Housing Finance

World Bank Group Support for Housing Finance
An IEG Learning Product
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPL</td>
<td>development policy loan</td>
</tr>
<tr>
<td>EMRC</td>
<td>Egypt Mortgage Refinance Company</td>
</tr>
<tr>
<td>EUR</td>
<td>Euro</td>
</tr>
<tr>
<td>FX</td>
<td>foreign exchange</td>
</tr>
<tr>
<td>HDFC</td>
<td>Housing Development Finance Company</td>
</tr>
<tr>
<td>HFC</td>
<td>housing finance company</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
</tr>
<tr>
<td>JMRC</td>
<td>Jordan Mortgage Refinance Corporation</td>
</tr>
<tr>
<td>MBS</td>
<td>mortgage backed security</td>
</tr>
<tr>
<td>MRC</td>
<td>mortgage refinance company</td>
</tr>
<tr>
<td>SHF</td>
<td>Sociedad Hipotecaria Federal</td>
</tr>
<tr>
<td>SOFOLES</td>
<td>Sociedad Financiera de Objeto Limitado</td>
</tr>
<tr>
<td>TC</td>
<td>Titularizadora Colombiana</td>
</tr>
<tr>
<td>TMRC</td>
<td>Tanzanian Mortgage Refinance Company</td>
</tr>
<tr>
<td>VSB</td>
<td>Villes Sans Bidonvilles</td>
</tr>
</tbody>
</table>
Acknowledgments

This learning product was prepared by Maria Elena Pinglo with contributions from Michael Lea and Mariano Cortes. It was carried out under the direction of Marvin Taylor-Dormond (Director), Stoyan Tenev (Senior Manager), and Andrew Stone (Advisor); and under the overall guidance of Caroline Heider (Director-General, Evaluation). The portfolio review was conducted with the support of Wasiq Ismail and Aida Tapalova.

Peer reviewers for the project were Kristin Hallberg (specialist in evaluation and private sector and financial sector development) and Douglas B. Diamond (expert on housing finance).

The team also appreciates comments provided by Independent Evaluation Group colleagues and consultants (in alphabetical order) Leonardo Bravo, Eric D. Cruikshank, Anjali Kumar, and Beata Lenard.

The Independent Evaluation Group appreciates the many individual staff throughout the World Bank who have been generous with their time for consultations and interviews on aspects of the World Bank’s housing finance related work.

Cheryl Marie Toksoz edited the report and Emelda Cudilla and Nadia Asgaraly provided administrative support and formatted the report. Marylou Kam-Cheong and Rosemarie Pena provided resource management support.
Highlights—World Bank Group Support for Housing Finance

**Highlights**

- Access to adequate housing is of critical importance for the health and wellbeing of people. Yet, hundreds of millions live in inadequate conditions with little or no access to decent housing. Current conditions will be exacerbated by rapid urbanization and population growth.
- Housing finance is critical to the functioning of the housing market. Creating sustainable and effective housing finance requires the mobilization of longer-term sources of funding for both rental and owner-occupied housing, which is often missing in emerging markets.
- In response, the Bank Group’s approach has evolved over time from the use of traditional stand-alone housing finance operations, to the development of more strategic and comprehensive solutions including both supply and demand interventions.
- While the World Bank Group has adopted an increasingly integrated approach to housing finance, the dedicated staff and resources it deploys have both fallen below pre-crisis levels, raising questions about the Bank Group’s ability to keep pace with rising global housing needs.
- This learning product aims to provide World Bank Group staff with lessons from experience about more or less successful practices related to housing finance projects in order to enhance their ability to properly assess and consider the most appropriate paths for the development of new housing finance interventions.

**Lessons Learned**

- If commercial banks are willing to provide mortgage loans they are logical partners in housing finance projects but they need to be fully committed to mortgage lending.
- NBFI’s have strategic weaknesses that endanger their long-term viability. They might need to diversify funding sources, expand, or convert into a bank.
- Sustainability can be enhanced when there is a strong link with advisory services. But it has to be adequately timed.
- There are certain preconditions for the developments of capital markets and primary market interventions. When these are not in place, adequate sequencing, timely interventions, and committed sponsors can have compensating effects.
- A needs assessment is fundamental to design interventions tailored to specific country needs.
- If expanding affordable housing is a key objective of an intervention, it needs to be targeted and the results adequately measured.
- If there is no mortgage financing, the low-income segment should not come first, but rather be introduced gradually.
1. Introduction

Access to adequate housing is critically important to the health and wellbeing of the world’s population. Yet, despite the fact that this statement is part of the United Nations Universal Declaration of Human Rights and has been on the global policy agenda for many years, hundreds of millions of people continue to live in inadequate conditions with little or no access to decent housing. The demand for housing solutions will increase as urbanization and population growth persists (Doling, Vanderberg, and Tolentino 2013). The United Nations Human Settlements Programme (UN-Habitat) has estimated that the number of people living in slums around the world will rise to 900 million by 2020 if nothing is done. Asia and Africa will face special challenges, because urbanization in those regions is proceeding rapidly.

Housing is frequently unaffordable to all but the top earners. A recent report estimates a housing affordability gap affecting 330 million households, with 200 million households in the developing world living in slums (McKinsey Global Institute 2014). Research has shown that more and better housing increases the welfare of occupants. Homeownership may increase stability and civic engagement, and provide financial security in old age.

Improvements in housing also have important benefits to the economy (Malpezzi 1999). Housing construction and home improvement generate demand for professional, skilled, semi-skilled, and unskilled labor; and allow many micro and small businesses to flourish. The housing market is an important component of national economies and housing booms and busts can have significant effects on the macro economy and financial sector (Zhu 2014).

Housing finance is critical to the functioning of the housing market. Housing is a large investment that most people cannot afford to pay for all at once. Developers need access to debt finance to leverage their equity investments to produce rental or owner-occupied housing, and homeownership requires access to a large amount of accumulated finance. Creating sustainable and effective housing finance requires the mobilization of longer-term sources of funding for both rental and owner-occupied housing, which is often missing in emerging markets. There are important prerequisites for the development and expansion of housing finance systems (Box 1).

<table>
<thead>
<tr>
<th>Box 1. Prerequisites to the development of Housing Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>- The avoidance of severe inflation, which creates high and volatile mortgage interest rates that are unaffordable to borrowers and risky for lenders.</td>
</tr>
<tr>
<td>- Legal infrastructure that supports housing finance. Property rights must be well defined, which requires properly functioning property and lien registries, collateral regimes, credit information systems, and the legal protection of creditor rights. Liens must be enforceable to reduce risk for lenders and the price of credit for borrowers.</td>
</tr>
<tr>
<td>- A sound regulatory and policy framework.</td>
</tr>
<tr>
<td>- Proper risk assessment and management.</td>
</tr>
<tr>
<td>- A competitive lending environment.</td>
</tr>
</tbody>
</table>

Government interventions in the housing and housing finance markets have evolved over the years. Prior to the 1990s, a common form of intervention was the creation and operation of state housing banks as direct housing lenders. Interest in state housing banks waned reflecting their poor performance (Chiquier and Lea 2009). Attention turned to the development of secondary mortgage markets and capital market funding for lenders. Interventions include the creation of secondary market institutions. Many of the institutional interventions were public-private partnerships that leveraged private sector capital and expertise. At the same time, greater attention has been paid to strengthening the legal and regulatory infrastructure. Governments have traditionally supplied subsidies to both borrowers and developers. Subsidization has also shifted away from lending institutions (for example, by providing them with below market funding) towards individual subsidies that are less distortionary (Box 2).

### Box 2. Type of Interventions

- Securitization conduits: purchasers of mortgages and issuers of mortgage-backed securities.
- Liquidity Facilities: second tier lenders and bond issuers.
- Guarantees to lenders covering mortgage defaults and providing mortgage insurance.
- Strengthening the legal and regulatory infrastructure supporting housing finance (i.e. Comprehensive mortgage laws).
- Establishing a sound regulatory and policy framework.
- Interest rate subsidies, extending credit to borrowers at below market rates.
- Buy-downs that reduce the rate for a specified number of years that is considerably shorter than the loan term (for example, three to five years).
- Tax subsidies, such as the mortgage interest deduction
- Strengthening competition to create a more competitive lending environment.


Mortgage markets in emerging countries have exhibited significant growth in recent years, but there are still huge funding and accessibility issues. Demand for housing finance is rising in both middle and low-income countries through a rising middle class. However, mortgage debt-to-gross domestic product is still below 20 percent in most emerging markets and below 10 percent in many. Lending is dominated by commercial banks. Private label residential mortgage-backed securities (RMBS) are rare and covered bonds have been slow to grow. Liquidity facilities are active in a number of countries. Policy attention has shifted away from the development of mortgage capital markets to the creation and strengthening of housing markets and primary mortgage market infrastructure. Policies to lower the cost of land, improve property and lien registration, and develop a credit information infrastructure facilitate the expansion of housing finance.

In many countries, greater attention is now being given to expanding the accessibility of lower income households and those with informal incomes to housing finance. There are interesting initiatives underway, including experiments with alternative products, risk sharing, and subsidies. Housing micro-finance and self-construction finance are still underdeveloped, as is rental housing finance, yet they are a promising area of focus in the years to come.
Objectives

The core purpose of this learning product is to generate knowledge and provide lessons learned from World Bank Group support to housing finance. Lessons were derived primarily from evaluated interventions in the form of World Bank loans or International Finance Corporation (IFC) investments and advisory services. World Bank technical assistance and knowledge products and interventions on housing finance matters were considered when provided in the context of lending operations. One limitation faced in preparation of this learning product was the lack of coverage of stand-alone World Bank advisory services. These in the form of technical assistance, reimbursable advisory services (RAS), and knowledge management, are currently not subject to the Independent Evaluation Group’s (IEG) project-level evaluations and are therefore not considered in this report.

Methodology

A review of 81 projects (17 World Bank lending, 30 IFC investments, and 34 IFC advisory) was carried to look at the components of Bank Group projects. The selection was random, weighted by institution, and included both active and closed projects. A deeper qualitative review was performed covering all 55 Bank Group housing finance projects approved between FY05 and FY15 that had been evaluated by IEG, comprising 18 World Bank lending operations (4 PPARs and 14 ICRRs), 14 IFC investments, and 23 IFC advisory projects. In some instances, evaluated projects that fell outside the review period were included to the extent they were still relevant and useful for learning purposes (Table 1). Under the current system, the World Bank AAA (ESW/TA) does not undergo IEG validated evaluation and therefore will not be included in this review.

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Housing Finance Portfolio</th>
<th>Component Review by IEG</th>
<th>Evaluated Housing Finance Projects</th>
<th>Percent Evaluated by IEG</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Bank lending (IBRD/IDA)</td>
<td>40</td>
<td>17</td>
<td>18</td>
<td>45</td>
</tr>
<tr>
<td>World Bank AAA (ESW/TA)</td>
<td>65</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IFC investments (including MAS)</td>
<td>97</td>
<td>30</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>IFC Advisory Services</td>
<td>77</td>
<td>34</td>
<td>23</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total Number of Projects</strong></td>
<td><strong>279</strong></td>
<td><strong>81</strong></td>
<td><strong>55</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: IEG

World Bank Group Strategy

The World Bank Group strategy is aligned with the sustainable development goals and ultimately aims to contribute to the twin goals. The Bank Group seeks to build a sustainable and efficient housing finance system that can address the needs of households at different income levels and will allow them affordable housing. The specific intervention depends on the needs and state of development of the client’s housing market and housing finance
system. Public policies on housing, the legal and regulatory framework, and the financial system, as well as the strength of financial intermediaries, are important to ensure that unserved and underserved segments of the population have the possibility of accessing adequate housing services through acquisition, home improvement, self-construction, or, more recently, the rental of houses. Having access to such services supports households in enhancing income generation efforts, thus contributing to poverty alleviation and shared prosperity.

**World Bank Group Portfolio**

The World Bank Group’s approach has evolved over time from the use of traditional stand-alone housing finance operations, to the development of more strategic and comprehensive solutions. Traditionally, actions focused specifically on issues relating to housing finance, but, more recently, housing finance is viewed part of a larger intervention into the housing sector, involving not just financing, but aligning with actions across the entire value chain by taking into account housing demand and supply factors (Figure 1). These efforts would require additional resources, but contrary to this trend, dedicated staff in both, the World Bank and IFC has been shrinking. In 2006, there were about 20 IFC and 12 World Bank staff dedicated to housing finance, currently there are only five IFC and four World Bank dedicated to support housing finance operations.

![Figure 1. Comprehensive World Bank Group approach to reach across the entire value chain](source: Technical Briefing- An Integrated World Bank Group Approach. WBG)

Many World Bank lending interventions focused broadly on housing and urban development, including the supply of low-income housing, the legal and regulatory framework for housing and housing finance, and subsidy issues related to affordable housing. World Bank advisory support through technical assistance, RAS, and knowledge management is a dominant part of World Bank support focusing on enhancing policy and regulatory reforms. IFC interventions focused on downstream support via investments
through a variety of housing lenders, including specialized non-banking finance institutions, commercial banks, and a few microfinance institutions supporting the development of primary markets and the expansion of lending.

IFC advisory services provide downstream support by helping housing lenders develop and improve new products, access new markets, and enhance risk management capacities. More recently, a focus on housing microfinance with home improvement loans and construction technical assistance has enabled IFC to reach lower income segments. To a lesser extent, IFC advisory services have supported upstream activities, such as improving land registries, refining supervision and oversight, drafting of mortgage laws, and enhancing financial and regulatory infrastructure (Figure 2).

Bank Group support to housing finance represents a small portion of the entire portfolio, accounting for only 1 percent of total projects (Table 2). Between FY05 and FY15, the Bank Group approved 279 housing finance projects in 73 countries, with a total commitment value of $5.2 billion. The Latin America and the Caribbean Region had the greatest volume, at 49 percent (27 percent by number) followed by Middle East and North Africa with 22 percent (18 percent by number) and Europe and Central Asia with 10 percent (20 percent by number). Overall, IFC (investments and advisory services) accounted for the highest share of housing finance projects by number of projects (59 percent), the World Bank (lending and non-lending) accounted for the highest share by commitment value (58 percent) of total Bank Group projects, due to a relatively larger average project size.
Table 2. Coverage—Projects Approved/Committed FY05-15

<table>
<thead>
<tr>
<th>Institution</th>
<th>All Projects</th>
<th>Housing Finance</th>
<th>% Housing Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Bank Lending (IBRD/IDA)</td>
<td>6310</td>
<td>40</td>
<td>0.63</td>
</tr>
<tr>
<td>World Bank AAA (ESW/TA)</td>
<td>11750</td>
<td>65</td>
<td>0.55</td>
</tr>
<tr>
<td>IFC Investments (including MAS)</td>
<td>4070</td>
<td>97</td>
<td>2.4</td>
</tr>
<tr>
<td>IFC Advisory Services</td>
<td>3626</td>
<td>77</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>Total Number of Projects</strong></td>
<td><strong>25756</strong></td>
<td><strong>279</strong></td>
<td><strong>1.0</strong></td>
</tr>
</tbody>
</table>

*Sources:* World Bank and IEG.

*Notes:* AAA = analytic and advisory activity; TA = technical assistance.

Commitments to housing finance have been volatile and are below levels prior to the financial crisis. By number of projects, Bank Group commitments significantly decreased in the wake of the crisis in FY08 (Figure 3). However, by volume, the Bank Group increased its commitments in FY9 and FY10 mainly to help Mexico and the Arab Republic of Egypt during the crisis. In contrast, IFC’s investment portfolio in housing finance decreased in the aftermath of the crisis by 85 percent, from $425 million in 2005 to $67 million in 2009, and has slightly recovered in 2012 but is still well below pre-crisis levels, reflecting the impact of the limited opportunities for profitable projects in housing financing for the private sector during this period.

Figure 3. World Bank Group Portfolio Supporting Housing Finance, Trend FY05-15

*Sources:* World Bank Group and IEG databases.

*Notes:* World Bank non-lending = analytic and advisory activity. WB = World Bank. AS = advisory services. IS = investments.
CHAPTER 1
INTRODUCTION

References


______________________________

1 The demand for housing increases in response to several factors, notably urbanization and population growth. In 2009, the world’s urban population of 3.42 billion people exceeded the rural population of 3.41 billion for the first time in history. This trend will continue with the urban population projected to increase by 1.7 billion people over the next 40 years (Doling, Vanderberg, and Tolentino, 2013).

2 According to the McKinsey Global Institute (2014) report, the gap is expected to reach 440 million households by 2025.

3 Chapters on housing finance and the economy, primary mortgage market infrastructure, enforcement of mortgage rights, risk management, and regulation that discuss important prerequisites for development of housing finance can be found in Chiquier and Lea (2009).

4 A framework for the analysis of market segmentation and frictions that keep housing finance underdeveloped and guidance for the design of subsidies can be found in Hoek-Smit (2009).

5 Though popular, interest rate and tax subsidies are often a very costly way to subsidize housing.


8 Due to the lack of evaluative evidence, World Bank standalone advisory support will not be included this review.
2. Relevance of World Bank Group Support

**Highlights**

- Despite its important role, the World Bank Group only has limited resources requiring a strategic allocation. Analysis shows that the Bank Group allocates resources primarily to countries with low mortgage penetration rates that are in the most need. However, the gap in coverage of countries with low access to housing finance continues to be wide.

- Interventions to primary market institutions have been relevant to country development needs. However, when there are binding constraints such as lack of mortgage legislation and land ownership, those need to be addressed first. Other constraints, while key, can be overcome. For example, in India the lack of foreclosure legislation was compensated for by lending conservatively.

- Timely and adequately sequenced Bank Group upstream and downstream support proved relevant for the development of capital markets in Colombia and Jordan. A detailed needs assessment is also key to determining clear market need for interventions: IFC’s securitization projects in South Korea and Peru were not relevant as there was no clear market need. In some cases, such as housing finance interventions in Egypt and Tanzania, the ability of a newly created facility to issue corporate debt was not adequately considered.

- Adequate design, and appropriate instruments are key for relevance of affordable housing. When there is no mortgage financing in the market, it may not be appropriate to target low-income housing. Extending foreign exchange (FX) loans to unhedged borrowers earning in local currency can put at risk vulnerable segments of the population. Having dual objectives of stabilizing the market while simultaneously moving move down-market is problematic.

This chapter analyzes the extent to which the World Bank Group’s support for housing finance has been relevant in the context of its country-level priorities and readiness. The review addressed: (i) how the Bank Group deployed its resources; and (ii) how the Bank Group addressed housing finance in its client countries.

**Strategic Alignment**

Overall, the Bank Group has supported countries that have the lowest mortgage penetration rates. Economies do not automatically develop mature financial markets. A well-functioning housing finance sector evolves in three conceptual stages: strengthening the enabling environment, initiating the primary market, and then funding mortgages through capital markets. Using Findex data and its proportion of respondents with an outstanding mortgage measure as a proxy for access to housing finance, the analysis shows that the Bank Group has geared its support toward countries that have a significant housing finance needs. As shown in Figure 4A, about 80 percent of the projects belong to the category of lowest and low penetration countries (38 and 40 percent, respectively). In volume the emphasis is even stronger, with 90 percent of Bank Group volume ($) flowing there.
However, the gap in coverage of countries with low access to housing finance continues to be wide. In spite of the Bank Group’s focus being disproportionately on countries with low degree of mortgage penetration, there are many countries in the lowest mortgage penetration category and low penetration category of countries where the Bank Group is not active (Figure 4B). Nonetheless, the Bank Group has supported 18 percent of the countries with lowest housing finance penetration countries and 23 percent of the countries with low housing finance penetration. In contrast, the Bank Group has full coverage in the countries that have medium housing finance penetration (18 percent).

Individually, World Bank and IFC advisory services have had a strong focus on reaching the countries with the lowest and low access to housing, reflecting a coherent Bank Group strategy. Both IFC advisory services and World Bank lending operations are active in countries in the lowest categories (90 and 83 percent of their projects respectively take place in countries that are at the bottom two categories). World Bank non–lending is noticeable in the lowest income category with 55 percent of projects and 52 percent by volume. While IFC has 53 percent of investments and volume in the low access categories, it also supports countries with medium access to housing (18 percent by number and 21 percent by volume). This allocation of resources reflects a coherent connection between country level of housing finance penetration and Bank Group response in supporting the development of the housing finance sector. Figure 5 shows the strategic resource allocation of Bank Group institutions.
Chapter 2
Relevance of World Bank Group Support

Relevance to Country Needs

The review covered three types of interventions: primary market interventions that provide investment (debt/or equity) or technical assistance to primary market lenders, capital market interventions to develop instruments, institutions or infrastructure to access the capital markets for funding; and affordable housing interventions that support efforts to go “down market” to assist lower income households. Relevance is based on whether the intervention was appropriate to the country needs and stage of financial sector development.

Primary Market Interventions

Primary market interventions range from creating new mortgage lenders in undeveloped primary markets to strengthening existing institutions in more developed markets. A number of prerequisites exist for the development of a robust primary mortgage market. These include a stable macroeconomic environment (moderate to low inflation and mortgage rates), a legal infrastructure supporting collateralized lending (including the ability to foreclose at a reasonable cost and within a practical time frame), a regulatory framework for mortgage lenders, access to longer term funds, and a borrower population that has sufficient income to support a long term financial commitment in the form of a mortgage loan (more on alternatives in the affordable section). Lenders have to be interested and willing to make mortgage loans or expand their existing lending. Technical assistance to institutions to strengthen their capacity or to governments to pass necessary legal and regulatory reforms may be necessary prior to or concomitant with an investment intervention if one or more prerequisites are not in place.

There are two types of primary market lenders supported by IFC projects: commercial banks and specialized housing finance companies. In many respects commercial banks are the logical institutions to support the development or expansion of a mortgage market. Their funding, distribution and brand recognition give them a competitive edge over specialized...
lenders. However, banks generally do not make loans for housing in emerging markets due to high risk. In such circumstances, it may be necessary to support non-bank financial institutions (NBIs) to develop the mortgage market. Such support can be transformational even if banks eventually enter the market once they see that housing finance can be both safe and profitable.

Interventions to support NBFI mortgage lenders have been relevant to country development needs when banks have been unable or unwilling to lend. In Mexico, legislation created specialized non-depository lenders, the Sociedad Financiera de Objeto Limitado (Sofoles) at a time when the banks had withdrawn from the market following a financial crisis. IFC invested in several Sofoles, (including the largest) funded by the state-owned Federal Mortgage Corporation that provided liquidity and long-term loans and subsequently access to the capital markets through securitization. Although things did not turn out so positively in the end (see effectiveness section para 4.1), the Sofoles became major players achieving a peak market share of 22 percent by loan amount (12 percent by number of loans) in 2008.

In India, the banks were precluded from providing mortgage loans until 1998. The Housing Finance Companies (HFCs) were created as NBIs for that purpose. IFC invested in the first HFC, and later in several other HFCs that are the major providers of housing finance. Although not all the prerequisites were in place for development of the mortgage market (notably the lack of foreclosure legislation and enforcement), the HFCs have demonstrated that they can lend responsibly and profitably. They used highly selective credit criteria and the use of personal guarantees to reduce risk compensated for the lack of foreclosure legislation.

IFC investments in Sri Lanka and West Bank and Gaza were made without properly addressing key binding constraints first. A loan to Housing Finance Company in Sri Lanka went ahead when critical mortgage legislation was not in place. A new government delayed legislation that would have clarified foreclosure rights. In the absence of such legislation, the company was not able to penetrate the housing market on a large scale. Instability in the financial market in the aftermath of the 2001 terrorist attacks in New York and Washington D.C., when the prime rate shot up from approximately 19 percent in the beginning of 2001 to a high of 24 percent by the end of 2001, negatively impacted its activities.

In the West Bank and Gaza, IFC supported the establishment of a NBFI mortgage institution when there was an unresolved complex issue with land ownership due to Israeli and Palestinian land zones. Although the project tried to address the issue through joint technical assistance with the World Bank and other partners to increase the use of land unit registration, the expectation that the risks associated with the underdeveloped legal and regulatory environment would be mitigated was overly optimistic. Due to their complexity, land issues are better handled through stand-alone or dedicated land tenure interventions as pointed out in IEG’s learning product on land administration (IEG 2016). In this project, technical assistance was insufficient for addressing land tenure issues, which needed to be addressed first.

IFC’s provision of long-term loans to several banks met an important lender need and encouraged lending and an expansion of mortgage portfolios. One of the prerequisites for providing housing finance is access to long term funding to manage the liquidity and potential interest rate risk of an asset-liability mismatch. IFC’s credit line of €12 million to a
commercial Bank in Bosnia and Herzegovina was able to finance over 1,300 housing loans, accounting for a total of €21.3 million. IFC’s long-term loan to a bank in Romania enabled a growth in its mortgage and home improvement loan portfolio 7.5 times to €612 million in the 2004-2008 time period. It also contributed to greater competition that led to an increased tenor of mortgages from 13 years at the end of 2005 to 23 years at the end of 2008 and a decrease in mortgage rates from 11 to 9 percent. In both cases, macro and market prerequisites were largely in place.

However, interventions through established commercial banks are less relevant in cases where the instrument used is inappropriate to the country context. In Vietnam, IFC’s intervention providing a local currency credit line of approximately $50 million to a commercial bank was predicated on the use of a long-term cross-currency swap. When the swap market collapsed in the 2008 financial crisis, IFC could not disburse $20 million to the bank. The evaluation concluded that a long-term cross currency swap, which was the fulcrum for provision of a long-term local currency loan by IFC was untenable in a developing country environment like that of Vietnam where a real market for such swaps simply does not exist and the financial system essentially operates on a short-term basis.

**Capital Market Interventions**

Bank Group interventions helped develop the legal and regulatory infrastructure for capital market funding of housing in several countries. Capital market interventions require extensive knowledge of the country constraints for the development of capital markets. In some cases, when pre-conditions for success do not exist, World Bank upstream support can be crucially important to support the development of the housing finance systems and capital markets. Examples include the Bank Group’s support to Morocco, Turkey, and Pakistan to create mortgage laws and facilitate securitization. In Morocco, the enactment of the law in 2009 contributed to an increase in the outstanding value of private fixed income instruments from around 5 percent to around 9 percent of GDP between 2009 and 2012. Equally important, but not as successful, has been the enactment of the new law on residential real estate in Turkey which included sections enabling both covered bonds and domestic securitization facilitating the development of Turkey’s capital markets. However, issuance has been slow to develop, in part due the slow progress in the government implementing regulations.

In Pakistan, IFC has been supporting the enabling environment before creating a liquidity facility. IFC had a key role as a member of the Housing Advisory Group, offering policy level recommendations that included the formation of the real estate investment trust law, rationalization of transaction costs, establishment of a land registration system, the streamlining of large-scale developer finance, and the creation of a Mortgage Refinance Company (MRC). At the request of State Bank of Pakistan (SBP), the main promoter of housing market reform in the country, IFC developed a feasibility study for the MRC. The study revealed a number of constraints\(^2\) that needed to be removed before capital market funding would be feasible.
CHAPTER 2
RELEVANCE OF WORLD BANK GROUP SUPPORT

The Bank Group’s timely and adequately sequenced support was relevant to the development of the securitization market in Colombia. IFC and World Bank helped the government develop regulatory standards for securitization through a new housing law. The law included the possibility of establishing a secondary mortgage company and contained the initial regulatory framework for efficient asset securitization. IFC invested in a secondary market conduit owned by the commercial banks in 2000. Colombia was a middle-income country with relatively developed government bond market and lenders with a clear need for off balance sheet finance. The project was highly relevant as the country was emerging from a financial crisis. Securitization was an important tool to clean up the banking sector. The bank owners of the company securitized assets to move them off balance sheet.

However, IFC’s projects in South Korea and Peru failed to take into account an important prerequisite: the needs of lenders in the market. In Peru, a securitization company was formed in 2007. However, from its inception and until the issuance of its first MBS in early 2010, it was not able to generate any revenue. Later that year, as the company was still operating at a loss, the shareholder banks confirmed they were not interested in securitizing any further mortgage loans given the liquidity in the market and cheaper alternative sources of funding. Lenders had enough liquidity and no need for credit relief. In addition, there was an underdeveloped capital market and securitizations were burdened with a general sales tax that deterred investors. Without the prospect of securitization, the liquidation of the company was the only alternative.

The IFC supported the first specialized secondary mortgage company in South Korea, which was formed with a mixed public-private ownership between IFC, Merrill Lynch and the South Korean government (its largest shareholder). Its lack of success was due to weak demand from private sector originators for securitization of their mortgage loan assets. There was not a need for off-balance sheet finance or liquidity and finance through securitization was more expensive than deposit funding. The company was nationalized and the government purchased the shares from private shareholders.

Bank Group support to liquidity facilities has been relevant in countries with shallow bond markets. Mexico and Jordan were cases where support was timely and appropriate given the country conditions. Both countries had a small but liquid bond markets and demand from lenders for long-term finance. In Mexico, the World Bank supported the transformation of FOVI, a central bank lending window, into Sociedad Hipotecaria Federal (SHF), which initially operated as a liquidity facility and funded the Sofoles, specialized financial intermediaries, the main private sector lenders at the time. SHF was structured as a development bank and its debt was fully guaranteed by the Mexican government, ensuring its credibility as an issuer. The intervention was timely as the country was emerging from a financial crisis in which the banks had left the mortgage market and government lenders were meeting only a fraction of market demand.

In Jordan, with the creation of the Jordan Mortgage Refinance Corporation (JMRC), the intervention was highly relevant as it followed government reforms (removal of privileges of the Housing Bank and removal of legal provisions that effectively prevented banks from making long-term housing loans). The 1993 Country Economic Memorandum (CEM) recommended removal of privileges from the Housing Bank and creation of a liquidity facility
to provide long-term finance that launched a multi-year process culminating in the creation of JMRC in 1997. The reforms created a demand for liquidity and long-term finance by lenders. JRMC was a public-private partnership (PPP) with partial Central Bank ownership giving it credibility as a bond issuer. The intervention encouraged commercial banks to enter the market and had a very strong impact on the overall availability of mortgage loans.

However, for liquidity facilities to make a positive contribution, adequate measures have to be in place to ensure the achievement of their stated objectives. A major objective of World Bank-supported PPP liquidity facilities in Egypt and Tanzania was to provide long term funding to lenders through bond issuance of a centralized issuer, an activity that would also stimulate domestic capital market development. The bond markets in both countries were relatively undeveloped, particularly for non-government debt. The World Bank provided a loan to create the Egypt Mortgage Refinance Company (EMRC) in 2006. While the design of the project shows well-articulated outcomes and a results framework with reasonable causal chains linking project activities to results, conditions were not in place to allow for the development of a mortgage bond market and the World Bank loan was used-up for mortgage lending instead.

A liquidity facility can function effectively only when there is a stable macro-economic framework, small but liquid bond markets and active institutional investors willing to purchase non-government bonds. Given this context, in Egypt there was a need to ensure that adequate measures were in place to enable the liquidity facility to succeed. Although not yet evaluated, the most recent World Bank liquidity facility in Nigeria has learned some lessons from earlier projects. The World Bank IDA subordinated loan is retained as capital and invested in government securities to build its equity and cover its administrative expense. The proceeds cannot be on lent, forcing the facility to go to the bond market for funds, which appears to have worked.

The Tanzanian Mortgage Refinance Company (TMRC) was designed to provide medium and long-term liquidity to mortgage lenders. Once TMRC was operational, demand for the mortgage refinancing facility’s loans did not materialize as expected due to banks’ (primary mortgage lenders) reluctance to take on any maturity mismatches even for the brief period needed to build up a portfolio ahead of refinancing. By the time the project was restructured to address this issue, the macro environment deteriorated significantly as compared to the time of project appraisal. The dramatic change in the macro environment made bond issuance very difficult to achieve due to much higher interest rate levels.

**Affordable Housing Interventions**

Affordable housing is a global challenge for cities in both developing and advanced economies. Affordability varies across economies but generally includes a standard of a minimum socially acceptable housing with a clear idea of which income groups are affected, and at what income level households should be eligible for different forms of housing assistance. Interventions for affordable housing depend on the specific conditions in client countries ranging from supporting middle income borrowers in countries with no mortgage market to supporting lenders to go “down market” in countries with established markets.
The relevancy of affordable housing interventions depends on the specific constraints impacting affordability in a country. There can be demand or supply constraints present. On the demand side, informal and irregular income, the cost of finance, and high taxes and down payment requirements are major constraints to affordability. On the supply side, constraints include high land cost, high operation costs, difficulty in assessing incomes, validity of title documents, and lack of access to long-term local currency funding. Demand-side constraints can be addressed through the provision of subsidies, guarantee schemes, subsidized financing, and reducing the risks of mortgage lending. Supply-side constraints are best addressed through improving land use regulations, land infrastructure, taxes and fees, land access and title, construction costs, lack of sufficient competition among developers, and improving the credit risk management capabilities of lenders. Affordable housing is not limited to buying a home. The majority of the low-income population in many countries will not be able to purchase a house due to the lack of minimum financial capacity and the very modest incomes they receive. For these population segments, developing housing microfinance and residential rental markets may be more relevant options to consider. A critical element of affordable housing is that is considered a risky endeavor and therefore requires a particular expertise to understand and manage the risks adequately.

When there is no mortgage financing in the market, it may not be appropriate to target low-income housing. In the West Bank and Gaza, the World Bank project initiated a small mortgage market where none existed before and refinanced approximately 300 residential mortgage loans totaling US$28 million. While the availability of long-term financing made housing more affordable in general, the project nevertheless failed to reach out to other lower and middle-income segments of the population. The refinanced mortgages were far fewer than the 2,000 mortgages estimated at appraisal. This translates into an average mortgage loan that was three to four times higher than the one targeted for lower- to middle-income households.

In Egypt, most real estate development was targeted to upper-income households and the prices of the housing units were largely out of reach for middle-income target market. In contrast, in Honduras, a joint AS/IS IFC supported a commercial bank with the objective to move down-market by increasing housing segments (as part of their growth strategy). The housing finance expansion outperformed its targets in terms of value and numbers of outstanding portfolio and its targeted average loan, which likely enhanced access to finance to first time HF borrowers from the middle and upper income segments. However, there is little evidence that the project fully supported its objective to serve low and medium income households. Rather, with the high average loan size and min/max income requirements (US$500-US$1,500 per month), the bulk of expanded mortgages likely went to upper middle and above income borrowers. Progress in these countries is likely to require improving the infrastructure and encouraging existing lenders to expand gradually.

Having the primary role of stabilizing the market while simultaneously moving down-market is problematic. In Mexico, the World Bank supported SHF to stabilize and develop the mortgage market with two minor components to expand access to low-income housing. While the project allowed SHF to inject liquidity into the sector and prevented the slowdown of the housing market in the aftermath of the crisis, the expansion of products towards lower
income segments was modest as the goal of market stabilization and strengthening SHF’s financial position was the priority.

Extending foreign exchange (FX) loans to unhedged borrowers earning in local currency puts at risk the affordability for vulnerable segments of the population. An IFC supported project in Ukraine intended to provide more affordable housing finance through FX loans and stimulating sustainable and healthy market competition. The idea of providing a loan in US dollars to borrowers earning domestic currency was very risky in general and the low-income group was the least likely to have protection from a devaluation as they had no access to FX resources. In Honduras, the evaluation note concludes that despite a lack of data on the share of US dollar dominated housing finance loans to Honduran households and unavailability of information to confirm whether US dollar denominated loans were extended to households that were not effectively hedged (i.e. earn in US dollars) from FX risk, the IFC AS project may have contributed toward exposing households to FX risks. In Russia, dollar loans to borrowers predominately earning in local currency, funded by IFC US dollar loans, put borrowers at risk when the local currency (ruble) was devalued in 2008 and 2009.

Reference


1 Measures the percentage of respondents who report having an outstanding mortgage loan from a bank or another type of financial institution.
2 Among the constraints listed were difficulty in appraising properties accurately, limited information on potential borrowers, Ambiguities in the tax, legal and accounting frameworks for Asset-Backed Securities, ineffective land titling and information systems, High stamp duties and registration fees.
3 Project design had anticipated that the existence a long-term funding vehicle (TMRC) would be sufficient to encourage primary mortgage lenders (PMLs) to originate mortgages that could later be refinanced. As this did not transpire, the project was restructured to allow TMRC to pre-finance PMLs to help build mortgage portfolios for refinancing.
3. Effectiveness of World Bank Group Support to Housing Finance

<table>
<thead>
<tr>
<th>Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Non-banking financial institutions can help develop a market when banks are unwilling to lend; but they are particularly vulnerable at times of crises and need to diversify funding sources and develop adequate credit risk management in order to survive.</td>
</tr>
<tr>
<td>• IFC technical assistance can improve specific deficiencies and contribute to the success of primary market institutions. While important, technical assistance alone is not a guarantee of success or long-term sustainability.</td>
</tr>
<tr>
<td>• Sustained and adequately sequenced World Bank Group support was key to the success of the securitization project in Colombia. Investments in securitizations elsewhere were not successful due to market factors.</td>
</tr>
<tr>
<td>• Evaluated Liquidity Facilities have been effective in expanding the primary mortgage market but recent projects have not been able to demonstrate long-term sustainability or ability to access the bond market.</td>
</tr>
<tr>
<td>• Effectiveness on affordable housing interventions could not be measured in several World Bank Group projects as they lacked adequate targeting and baseline indicators and data on actual achievements. Sustained World Bank support and strong government counterpart was key to the success of the low-income programs in Morocco. In India, collaborative and adequately sequenced World Bank Group effort has been key.</td>
</tr>
</tbody>
</table>

This section of the review seeks to understand how effective the evaluated operations been in supporting the developing of housing financing in client countries.

Primary Market Interventions

The effectiveness of downstream primary market interventions varies by country and can be measured by mortgage market outcomes (development outcomes including increased volume of lending, mortgage debt outstanding, reduced NPLs, and more lending to middle and lower income borrowers) and financial institution outcomes (business success outcomes including profitability and economic sustainability of the lending institution, and reduced risk due to asset-liability mismatch). Successful interventions can also have a demonstration effect, encouraging other lenders to either enter the market or expand their lending. Success depends, in part, on whether the prerequisites for primary market lending are in place or are addressed in the project. The review covers lenders in 15 countries — eight specialized lenders and seven commercial banks.
The World Bank Group support to primary market interventions is done mostly through IFC. In countries with undeveloped mortgage markets, IFC support can enable lenders to begin making mortgage loans. In countries with more developed markets, IFC support can expand competition, introduce new products, enable more down market lending or strengthen operations and risk management.

Providing access to long-term loans can stimulate lending and mortgage market development if other prerequisites (including lender need) are in place. IFC provided long term funding to a Romanian Bank allowing it to make long term foreign currency loans to its clients in Transylvania. The Bank had limited long term borrowing from its sponsors and the money and capital markets in Romania were undeveloped at that time. IFC's investments strengthened and facilitated its strong presence in the regional mortgage finance market. The bank was able to grow its mortgage and home improvement loan portfolio 7.5 times. It also contributed to greater competition which led to an increased tenor of mortgages from 13 years at end 2005 to 23 years at end 2008 and a lowering of mortgage rates from 11 to 9 percent. Through its strong and profitable performance, the bank was able to demonstrate the commercial viability of mortgage finance in the region.

An equity investment in the Housing Finance Company of the Maldives supported the privatization and improved access to housing finance in the country. The project met its targets for outstanding housing loans, and new housing loan disbursements and NPL levels. The privatization was successful and the company was well capitalized and profitable. A long term loan to an Indian HFC, enabled it to expand its lending and branch network. The expansion allowed HFC to penetrate second and third tier markets and provided the impetus for other lenders to enter those markets.

Pursuing ambitious development objectives through a single long-term loan in a country can lead to unsatisfactory results. IFC provided a long-term credit line to a Greenfield and first specialized housing finance company in Romania. The project’s aim was to develop and expand the mortgage market and ultimately to create a secondary mortgage market in a country with very low mortgage penetration (0.3 percent of GDP in 2001). The NBFI became the country’s largest specialist mortgage lender, achieving a market share of 1.7 percent by 2007 with good portfolio quality. While the company was able to on lend the loan funds, its presence in the market was small, and operations were unprofitable. The company did not securitize its portfolio and did not become the important secondary market institution envisioned in the project.

In West Bank and Gaza, in a market with no mortgage lending the Joint IFC-World Bank project aimed to develop and expand the mortgage market in the West Bank and Gaza to (i) enable middle income families to buy houses funded with mortgage loans, (ii) stimulate construction demand and employment, (iii) encourage banks to recognize the potential of the mortgage market and to build their mortgage loan portfolio by absorbing part of the credit risk, and (iv) develop the capital markets through the issuance of bonds. Expecting to achieve these objectives in a conflict-affected country with no primary mortgage market and significant land ownership issues was exceedingly optimistic.

Similarly, in the Philippines, IFC expected that its project funding the housing developer would contribute to a broadening and deepening of the primary mortgage market to facilitate the eventual creation of a secondary mortgage market. At the time of the appraisal, the
primary market was under-developed. The project provided increased access to housing loans to middle-income clients but did not have a significant developmental impact as the number of mortgages provided by the company was small compared to the market size. Evidence was lacking to show that the project had a demonstration or replication effect in the market, and the company did not scale up its mortgage business.

Non-banking financial institutions can help develop a market but are particularly vulnerable at time of crisis and may need to diversify their funding sources to survive. In Ukraine, IFC supported an NBFI mortgage lender with a long-term loan and equity. The project aimed to address the housing sector challenges in a holistic manner first, while providing long-term funding, supporting best underwriting practice standards and developing of a platform for alternative sources of funding from capital markets. The project was able to build a relatively good quality mortgage book that kept the portfolio from sharp deterioration during the financial crisis of 2008. When the bond markets shut down, the NBFI was forced to change its strategy, become a bank and begin collecting deposits. In March 2009, the bank embarked on an expansion plan, changed its name, and started opening branches throughout Ukraine. IFC supported the strategy demonstrating flexibility in light of changing market conditions. Today the bank holds a recognizable franchise retail lending market.

In Mexico, the crisis exposed the weakness of a monoline business model. The Sofoles collapsed when the capital markets closed during the crisis, leading to losses in several IFC investments. Their dependence on capital market funding and excessive risk taking (both in lending and mismatched finance) proved to be their undoing. The financial crisis of 2008 combined with the failure of two MBS issuers closed the capital markets to the Sofoles. The lack of prudential regulation was also a factor in the demise of the Sofoles. The banking and securities regulator did not regulate the Sofoles as it was believed that the market could regulate them given their dependence on capital market finance. In an environment of intense competition and lax oversight, some Sofoles were not applying basic prudential lending norms or even contacting the borrowers. Moreover, the business model included providing bridge loans to developers that would refer clients for permanent loans, a risky form of lending. Developers presented groups or packages of loans to the institutions to be approved in bulk. Loan underwriting, approval and collection processes in the Sofoles were generally sub-par and needed to be adjusted to best practices.

In contrast, NBFI's in India had a diverse mix of funding sources and adequate prudential regulations that made them more resilient to crises. The Housing Finance Companies (HFCs) were able to attract term deposits as well as borrow from a liquidity facility (that did not exist in Ukraine) and securitize mortgage loans. The National Housing Bank acts as both a regulator and a lender of the HFCs. After 2001- the Reserve Bank of India (RBI) introduced prudential lending norms/risk weights to banks and HFCs in housing finance. Regulation, diverse funding and conservative credit risk management all played an important role in maintaining a successful growth strategy during and after the global crises. IFC supported several HFCs to put in place stringent risk management and pricing, high standards of underwriting, retaining skilled loan officers, and a diversity of loan products and credit assessment approaches based on local knowledge for different customer segments (both payroll and self-employed). The use of technology and lack of outsourcing collections enabled an IFC supported HFC, to speed up decision-making, maintain high level of customer services and closely manage collections.
IFC supervision, and in particular its role as a Board member, can help client companies increase the chances of success, but only if senior management is receptive to implement suggested changes. Projects that support institution building require much from the client—such as active Board member and periodic supervisory missions can increase the chances of success. In Colombia with TC, IFC’s Board nominee had an active role in the definition of the company’s strategy that was critical to the success achieved. The nominee contributed to strengthening TC’s governance structure and supported management in key operational and strategic initiatives, providing an important check and balance to the decision making process. The Board member provided valuable advice on market development, MBS trading, and internationalization and raised the flag on certain investment risks such as the different structure for securitization of non-performing mortgages.

IFC’s Board representative played an important role in the privatization and strengthening of NBFI in Maldives. In the case of an IFC supported Sofol in Mexico, which had an initial good start and became a leader in the industry, the IFC missed warning signs such as the fast growth and increasingly risky lending including a growing maturity mismatch. These factors exacerbated by the global financial crisis adversely affected the company’s performance leading to its demise.

In Sri Lanka, IFC did not exercise the option to appoint a director to the Board of a NBFI. The company’s parent continued to be the dominant player on the Board, placed restrictions on company’s ability to mobilize deposits and setting unrealistic return expectations. Through its Board member, IFC could have played a critical role in developing the company’s strategy and positioning it in the market. But a strong Board member may not be sufficient to overcome poor management and weak corporate governance, as was the case with an IFC supported investment in China. In Vietnam, IFC conducted a corporate governance review but the bank did not take its recommendations leading IFC to sell its shares.

IFC technical assistance can improve specific deficiencies and contribute to the success of primary market institutions. In Maldives, technical assistance provided by an IFC supported HFC in India, which also invested in the company, was a significant factor in its success. This approach was repeated in Egypt with the same institution providing technical assistance and investing in the Egyptian Housing Finance Company. An IFC supported bank in Russia had little experience with mortgage products. This issue was successfully addressed by technical assistance services provided by external consultant. IFC’s funding and AS helped the bank to increase origination volumes, develop mortgage standards and grow a sustainable business.

While important, technical assistance alone is not a guarantee of success or long-term sustainability. In Romania, IFC played a role in helping an NBFI set up a good quality mortgage portfolio that was up to securitization standards. It was insufficient however to ensure the success of the company which was never profitable and failed to scale up. IFC technical assistance in Cambodia also did not result in a successful operation due to poor management of the company. In Mexico, IFC introduced the mortgage tool kit in 2007-2009 to a number of Sofoles that helped strengthen and standardize their mortgage lending. The project has been replicated in Mexico an IFC supported project to service and credit institutions (Cajas) and Honduras and Nicaragua. However, none of the mentioned cases were able to show significant demonstration effects in the market. The portfolio quality of the Sofoles decreased due to significant competitive pressures.
The lack of technical assistance can undermine the success of a project underscoring the importance of having technical assistance in place. In the Philippines technical assistance was presented as a way for IFC to add value to a housing developer. However, IFC failed to secure the work that was viewed as necessary to improve credit risk management. In Vietnam, provision of advisory services to a Bank to improve its mortgage lending operations, as envisaged in the Board report, was not arranged. Also, IFC was not able to provide technical assistance to regulators and policy makers to promote an environment conducive to the development of a housing finance market as well as mortgage-backed securitization. The project was unsuccessful, with the bank’s mortgage portfolio 55 percent below the target. In Bosnia and Herzegovina, IFC staff was requested to bring expertise to a bank to improve overall mortgage laws and regulations in the country. Although the bank disbursed all IFC money for mortgages, there is no evidence that any of the additional work was considered and delivered by IFC, which was viewed by IEG as a missed opportunity to leverage a strong institutional relationship.

Capital Market Interventions

There are a number of measures of effectiveness in evaluating capital market interventions. These include housing finance outcomes (growth in mortgage debt, lengthening of the tenor of mortgage products, and increased competition in the mortgage market by facilitating finance of non-bank lenders), bond market outcomes (issuance of mortgage-related securities – MBS, covered bonds, liquidity facility debt), and business success outcomes (sustainability and profitability of institutions). An effective intervention can only be judged over time. A mortgage-related security intervention requires sustained issuance. A one-time MBS or bond issuance may demonstrate the feasibility of that form of finance, but to be effective in expanding housing finance or developing capital markets it should be replicated on a regular basis.

The Bank Group has been involved in the finance of housing through the capital markets for many years and in many countries. The review covered 10 countries with 12 evaluated Bank Group projects that contained a significant capital market component. Three of the projects were in Mexico. Additional projects were in Colombia, South Korea, Russia, South Africa, Peru, Turkey, and Morocco. In order to draw lessons from capital market interventions we also reviewed evaluated projects in Jordan, Brazil and Tanzania that fall outside of the study period.

The Bank Group experience with both securitization and liquidity facilities for fostering housing finance has been mixed. Fifty percent of the projects achieved satisfactory results. Success depended in large part on whether the prerequisites for capital market funding were in place—in particular macroeconomic stability, an extant bond market, and lender need for capital market finance.

Securitization

Bank Group technical assistance has been key in enhancing capacity in housing lenders, in structuring securitization transactions and in improving standards. In the area of capital markets IFC played an important role in transferring know-how and assisting Titularizadora
Colombiana (TC) in designing the operational structure, analyzing the risks, introducing valuation methods for securities and opening an active market for senior MBS. The World Bank provided technical assistance to the creation and operation of the liquidity facilities in Jordan (JMRC), Egypt (EMRC), and Tanzania (TMRC). IFC technical assistance has also been instrumental in creating successful lender securitization transactions. IFC was successful in creating standards for documentation and origination for two banks in Russia. In one of them, IFC also developed standards of custodian services that the bank used while preparing for securitization of its mortgage portfolio.

But over-dependence on the capital markets can expose NBFIs in a crisis. In Mexico, The World Bank supported SHF on several initiatives moving its funding model from that of a liquidity facility to partial guarantees of mortgage-backed securities issued by Sofoles. The IFC supported the development of securitization by investing in several Sofoles and providing technical assistance on all aspects of the mortgage lending process in order to build high quality securitizable portfolios. Prior to the crisis, these interventions were successful. Mortgage refinancing and securitization began in Mexico under the FOVI Project and expanded under three DPLs. Well-structured packages were launched, and securitization mobilized US$4.3 billion in financing from 2004 to 2008, equivalent to nearly all of SHF/Sofoles mortgage funding over that period.

The Sofoles were able to issue MBS at competitive rates with issuance increasing year on year up to 2008 — in fact proceeds were in part used to replace SHF funding. However, the securitization market collapsed in 2008-9 when several Sofoles, including the largest, experienced significant financial distress at the time when the sub-prime housing finance crisis in the U.S. was in full force. Investors lost confidence in the securities and the Sofoles were unable to access the capital markets for funding. A business model (largely) dependent on the capital markets for funding, both short term through commercial paper and long-term through securitization proved to be vulnerable to severe disruptions in the capital markets.

The Bank Group sustained support was key to the successful development of mortgage capital markets in Colombia. Support was a result of seven years collaboration among IFC, the World Bank, the Colombian private sector and the Colombian authorities. It established legal requirements for successful development of the mortgage sector and created the first secondary mortgage company. Titularizadora Colombiana (TC) was successful in implementing standardization and origination best practices and efficiency improvements in mortgage financing. It was instrumental in cleaning up the mortgage sector loan portfolio after the 1999 financial crisis and thus expedited the recovery of the banking sector. IFC assisted in several of its MBS transactions including the provision of a local currency facility of up to US$100mn to support the first issuance of MBS arranged by the company.

IFC’s presence strengthened TC’s market credibility and enhanced the Company’s ability to obtain a favorable credit rating for its securitizations. All senior MBS issues were rated “AAA” and TC was able to securitize 30 percent of the outstanding mortgage stock in Colombia. TC was successful for two reasons. “IFC played successfully the role of honest broker among the sponsors, usually fierce competitors, to design an appropriate structure to ensure independence of the company and support from the sponsors, through transparent governance practices and business procedures.” And the primary lenders, commercial banks, needed liquidity, and off-balance sheet finance.\(^1\)
IFC’s other investments in securitization conduits were not as successful due to market factors. As noted above the South Korea project was not successful because lenders did not need securitization. This was also the case in Peru. In Brazil, securitization did not work well because of a highly distorted market. IFC made an equity investment in a Brazilian secondary market facility in 2004 that was owned by the country’s major banks. The facility was successful in issuing mortgage-backed securities but not in developing a market as 95 percent of all issues were private placements and represented a small share of both the mortgage and securities markets.2 A major factor was the crowding out of private sector issues by heavy government bond issuance. Also, capital market funding could not compete with government subsidized funding. An underdeveloped capital market was an issue with a lack of standardization and high transactions cost of issuance. Investors did not accept the interest rate index used in the securities.

IFC successfully supported several mortgage lenders in securitizing their portfolios but with limited market impact. In South Africa, IFC supported the first specialized non-bank residential mortgage company. The company launched South Africa’s first local currency residential mortgage securitization in 2001.5 IFC subscribed in US$6.7 million of BBB locally rated mezzanine notes. The ability of the company to issue MBS increased competition, reduced mortgage rates, and facilitated the securitization of other asset classes. Through 2005, the company successfully securitized 86 percent of its mortgage portfolio (about 20 percent of the market) and sold to institutional investors. Despite the success, the securitization market in South Africa remains small and illiquid, dominated by the four largest banks that are liquid and flush with relatively cheap deposits. In addition, as variable rate mortgages predominate in South Africa, lenders do not have significant interest rate risk keeping them on their balance sheet.

In Russia, IFC assisted in a successful MBS issuance by a bank in 2006 – the first MBS issued in the country. The securitization augmented bank’s funding and allowed it to expand its mortgage lending. The bank’s mortgage market share reached 16.8 percent at YE2010 surpassing the 12 percent market share target set at approval. The assistance contributed to the development of the market and was followed by a number of securitizations by the company.

LIQUIDITY FACILITIES

Throughout the review period, the Bank Group has supported creation of liquidity facilities. As noted above, the liquidity facility is a simpler capital markets model and thus more suited to countries with less developed bond markets. Evaluated facilities have so far been effective in expanding the mortgage market but with few exceptions have been able to demonstrate long-term sustainability.

The Bank Group effectively contributed to the development of the Jordanian housing finance market. The World Bank Jordan project aimed at the establishment of a secondary mortgage facility that would provide term financing to banks engaged in residential mortgage financing.4 JMRC lent banks term funds (generally between 2 and 5 years) against pledged mortgage loans originated by the borrowing bank, reducing interest rates and asset-liability matching risks for the banks. At the end of the project, JMRC’s refinance operations represented over 30 percent of mortgage loans in the system eligible for refinancing.5 JMRC
had outstanding bonds of approximately JD52 million (US$73 million), with origination yields 100 and 200 basis points below other corporate bond issues. Strong support of the government was critical in the success of the project. The removal of privileges of the Housing Bank that effectively precluded banks from making long-term housing loans and the key role of the Central Bank as investor, regulator, and promoter enhanced the likelihood of success. At the time of evaluation, the number of lenders increased from one to 10. Maturities more than doubled to between 12 and 15 years and mortgage loans went from 2.5 to 7 percent of the banking system’s net loans. JMRC continues to play a significant role in the Jordanian mortgage market with a portfolio of refinance loans as of December 31, 2015 of JD 148 million.

In Egypt, the liquidity facility was successful in developing the mortgage market but it has yet to demonstrate long-term sustainability. The World Bank and the IFC supported the creation of Egyptian Mortgage Refinance Company (EMRC) liquidity facility. At the time of its creation there was little long term mortgage lending in Egypt. The facility was expected to begin issuing bonds or other securities in the capital market to fund its operations on a market sustainable basis. Initially, the EMRC made a number of positive contributions toward meeting its objectives. The Egyptian mortgage market grew from US$50 million in 2006 to $740 million in 2011 and the number of primary mortgage lenders increased from six to 12 and the tenors lengthened. However, in 2011 when the World Bank project closed, outstanding refinance loans were less than half of the target envisaged. Both local and international agencies rated EMRC too low and its refinancing costs would have been too high for the companies and banks. EMRC was unable to issue bonds due to an undeveloped corporate bond market, with few institutional investors reluctant to invest in non-government debt, and macroeconomic and political instability. Recently, the long-term sustainability has been called into question with the development of a new government program competing with EMRC.

Similar issues arose in Tanzania with the TMRC. Initially funded with a long-term World Bank loan, the TMRC has been unable to issue bonds in part due to macroeconomic instability. Inflation doubled and became more volatile during the first few years of the project and the T-bill rate increased significantly. As with EMRC, on-lending World Bank funds has stimulated the mortgage market but until the institution can access the bond market its sustainability is in question.

**Affordable Housing Interventions**

Effectiveness in this area can be measured by indicators such as increased access to lending for an underserved population and sustainability of the program or business success of the financial institution (profitability and sustainability of the lending institution, reduced risk in particular due to asset-liability mismatch). Successful interventions can have a demonstration effect encouraging other lenders to enter, go down market, or expand their lending to underserved population. The review covered 30 interventions that had affordable housing objectives – 12 World Bank and 13 IFC investments and 6 IFC advisory Bank Group institutions use a variety of instruments and approaches to support affordable housing. World Bank downstream interventions to support countries to provide affordable housing often aim to enhance demand of lower income segments supporting the provision of grants, subsidies or the creation of house assistance funds, or enhancing supply by encouraging
institutions to move down-market through guarantees or access to cheaper funds or to developers to produce low income housing units. World Bank upstream interventions typically address rationalization and unification of subsidies, simplifying norms for social housing, and amending or creating rental housing legislation land use regulations, land infrastructure, reducing taxes/fees or building material costs, and increasing competition among developers. IFC through its investments aims to enhance affordable housing through the provision of access to financing to underserved segments, typically low and lower middle segments of the population. IFC advisory activities also support affordable housing providing capacity building to housing lenders.

The experience of the Bank Group in providing affordable housing has been challenging. With some exceptions, the evaluated operations have not fully achieved affordable housing objectives. The main factors for this result are the lack of specific targets, attempting to attain long-term objectives with short-term interventions, and isolated interventions unconnected with a larger program of urban development.

Effectiveness could not be measured in several Bank Group projects as they lacked adequate targeting and baseline indicators and data on actual achievements. In Brazil, the World Bank supported policies and incentives to expand the housing finance markets as well as to move down market. The project evaluation found little evidence that the poor directly benefited from the expansion or the two institutions supported moved down market. The lack of adequate measures and the fact that the average loan size more than doubled during the project period supports the finding. In Mexico, an evaluation of three DPLs indicated that these DPLs were not explicit about the income levels of their target beneficiaries, lacked baseline data, program targets, and related performance indicators. In particular, it lacked indicators that could track changes in affordable housing supply and demand, access by the poor to urban land, and the impact of the prior actions identified on physical and social investments in poor neighborhoods. In Morocco, detailed planning parameters of VSB were well developed, but data on actual achievements were missing at project completion, which makes the evaluation of the program results difficult.

In West Bank and Gaza, the World Bank project aimed to support lower- and middle-income segments of the population by providing with access to long-term financing. However, the program financed houses that are three to four times higher than the targeted housing price for lower to middle income housing, in part due to the prior lack of any mortgage financing in the area. The program lacked performance indicators to measure outreach to the targeted population both at appraisal and at completion.

In Brazil, the Brazil housing sector reform project had as an overall objective to improve access to the poor to improved housing and land while maintaining fiscal discipline. While the project helped expand housing finance and improved the quantity and quality of demand for mortgage lending, in particular, through the widespread use of the alienacio fiduciaria trust deed instrument instead of the traditional mortgage lien, there is little evidence of down market shift. While average loan size increased in real terms, the mean by itself does not describe the distribution of loan sizes. IEG sought data on the number of loans and amount lent per cohort of loan size, but was unable to obtain it. Without such data, evaluation findings must remain tentative. In Vietnam, according to the project evaluation the IFC supported bank aimed at the provision of affordable housing. However, there were fundamental flaws
in the structuring of the project. It lacked the establishment of a precise scope, market niche, and type of clientele that could be targeted.

Programs aimed at sector-wide reform in Mexico needed a strong champion to deal with multiple stakeholders. In Mexico, World Bank support aimed at affordable housing and urban poverty reduction through a series of DPL’s. The specific objectives were to design a unified housing policy as well as to improve the housing credit and savings institutions system (cajas), and to move them down-market. A unified housing policy of up-front lump-sum housing subsidies for low and moderate families was not achieved due to the difficulty of dealing with numerous stakeholders instead of having a key champion/counterpart and because an essential partner “Infonavit” was not included in the negotiations. The objectives were unduly ambitious in seeking to reform such a large and complex housing and urban development sector as Mexico’s over a short period of time. In hindsight, a more thorough analysis of housing demand across income groups in Mexico, and its shortfalls across the country might have better guided the design of these operations.

In contrast, in Morocco, appropriate World Bank-supported institutional consolidation support led to the rise of a strong government counterpart that was key to the sustained success of the low-income program. In Morocco, the housing sector development policy loan had two main objectives, one upstream focusing on strengthening the institutional, regulatory, and fiscal environment and one downstream, focusing on increasing access to low income and severely disadvantage households to more affordable and higher quality housing. In 2004, the Government of Morocco (GOM) consolidated the ten separate institutions that were part of a poorly articulated institutional framework of housing and urban development into one “Al Omrane.” The World Bank identified under the housing DPL key aspects of the Al Omrane consolidation that were included as key prior actions.

The consolidation was at the time of evaluation the most significant public sector consolidation in Morocco and has become the major player in Morocco’s Housing and urban development sector. Due to this consolidation Al Omrane became the key counterpart of the Villes Sans Bidonvilles’ (VSB) program. The project anchored the housing reform to government’s flagship slum upgrading. VSB was an important instrument for helping to achieve the Housing DPL’s second objective of increasing the access of low-income households to higher quality housing. At evaluation, the five-year-old Al Omrane Holding Company was a financially sustainable GOM’s principal housing and urban development agency. The consolidation was completed and the institutions stands ready to fulfill sector programs throughout the country.

Bank Group capital markets projects can indirectly enhance affordability but that is not their principal aim. Systemic interventions can indirectly support affordable housing for all income segments. In Colombia, IFC supported the development of a secondary mortgage institution that improved the affordability of housing and lowered the cost of mortgage loans by making longer term funding available to originators. In the end, the project mitigated the risk associated with the mortgage lending activity by providing liquidity to the mortgage assets and reduced the costs of origination and administration of the loans by introducing better practices to the system. Affordability of low-income housing increased, which is reflected in a reduction of interest rates and a significant rise in housing construction.
Sustained and collaborative Bank Group support has contributed to expand affordable housing in India. In 2007, a Bank Group study on the housing market for Low-income groups to the National Housing Bank (NHB) identified commercial segments for affordable housing without public assistance, recommended enhancement of business processes and products and credit risk management and proposed policy issues to resolve. The Government followed up the recommendations. The study was followed up by World Bank technical assistance in 2009 to strengthen NHB capacity and to identify training needs, which were subsequently addressed by IFC. In 2009, IFC provided capacity/institution building for a select group of 10-12 MFIs and HFCs to build institutional capacity to create low cost housing finance products, improve credit scoring and risk management functions, build institutional awareness on legal and regulatory requirements, and create quality and standards in processes and documentation for origination, credit evaluation, and portfolio management. The project received excellent ratings for strategic relevance and output and outcome achievement.

In 2010, IFC advisory also supported the creation of a “stand-alone Housing Finance Company” in a Private Public Partnership model, with equity participation from the Government of Rajasthan (GoR), IFC, and the National Housing Bank (NHB). IEG’s evaluation notes that IFC successfully managed to bridge key stakeholders in the low-income housing business and to convince them to jointly set up the PPP, yet the critical outcome of a formal investment agreement among them has not yet been reached. Consequently, the expected impacts have also been delayed. On the downstream side, HFC partnered with IFC in 2010 to create a subsidiary, focusing exclusively on low-income states. IFC provided capacity building to this start-up to launch and scale up micro-mortgage products targeted at lower and lower-middle income households that met pre-defined selection criteria. At present, the company is operating in 13 states with 94 branches. IFC supported the MFI to include a package of services including, housing microfinance products, risk management capacity, and responsible finance. In 2013, IDA followed up with a $100 million Affordable Housing Finance Project in support of NHB’s activities in the sector.

IFC Advisory can enhance capacity of financial institutions to develop innovative housing microfinance in conflict-affected countries but market-impact remains limited. In 2008, IFC strengthened the capacity of a Microfinance Bank in Afghanistan to launch and offer a housing improvement loan. Over the years, bank operations have grown from a single credit product to more diversified portfolio. Seeking to increase the availability of quality housing to lower income earners, the bank with IFC support successfully developed, launched, and operated a housing microfinance (HMF) product line coupled with construction technical assistance. To date, the MFI is the only financial institution in the country to offer HMF products, which are now available in 21 urban and six rural branches throughout Afghanistan. IFC in Haiti supported an MFI with an innovative approach to link financing, construction technical assistance, and quality materials to fill the gap in building standards and enforcement and rebuild better. However, program results were short of expectations. The project reached fewer Haitian homeowners than anticipated. The project experienced a delay in pilot launch due to time invested in efforts to coordinate with large, planned housing initiatives in Haiti, which ultimately was not possible due to changing timelines, program criteria, and scope of these initiatives. However, program has influenced the design of ongoing projects with Indonesia and Kyrgyzstan.
The Colombian government also provides tax exemption of the interest on TC securities lowering their cost.

World Bank, Instruments to tap capital markets for funding in housing and related considerations concerning the Sistema Brasileiro de Poupança e Empréstimo (SBPE), June 8 2011. CRIs are backed by collateral of real estate loans to homebuilders and real estate development companies. Financial institutions hardly used CRIs to securitize their residential mortgage loan portfolios (less than 5 percent, as per 2007).

Per XPSR. An article by A. Saayman and P. Styger Securitisation in South Africa: Historic Deficiencies and Future Outlook (2003), notes that Union Building Society issued a local currency MBS in 1989 and Sasfin Ltd. Issued an asset-backed security in 1991. There were no further securitizations until 1999-2000 when several non-mortgage issues came to market.

The Jordan project was based on the successful Malaysian liquidity facility, Cagamas.

As of the end of 2015, JMRC had a loan portfolio of JD 149 million. As with any liquidity facility, the annual volume of its lending varies over time with the macroeconomic environment and needs of lenders.

Trust deed became more attractive than traditional hipoteca in Brazil (which is slow and difficult to execute through courts as in cases of loan repayment default) because trust deeds withhold full ownership until loan is fully repaid making execution in a court of law more agile. Non-performing loans backed by trust deeds were only 1.2 percent in 2009 compared with 33.1 percent for loans backs by mortgages.
4. Lessons for Future Projects

Design

Pursuing ambitious objectives through a single operation in a country can lead to unsatisfactory results. If the amount it can offer an individual client is comparatively small, IFC should be more realistic in its expectations with regard to the role it can play in improving the financial institution's risk profile through the investment. The Philippines project did not have a significant developmental impact as the number of mortgages provided by the company was small as compared to market size and that there is no evidence that the project had a demonstration or replication effect in the market. In Vietnam, due to the limited size of the investment (vs. both the total loan book and the housing loan book), IFC has not been able to achieve the desired effect and contribution to improving the Bank's risk profile. It was overly ambitious to think that a specialized housing company in Romania could create a secondary market in an undeveloped primary mortgage market.

If expanding affordable housing is a key objective of an intervention, it needs to be targeted and the results adequately measured. Effectiveness could not be measured in projects in Brazil, Mexico, and Morocco, because they lacked adequate definitions of intended targets and baseline indicators and data on actual achievements. In Vietnam, the project lacked the establishment of a precise scope, market niche, and type of clientele that could be targeted. Projects in Egypt and West Bank and Gaza targeted lower- to middle-income borrowers in undeveloped mortgage markets. Such a target is more appropriate in countries where a mortgage market exists and lenders are reaching middle-income borrowers.

A needs assessment is a fundamental prerequisite to the design of interventions tailored to specific country needs. Many of IFC’s interventions involve a long-term loan allowing a lender to expand its lending and better manage the asset-liability mismatch. But certain conditions need to be in place for this intervention to succeed. In Sri Lanka, lack of foreclosure legislation negatively impacted the project. In Bosnia, lack of mortgage laws and regulations limited the development impact. In West Bank and Gaza, there was an unresolved complex issue with land ownership that needed to be addressed first. A needs assessment is fundamental to designing interventions appropriate to the specific country needs.

Pre-Conditions

The existence of a developed government bond market and a need for capital relief are key for success of securitization. Mortgage-backed securities are complex instruments – a country must have a benchmark government yield curve and experienced institutional investors. In Colombia, securitization was successful in part, as the owners of the facility had a pressing need to securitize assets to move them off balance sheet. Colombia also had a relatively developed government bond market prior to the introduction of securitization. In contrast, the securitization in South Korea shows the importance of ensuring that a country’s lenders have significant interest in capital market funding. In South Korea the banks were liquid and not in need of capital relief. Given the market rates on mortgages it was more profitable for them to keep their mortgage loans in portfolio funded by deposits – securitization in effect

34
represented a higher cost of funds. Peru did not succeed because lenders did not need capital relief and securitization was burdened by a sales tax.

Liquidity facilities have the potential to be an effective catalyst to mortgage market development in countries with stable economies and functioning bond markets. A liquidity facility is a relatively simple capital markets model and thus well suited to countries with less developed bond markets. Two examples of successful liquidity facilities are projects in Mexico and Jordan. Both countries had relatively stable economies, shallow but functioning bond markets and, importantly, mortgage lenders in need of long-term finance. SHF provided funding to the Sofoles issuing debt at a time in which the bond market was developing and accepting longer maturity issues. The creation of JRMC along with the removal of monopoly privileges for the housing bank brought banks into the market and helped develop the long end of the bond market. More recent liquidity facility projects in Egypt and Tanzania, modeled after Jordan, have not been as successful. In both countries, there was considerable macroeconomic instability and undeveloped bond markets. Consequently, the facilities have not been able to issue bonds.

When preconditions are not in place adequate sequencing, timely interventions and committed sponsors can have compensatory effects. The Colombia and Jordan interventions were successful in part due to strong government counterparts with the commitment to passage of key reforms and Bank Group assistance prior to the creation of a bond issuing entity. In Colombia, support was a result of seven years collaboration among IFC, the World Bank, the Colombian private sector and the Colombian authorities. It established legal requirements for successful development of the mortgage sector and then created the first secondary mortgage company. In Jordan, the intervention followed government reforms that removed key binding constraints that were suggested in the 1993 Country Economic Memorandum (removal of privileges of the Housing Bank and removal of legal provisions that effectively prevented banks from making long-term housing loans and creation of a secondary market facility).

**Sector Development**

Sector-wide reforms require time and a strong and stable key-counterpart to be successful. In Morocco, World Bank-appropriate institutional consolidation support led to the rise of a strong government counterpart that was key to the sustained success of the low-income program. In contrast, in Mexico, the multiple stakeholders involved made it difficult to achieve results. It was overly ambitious to seek to reform such a large and complex housing and urban development sector as Mexico’s over a short period.

**Supporting Commercial Banks vs. Non-Banking Financial Institutions**

If commercial banks are willing to provide mortgage loans they are logical partners in housing finance projects but they need to be fully committed to mortgage lending. In most countries, commercial banks have strong brands, distribution, and relatively inexpensive deposit funding. Barriers to bank lending include the lack of long-term funds, inability to assess or manage credit risk and low profitability of mortgage loans (small loans costly to underwrite and service). Providing long-term finance can allow banks to manage the liquidity and interest rate risk from mortgage lending can induce them to enter or expand their
presence in the market (e.g., Romania and Bosnia and Herzegovina banks). But it may not be enough if other barriers exist or their interest in housing is not deep.

If banks are unwilling to lend a case can be made for supporting NBFI's. The advantage of specialized lenders is a focus and expertise in the mortgage business. In a nascent stage of mortgage market development, such focus and expertise is more than worthy and profitable, it is necessary. Successful examples include the Sofoles in Mexico (pre-crisis) and the Housing Finance Companies in India. Successful specialized lenders can have a strong demonstration effect and pull commercial banks into the business thus being part of a market transformation.

**Sustainability**

NBFI's have strategic weaknesses than can endanger their long-term viability. These include distribution and funding disadvantages, vulnerability to disruptions in the capital markets and less stringent prudential regulations (Mexico). In order to remain competitive, they might need to diversify funding sources, expand distribution (Egypt, India), or ultimately convert into a bank (Ukraine). Strong sponsors committed to asset management with stringent risk management procedures are needed.

Bank Group technical assistance can enhance sustainability when there is a close link between investment and advisory services. In the area of capital markets IFC played an important role in transferring know-how and assisting the securitization company in Colombia in designing the operational structure, analyzing the risks, introducing valuation methods for securities and opening an active market for senior MBS. The World Bank provided technical assistance to the creation and operation of the liquidity facilities in Jordan, Egypt, and Tanzania. IFC technical assistance was instrumental in creating successful lender securitization transactions in Russia and South Africa. However, IFC technical assistance in Cambodian and Romanian banks did not lead to their success. In India, IFC provided capacity/institution to HFCs that received excellent ratings for strategic relevance and output achievement but the outcome rating was only satisfactory as no evidence was provided for sustainability. The lack of technical assistance negatively impacted the project in Vietnam and could have helped avoid a risk that was foreseen at the outset in the Philippines.

**Foreign Currency Loans**

While they initially may look more affordable for borrowers, FX denominated loans are highly risky for borrowers and may pose substantial risks to lenders and the market. In Ukraine, extending medium to long term FX denominated loans to unhedged borrowers earning in local currency put at risk and negatively affected vulnerable segments of the population (also in Honduras, Russia).