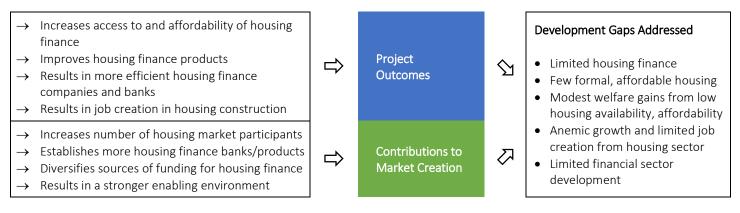


AIMM Sector Framework Brief Sector Economics and Development Impact Department International Finance Corporation

HOUSING February 2019

Development Impact Thesis – IFC financing in this sector seeks to promote access to housing finance for households and developers and improving their affordability. Lending to developers, along with formal housing finance for households, allow access to better quality housing, which is positively linked with higher social benefits such as education and better health outcomes. Housing finance covers a wide range of products and services. IFC's financing and technical advisory in this sector helps lenders develop and improve products, access new markets, and enhance risk management capacities which:



Rating Construct – All AIMM sector frameworks include detailed guidance notes that help define project outcomes and contributions to market creation, aggregating to an overall assessment of development impact.

- For project outcomes, stakeholders, economy wide and environmental effects are the key components for which industry-specific benchmarks define the context in which an IFC operation seeks to drive changes. This gap analysis is combined with a separate set of impact intensity estimates that specify the expected results using predefined indicators.
- For contributions to market creation, industry-specific market typologies define stages of development for five market attributes (or objectives): competitiveness, resilience, integration, inclusiveness, and sustainability. These market typologies, when combined with estimates of how much an intervention affects the development of a market attribute, provide the foundation for IFC's assessment of an intervention's market-level potential for delivering systemic changes.

PROJECT OUTCOME INDICATORS		CONTRIBUTION TO MARKET CREATION INDICATORS	
	Access Increased access to residential housing finance and/or construction finance Affordability Inprovements in loan terms that bring more borrowers into the housing market Increase in affordable housing units financed	Competitiveness	Change in market/concentration structure Change in mortgage terms (pricing, maturities, transactions fees, transparency) Promotion of international best practices in credit policies Change in product offerings and processes Introduction or change in regulatory/legal framework related to competitiveness of housing finance market (Advisory)
Stakeholders	Ouality	Resilience	Promote diversification of funding sources for housing finance lenders Promote local currency funding and financing for borrowers to minimize risk related to FX Promote best practices in mortgage underwriting and collateral valuation trough IFC eligibility criteria Introduction or change in regulatory/legal framework related to stability and risk assessment of housing finance market (Advisory)
		Integration	Increase in capital market instruments; creation or expansion of secondary mortgage finance market Improvement in value chain of housing sector
Economy-wide	Impact on value-added Impact on employment	Inclusiveness	Market-wide adoption of business models including product and/or processes to reach underserved SMEs/groups and increase awareness of these groups Market-enabling frameworks/standards supporting inclusive businesses/interactions with underserved SMEs/groups
Environmental / Social	Efficacy of GHG emission reductions Water, energy and construction material savings	Sustainability	Adoption of green building and construction standards by housing market) Capacity in the market to support adoption and certification of standards by housing finance beneficiaries Improvements in the enabling environment or changes to regulatory framework related to sustainability in the housing finance market and/or to drive housing beneficiaries to standards

IFC's Environmental and Social Performance Standards define IFC clients' responsibilities for managing their environmental and social risks. While for most IFC investments, meeting Performance Standards reflects improved environmental and social performance, effects from implementation of the standards are only claimed in the AIMM framework where a clear counterfactual can be established and where the investment intent is to improve environmental or social outcomes.

Sector Specific Principles or Issues – The following principles will be applied for projects rated under this framework:

Principle or Issue	Treatment Under Framework		
Affordability	Housing affordability is strongly tied to cost of homes, household incomes as well as the cost of the mortgage. Housing markets thrive when interest rates are relatively stable and low, and loan tenors are greater than 20 years. Benign macroeconomic conditions are important to sustaining low and stable mortgage rates - high inflation is often accompanied by high and volatile mortgage rates that are harmful to borrowers and risky for lenders. To maximize affordability, IFC and its clients should aim to provide mortgage products at the lowest possible costs given the prevailing macroeconomic conditions.		
Underserved segments Housing finance in most low and lower-middle income countries is at very low levels, and vast segments of the population have access to mortgage products. In the context of the country, IFC investments should move mortgage lenders down-material assistant as sustainable way. However, even in relatively developed markets, there are overlooked segments of the population such a women or those with informal income sources, who are excluded.			
Demand and supply side roles Financial institutions (FIs) and NBFIs can play a pivotal role in the growth of the housing sector through their connections several key aspects of the housing value chain. An intervention in a country where the demand and supply are not lead to adverse market effects, and ineffective interventions. IFC will consider the presence of all key aspects of the chain, and both the demand and supply, when assessing projects that tackle one side of the issues.			
Liquidity risk Many emerging market banks face a maturity mismatch between short-term deposits and long-term mortgage loans, capacity to provide the long tenor (20+ years) financing required to make mortgages affordable. Directly addressing retransformation issues is key for financial resilience and the sustainable development of the housing finance market.			
One of the greatest challenges to deepening housing markets is to develop solutions that serve informal income ea countries, informality makes up most of the population, as high as 70% in the poorest countries and is typically und market even in relatively developed countries. Where informality is a constraint to further development of the hou housing interventions that address this population segment will be recognized and credited in the AIMM assessment			
Capital market development To support continued growth of the housing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding from diversing finance market, lenders need access to long-term funding finance market finance market finance market finance market finance finance market finance finance finance finance fin			
Treatment of negative effects	There are a few potential negative effects from a housing finance operation, both on the project outcomes and on market impact. One important negative effect could be IFC's inability to lend in the currency most appropriate to the FI and its borrowers. Also, while housing construction can be a major source of GHG, IFC encourages the adoption of EDGE and "green" construction methods. Where there is significant GHG, this could adversely affect the net project outcomes and will be noted and reflected in the environmental component rating.		

Project Outcomes – The AIMM system considers the extent of the development gap and uses a gap analysis to classify project contexts according to the size of the deficit/gap being addressed. For each indicator, the size of the gap is measured in relation to development goals associated with the sector. Contexts are classified into very large, large, medium or low gap, for each performance dimension. Development gaps are defined using a combination of qualitative and quantitative benchmarks, which leaves room to consider context-specific attributes that drive investments in the sector.

COUNTRY CONTEXT	Low Gap	Medium Gap	Large Gap	Very Large Gap
Access	 Mortgage debt O/S % GDP >1 STD above EM median % total pop age 15+ w/ O/S housing loan >1 STD above EM median Average growth in 3-yr urban pop <1 STD below EM median Housing deficit per capital lower than TBD 	 Mortgage debt O/S % GDP within 1 STD EM median % total pop age 15+ w/ O/S housing loan within 1 STD EM median Average growth in 3-yr urban pop within 1 STD EM median Housing deficit per capital lower than TBD 	 Mortgage debt O/S % GDP <1 STD below EM median % total pop age 15+ w/ O/S housing loan <1 STD below EM median Average growth in 3-yr urban pop >1 STD above EM median Housing deficit per capital lower than TBD 	 Mortgage debt O/S % GDP below EM 15th percentile % total pop age 15+ w/ O/S housing loan below EM 15th percentile Average growth in 3-yr urban pop above EM 85th percentile Housing deficit per capital lower than TBD

"Core outcomes" for housing investments are access/affordability and quality. The key stakeholders are the beneficiary households who will have access to housing financing, and housing developers receiving construction finance. The client financial institution (FI) may increase housing finance for mortgage customers by improving the affordability of their products or by creating processes to reach down-market or underserved customers (e.g. reaching salaried individuals or those with informal income sources). A growing housing sector contributes to job creation and growth for the construction and building sector, as well as the secondary industries, such as durable goods manufacturing that support these sectors. The core outcomes for housing finance operations include improvements in access to housing finance as well as the affordability of housing finance products, both in quantity and quality. These are the main drivers of project outcome potential. The rating guidelines award a higher collective implicit weight to core outcomes.

PROJECT INTENSITY	Below Average	Average	Above Average	Significantly Above Average
Access and affordability Increased access to housing finance Lower payments due to longer tenors Lower pricing Share of IFC financing going to underserved groups	 Growth and change per million population (5-yr) <1 STD below IFC portfolio median Growth and change as % of mortgage debt outstanding (5-yr) <1 STD below IFC portfolio median % proceeds to underserved groups <35% # new units built % of total housing units is TBD; # new homes built <1,250 units 	 Growth and change per million population (5-yr) is within 1 STD IFC portfolio median Growth and change as % of mortgage debt outstanding (5-yr) is within 1 STD IFC portfolio median % proceeds to underserved groups 35%-50% # new units built % of total housing units is TBD; # new homes built is 1,250+ units 	 Growth and change per million population (5-yr) >1 STD above IFC portfolio median Growth and change as % of mortgage debt outstanding (5-yr) >1 STD above IFC portfolio median % proceeds to underserved groups 50%-75% # new units built % of total housing units is TBD; # new homes is 3,000+ units 	 Growth and change per million population (5-yr above IFC portfolio 85th percentile Growth and change as % of mortgage debt outstanding (5-yr) above IFC portfolio 85th percentile % proceeds to underserved groups >75% # new units built % of total housing units is TBD; # new homes built >5,000
 Quality Promoting responsible finance Promoting building quality and standards (green, etc.) Improved underwriting in housing finance 	- TBD	 Change in responsible finance minor or differential with market minor Change in non-financial services offered minor Narrow array of training, housing support services provided Mortgage borrowers must rely on third party providers for most non-financial services 	 Change in responsible finance economically substantial or differential with market is meaningful Change in non-financial services offered meaningful Wide array of housing support services including link to builders, property managements, certification Training to increase awareness on housing finance products and terms 	- TBD

The AIMM methodology considers the uncertainty around the realization of the potential development impact being claimed, making a distinction between the potential outcomes that a project could deliver and what could be realistically achievable in the project's development context. The table below presents the key types of risk factors for water and wastewater services operations.

PROJECT LIKELIHOOD Operational Factors		Sector Factors	
Assessment Considerations	 Experience and track record of the FI in the target market (e.g. residential vs commercial) Project's projected growth relative to the recent history Expansion into markets (e.g. expansion to new housing types), delivery using new channels (e.g. online origination), or other innovations in product/service design. Risks from new line of business (e.g. generalist FI building a housing finance business) IFC providing AS that mitigate any of these operational 	Target sector's market risks (e.g. high degree of housing informality) Specific regulatory risks (e.g. land registry and governance, building codes) Central bank supervision perimeter and capacity (e.g. underwriting standards, consumer protection and financial literacy requirements) Supporting government policies and programs (e.g. affordable housing) Market competition for housing finance lending, or for the target (specialized) market segment.	

Contribution to Market Creation – The market is defined as the housing finance market in emerging markets, with a primary focus on residential mortgage lenders and a secondary focus on financial institutions supporting housing developers. The housing finance market is supported by a variety of market participants including specialized NBFIs, commercial banks, microfinance institutions, as well as important intermediaries such as MRCs. The global housing market is dynamic and growing, but many countries face

headwinds from crippling market failures. IFC's housing finance projects vary considerably in size and scope. However, even when IFC's projects are small relative to the size of the housing finance market in the country, they may provide targeted interventions to elicit positive reinforcing market reactions from other market players, and thus make meaningful contributions to market creation.

Housing market typologies provide the building blocks in the AIMM system to construct a narrative for how much an IFC intervention is advancing a market objective. These typologies provide a description of the market gap based on various stages of development for a given sector from least developed to most advanced and enable the location of the market before and after IFC's intervention. The table below focuses on core market attributes that IFC investment projects typically affect. IFC's detailed guidance note includes more information on how IFC investment projects may contribute to changes in the other market attributes.

MARKET TYPOLOGY	Highly Developed	Moderately Developed	Underdeveloped	Highly Underdeveloped
Competitiveness	 Private sector share > [70%] of effective demand in affordable housing sector Tenors approaching 30 years Prices reflect risk Balance between consumer and lender rights; literacy part of underwriting process Standard underwriting following best practices Checks on mortgage process Predictive, auto dialers for late payment Diversity of mortgage products for all segments Product design incorporates risks-based pricing Mass-customization Strong regulations in all key phases of housing market No special SOE regulations, public sector competes 	 Some capital market activity; few capital market products Private sector market share >40% of effective demand Single FI >30% of market Top 5 FIs >80% of market Standard underwriting practices in place but some deficiencies Very few standard mortgage products exist Rates are almost entirely variable, with low tenor Replication of product types from developed markets without consideration for local condition Regulation in place and considered to be adequate for general purposes; some elements are lacking that decrease competition 	 Private sector <30% of market Short tenors (typically less than 5 years) No or limited quantifiable risk assessment Very high/volatile interest rates Limited or no consumer protection; low literacy No standard underwriting following best practices Poor no credit evaluation Credit policies not following best practices No standard products Ad hoc analysis based on familiarity of client; not evidence based No standard terms, indices or loan documentation Inadequate regulation on housing finance 	 No or extremely limited private sector participation Housing finance through short-term, high interest personal loans Underwriting practices and policies are ad-hoc No rule-based credit evaluation process No standard credit policies Mortgage products generally unavailable Housing finance through non-mortgage products No or little regulation of housing finance
Resilience	 Capital markets and other funding sources used to match borrowers/savers Multiple capital market instruments; tenors >7 years Fully functional mortgage refinance company with ability to raise funding from capital markets Active swap market; CDS/ other derivatives available Adequate risk measures in place to reduce risk of FX or inflation-indexed mortgage Limited FX mortgages Mortgage loans made in line with best practices Critical measure of risk is well defined and used to monitor sector risk Strong regulations in all key phases of housing market Established government ordinances including permits, codes 	 A few institutions have access to long-term loans (>7 years) Existence of mortgage refinance company, but with limited functionality Limited swap market; more than a single market counterparty Credit decisions made with key parameters but still contain some weakness largely due to the environment Emerging credit markets provide alternative funding sources with tenors > 3 years Regulation in place and considered to be adequate for general purposes; some elements are lacking that decreasing confidence Some regulations exist, but limited application of land use regulations 	 Few institutions have access to general bilateral or syndicated loans, but of shorter tenor Housing lenders not have access capital markets or limited to government bonds No mortgage refinance companies No/very limited sources of long term funding No swap market; mortgages in hard currency FX mortgages without consumer protections or systemic safeguards High credit risk/decisions missing key parameters Inadequate regulation on FIs in the housing finance No or inadequate rating and provisioning of mortgage assets Land regulations exist, unenforced 	 Very limited set of funding sources for lender No access to capital markets No FX market exists No mortgage underwriting or collateral valuation market Little or no regulation in the housing finance sector Limited or no land regulation

MARKET TYPOLOGY	Highly Developed	Moderately Developed	Underdeveloped	Highly Underdeveloped
Integration	 Access to bond market not a constraint for established mortgage providers and developers; multiple capital market instruments (bonds, securitization, etc.) and regular issuances with established yield curves Broad participation of pension funds and insurance companies in long-term bond purchase Full integration of supply and demand side of housing finance No or limited information asymmetry between banks and developers Well established and reliable supply chain for housing developers 	 Robust capital market activity but bond issuance primary short- and medium term (maturity <7 years) and use of some capital market products (MBS, covered bonds, etc.) Limited participation from institutions with access to long term funding (such as pension funds and insurance companies) Broad range of mortgage providers integrated with housing construction sectors or provide financing for developers; robust housing support services (e.g. link to builders and plans) Construction sector well integrated with local value chain 	 Capital markets primarily limited to government bonds and limited issuance by the private sector Sovereign bonds issuances crowd out private sector issuances Limited but unsystematic integration of housing construction sector with the local value chain A few developers rely on informal relationships to access suppliers and firms in the housing value chain 	Capital markets are nascent or do not exist Housing construction sector value chain not well connected

In general, most individual projects are not expected to make a significant and immediate systemic market change, unless the project is a pioneer in a non-existent or nascent market. Instead, most projects are expected to have incremental effects on the market. In other words, it takes more than one intervention to move a market to the next stage. This means that integrated and concerted efforts are often needed to generate substantial market effects. For example, cumulative World Bank Group efforts over time will have a stronger effect on markets than non-integrated and non-concerted interventions. Where a project is explicitly part of a programmatic approach, the expected movement induced by the program should be the basis for the assessment where timebound movements, market effects, and indicators are available. The most important market creating effects from IFC's housing finance operations are:

MARKET MOVEMENT	Marginal	Meaningful	Significant	Highly Significant
Competitiveness	Competitiveness in the housing finance market creates incentives for financial intermediaries to provide more financing for residential mortgage seekers, and for more FIs to prioritize serving the market's un(der)served segment. The market structure of the housing finance market can either provide the right environment for healthy competition among FIs, or undesirable incentives for a few FIs to rent seek by capturing large market share. Competition in the housing finance market often revolves around the mortgage terms. IFC clients could translate higher internal efficiency and lower client acquisition costs into more competitive mortgage rates. Longer mortgage tenors ensure affordability by decreasing monthly payments and expand access for homebuyers from lower income segments. Promotion of international best practices in credit policies is expected to translate into more cost effective and efficient housing finance, thereby contributing to greater market access and affordability. Market effects on mortgage financing would be expected to be amplified by the response of other FIs in the market to meaningful changes on mortgage terms introduced by IFC client FIs. Client FIs could also bring to the market new housing finance processes and diversified products. Specialized product and processes adopted by IFC's client FI that better meet housing finance needs and overcome behavioral/institutional market failures, could induce market wide adoption of these practices and bring about measurable competitive market movement in housing finance.			
Resilience	Projects that play a key role in setting up the legal, regulatory and institutional infrastructure for the development of the housing finance market, as well as streamlining property registration would apply under this channel.			
Integration	Integration in the housing finance market can primarily take place in two forms. First, financial integration, through the development and expansion of capital market instruments. Local currency bond issuances and secondary mortgage finance products can mobilize longer term sources of funding and deepen the capital market. Second, an integration at the housing value chain level among various participants, such as mortgage providers, developers, home insurance companies, building material suppliers, etc. Specialized comprehensive housing finance packages adopted by IFC's client FI that better meet housing finance needs and overcome behavioral/institutional market failures, could induce market wide adoption of these practices and bring about measurable competitive market movement in housing finance.			

The market likelihood adjustment follows the principles for the likelihood adjustment for project outcome potential. In general, the likelihood assessment includes sector-specific, as well as broad country risks that may prevent potential catalytic effects from occurring, plus political economy or policy/regulatory risks that may constrain market systemic change. Due to the diversity of market creation attributes and channels, most of the likelihood factors are expected to be sector, or intervention specific.

MARKET LIKELIHOOD	Sector Factors	Political / Regulatory / Policy Factors
Assessment Considerations	 Concentration in the banking sector, or the housing finance market segment (e.g. barriers to entry) Strength of channel for competitive pressures and incentives to adopt innovations (e.g. high mortgage rates, short mortgage lengths, transaction fees, fees transparency, etc.) Regulatory scope and capacity (e.g. for new products, will new regulatory frameworks need to be established?) 	Government commitments and supporting policies/programs (e.g. housing, affordable housing or urban development) Legal infrastructure that supports housing finance – property rights must be well defined, which requires properly functioning property and lien registries, collateral regimes, credit systems, and legal protection of creditor rights Government capacity to implement policies and programs Environmental aspects, such as environmental protection regulations/enforcement, ecological construction