

Does Housing Finance Promote Economic and Social Development in Emerging Markets ?

Short version of a study commissioned by the
International Finance Corporation

By

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Abstract

Assisted by growing capital supply, declining interest rates and legal reforms, in the past decade housing finance has grown dramatically in emerging markets. The study explores with evidence available from early emerging markets mainly from Latin America and Asia under which conditions the lending boom translated into a dynamic and sustainable economic and social development as measured by various indicators. The main finding is that despite early house price increases and boom-bust cycles in the early emerging markets, housing finance has in the long-run helped to build thriving construction and financial service industries, with some players starting to go global. It has also contributed to improved blue collar employment opportunities. Where housing supply moved down-market and regional in parallel, sometimes with public policies assistance, greater availability of finance was finally able to contribute to declining housing deficits and indirectly has reduced slums. The paper concludes with lessons for housing finance system development strategies.

Introduction¹

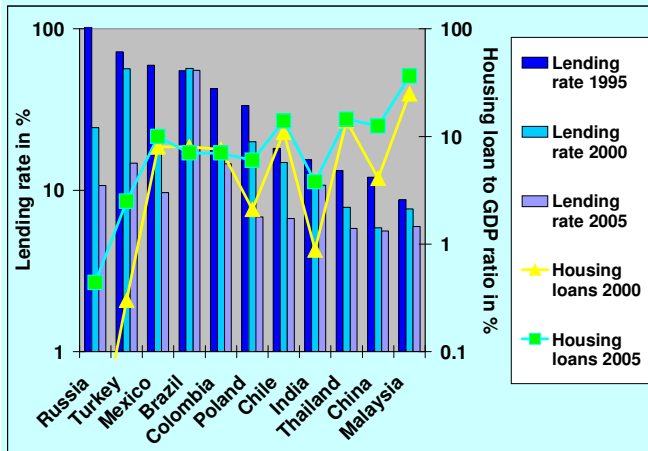
Housing finance has become a **boom industry in emerging markets** over the past decade. Supporting trends were the global disinflation until very recently, and declining real interest rates. In the middle of the 2000s, an unprecedented number of countries had reached the magic 10% interest rate threshold below which standard mortgage finance instruments that appeal to investors can be applied. Latin America had started to move out of decades of indexation. Legal and regulatory reforms had improved registration and enforcement of mortgage collateral, or at least created credible shortcuts. The IT and communications revolution had allowed lenders to leverage their distribution networks in countries served thinly by branches and created a new level of transparency about col-

¹ The author is an independent financial sector consultant based in Berlin/Germany. He is indebted to the IFC and World Bank housing finance business groups lead by Kenroy Dowers and Loic Chiquier for their financial and substantial support of this and other projects. Special thanks also go to Simon Walley in the World Bank business group who complemented the comprehensive data generation effort necessary for this study.

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lateral and borrowers alike that gave a new level of comfort to extending credit in uncharted territory.

Figure 1: Interest rate compression and housing finance growth in Emerging Markets, 1995-2005



Source: for Housing Loan to GDP ratio – Finpolconsult computations based on World Bank Group, Merrill Lynch and private consultants. Lending rates – IMF international financial statistics and other sources.

Still, the idea of housing finance as a tool for economic and social development is still met with skepticism. Some see it as the main culprit of house price inflation that has plagued emerging and developed markets alike. Stability questions are raised as new lending instruments and risk management techniques seem to enable both, better access to ownership as well as greater speculation. The US subprime mortgage lending debacle is fuelling such concerns: are not **emerging mortgage markets** the potential **global subprime market**?

A second line of questions confronting an institution such as the World Bank Group focused on eradicating poverty, and in contradiction with the former argument, is: is it possible to achieve **rapid down-market penetration** and fast social development with **a new housing finance system**? In line with this housing finance is often being given a connotation of a 'top-down' development tool standing in opposition to, and competing for resources with, 'bottom-up' alternatives, such as microfinance, or traditional public housing policies.

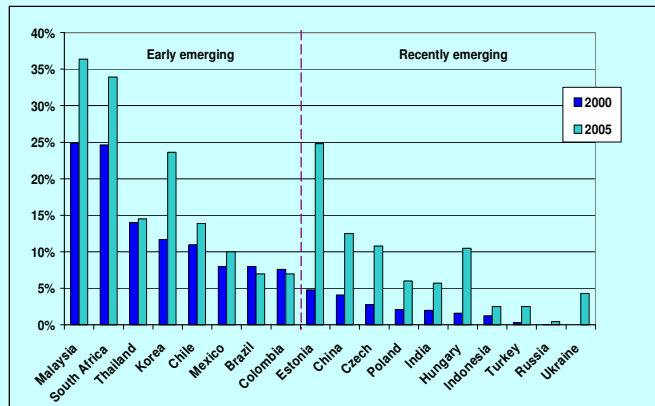
The study intends to take stock of the impact that the fast mortgage market development in the past decades has in reality had on the economies and social development of emerging markets, addressing the value that the above arguments and how they can be reconciled in a holistic and sustainable sector development strategy.

Country samples

For an impact assessment it is useful to differentiate between **two groups of emerging housing finance systems**, early emerging markets that had developed housing finance by 2000 into the range of 10% of GDP and more, and recently emerging markets with new, and partly precipitously growing finance markets (see figure 1). For the former group an empirical impact analysis is already possible, data situation permitting; for the latter group we can check whether system design is set right in order to achieve a maximum development impact following the earlier examples.

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Figure 2: A fast growing sector - housing loan to GDP ratios in Emerging Markets 2000 and 2005



Source: for Housing Loan to GDP ratio – Finpolconsult computations based on World Bank Group, Merrill Lynch and private consultant information.

Most **early emerging markets** have now successfully developed their housing finance systems, typically from initial public sector initiative into private markets with supporting government roles (Chile, Mexico, Malaysia, and Korea). Virtually all have gone through pronounced lending and house price cycles and some are still lagging behind as a result (Brazil, Thailand). Developed markets experienced similar cycles and crises during their early development in the 19th century.

Recently emerging markets are a more heterogeneous group: the former socialist subgroup started from a severely repressed, government intermediated housing finance systems (Estonia, Russia, China), while the remaining group of large developing countries suffered hitherto from a more pronounced underdevelopment of institutions, laws and markets (India, Pakistan, Indonesia) that is now being removed. Common to both groups is a precipitous growth: for example China within a few years surpassed most early emerging markets in market size.

Impact hypotheses

Housing plays an important role in the economy as both wealth storage and urban production factor. Figure 3 highlights the classical **S-curve theory of latent housing investment demand** whose peak coincides with the peak rate of urbanization. Clearly, the conceptual idea of housing finance in emerging markets is to turn this high level of latent demand into active demand by improving affordability.

Yet, due to long production lags, urban land market and infrastructure constraints, housing markets tend to be characterized by **slowly responding supply conditions** in the short-term. While the introduction of housing finance will reduce interest rates, it will initially just provoke a revaluation of existing housing stock on the capital market – i.e. a short-term house price increase.

However, such an **initial price effect** must not be confused with inflation. It is a **desirable relative price change** that will eventually set in motion a

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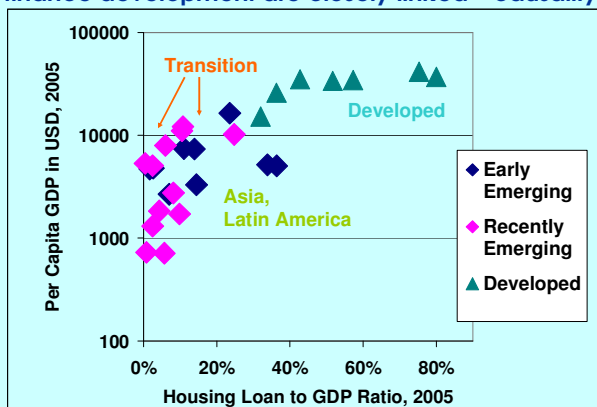
chain of supply reactions in the land and construction markets that lead to more housing becoming available in the mid-term. New construction is stimulated, and more entrepreneurial capacity in finance and construction industries is being developed.

A **key to supply growth** is held by **developers**: companies that were forced to finance consumers from their thin capital base in the absence of housing finance in its presence may multiply pipeline, production and turnover. This enables them to attract both more capital from banks and equity investors through higher profitability and solvency – a virtuous circle.

Similar mechanisms can be assumed at work in the **progressive housing market** where - with appropriate techniques such as microfinance - housing finance may help to raise the efficiency of house-building through faster and higher quality housing construction.

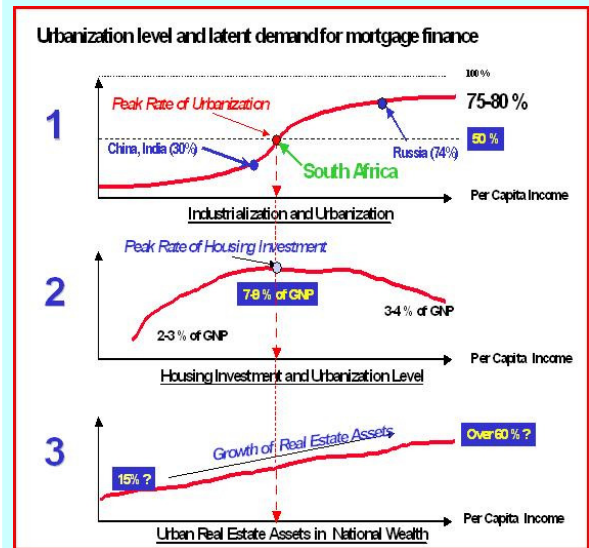
Beyond the construction sector, introducing housing finance with sufficiently broad access and borrower screening techniques, sound collection and funding mechanisms as well as regulatory safeguards minimizing housing market volatility should have a considerably positive impact on the economy and social indicators.

Figure 4: Per capita income levels and housing finance development are closely linked – causality?



Source: IMF International Financial Statistics (per capita GDP, US GDP deflator), Finpolconsult research with World Bank Group staff support (Housing Loan to GDP). Sample includes: Brazil, Chile, Mexico, Colombia, Korea, China, Indonesia, Thailand, Malaysia, India, Pakistan, Iran, Hong Kong, Turkey, Russia, Estonia, Poland, Czech republic, Hungary, South Africa, Germany, United Kingdom, Canada, Australia United States. Note: logarithmic income scale.

Figure 3: Urbanization levels and latent demand for housing finance



Source: Bertrand Renaud, ca 2003.

the economy and social indicators.

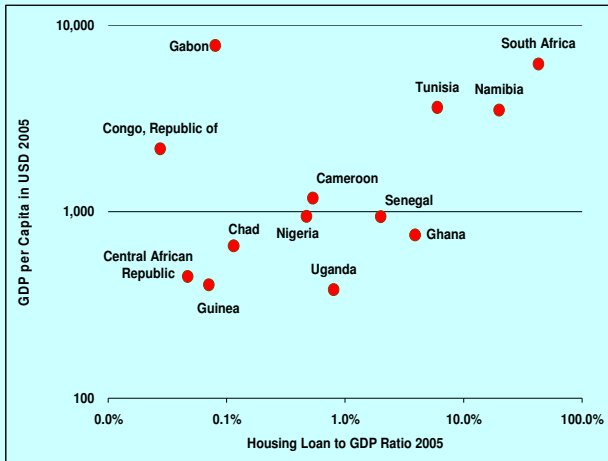
Indicators for development impact of interest for the study are construction activity and investment, the demand multiplier effect of construction, changes in both quantity and quality of housing supply, effects on wealth (homeownership) and consumption, as well as direct and indirect labor market effects

Findings - economic development impact

Housing finance develops **closely with the income level** of the economy as Figure 4 shows. Currently,

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Figure 5: Income and housing loans are also positively correlated in Africa



Source: IMF International Financial Statistics (per capita GDP, US GDP deflator), World Bank (housing loan to GDP). Note: logarithmic income and housing loan to GDP scale.

emerging housing finance market size seems broadly in line with the individual nation's income levels. The exceptions are the former socialistic financial systems that have smaller, but faster growing, markets compared to peers. In contrast with developed markets, there should be no reason for concern at this point that emerging housing finance markets are over-dimensioned.

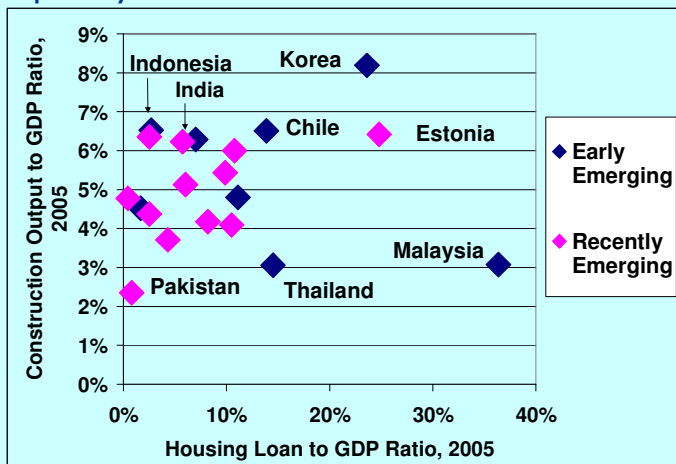
Such relationship even holds true at the lowest income levels, as a comparison of **late emerging markets in Africa** in Figure 5 shows. A broad correlation between income level and housing loan market penetration

emerges, with resource-rich but financially unstable countries as Gabon and the Republic of Congo being negative outliers. Legal and financial institution building programs are currently under way in a number of African countries, including Nigeria and Uganda.

The study finds **open causality questions** on economic impact channels open: greater macroeconomic stability, lower real interest rates and dynamic labour markets may generate both higher incomes and larger finance sectors. However, housing finance can be shown to have a

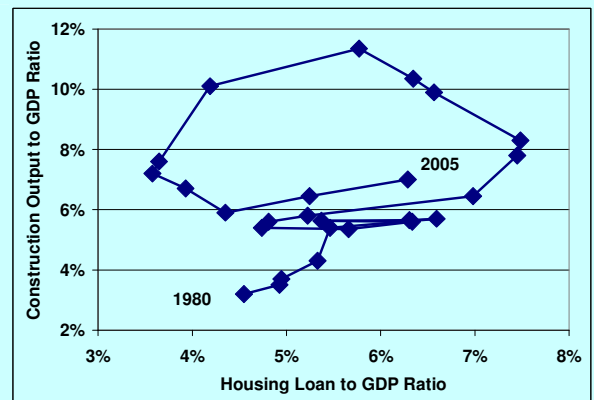
causal impact on gross fixed investment levels in emerging markets.

Figure 6: Housing finance is supporting construction – except for cyclical outliers



Source: for Housing Loan to GDP ratio – Finpolconsult computations based on World Bank Group, Merrill Lynch and private consultants; for construction output shares – United Nations. Notes: Sample includes: Brazil, Chile, Mexico, Colombia, Korea, China, Indonesia, India, Pakistan, Iran, Estonia, Czech republic, Hungary, Poland, Russia, Ukraine, Turkey. Malaysia, Thailand post mortgage and construction sector cycle.

Figure 7: Cycling or not – housing finance supports construction Colombia 1980 - 2005



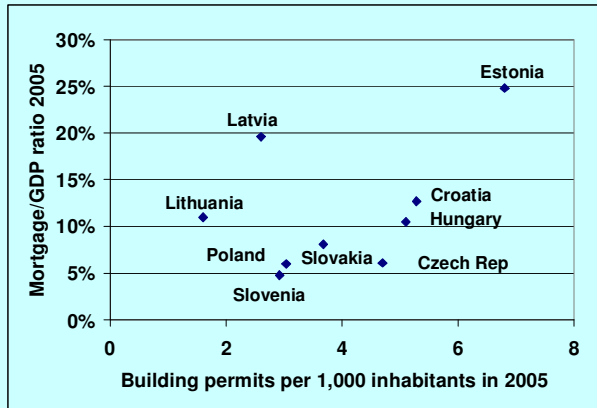
Source: for Housing Loan to GDP ratio – Finpolconsult computations based on World Bank Group, Merrill Lynch and private consultants; for construction output shares – United Nations.

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Housing finance also **directly drives construction output** in emerging markets, in both cross-sectional and inter-temporal perspective. Figure 7 shows the example of Colombia, where despite a strong sector cycle

housing finance contributed to sector expansion in the long-run.

Figure 8: Stimulating for the construction sector - Central and Eastern Europe 2005



Source: Hypostat, Finpolconsult computations.

of Latvia with its dominating centre in the city of Riga in Figure 8 suggests.

Early emerging markets that addressed supply issues forcefully, most notably Malaysia and Mexico, in the past 15-20 years have both developed **competitive and internationally active developer industries** as well as shown better down-market penetration results. Malaysian developers are successful in South Asia and the Gulf. Mexico's Homex – which grew with publicly guaranteed construction finance loans - today has one of the most efficient low-cost production platforms and exports its knowledge base around the globe, e.g. to Egypt and Brazil. Brazil's developer industry itself has tripled its production pipeline after a series of successful IPOs between 2004 and 2006. The deepening of South-South trade is likely to play a prominent role in access to housing in other emerging markets.

Housing finance, via construction output, creates also significant **demand multiplier effects** for other sectors of emerging market economies. Table 1 provides the example of Argentina. The study finds also evidence for an independent direct impact on the development of the real estate and financial service industries (see discussion on employment effects below).

Table 1: Argentina: Construction Multiplier Impact (for each AR\$ 1 million) Estimate, 2006

Sector	Production Pesos	Employment Jobs
Direct Demand	1,000,000	40
Indirect demand	800,000	20
Services	300,000	10
Industry	450,000	9
Mining	50,000	1
Multiplier	1.8	1.6
Total Demand	1,800,000	60

Source: Freire, Hassler et al. (2006) based on INDEC Input-Output Matrix and consultants.

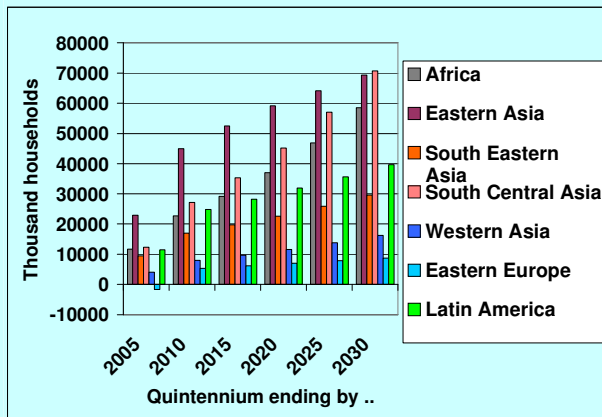
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Despite partly aggressive growth of their housing finance systems, as Figure 9 shows **emerging markets do not see the strong consumption effects** recorded in developed markets. The reason lies in their still shallow market penetration, limited to narrow (often well-off) borrower groups and their proximity to the housing investment peak. That said, partly for credit reasons, many emerging housing markets have moved fast-forward in developing home equity products to fund non-housing loan uses within a few years.

Social development impact

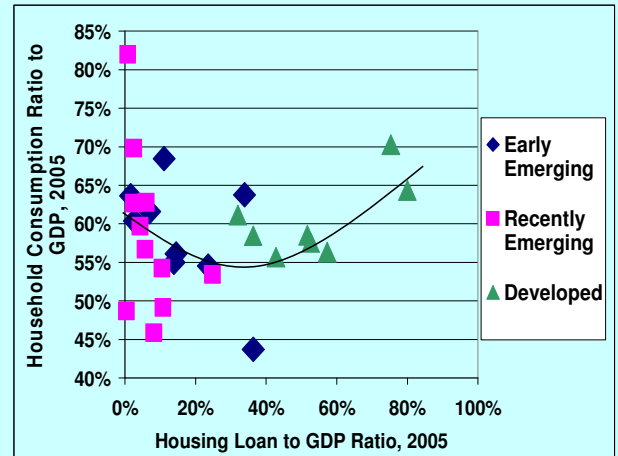
Even critics of housing finance as being insufficiently focused on, or even damaging through financial bubbles, socially vulnerable groups will acknowledge the fact that **emerging markets need formal housing finance** in order to cope with their vast housing challenge. Current UN urbanization forecasts and typical household formation trends imply that cities in emerging markets will require more than 1 billion new housing units until 2030. Expanding the

Figure 10: Urban housing demand resulting from urbanization and household formation trends is vast



Source: UN Population Division (2005), Finpolconsult computations. Notes: computation takes differences of urban population estimate during quinquennium, multiplied by average household size change assumption. Average household size is assumed to decline by 10% per quinquennium, starting per 2000/2005 with (current levels): Africa (4.5), Eastern Asia (3.5), South Eastern Asia (4), South Central Asia (4.5), Western Asia (4), Eastern Europe (3), Latin America (3.5). Household formation translates into increased demand for both existing and new urban dwellers.

Figure 9: Housing finance boosts investment rather than consumption - at least in emerging markets ...



Source: for Housing Loan to GDP ratio – Finpolconsult computations based on World Bank Group, Merrill Lynch and private consultants; for household consumption shares – United Nations. Notes: Sample includes South Africa, Brazil, Mexico, Colombia, Chile, Korea, Thailand, Malaysia, Russia, Poland, Ukraine, Estonia, Hungary, Czech republic, India, Pakistan, China, Iran, Turkey, Indonesia, Hong Kong, Taiwan, Germany, United Kingdom, Australia, Canada, United States.

housing stock at such colossal scale and pace implies investments in the range of 75 trillion USD under conservative assumptions, which means mobilizing 25 times the 2007 US mortgage finance production. Additional large-scale demand arises in rural areas and through necessary modernization and upgrading investments.

Despite popular belief supported by spectacular cases of construction mismatch with demand such as Shanghai, a **greater overall housing supply** in many cases does lead to

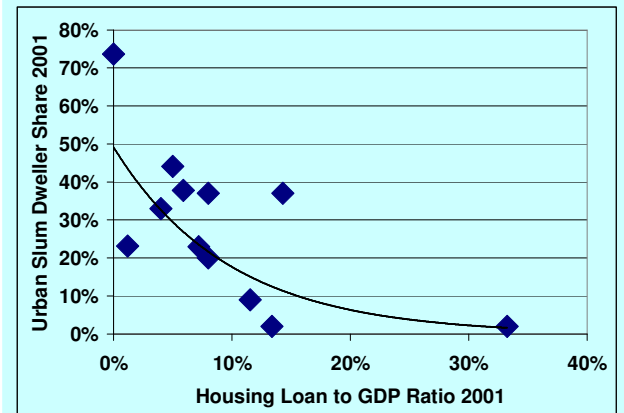
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greater availability of lower-cost units.

Even where most new construction takes place at the upper end of the market, the filtering chain of the housing market, i.e. the series of upgrades and moves of households, helps to vacate lower-quality stock for lower-income households.

Developing nations with deeper housing finance systems can so be shown to have **a lower proportion of their population living in slums**. However, the trickle-down mechanism can be shortcut: Thailand with its liberal urban land policies and focused developer industries has been able to deliver low-cost housing down to the second income distribution decile as a market solution, and as a consequence was able to remove urban slums in high speed. Emerging nations such as Mexico and Malaysia have achieved similar results with moderate subsidy incentives assisting developers to find their way down market.

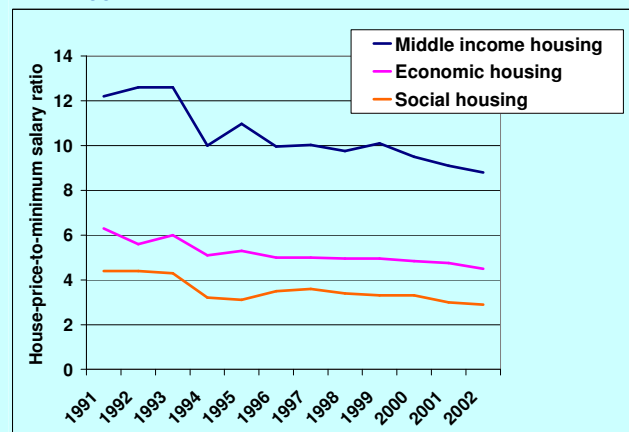
Figure 11: Where trickle-down is not a myth - urban slum dwellers and housing finance in Asia and Latin America 2001



Source: for Housing Loan to GDP ratio – Finpolconsult computations based on World Bank Group, Merrill Lynch and private consultants; for urban slum dweller share – ADB, IADB, United Nations. Notes: Sample includes South Africa, Brazil, Chile, Mexico, Colombia, Thailand, Malaysia, Korea, China, Indonesia.

Seen from the credit demand side, most emerging markets indeed **start with a prime mortgage market** – as developed markets did earlier – **and are not subprime**. Improving tradability and enforceability of collateral through legal reform has been a priority approach with regard to fast deepening. However, contrasting with the philosophy for example of the de Soto empowerment school, many emerging market lenders recognize the increase of price and quality risks of housing in the lower income segments and focus on borrower solvency and incentive issues in these segments.

Figure 12: When housing supply policies are set right - affordability of different housing categories in Mexico 1991-2002



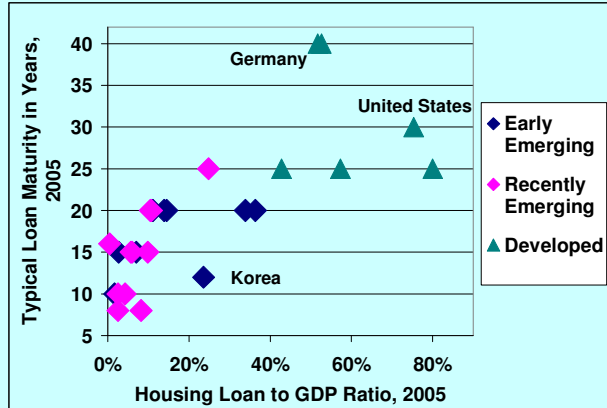
Source: Alberdi (2003). Notes: House prices as multiples of the annual minimum salary.

Securing related data requires a bottom-up distribution and risk management infrastructure which many emerging markets miss for historical reasons. Where they have survived or been rebuilt, as in Peru or Mexico, local and social lenders, such as microfinance institutions, savings banks or finance companies, have had an impact on supplying lower-income households initially with short-term

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loans. Typically these institutions in the next step seek capital market access to be able to provide longer-term loans.

Figure 13: Affordable products come with development – typical loan maturities in emerging and developed markets



Source: for Housing Loan to GDP ratio – Finpolconsult computations based on World Bank Group, Merrill Lynch and private consultants. Typical loan maturities – Merrill Lynch and other sources. Notes: Sample includes South Africa, Brazil, Mexico, Colombia, Chile, Korea, Thailand, Malaysia, Russia, Poland, Ukraine, Estonia, Hungary, Czech republic, India, China, Iran, Turkey, Indonesia, Spain, Germany, United Kingdom, France, United States, Canada, Australia.

Expanding the loan product menu has been proven a mixed blessing as an access driver in emerging markets. While maturity expansion and fixed-rate lending contribute to greater stability in lending portfolios, products that try to lower initial payments such as forex or short-term adjustable rate lending risk or products with negative amortization may produce considerable risk. Especially Latin American countries have had negative experiences with the wrong initial product set.

As a rule, **low-income households should be selected to safer mortgage** products, i.e. fixed-rate lending in local currencies. Because these are costlier and sometimes not available in the entire market there is an additional affordability gap

and often need for initial government intervention. Mexico has addressed the protection needs by offering public wage to inflation unit swaps, India and South Africa are starting efforts to develop a fixed-rate low-income housing finance market.

Alternatives to retail lending products and immediate homeownership such as **renting and leasing** that target the poor and young are still explored only marginally in emerging markets. There has been lasting stigmatization of rental tenure in many regions through failed public housing experiments of the 1970s and the impact of rent controls on the quality of rental housing; privatization of rental housing has sometimes even driven the mortgage market, e.g. in Hong Kong in the 1990s. Most emerging mortgage markets are still far away from developing rental housing finance, including with the exception of South Africa the early emerging markets. In contrast, leasing has become more widespread, e.g. in Latin America and the Arabic world, and especially in the low-income housing sector where the foreclosure likelihood is higher.

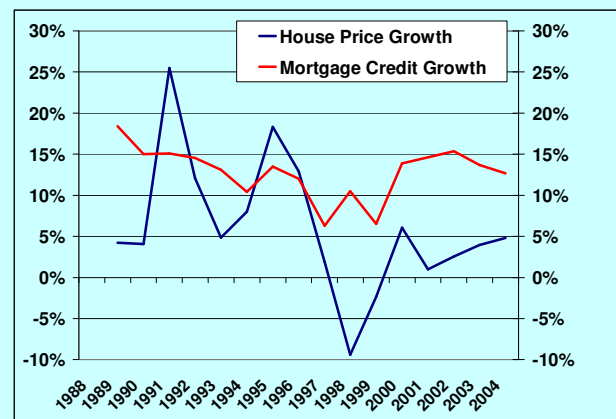
Introducing new housing finance systems for theoretical reasons ought to be accompanied by an initial upward house price adjustment and thus initially weakened affordability. Examples for **short-term house price booms** with close linkages to housing credit expansions in the 2000s indeed abound, including Kiev, Astana or Warsaw in transition economies.

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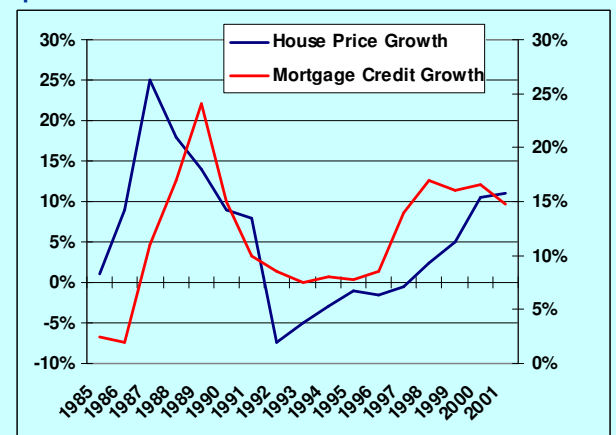
In contrast, neighbouring cities in the same region, such as Moscow or Istanbul, have experienced similar booms without any significant mortgage portfolio in their economies due to capital gains expectations, e.g. arising from migration pressure meeting migration destiny supply constraints. Clearly, accumulation of 'easy finance' with such conditions can be destabilizing and trigger tough regulatory responses, such as the numerous restrictions now imposed on developer and retail credit in China. Yet, the Chinese example also highlights the analytical problem: have strong capital gains expectations in China arisen because of a government-supported migration policy or because of the availability of cheap finance to 'speculators' in the migration target centres?

The more worrisome problem compared to short-lived bubbles of the above kind from the structural development perspective is that, as systems begin to mature, there is danger of **repeated lending and house price cycles caused by inappropriate initial system setup**. Mexico is the classical case of initially wrong set-up with a foreign-financed boom in adjustable-rate housing loans prior to the Tequila crisis that was followed by a complete withdrawal of banks frustrated by the subsequent foreclosure losses. The government reacted by promoting safer lending standards, wage-to-inflation swaps, consumer protection and new domestic distribution channels. South Africa and India in contrast are struggling with their British variable-rate legacy. In Eastern Europe, with internationalizing banks, forex lending is advancing. Repeated price cyclicality can generally be traced back largely to a combination of weak regulations and lax monetary policy, which are no privilege of emerging markets. Figure 14 shows that the house price and lending cycles in seemingly completely disparate countries – Malaysia and Spain, with however the same predominant lending instrument – adjustable-rate mortgages, were almost identical.

Figure 14: Continued growth pains – initial house price shock followed by classical variable-rate system cycles in Malaysia and Spain
Malaysia 1988 – 2004



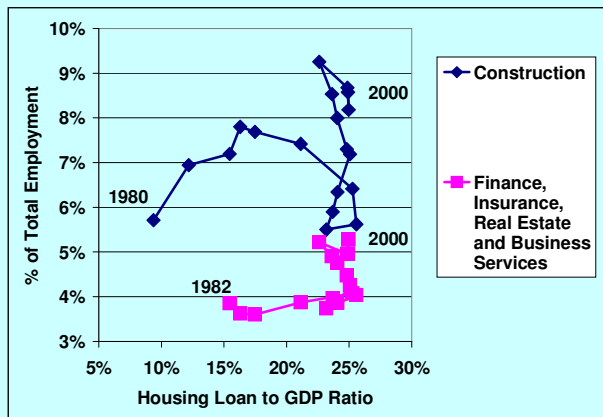
Spain 1985 - 2001



Sources: Bank Negara, Cagamas Berhad, Bank of Spain, Finpolconsult computations.

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Figure 15: Against all cycles – housing finance pushes construction and services sector employment Malaysia 1980-2000



Source: for Housing Loan to GDP ratio – Finpolconsult computations based on World Bank Group, Merrill Lynch and private consultants. Employment – UN, based on ILO.

Under such conditions, greater housing finance availability can easily frustrate low-income policies. A recent example is the failing Financial Sector Charter credit extension program of South Africa that is meeting unaffordable land and house prices for low-income households.

In terms of broader social benefits promoted by housing finance, the construction sector is indeed a **motor for blue collar employment** in urban areas which often also directly increases female and rural employment levels. In fast forward, com-

pared to developed countries, the sector plays an integral role in the emergence of new financial centres, the most prominent case perhaps being Dubai. Figure 15 shows the relevant relative sector employment data for Malaysia, which have been positive despite the impact of the real estate cycle of the 1990s. Similar data can be found for China, Thailand or Mexico; in contrast with this, confronted with an illiquid housing finance system the Brazilian residential construction sector has been ailing for almost two decades.

Anecdotal data suggests that in the fast urbanizing markets of Asia, the Middle East and Latin America, moreover, housing finance has helped to further **increase homeownership against the urbanization trend**. Ownership should be expected to decline with higher urban density due to coordination problems. In contrast, condominium ownership of multifamily housing units in emerging market cities appears to be far more widespread than in Europe or the US. One important driver in addition to depressed rental sectors are insufficient cash pension systems: due to gaps in capital market development and limits in pay-as-you go systems, homeownership is a more important pillar of the pension system than in developed countries.

Figure 16: Homeownership and housing finance in Emerging Markets – aggregate data conceal the micro story

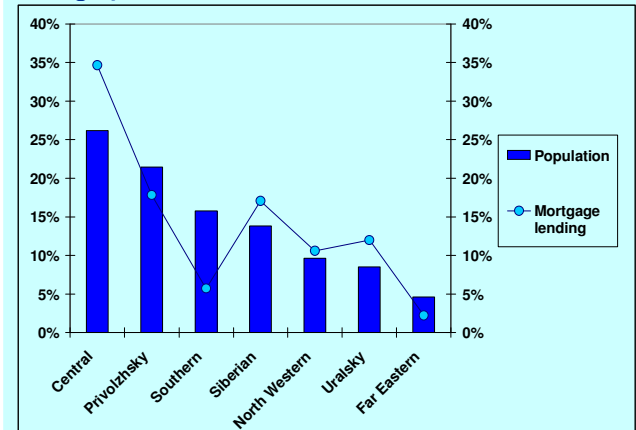


Source: for Housing Loan to GDP ratio – Finpolconsult computations based on World Bank Group, Merrill Lynch and private consultants. Homeownership ratio – Merrill Lynch, UN-ECE, United Nations, World Bank mission reports, other sources. Notes: Sample includes South Africa, Argentina, Brazil, Mexico, Colombia, Chile, Korea, Thailand, Malaysia, Russia, Poland, Ukraine, Estonia, Hungary, Czech republic, India, China, Iran, Turkey, Indonesia.

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Finally, **capital city bias** in emerging housing finance systems exists – in markets such as Colombia and Brazil 60-70% of lending is concentrated in the capital regions, far above population share. But the evidence is hardly surprising when introducing a new system and also not uniform across countries. A local banking approach, possibly after public initiative as in the Russian case displayed in Figure 17 where local mortgage agencies were created to support the regions, may assist decentralization and reach to regional cities.

Figure 17: More even regional mortgage lending through public intervention in Russia, 2006



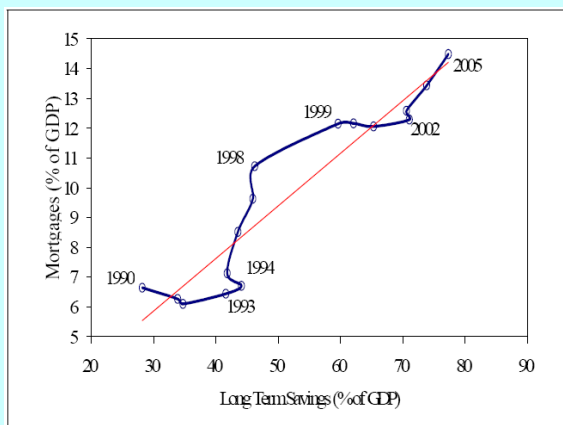
Source: Federal States Statistics Services, Merrill Lynch based on Bank of Russia, Finpolconsult computations.

No sound system development without domestic capital markets

Despite the fact that emerging market mortgage portfolios in many cases are still small, developing the domestic capital markets has played a pivotal role for funding and risk management in housing finance. Due to fast demand growth, the lack of financial distribution channels and frequent fragility of banks resulting in **high risk premiums of unsecured borrowing**, deposit funding for mortgages in emerging markets hits liquidity constraints sooner than in most developed markets. Banks are also wary of holding illiquid assets given their funding side liquidity risks.

Policy responses such as tax-funded public lending circuits and subsidy/guarantee activity have proven to be **sometimes a cure and sometimes a cause for illiquidity**, depending on the approach and in particular

Figure 18: Domestic long-term savings wanted – the Chilean mortgage market success story



Source: Ruprah & Marcano (1997)

quality of implementation. In the Brazilian case, a malfunctioning subsidized credit system must be debited with at least one lost decade of housing finance development. In Malaysia, in contrast, a public-private liquidity facility has substantially supported market development. The long list of failed public mortgage lenders shows that in particular direct government lending is generally not a good idea.

Reliance on forex lending and/or foreign short-term portfolio investment in banks

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on the other hand has proven to as potentially destabilizing in the historic emerging market crises in particular 1990s with mortgage sector crises in Thailand and Mexico, followed by Argentina in 2001.

Facing these risks, successful emerging markets have adopted **diversified capital market strategies** consisting of building a domestic institutional investor base, domestic bond market instruments, including mortgage-backed securities and covered bonds, and of attracting foreign direct investments as well as long-term portfolio investment. Chile is the example of excellence here with its pension reforms of the 1980s that jump-started what is the oldest mortgage bond system in emerging markets (see Figure 18).

The **case of Mexico** shows how a new diversification strategy can bear fruits in the form of lower liquidity risk for the housing finance system. A particular important step was the emergence of finance companies funded through the corporate bond market. With the SOFOLs increasing relevance for mortgage lending, their bond issuances in the early 2000s developed dynamically, from a few 100 million USD in 1999 to 10 billion USD in 2003.

The guarantees on such bonds provided by a public agency, Sociedad Hipotecaria Federal, are being phased out. Some of the SOFOLs have responded by engaging in a **joint issuer entity**, Hipotecaria Total, an issuer of covered bonds modeled after the Danish mortgage bond system.

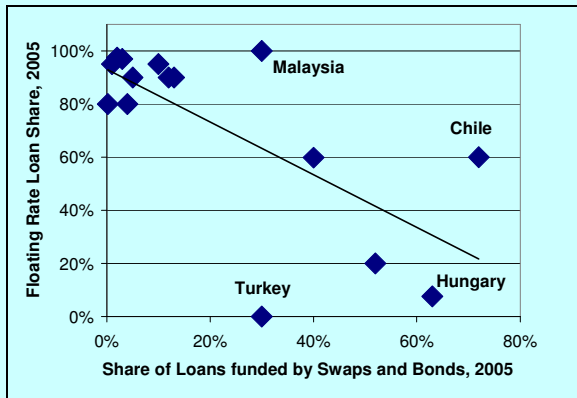
Meanwhile direct investment has replaced the short-term lending programs of foreign investors in Mexican banks of the early 1990s. Some of the banks have bought SOFOLs in order to participate in the growing lower-middle income market. Wage tax funded lending through the public fund Infonavit has been restructured to top up private mortgage

Table 2: Transition of the mortgage capital markets in Mexico since the 1980s

	1980s	1990s	2000s
Funding structure	Wage taxes Deposits External debt financing of commercial banks	Wage taxes Deposits Foreign direct investment in commercial banks Corporate bonds	Wage taxes (declining) Deposits Foreign direct investment in commercial banks and finance companies RMBS Corporate bonds Covered bonds (forthcoming)
Lending/guarantee structure	Wage tax fund lending Direct public lending Commercial bank lending	Wage tax fund lending Commercial bank lending (diminished by Tequila crisis) Finance company lending Public guarantees	Wage tax fund lending (restructured) Commercial bank lending Finance company lending Public guarantees (focused)

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Figure 19: Protection needed - share of loans funded by bonds and swaps and share of Fixed-rate Lending



Source: floating rate loan share – Merrill Lynch and other sources. Share of loans funded by swaps and bonds – Lea (2005), Merrill Lynch, Finpolconsult assessment.

Notes: Sample includes South Africa, Brazil, Mexico, Colombia, Chile, Korea, Thailand, Malaysia, Russia, Poland, Hungary, Czech republic, India, China, Turkey.

loans. Investor confidence in the market has remained high, with MBS issuance from Mexico still active during the US subprime crisis.

Finally, a **key function of bond (and swap) markets** in emerging housing finance systems is to **reduce mismatch, extend maturities and thus enable fixed-rate lending**. Especially Latin American markets due to their inflation risk history excel with developed regulations that reduce lender mismatch. Housing finance systems that provide fixed-rate lending are generally more stable and in the long-term provide better outreach to low-income households as price cycles are cushioned and low-income house-

holds receive suitable products. Yet, as Figure 19 shows interest rate risk protection available through bond (and swap) markets is often not used, and in many cases simply still unavailable.

Lessons for emerging housing finance system development

The most **successful early emerging markets** in terms of economic and social impact – Chile, Mexico, Colombia, Thailand, Malaysia, and Korea – have pursued **broadly similar development strategies** with the following elements:

- Macroeconomic stability and fiscal discipline reducing the crowding out for corporate bond and bank deposits markets;
- An attack on credit risk through an improved legal and regulatory framework for mortgages and banking sector modernization;
- Access of lenders to capital markets, esp. via bond issuance and liquidity facilities, more recently also via securitization, and control of mismatches;
- Development of the contractual savings system generating the demand for long-term local currency assets, such as mortgage bonds;
- Liberal, or where planned accommodating, land market and urban planning policies;
- Public support securing sufficient scale of the low-cost developer industry, especially via access to finance; and

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- Public support for downmarket access to retail lending while eliminating untargeted sector subsidies or directions.

Chile, Mexico, Thailand and Malaysia also managed to significantly **expand the least cost formal housing frontier** and in addition to attacking the housing deficit developed internationally competitive developer industries. Brazil finally is currently catching up with this peer group as real interest rates are declining, lending is restarting and a low-cost developer industry is becoming active. Russia may be cited as a case where the regionalization of mortgage finance succeeded, adding another important social policy dimension that is still missing especially in Latin America. South Africa finally, starting from the best developed sector infrastructure, is struggling with bridging the gap to the lower-income market.

Even the successful performers, including those that successfully developed capital markets, still show a number of **strategy gaps**. Most important is a **lack of focus on long-term stability**:

- Current strategies too much focus on retail lending and ignore the corporate housing finance sector, i.e. rental and – with the exception of Chile and South Africa – leasing. There are **limits to homeownership** related to income or house price risk, despite the successes. These limits can also not be overcome by pushing the least cost formal house price much further down. Rising vacancies and defaults in Malaysia and Mexico suggest that marketability of standardized units is limited and there is risk of substantial misallocation through subsidies.
- Also, **fast growth is still too often bought by distributing risky housing finance system setup**, especially through adjustable-rate or forex mortgages without interest caps and high loan-to-value ratio loans accommodating price bubbles. This is a particularly redundant approach in markets that successfully have developed mortgage-related securities. The situation can be corrected with regulatory measures favouring fixed-rate products and other safe lending standards.

Current strategies are also still **weak on diversifying the institutional framework**, which would help to further increase economic and social impact. With the named exceptions the financing and risk management constraints of developers as central agents of the housing supply chain is still too often ignored. The universe of long-term mortgage and property investors, from contractual savings via REITs to non-profit rental investors, needs expansion in most countries.

Despite the shortcomings, **recently and future emerging markets** are left with valuable experiences from the cited experiences for **benchmarking**

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their own strategies. Many of them are currently experiencing excessive house price growth. The overheating cases can mostly be traced to severe distortions in land supply and in the developer industry as well as an unhealthy funding and instrument mix and declining underwriting standards. The options of housing finance policies to correct are limited to the second set of issues; a broader and consistent sector development strategy is needed that in addition removes land and housing supply constraints in order to set the stage for sustainable development.

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