad and Tobago, and Uruguay the design and implementation of the housing policy is coordinated at a ministerial or national housing council level. Other countries such as Brazil, Bolivia, Guatemala, Peru, and Venezuela have recently followed this example by creating ad hoc ministries. There are housing ministries in the Dominican Republic, Honduras, and Nicaragua, and their housing sectors are poorly developed. Countries that have only recently established a national ministry, such as Brazil, still need to coordinate efforts between the existing institutions and different levels of government, as do countries with powerful national, regional, and provincial governments, such us Argentina and Mexico.

Subsidies and Commercial Risk

As housing is a "merit good," governments support families in accessing good housing, usually through some form of subsidy. Traditional public production and delivery programs supply finished homes to qualified applicants at below market costs, and/or financed with subsidized loans, or completely free. Housing subsidies have been financed primarily by the state budget or through mandatory withholdings on employees' salaries and their distributions have been subject to tight fiscal budgets. The country profiles in the companion CD describe the main subsidy programs in each country, pointing out that the eligible households' earnings range between 2 and 4 minimum-wage salaries.

Initially subsidies were concentrated on the supply side; governments tended to offer housing solutions through developers and contractors, often resulting in poorly constructed homes built far away from city centers, the result of the desire to maximize the number of houses built with the always insufficient public resources allocated to this end. Supply-side housing strategies have been ineffective and the homes have often ended up in the hands of higher income households who, lacking affordable housing options for their income levels, have purchased or rented the houses from the original beneficiaries.

As described, programs have recently shifted to the demand side. Direct subsidies, such as vouchers, have been distributed to eligible households, and indirect subsidies have been introduced through interest rate reductions. Such subsidies promote a greater allocative efficiency by reducing the commercial risk faced by lenders and allowing households to choose the size and location of their home, optimizing their spending according to their preferences. Direct subsidies matched with mortgage financing can ensure better access to new homes or renovations; however, interest rate reductions tend to distort competition among lending institutions and subsidized interest rates favor middle-income households that usually borrow larger sums than those most in need.[16] Direct subsidy schemes reduce the commercial risk faced by private lenders by increasing the down payment and making the loans affordable for the beneficiaries. However, as previously stated, this solution has proven accessible mostly to low and high-middle income households with formal jobs.

Taxation as Incentive

The taxation system of housing finance and ownership and its use to assist households secure housing is a multifaceted issue. Few countries have a system in place to allow households to deduct the interest rate on mortgage loans from taxable income. Although this tax incentive is attractive to high-middle and high-income households in applying for mortgage financing, it actually distorts housing consumption decisions made by these households and is a weak instrument for low-income households. Property taxation has not been thoroughly investigated in the papers reviewed yet it is a powerful tool to bring adequate infrastructure and other services to the territory, particularly in countries with a decentralized administration.

To apply this mechanism, however, a strong and powerful tax collection system is required, with a political willingness to fight tax elusion or

[16] A different approach has been developed in Panama, where there is a system based on preferential rates set by the central bank on a monthly basis and on a spread under the market rate. The spread is deducted from the corporate income tax of the lending institutions. As stated before, current approaches to housing policy prioritize up-front subsidies, with a combination of savings and bank loans, to help low-income households purchase homes built by the private sector.

avoidance, and corrupted practices. A related topic is the treatment of VAT taxation in mortgage financing, which often discourages the banks to go down market since in case of foreclosure the tax increases the losses. The available literature addresses the taxation issue in relation to securities transactions that originate from a securitization process. There are tax benefits for banks and institutional investors investing in such securities, such as tax-free interest. In the short term, this preferential tax treatment could have a positive effect on the securitization market and stimulate the creation of new financial products; however, in the long run, tax distortion may have a negative effect on portfolio diversification through the creation of dual markets in taxable and non-taxable securities, which may result in sub-optimal portfolio allocation. A common taxation and documentation standard among Latin American countries could help foster a collective market for securitized assets and attract Latin American institutional investors to provide long-term financing. This topic deserves more analysis, which can be done through researching government databases or, more effectively, through contacting tax officials, originators, and investors.

Foreclosure Laws and Collateral Risk

Foreclosure laws and collateral risk are of great relevance in assessing whether commercial and mortgage banks can go down market. Effectiveness of the judicial system in protecting the rights of lenders to recover their loans is a prerequisite for the development of a well functioning housing finance system, such as in Chile, but there are still improvements to be made.

The procedure for executing a mortgage guarantee under a foreclosure procedure appears simple, but in practice in Latin America, foreclosure and eviction is generally a long and complicated process. In countries such as Argentina, Chile, Colombia, and Costa Rica, the process is faster than in others, but still averages over one year to complete. In Uruguay the public mortgage bank is the only one allowed using a fast track for foreclosure and eviction, thus monopolizing the mortgage market.

The time to recover funds from the first notice of non-payment through the auction sale of the house may take from 12 months (Chile) to 5 years (Colombia). Delays are partly due to the banks' internal procedures, which often begin with more friendly solutions in order to defer the legal fees involved in a court case. Recovery is slow due to the excessive backlogs at tribunals that delay the setting of hearing dates. Most countries have adopted an executive judgment procedure (*Juicio Ejecutivo*) in which non-payment of the debt can be automatically relayed to the courts; however, in some countries there is tenant protection legislation, which has precedence over an executive procedure and allows the tenant to appeal, thus postponing a court decision. In Uruguay, for instance, the law also treats state mortgage defaults differently than private mortgages, which limits the involvement of banks in lending to low-income households. State loan defaults benefit from a "fast track" procedure in court, which results in a court decision in about one month; this does not apply to private commercial banks, in which the process takes approximately 24 months and is more costly. This type of distortion should be eliminated to develop a more competitive mortgage market.

Country profiles provide details on existing foreclosure procedures; however, interviews with local banks and IDB country staff indicate that the foreclosure and repossession of the homes takes longer than indicated in official publications. This timeframe varies according to the tenant or borrower's ability to secure good council to appeal a court decision; the legal bureaucracy and backlog; and the internal procedures of the banks. An indication of the effectiveness of the respective judicial systems is given in World Bank's "Doing Business," which compares the timeframe, procedures, and costs needed to enforce a contract in some of the countries reviewed to the regional average; results are indicated in table 2.1 below.

Table 2.1 Enforcing Contracts in LAC

Region or Economy	Procedures (number)	Time (days)	Cost (% of debt)
Latin America & the Caribbean	39.3	642	23.4
Argentina	33	520	15.0
Belize	51	892	18.0
Bolivia	47	591	10.5
Brazil	42	616	15.5
Chile	33	480	16.3
Colombia	37	1,346	20.0
Costa Rica	34	615	18.7
Dominican Republic	29	460	35.0
El Salvador	41	626	15.0
Guatemala	36	1,459	26.5
Honduras	36	480	30.4
Mexico	37	415	20.0
Nicaragua	20	486	21.8
Panama	45	686	50.0
Peru	35	300	34.7
Trinidad & Tobago	37	1,340	30.5
Uruguay	39	655	15.9
Venezuela	41	435	28.7
OECD	22.2	351	11.2
US	17	300	7.7
UK	19	229	16.8

Source: World Bank, 2006.

Property Rights, Cadastral Registration, and Collateral Risk

Property legalization entails the public registration of property ownership so it can be traced. In Argentina there is also a tax registry in which the borrowers' tax payment records are made public; if such records are not in good order the mortgage applications may be rejected. The availability of combined property ownership and cadastral registration may encourage lenders to go down market. In fact, access to more information, such as knowing whether or not the borrower is in arrear with his tax payments, will be a risk-mitigating factor in increasing lending to low and middle-income population. Moreover, access to tax history can help the administration to target the right population for subsidy eligibility.

The quality of cadastral registration varies from country to country. With the help of international organizations, governments are improving public registries including cadastral identification and registration. However, progress is not immediate due to a lack of technical equipment, electronic access, and sufficiently trained personnel at the registry office. The inadequate culture of registration is particularly relevant with the very poor as informal settlers are often not aware that registration could be beneficial in improving their creditworthiness, which in turn could help improve their living standards. Even if education is set in motion by governments (central or local) registration is often too costly for poor households. Registration costs must be stabilized in order to increase property registrations, thus improving access to mortgages or other forms of credit (Table 2.1).

Barriers to Private Lending for Low-Income Housing

Barriers to Private Lending: the Lenders Perspective

This chapter identifies a group of macro and micro barriers discouraging lenders to serve the needs of low-middle and low-income income households with mortgage financing. The study takes on the point of view of the private lenders and focuses on barriers and risks that can be mitigated through government policies and programs. As the barriers vary across the region, the solutions proposed are of general nature and intended as orientations in identifying more specific solutions for each country. The reader is encouraged to read this chapter together with the Country Profiles and the Database in the companion CD, which include more detailed information for each country.

The discussion includes risks that originate from the countries' macroeconomic situations, and highlights the key role of macroeconomic stability in promoting any type of long-term lending, especially mortgages. There is also a significant focus on key issues related to the evolution of the financial systems, underscoring the complete dependence of private housing finance on this development, as the most effective policies and programs are related to growth in this sector. The chapter closes by pointing out the barriers and risks originating from the legislative framework for real estate property registration and foreclosures, sources of key problems in private lending as discussed in Chapter 2. The conclusion also identifies distortions introduced by inappropriate government interventions in housing finance, a major barrier for the private sector; this leads to the discussion in Chapter 4, devoted to policy recommendations for a greater penetration of private lending for housing for low/middle-income families.

Macroeconomic Stability

A stable macroeconomic environment and credible government policies are crucial for long-term lending. Experiences indicate that banks increase loan portfolios by going down market in countries with improving living standards, good public management of social issues and housing policies, and credible monetary and fiscal policies.

Inflation Targeting. Inflation targeting is an indicator of monetary stability. Latin American countries were formerly known for high inflation and recurrent currency devaluation, thus various policies such as dollarization and pegging systems were adopted to reduce inflation, although with mixed results. Inflation targeting has been the most effective, even though recently inflationary tensions have reappeared in some cases. Macroeconomic stability has increased significantly in the region in the last decade, having a significant impact on financial systems. Policies to reduce inflation in Brazil, Chile, Colombia, Mexico, and Peru fostered the development of local currency capital markets with longer maturities and lower interest rates for government bonds, and lower bank interest rates and lending spreads with favorable results in the mortgage market. Fiscal adjustment programs, reducing the share of public borrowing, have increased the availability of credit to the private sector, although not necessarily to lower income households. On the whole, the economies of countries choosing inflation targeting have done better that the rest of the countries in the region, as shown in Table 3.1.

Table 3.1 Inflation (2006)

		Inflation Rate %
Low Inflation		
Stable and Declining	Chile (IT)	2.7
	Mexico (IT)	3.4
	Panama	2.6
	Peru (IT)	2.3
Medium Inflation		
	Bolivia	5.0
	Brazil (IT)	4.0
	Colombia (IT)	4.55
	Dominican Republic	5.0
	El Salvador	4.9
	Guatemala	6.2
	Honduras	5.8
	Uruguay	6.5
High Inflation		
	Argentina	9.5
	Costa Rica	9.9
	Nicaragua	9.4
	Trinidad and Tobago	8.6
	Venezuela	12.9

Source: Central Bank and Database compiled by Cohen and Co.
Note: (IT) symbolizes countries using Inflation Targeting.

Indexation. Bolivia, Colombia, Chile, Costa Rica, Honduras, Mexico, and Uruguay use indexation as a protection from macroeconomic instability.

Issue: Mortgage loans are offered in indexed units of accounts or straightforward in foreign currency (US dollars). Indexation is generally linked to inflation or domestic wages. Thus, in cases of high inflation and currency depreciation the mortgage loan is automatically adjusted, but the borrower's wages may not be, which can create potential liabilities for the banks when assessing the initial payment capacity of the borrowers.

Proposed Solution: Countries should be encouraged to offer swap through government entities to cover the mismatch risk between price and wage indexation of interest rates. The swap should enable the borrower to maintain its ability to service its mortgage obligations; SHF in Mexico and Davivienda in Colombia offer such hedging instruments. A more credible anti-inflationary policy, such as inflation targeting, should help develop a framework for reduced interest rates and longer maturities for local currency-denominated government securities. A long-term market for government securities could encourage a long-term market for mortgage-backed securities.

Table 3.5 Mortgage Rates Settings in Selected Countries

Country	Mortgages
Belize	Fixed, 7 yrs, floating to 30yrs
Argentina	Floating, 10-25 yrs, fixed, 10 years
Costa Rica	Floating, US$, local and CPI index to 25 yrs
Bolivia	Floating, US$, local and CPI index, 15 yrs
Dominican Republic	Floating, 20yrs
Brazil	Fixed up to 15 years, floating to 25 yrs
El Salvador	Dollarized currency
Chile	Fixed, local currency and CPI indexed, 25 yrs+
Guatemala	Floating US$ or local, to 15 yrs
Colombia	Fixed, local currency and CPI index, 15 yrs
Honduras	Floating, CPI index, 15 yrs
Mexico	Fixed and wage indexed, 22 yrs
Nicaragua	Floating, mostly in US$
Peru	US$, local, CPI indexed, 10 yrs
Panama	Dollarized currency, fixed 5 yrs
Uruguay	Fixed, CPI indexed, 5yrs
Trinidad and Tobago	Floating, up to 30 yrs

Development of the Financial Systems

The barriers within the financial system are particularly relevant for this work. Reforms are needed in the pension system and the banking sector, as well as encouragement for multiple banking systems and the participation of foreign banks to increase competition in financial services to include mortgage products and securitization techniques.

Long-term financing. Long-term funds for housing finance are still in short supply in most countries of Latin America, which is the result of the limited development of the domestic markets in national currency, such as government bonds. In addition, deposit bases are mostly short term (up to 90 days) and they may cause maturity mismatch when banks grant long-term mortgage loans funded by those deposits. The situation is improving as the economies stabilize in the region and as better government debt management policies are implemented to encourage long-term benchmarks in local currency. Also, reforms taking place in certain countries promote investments in mortgage-backed securities. The need for long-term financing or refinancing mechanisms is more relevant for banks or financial institutions (ONGs, microcredit institutions, savings and loans cooperatives) offering mortgages to low-income households, while large commercial banks are less constrained, as they can tap the securitization market, when available, and also offer longer-term indexed deposits.

Table 3.2 Availability of Long-Term Funds for MBS

Existing	Non existing or infant stage of development
Argentina, Brazil, Colombia, Chile, Mexico, Panama, El Salvador, Costa Rica,	Bolivia, Dominican Republic, Guatemala, Honduras, Venezuela, Nicaragua, Uruguay

Certainly more stable long-term funds are needed, which depends on institutional reforms (of the pension system, for the development of local capital market) and increased macroeconomic stability. The risk is excessive intervention of the government in debt markets, crowding out medium and long-term private borrowing and lending, including mortgage financing.

Table 3.3 Deposit Rates (2005)

Country	Deposit Rate %	Country	Deposit Rate %
Argentina	4	Guatemala	4
Belize	8	Honduras	11
Bolivia	5	Mexico	3
Brazil	18	Nicaragua	4
Chile	4	Panama	3
Colombia	7	Peru	3
Costa Rica	10	Trinidad and Tobago	2
Dominican Republic	14	Uruguay	3
El Salvador	N/A	Venezuela	12

Source: IMF IFS

Issue: The lack of long-term funding prevents local banks from granting long-term mortgage financing, while exposing the banks to a maturity transformation risk.

Proposed Solutions:

a) The creation of a deposit insurance scheme (such as FDIC in the US) would allow greater confidence in the banking sector by depositors and increase length of deposit maturity.
b) Savings schemes help expand the ability to save for housing, specifically to finance down payments.
c) Inflation targeting encourages: a decrease in interest rates and the development of credit on domestic currency; the development of capital and securitization markets; and the rediscounting of mortgages by second-tier banks.
d) Second-tier banks, wholesale lenders and other financial institutions can play a powerful role in kick-starting mortgage lending.[17]
e) Mortgage securitization opens new sources of long-term funding for housing. Chile, Mexico, Colombia and Brazil have well-developed systems and Argentina, Peru, El Salvador, and Panama have made significant progress. Other countries, such as Bolivia, Guatemala, Costa Rica, Dominican Republic and Trinidad and Tobago, have shown initial interest, but still lack a well-defined securitization framework, while Venezuela, Nicaragua and Honduras have no systems in place.
f) The reduction of public sector and government medium and long-term borrowing, leaving space for private sector borrowing.

Institutional Investors. Pension system reform is a building block to enable the establishment of a long-term securitization market and the development of local capital markets at large. Most of the countries studied have long-term institutional investors, such as pension funds (public or private), insurance companies, and mutual funds; however, these investors often face regulatory restrictions in terms of their portfolio diversification, particularly in smaller countries. The private pension system in Latin America is growing, with Argentina, Mexico, and Chile leading in volume (see Table 1.12), while funds in El Salvador, Dominican Republic, and Bolivia are also growing rapidly.[18]

[17] A second-tier bank has been instrumental in launching a specialized private mortgage sector in Mexico during a period of complete withdrawal of mortgage lending by the commercial banks. Second-tier banks in Colombia, Costa Rica, and El Salvador, and to a certain extent in Trinidad and Tobago, are funding microcredit and cooperative institutions.

[18] International Federation of Pension Funds Administrators.

Table 3.4 Private Pension Funds (2006)

Large >15 billion US$	Medium	Small or Underdeveloped
Argentina, Brazil, Colombia, Chile, México	Bolivia, Costa Rica, El Salvador, Panama, Peru, Dominican Republic, Uruguay	Guatemala, Honduras, Nicaragua, Trinidad and Tobago, Venezuela

Source International Federation of Pension Fund Administrators

Issue: Long-term institutional investors often face regulations limiting portfolio diversification, preventing the development of domestic capital markets, particularly of mortgage-backed securities. The existence of long-term investors could mitigate the maturity mismatch in the banks' balance sheets and shift their funding from short-term deposits to long-term investments in their portfolio.

Proposed Solution: Countries must undertake institutional reforms to promote the establishment and growth of pension funds, allowing for a greater involvement of private pension fund administrators and encouraging pension funds, insurance companies, and banks to invest a portion of their assets in local or foreign currency denominated mortgage-backed securities; these assets should meet requirements or technical reserves of the central bank and the regulatory institutions.

Remittances. Migrants' remittances create important monetary flows that have positive impacts on the remittance recipients´ living standards. They are a source of savings and could be used partly to meet the obligations under loans for incremental housing construction and improvement.

Issue: Low-income households do not have access to mortgage/subsidy markets, as they are unable to demonstrate sufficient savings or a steady flow of income to certify their repayments capabilities.

Proposed Solution: A steady flow of remittances, such as the one experienced in Latin America, could be used as a down payment on ABC mortgage schemes and for incremental housing construction. Moreover, remittances are a stable source of funds so local banks can have the necessary assurances to go down market in offering mortgage products. Governments should encourage the development of formal channels for transferring the remittances, improving the control and transparency and reducing transaction costs.

Title Insurance. As discussed previously, uncertainty about ownership is a mayor deterrent to housing lending, as it affects the quality of the collateral. The introduction of title insurance is a solution that provides lenders coverage on eventual disputes regarding ownership of the real estate held as loan collateral. Currently, only Chile and Peru offer title insurance.

Issue: Deficiencies of the land registration systems and the land cadastre makes it difficult for banks to obtain the necessary information on the house ownership and tax status. The process can be lengthy and expensive, due to the inconvenient location of the cadastral offices or to inaccurate registration information.

Proposed Solution: Countries should develop title registration and insurance programs, eventually through the assistance of multilateral lending agencies, to enhance and expedite the retrieval of the required property information and provide comfort to lenders on the soundness of the collateral. They could also increase their investments in digitalizing the cadastral system in order to expedite electronic records, which would maximize the flow of information within a minimum timeframe and cost. Lastly, greater investments should be made in the education and training of cadastre or property offices to update property ownership records.

Mortgage Insurance. Mortgage insurance covers lenders from commercial risk, assuring them that mortgage payments will be covered if the borrower experiences financial stress. Chile, Mexico, Peru, Colombia, and on a small scale Guatemala and the Dominican Republic, currently extend mortgage insurance.

Issue: Banks are reluctant to offer mortgage loans to low-income households, particularly those earning their incomes in the informal economy, as it is difficult to determine their payment capabilities. Moreover, delays and bureaucracy in obtaining foreclosure judgments force banks to reduce the loan to value ratios of their mortgage loans.

Proposed Solution: Countries should develop mortgage insurance programs, initially with the support of government-owned institutions and, once recognized and established, by opening the market to private insurers. Mortgage insurance reduces the credit risk for banks, thus they can increase their lending portfolio. Moreover, in foreclosure cases, if the mortgage is insured, the recovery procedure is often accelerated. Finally, mortgage insurance reduces default risk, thus helping to develop the securitization market. Another alternative is to promote prompt payment through incentives. Countries such as Peru, Mexico and Chile have already introduced a system *Bonos del Buen Pagador* and Columbia has implemented *Cuota Reducida*, which rewards debtors that make timely payments by reducing their total payment amount.

Monoline Insurance. Financial instruments must be of investment grade to be acceptable to most institutional investors seeking long-term investment opportunities. Most countries in Latin America lack local instruments to enhance the quality of debt issues, such as monoline insurance.

*Issue***:** The securitization market must have a credit rating on the issuing securities in order to benefit from reduced pricing and longer maturities. In the US and Europe the use of AAA rated monoline insurance enhances the quality of an MBS portfolio. Foreign monolines have insured the first tranche of certain MBS domestic issues in Mexico and provided country risk insurance in cross border MBS issues in Argentina.

Proposed Solution: Latin American countries should be encouraged to create monoline insurance companies to cover MBS in the Latin American region through multilateral lending agencies and local institutional investors,

Evolution of the Banking Sector

The reform of the banking sector, which allows banks to compete for mortgages and other loans, positively affects the development of the housing credit market. Increased competition, especially amongst foreign banks, has decreased mortgage prices and introduced new financing techniques. The size of the credit market varies in the countries analyzed in this report; in Brazil, Chile, and Panama the total credit in the economy represents more than 60% of the GDP, while there is potential for a quick expansion in Argentina, Colombia, Peru, and Mexico.

Table 3.5 Size of the Credit Sector (Credit% of GDP, 2004)

Large	Medium	Small
Brazil, Chile, Panama	Bolivia, Costa Rica, Dominican Republic, El Salvador, Honduras, Mexico, Trinidad and Tobago, Uruguay	Argentina, Colombia, Guatemala, Nicaragua, Peru, Venezuela

Source: CEPAL.

The size of the credit market in relation to the GDP is only one potential indicator; the efficiency of the banking sector could also be analyzed through the spread between lending and deposit rates.

Table 3.6 Efficiency of the Credit Sector (Spread Lending to Deposit Rates, 2005)

Efficient	Average (9%)	Inefficient
Argentina, Belize, Chile, El Salvador, Panama, Venezuela	Colombia, Dominican Republic, Guatemala, Honduras, Mexico, Nicaragua, Trinidad and Tobago,	Bolivia, Brazil, Costa Rica, Peru, Uruguay,

Source: Database Accompanying CD Cohen and Co

In each country, the presence of the top 1,000 world banks, as classified by the Global Financial Intelligence of the Financial Times, as well as international credit institutions, indicates the dimension of the financial sector. In Brazil, there is a presence of 16 out of this 1,000, while Argentina, Chile and Panama count more than 6; in these countries there are numerous international financial institutions. In Venezuela there are 5 of the top world banks, while

Colombia, El Salvador and Uruguay have just 1 or 2. It would be interesting, for future reference, to analyze the penetration of the banking sector, but there is minimal data available on the number of branches in the different countries and their geographical distribution.

The size of the mortgage market can be gauged by examining the mortgage credit as percentage of GDP and of total credit; these statistics give an idea of the market size and when compared to the European or American market they indicate the potential for further penetration of the mortgage market.

Table 3.7 Size of the Mortgage Market (Mortgage Credit % of Total Credit, 2005)

Large >20%	Medium (approximately 15%)	Small
Mexico, Chile, El Salvador, Panama, Honduras,	Brazil, Costa Rica, Guatemala, Colombia, Donimican Republic, Nicaragua	Ecuador, Argentina, Venezuela,

Source: Titulizadora Colombiana and Cohen and Co.

Table 3.8 Size of the Mortgage Market (Mortgage Credit % of GDP, 2005)

Large >15%	Medium (approximately 5%)	Small
Chile, El Salvador, Guatemala, Mexico, Panama, Costa Rica	Bolivia, Brazil, Colombia, Honduras, Trinidad and Tobago,	Argentina, Dominican Republic, Nicaragua, Peru, Venezuela

Source: Titulizadora Colombiana and Cohen and Co.

Quality of Banks. The country reviews indicate that banks have had difficulties extending mortgage loans to low-income households due to a number of barriers and risks already discussed; however the banking sectors are at fault as well.

Issue: The inadequate training of the staff and inability to offer suitable products for low to middle income borrowers limit the banks' capacities to lend for housing.

Proposed Solution: Bank personnel need further training in how to determine the needs of the borrowers and their abilities to repay the loans; for example, Banco Azteca in Mexico grants credit only after a thorough familiarization of the borrowers' savings capabilities, their expense habits, and their revenue sources (informal money, remittances, etc). In addition, there is a need for more suitable products for poor households, such as micro financing or products tied to incremental housing financing.

Subprime Market. Banks that refuse to grant mortgage loans to low-income households with insufficient income are prepared to grant consumer loans at rates twice as high as mortgage rates. Consumer loans are shorter-term loans and can be easily funded and securitized. In large countries such as Mexico, Colombia, and Brazil, as well as some countries in Central America, there has been a sudden increase in consumer credit.

Issue: Low-middle income households represent a higher commercial risk for banks, thus they face restrictions in accessing long-term financing for housing.

Proposed Solution: Banks in the US have solved this issue by charging a higher rate in the subprime market, which has given many low-income borrowers including minorities, access to homes, although this type of lending is very vulnerable to rises in interest rates. Cooperative and microcredit banks also charge a high rate for housing loans to their clients, often in the informal economy. However, such lending implies a high risk and offers only a partial solution to credit rationing, as borrowers of such loans are more likely to default.

Transaction Costs. The development of mortgage based lending for housing is also constrained by high transaction costs, which result from a combination of factors including deficiencies of the regulatory framework and the financial institutions, and the reduced size of the transactions inhibiting the achievement of economies of scale.

Issue: Mortgage loans in the region are difficult to obtain and expensive, as transaction costs are higher than in other countries. In part, this is the result of difficulties in obtaining sufficient information about both the borrowers and the asset to be financed, as well as internal inefficiencies of the banking system.

Proposed Solution: There are a number of steps to consider, such as streamlining and standardizing the contractual documentation; minimizing transaction fees (brokerage, legal, surveyors, consultants, etc); reducing the time needed for permits and other authorizations; and introducing title insurance and mortgage insurance to accelerate the credit approval process by the private banks.

Microcredit Development. Microcredit is well developed in Bolivia, Brazil, Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Peru, and Nicaragua. Given the needs of the population and the high incidence of incremental housing construction in the region, it is evident that microfinance institutions should be further developed in these and other countries and their housing portfolios should be increased.

Issue: Microfinance institutions (mostly NGOs) have funding problems and institutional weaknesses that lead to high administrative costs. The quality of their portfolios, which are more biased towards trade and consumption rather than housing, tend to deteriorate over time. These institutions are also facing competition from commercial banks (government or private) offering similar products.

Proposed Solution: It is essential for central banks or other monetary authorities to supervise microfinance institutions, which should allow for a greater transparency in managing funds and cost savings. Moreover, microfinance institutions should be eligible for long term financing or refinancing from second tier government banks. Competition should be encouraged in private and government banks through microfinance products (such as in Procredit in Bolivia), including mortgages and incremental housing instruments.

Public/Private Mortgage Market. In most Latin American countries, government banks act as primary mortgage lenders and often as second tier banks for commercial and other public banks (for instance in Mexico and Brazil). Public banks are present in all the countries reviewed, while the private sector is active in mortgage financing in only a few countries. No detailed information has been published on the ratio of public and private sector mortgage credit to total credit; this type of information could be useful in comparing the development of the private market to the public one and could be part of a field assignment for specific countries.

Table 3.9 Presence of Private Banks in Mortgage Financing

Large	Medium /Small
Chile, Panama, Colombia, Brazil, Mexico, Peru, Argentina, El Salvador	Dominican Republic, Trinidad and Tobago, Costa Rica, Guatemala, Honduras, Nicaragua, Bolivia, Uruguay

Issue: Public institutions tend to crowd out private lenders, especially in the low to middle income layer of the population. Moreover, these institutions are generally poorly managed with a higher rate of default on their credit portfolio than in the private sector.

*Proposed Solution***:** There is a need to solve the non-performing portfolio problems and privatize most of the government banks, leaving only those that have a clear role to play in the development of primary and secondary mortgage markets. Greater efficiency in housing loans could be achieved by creating “bad” and “good” bank-type solutions; the “good bank” could be spun off from the public institution, leaving the “bad banks” to deal with problem-loans. New banks could be streamlined and managed in accordance to the best banking practices; INFONAVIT in Mexico is a good example for future procedures in this area.

Efficiency of the Legislative Framework

In order to adopt an efficient housing policy and develop a well-organized mortgage market, the legislative framework must be balanced; while protecting the rights of the debtors, it should give lenders the support they need for carrying out profitable lending activities. Efficient mortgage markets develop in countries where the borrowers' credit histories are easily accessible, where property is legally registered and protected, and where banks have effective foreclosure procedures in place.

Availability of Credit Bureaus. Private credit bureaus cover only 27.9% of the adult population in the region, which is well below the average of the OECD countries (60%). Amongst the countries considered here, only Argentina, Brazil, and El Salvador have similar coverage to the OECD countries while Brazil, Chile, Colombia, Mexico, and Panama have credit information that covers less than half of the total adult population. In Bolivia, Costa Rica, the Dominican Republic, Peru, and Trinidad and Tobago the private credit bureau covers only a quarter of the population, while in Guatemala, Honduras and Nicaragua, the coverage barely exists. The average credit information index for the region is 3.4, compared to 5 in OECD countries and 6 in the US and UK.

Table 3.13 Credit Bureau Coverage

Large	Average	Inexistent or Irrelevant
Argentina, Brazil, Chile, Colombia, El Salvador, Mexico, Panama	Bolivia, Costa Rica, Dominican Republic, Peru, Trinidad and Tobago	Guatemala, Honduras, Nicaragua
	Private Credit Bureaus Coverage	**Public Credit Bureaus Coverage**
Latin America and the Caribbean	27.9%	7%
OECD	60.8%	8.4%
UK	86.1%	0
US	100%	0

Source: World Bank, Doing Business database.

Issue: In granting loans, lenders need easy access to borrowers' credit information.

Proposed Solution: Governments should encourage the creation of credit bureaus and the use of new technologies, such as the Internet, to share available information amongst government and credit institutions. Moreover, lenders should have access to more reliable public databases, such as those available in the Dominican Republic, Argentina, and Colombia.

Property and Cadastral Registration. The efficiency of the housing market is strongly related to effective property registration and the existence of a cadastre. The ability to demonstrate property ownership and have clear property rights based on stable legislative framework is essential when making real estate investment decisions. Within the region, Argentina, Chile, Mexico, and Panama have reasonably current cadastres, while Colombia, Peru and Costa Rica have recently taken steps to introduce reforms.

Table 3.11 Cadastral Registry Information

Existing Reforms	Planned Reforms	No Reforms Planned
Argentina, Brazil, Chile, Colombia, Mexico, Nicaragua, Panama, Peru, Uruguay	Bolivia, Costa Rica, Dominican Republic, Guatemala, Venezuela	El Salvador, Honduras, Trinidad and Tobago

Source: World Bank, Doing Business database.

Urbanization has increased in all the countries reviewed, as has the number of people living in informal settlements. Besides the issues of title legalization and financing of the title acquisition for informal settlers, all cadastres in the region need some reform; for example in Brazil, there is a national cadastral registry, yet as the number of informal settlements has greatly increased in the country, it only accounts for approximately 10% of the population in San Paolo and 30% in Rio de Janeiro. In Uruguay reforms to the cadastre were undertaken in 1994, yet since then the informal settlements have increase dramatically. Progress in this area is essential in countries such as Venezuela and Guatemala, where more than 60% of the urban population live in informal settlements, and Trinidad and Tobago, where 12% of households are squatters.

Table 3.12 Property Registration Averages within the Region

Faster than Average	Average	Below Average
Argentina (Costs higher than the average), Colombia, Costa Rica, Peru	Chile, El Salvador, Honduras, Mexico, Panama, Venezuela	Bolivia, Brazil, Dominican Republic, Guatemala, Nicaragua, Uruguay

	Procedure N.	Time Days	Cost (% Property Value)
Average Region	6.6	77.4	6
OECD	4.7	31.8	4.3

Source: World Bank, Doing Business database.

Problem: It is difficult to register a property without a cadastre, and without clear and protected property rights lenders are hesitant.

Proposed Solution: Governments should create effective cadastres when lacking and improve the quality of existing public registries.

Foreclosure. Lenders decisions are strongly influenced by foreclosure laws. It is difficult to establish effective repossession processes since most legal frameworks do not favor easy and fast foreclosures, even in Bolivia, which has reduced the time needed for evictions to 2 –3 months. Since data for this process is not available from all countries, the table below illustrates a comparable process of enforcing a contract as a proxy.

Table 3.13 Contract Enforcement Timeframe

Faster than Average	Average	Below Average
Argentina, Brazil, Chile, Colombia, Dominican Republic, Mexico	Costa Rica, El Salvador, Panama, Peru, Uruguay, Venezuela	Bolivia, Guatemala, Honduras, Nicaragua

	Procedure N.	Time Days	Cost (% of Debt)
Average Region	39.3	641.9	23.4
OECD	22.2	351.2	11.2
US	17	300	7.7

Source: World Bank, Doing Business database.

Issue: Lengthy and expensive procedures to access the collateral are major barriers in the lending process.

Proposed Solution: Legislation should be introduced to improve and speed up foreclosure processes while decreasing costs.

Efficiency of Housing Policies and Programs

To adequately respond to the housing needs of the poorest population, governments need to develop coordinated housing policies, even in economies with efficient mortgage markets. For example, the UK has an exceptionally developed mortgage market, yet almost 5 million social dwellings still exist.[19] Most countries reviewed here have housing policies in place, yet data on housing needs shows that much of the population still lives in inadequate housing.

Coordinating Housing Policies and Programs. Municipal governments and housing ministries or state housing departments do not always coordinate their housing policies and programs. There is a need for long-term strategies on part of the government to coordinate such policies and frame market interventions accordingly, away from short-term concerns or mere political expediency.

Issue: Most countries have outstanding issues to resolve the coordination of existing housing institutions of different government levels operating on the same territory or supporting the same segments of the population.

Proposed Solution: Governments should encourage better coordination between central and local authorities in order to avoid overlapping responsibilities in the institutional

[19] Communities and Local Government, http://www.communities.gov.uk/index.asp?id=1156006.

framework of housing policies. Furthermore the housing policy should concentrate on ensuring the adequate functioning of housing markets in the country, which directly affect housing prices.

Subsidy Management. Another important aspect in successful housing policy is the use of subsidies and compulsory savings, down payment financing, and guarantees. Direct demand side subsidies are used to foster the housing market in Chile, Colombia, Costa Rica, El Salvador, Mexico, and the Dominican Republic. Brazil, Peru, Panama, and Trinidad and Tobago offer interest rates subsidies, tax credits, building material grants, in addition to demand subsidies, while Argentina offers interest rates subsidies.

Problem: Often these systems lack transparency and there is overlapping of subsidy granting agencies, which tend to ill target the beneficiaries.

Proposed Solutions: There is a need for more transparent allocation procedures, for instance, channeling the subsidies, the credit, and the prior saving records through one institution. Households need to learn proper saving skills, while banks should offer better savings products with a positive real rate of return. In addition, a mechanism for efficient, timely reimbursement of the subsidy (total or partial) should be put into place for middle-income beneficiaries.

Moving Forward and Policy Recommendations

The countries reviewed show certain dynamism in the financial and housing sectors, with noticeable differences between large and small countries. Nonetheless, most countries share the trend of trying to utilize market instruments to address housing for low-income households, accompanied by government support when necessary. Although banks are willing to go down market, taking advantage of the potential for further penetration of banking products and services, there are still barriers for the banks in lending to the poor, as evidenced in this study. The Latin American "best practices" in Chile, Colombia, Mexico, Peru and Panama indicate a need for strong government support to private lenders to convince banks to service the low-income households. In parallel, government primary mortgage institutions should continue to service the poor, while strengthening operational management and housing policy framework.

Here, two macro-categories of policies are highlighted which help create a more efficient housing market, particularly for the poor. It is difficult to completely separate the set of policies in each macro category, as several policy suggestions are mutual.

Financial and Mortgage Market Development

Macroeconomic stability. Latin America has been characterized in the seventies and eighties (and also more recently) by severe inflationary pressures, external debt overhang and crises, and currency devaluation, which has discouraged long-term savings and foreign investors. A stable macroeconomic framework would promote better housing finance products and attract foreign investments into the sector, and will make possible that funding from emerging sources like workers remittances or from new financial instruments like cross border securitization be channeled through the banking sector. Another inhibiting factor is the currency risk, which is not easy to hedge, particularly on long-term maturities as most of Latin American currencies lack a proper foreign exchange swap market. A more active role in developing hedging tools should be taken on by Multilateral Lending Agencies (MLA) and aid agencies such as USAID and OPIC.

Institutional Reforms. It will remain extremely difficult for the banking system to go down market without developing a long-term source of funds, which in many countries involves a less aggressive government intervention in debt markets. Chile has shown promising advancement in this regard as pension system reforms have enabled institutional investors to invest in long-term mortgage backed securities; the monetary and securities authorities have regulated this market from its onset, preventing possible crisis. In addition, the liberalization of the banking sector has broken the monopoly of public banks and encourages competition between public and private banks in a variety of financial products and services, including mortgages. The various mergers among financial institutions and the penetration of foreign banks have also contributed to this progress. Using this as a lesson, it can be safely said that the ability to compete without being crowded out by subsidized loans offered by public banks will encourage private banks and financial institutions should be encouraged to go down market.

Refinancing and Development of the Capital Market. The ability to go down market and the possibility for lenders to offer mortgage products based on market interest rates depends heavily on the availability of long term financing and refinancing, which can be achieved through greater access to both local and international capital markets; better access to refinancing opportunities in the capital markets can create additional long term funding options for lending institutions on the primary market as well as opportunities to refinancing through second tier mortgage banks. The economic stability in the originating countries blended with a well-defined securitization law and legal protection for repossession and foreclosure could help in further improving this market. Securitization legislation could benefit from the efficient management of non-performing loans of banks and financial institutions, readjusting their portfolio and their capital adequacy to accommodate new loans. An effective securitization program should include legislation to ensure effective bankruptcy remoteness of the securitization vehicle and a set of standardized mortgage documentation and processing procedures that could help the creation of a Latin America cross-border MBS market. Given the different legislations, this is not an easy task; yet with the proper assistance of Multilateral Agencies (MLA) such a program could help increase the size of the market and enhance competition within it, while helping to reduce mortgage origination and servicing costs. Fannie Mae types of institutions could be developed and funded by multilateral institutions as well as national governments, and that could be enhanced in order to obtain AAA ratings to develop the refinancing market both for primary mortgage originators and second tier refinancing banks.[20] Access to the capital market could also be achieved by introducing instruments similar to the *letras hipotecarias* in Chile or covered bonds used in several European markets; similarly, access to long-term refinancing could improve by encouraging existing monoline insurers to enter smaller Latin American countries or by creating MLA funded monoline insurances to cover mortgage securitization. Also, bilateral assistance could be addressed to develop refinancing guarantee vehicles.

Primary and Secondary Market. Mortgage origination and the development of a primary market should rely significantly on private lenders, while government agencies should ensure liquidity and reduce transaction costs, as well as reduce regulatory and systemic risks, to encourage private lenders to go down market. Government agencies should devote their effort to assist the most impoverished and promoting the development of strong mechanisms for refinancing private lenders, thus developing secondary markets through mortgage securitization. However, such agencies should be aware that public banks which fund housing mortgages by tapping into social security or pension funds create a contingent liability, which is particularly burdensome if defaults are high and short-term political concerns prevent them from collecting the loans to cover pension liabilities.

Credit education. Two main factors should be considered in analyzing the difficulties for financial institutions to go down market. First, there is a need to develop a culture of borrowing (*cultura de credito*), particularly among the poor and the very low-income households, to increase the trust in banking institutions, which in the past 20 years have experienced severe financial crises in many countries. In this regard, it would be helpful to set up deposit insurance in countries where needed, using the FDIC in the US as a model; moreover, understanding credit and the link between credit and the economic development and well being of the household has to be reinforced. Low middle-income households with access to mortgage financing have increased creditworthiness, making it easier for them to develop their own commercial or industrial activities through the formal banking sector and microfinance institutions. Secondly, banking and financial institutions should offer better professional credit, particularly following bank mergers and the liberalization of financial products and services offered by lending institutions. MLA should continue to cooperate in promoting the education of borrowers and lenders, as well as assisting in the implementation of needed reforms.

Savings Incentives. Savings incentives help trigger housing financing schemes such as the ABC (*Ahorro, Bonos, Credito*) type used in several Latin American countries; to mobilize savings, lenders should offer financial products and saving schemes with positive real rate of return, along with gaining the trust of depositors. Products must be profitable in order to encourage people to save so the banks have a stable deposit base, while saving schemes help educate borrowers in how to build up a track record of payment credibility, thus mitigating lenders risk in mortgage financing. Governments should encourage such savings, for instance, by granting subsidies to borrowers

[20] Current problems in the United States with these institutions and the general subprime market do not seem to be relevant for the Latin American housing finance environment. Securitization is still at an early stage, and banks are still not lending to sub prime borrowers without some form of government guarantee or mortgage insurance. Certainly over a longer time horizon, developments of such institutions should be properly monitored in order to avoid creating undue disruptions in the financial markets, and potential liabilities for governments.

with a punctual payment record. In Peru the *Bono al Buen Pagador* is a good example on how to approach the subsidy issue, proving that it helps enlarge the bank mortgage market. According to Mi Vivienda, as of December 2005, 99.5% of the borrowers benefited from the *Bono al Buen Pagador*. As mentioned before, a similar scheme, *Cuota Reducida,* has been applied in Colombia.

Migrants' Remittances. Channeling migrant remittances through the formal banking system may increase the banks' access to funding, but banks need to offer new and competitive products. Remittances may be used as down payment or to build up the required saving for household to qualify for mortgage financing, while serving as long-term sources of funds for private banks.

Mortgage Insurance. The experience of SHF in Mexico suggests that mortgage insurance assists lenders in the transition from a government-based to a market-based housing finance framework. Mortgage insurance could be helpful to allow lenders to go down market and increase the loan-to-value provided, as borrowers' payment capability must meet the acceptance criteria of the insurance company. Mortgage insurance could thus introduce lending discipline and streamlined procedures, as well as facilitate refinancing of capital markets. Initially mortgage insurance could be sponsored by government agencies in order to test the market; during the development of the market, government insurers could gradually limit their coverage, or coinsure or reinsure with domestic or international insurance companies. Mortgage credit insurance schemes, with the participation of MLA, could help revolutionize government housing programs.

Transaction Costs. Among the factors that prevent banks from going down market it is worth noting: the uncertain judicial system, difficulties in accessing property and cadastral registrations, inability to assess the applicant creditworthiness by lending banks, and high administrative costs (stamp duties, legal fees, notary fees). The latter also deter low-income households from applying and being accepted for mortgage loans. In Chile and Peru the government subsidizes part of the transaction costs for mortgages issued to low-income households, which could be a model for other countries. Market based solutions have also been successful, such as involving the insurance companies to take part of the transaction risk. In addition, better mortgage contract standardization and access to online property databases and a wider spread of credit bureaus may help reduce transaction costs and approval timeframes.

New Housing Financing Products. Along with the regular mortgage market programs, there are other products offered by banks or financial institutions.

(i) *Housing leasing*. In this market, the leasing company buys the house and leases it back to the tenants, who have to meet the monthly leasing fee. When the leasing period ends, the house can be transferred to the tenant, with a final payment agreed upon at the initial signing. Housing leasing is a flexible mechanism, as the amount of the financing depends on the initial down payment and the residual payment at the end of the lease period. This structure offers more flexibility to lenders to accommodate solvent borrowers with irregular annual earnings. The system provides strong incentives for borrower to avoid default and comfort to lenders that are uneasy with those households that earn their income in the informal sector. Households that show solid savings capabilities can benefit from this form of financing together with traditional beneficiaries of mortgage financing employed by the formal sector of the economy with regular earnings. Housing leasing may be supported with government subsidies that add to prior savings, as well as make it easier to obtain higher loan-to-value ratios (more than 95%), thus offering a solution to households that do not have sufficient savings for a down payment, but have a stable income to cover leasing fees. Lenders may prefer this option, as they own the house and thus foreclosure risks are eliminated. In Chile, there are approximately 5,000 leasing contracts per year, which account for nearly 20% of housing financing; the average value of a leased house is high (about US$23,000) Leasing debt service could be higher than mortgage financing, often due to higher refinancing costs of leasing companies (securitization) compared to banks (savings deposits), however leasing may have a positive fiscal effect on borrowers due to tax deductions.

(ii) *Flexible mortgage repayment.* In case of indexed mortgages, frequent in Latin America, borrowers my find difficulties in meeting debt service obligations when mortgage installments increase due to the rise of interest rates or a devaluation of the local currency versus the referenced foreign currency or unit of account. In this case, banks could offer a product (already often used in Europe on variable rate mortgages), which in the event of an increase in interest rate extends the maturity of the mortgage loan, thus maintaining the monthly installments at the original level.

(iii) *Flexible mortgages and remittances.* This product could be structured and linked to remittance flows that are not following a regular pattern (when they are not consistent in payment schedule and amount). Mortgages could be based on borrowers' capabilities to meet their interest payment obligations, while the repayment of the principal could be tied to the remittances received by the borrower. Each time there is a remittance flow, the bank will apply part or all to the principal prepayment. A better control and coordination between the banks in the migrant and recipient country could attract more remittances and manage the flows more efficiently.

(iv) *Refundable subsidies*. This product concerns the management of subsidies, but could play a significant role in the development of market-based mortgages. Currently subsidies are granted once in a lifetime and are not refundable. In the event that the subsidy recipient sells his house after an agreed period of time, it would be interesting to make it partially or fully refundable. Depending on future income, the housing price, and the payment track record of the borrower, banks could supplement the subsidy portion on the new home acquisitions at market rates; thus the refunded subsidy could go into a government fund to finance new subsidies or finance housing/urban infrastructure.

Legal Framework and Housing Policies

Foreclosure Laws. It is of paramount importance for the development of mortgage financing to set a proper judicial system, which may facilitate repossession in case of payment delinquency by the borrowers. A strong foreclosure law may induce banks to go down market, but it is not a straightforward or sufficient exercise. Two econometric studies for Bolivia and Peru are reviewed here. In Bolivia, there is a strong foreclosure law, entails a system of "*juicio coativo,*" where the borrower has no defense, compared to the "*juicio ejecutivo*" of other Latin American countries. Notwithstanding this, banks are setting higher barrier in accessing the mortgage market by low-income borrowers. In Peru, for instance, title to the borrower's property makes mortgage credit more accessible, but does not always ensure it.

Property Ownership Registration. Steps should be taken to update and unify the various public registries, such as in Peru and Chile. Updated cadastral registration identifies owner and could ensure a better property tax assessment. Collection of property taxes, if professionally managed, could be used to fund housing loans by public agencies. In fact, if the collection system is efficient and predictable, future property tax flows could be securitized and used for capital investments in infrastructure development and low income housing construction. Moreover, effective handling of property taxation could help local municipalities or decentralized authorities to better manage the territorial housing needs. Efforts of international organizations to improve and modernize property registrations and titling should be strengthened.

Low-Cost Housing. Government agencies should induce developers through national or international competitions to go into the design and construction of low cost housing, which meet required safety standards. Several architectural firms and construction companies worldwide are developing affordable housing solutions; recent experiences in Asia following certain natural disasters are clear examples. More recently, the absorption of Russian immigrants in Israel has been handled through a system that has encouraged the development of low-cost housing and created a diversified demand subsidy program. Incremental housing schemes should be developed for the very low-income households, rather than concentrating on offering finished houses. Developers that take on major commercial housing and other real estate projects should be required to compensate governments or municipalities with projects in low-income housing and urban infrastructure to benefit the poor.

Infrastructure Provision. Housing financing could also be enhanced and banks could go down market more easily if there is good basic infrastructure in the city (water, electricity, sanitation, transportation). Infrastructure provision affects housing prices and reduces sales time, thus offering enhanced security and further protects mortgage lenders by minimizing foreclosure risks. Policies for implementing infrastructure provision should be implemented, while fiscal resources in public budgets should be leveraged with new financing frameworks, such as public private partnerships.

Real Estate Valorization. Promoting infrastructure or real estate funding for infrastructure provision and neighborhood upgrading is needed; neighborhood improvements increase property values and generate additional resources through the state or municipal land taxes. As these investments increase the market value of real estate they could be financed through schemes similar to tax increment financing used in the US. Tax increment supported funds could be listed and purchased by institutional investors; Patrimonio SpA in Italy exemplifies this tactic.

Subsidy Management. It is clear from the countries reviewed that demand-side, rather than supply-side subsidies should be developed. However demand subsidies require transparent allocation system, as well as an efficient control mechanism to ensure proper targeting of beneficiaries. Steps to further improve housing subsidy management should be taken; in some countries, such as Chile, the systems are transparent, while in most others, the system is somewhat opaque. The distribution of subsidies should be delivered by the same mortgage lenders, which could create a more efficient application and approval process including confirming the applicant's prior savings capability. Governments should be aware that subsidies granted by public agencies could crowd out private mortgage lenders; in fact, interest rate subsidies deter private banks from offering competing, market-based products.

Microfinance. Microfinance institutions should be encouraged to enter the housing finance market, particularly to assist households earning less than 2-4 times the minimum wages. The need to link subsidy granting and housing finance and microfinance institutions could be the focus of such affiliation, given their knowledge and extensive territorial presence; moreover, microfinance institutional involvement should be directed towards incremental housing finance rather than long-term mortgage financing, given the uncertain earning flows of the households and their saving habits. Such institutions must become more efficient, as they usually confront high operating costs in relation to their credit portfolio. Multilateral organization and donor contributions should focus on improving credit management efficiency while enabling microfinance institutions to increase their market share without increasing the default rate on their loans. As such, it is worth mentioning the recent OPIC initiatives in Latin America that stress the importance of housing finance to foster economic development. Similarly cooperatives banks and credit unions should be strengthened since they are particularly suited to lend for incremental building, and the boosting of savings education.

Public Private Partnership. Public private partnerships to enhance and promote housing ownership in Latin America should be further investigated; currently there are no alternatives to government funding for the most impoverished households. Trying to convince commercial banks to go far down market is an illusion. However, some form of cooperation between the private and public sector could lead to more market driven solutions to housing problems. The public sector should focus on the following: regulatory issues; urban policies to facilitate access to suitable land to low-income households; assuring access to adequate infrastructure; quality construction supervision; creating a more friendly users/investors/developers cooperation framework; and assuring refinancing of primary market lenders. Together with direct subsidies, government agencies could provide partial or total guarantees to banks that lend to low-income households. This could enable more efficient private banks to enter the low-income mortgage market, currently managed by public banks that are often highly inefficient in managing and recovering loans. The private sector could administer the actual construction process, bringing new ideas and low costs solutions, handling subsidies on behalf of the public sector through private banks, and financing construction and mortgage acquisitions. Better management of subsidies, low-cost housing financing, and mortgage financing could accelerate the construction and sale of new houses.

Outsourcing Housing Services. The field of maintenance and facility management is another area were a public private partnership could be envisaged; this would involve the private sector, which, at a decentralized level, can assure an adequate maintenance of the housing stock as well as provide more cost effective and reliable access to maintenance and infrastructure services to home owners (water, sanitation, electricity etc). Public and private actors need to be involved in the rehabilitation and development of central city locations and in preventing the continuous degradation of the central areas and the movement of the residents to the periphery. Public-private development corporations are suitable institutions to buy, develop, sell, or lease properties and land in the rehabilitation with the purpose of ensuring long-term development. Besides the increasing the valuation of those properties, if properly managed, these developments could be profitable and positively affect long-term real estate value increases, indirectly expanding the investment resources available to governments. Lending institutions would be more keen to finance the acquisition of such properties knowing that there is a maintenance program outsourced to the private sector, while the mortgage payment mechanism could be better protected, not only by the credit of individual homeowners, but also by community influence.

Multilateral Institutions. Multilateral lending agencies should continue to look at solutions to cope with the housing problem in Latin America, concentrating more on the financing issues and helping bridging the gap between those who can afford formal housing and those that cannot. There is a need to assure the development of a secondary market of mortgage securitization, following the examples of Colombia, Peru, Argentina and other countries with IFC; increase technical assistance to microfinance to increase their efficiency and productivity; and foster technical assistance to redesign the pension systems in order to create a market of institutional investors. MLA could promote programs of neighborhood valorization through public/private real estate development companies. Infrastructure and real estate funds should be encouraged, seeding money from MLA, who should also help participating countries in the evaluation of their housing policies and address their failures. Housing solutions are not simple; there is a need for concerted consensus with local communities as well as continued education among the poor on how to increase savings for their housing needs. Lending officers should be educated on how to identify suitable housing finance products for potential informal and impoverished borrowers.