

SUMMARY OF FINDINGS OF A STUDY COMMISSIONED BY THE NHB,
FUNDED BY FIRST INITIATIVE, AND SUPPORTED BY THE WORLD BANK

Building Houses, Financing Homes

INDIA'S RAPIDLY GROWING HOUSING AND HOUSING FINANCE
MARKETS FOR THE LOW-INCOME CUSTOMER

Anamitra Deb, Ashish Karamchandani & Raina Singh July 2010



Monitor is a management consulting and merchant banking group with over 1000 professionals in 22 offices across the globe. Started by Professor Michael Porter and a group of his colleagues at the Harvard Business School, our focus has been on fundamentally enhancing and sustaining the performance of our clients in the private, public and non-profit sectors.

In 2006, Monitor started its Inclusive Markets Practice in India that aims to catalyze market based solutions (MBSs) for creating social impact among the B60 (bottom 60% of the economic population). Our work strives to understand and scale up commercially viable business models that either engage the B60 as customers for socially beneficial products or as producers/suppliers in value-creating market opportunities. For the past 4 years, we have had a dedicated team catalyzing the market for good quality housing affordable for the low-income customer in urban India. We have worked on a number of market-making initiatives and with a broad group of stakeholders to stimulate housing supply and strengthen the broader ecosystem.

For more information, visit www.mim.monitor.com.

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THE LOW-INCOME HOUSING MARKET in urban India is improving, with the beginnings of a robust supply equation in place for affordable, high-quality housing and an upswing in the availability of housing finance for lower income customers.

INTRODUCTION: The Changing Landscape¹

Rapid urbanization has led to an increase in the number of low income households in India's cities. Despite a vibrant housing market in India, decent housing in the formal sector is beyond the reach of the vast majority of these lower income households. Monitor Inclusive Markets conducted a study in 2006-7 for NHB (funded by FIRST Initiative and with active support by the World Bank), which found that even the cheapest houses in the market, were at best affordable² for the top 15% of the urban population. Customers in the next 30% income segment generally rented rooms in slums and low income neighborhoods. They lived in poorly constructed houses with deplorable sanitary conditions (shared toilets, bad drainage and water-logging) and lacking basic neighborhood amenities (few common spaces or gardens, unsafe alleys, open gutters). Many families had tiny quarters, for which they paid high rent and yet remained at the mercy of their landlords. Moreover, these customers aspired to live in and could afford to buy houses between 250-400 square feet in suburban areas at current market prices, but there was virtually no supply of houses, and almost no access to mortgages from traditional financial institutions (even more the case for informal sector customers).



SMALL HOUSES



COMMON TOILETS



BAD DRAINAGE

However, in the last three years, the low-income housing market has seen a series of encouraging developments. Driven partly by the macro-economic recession (which has led to some traditionally up-market developers down-switching their target customer segments, and starting to seriously consider the provision of low-income housing), and partly by the efforts of dedicated “market-makers” and “field-builders”, (including NHB, World Bank, IFC, Michael and Susan Dell Foundation and Monitor Inclusive Markets) who are committed to market-based, alternative models of building commercially viable housing for the lower-income segments, and have demonstrated the value of and the opportunity in the urban low income housing market, there is now the beginnings of a robust supply curve in low-income urban housing.

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1 This document is intended as a summary of findings accompanying the main study conducted in 2010 by Monitor Inclusive Markets for NHB, funded by FIRST Initiative and supported by World Bank. The detailed study is available in the public domain, and available for download at the NHB and Monitor websites.

2 There was some supply of housing for the lower end of this market, but it was limited. Additionally, the lack of availability of housing finance, especially for informal sector customers, constrained the ability of many customers to actually purchase such housing.

ACCELERATED IMPACT: The Low Income Housing Market in Urban India

The 2006-7 study of low income housing supply found that there was very limited supply by some small developers of housing below Rs. 5 lakhs (approximately US\$ 10,775)³. However,

A NOTE ON THE 2010 STUDY FOR NHB AND WORLD BANK:

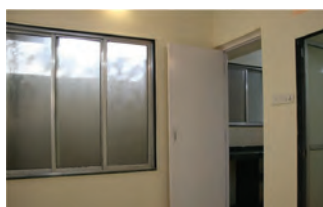
- Through leveraging a network of more than 2,000 nodes and stakeholders, Monitor engaged with over 45 developers and 10 housing finance companies and banks across India
- Undertook primary research (including field-study and management interviews) to provide a market overview of housing and housing finance markets serving the low income customer in India
- Documented in-depth case studies of selected demonstration projects in both housing and housing finance in two selected geographies, Mumbai and Ahmedabad
- Assessed the marketability and commercial viability of these markets from a developer's/HFC's point of view

three years later the situation looks quite different. This study, undertaken in early 2010, found more than 25 developers in urban areas building (or about to build) good quality, multi-family units in the Rs. 3 lakh to Rs. 7 lakh price range (approximately US\$6,500 to US\$15,100).⁴

This by itself is encouraging, but our belief that this represents a shift toward a more sustainable supply equation is informed by a number of additional factors that have become apparent in the last year.

The first factor is the growth of the number of **new cities** that are starting to see supply of low income housing. As Figure 1 shows, Ahmedabad and Mumbai, which

were the initial centers for low income housing projects, continue to build on the success of the early projects, and today boast numerous developers providing housing to low income customers. One of our observations is that successful pilot projects engender copycats—for example, following on the heels of Santosh Associates' Om Shanti Nagar 2 project, low income housing projects are sprouting in Vatva today, including Foliage's Navjivan Housing, Shree Ram Developers' Karnavati Apartments and Dharmdev's Swaminarayan Park. We expect that other cities across India, which currently have one or two pioneering developers bringing houses to market, will similarly prove to be fertile grounds for the proliferation of low income housing projects.



WELL PAINTED AND VENTILATED UNITS



SEPARATE & SPACIOUS KITCHEN AREA

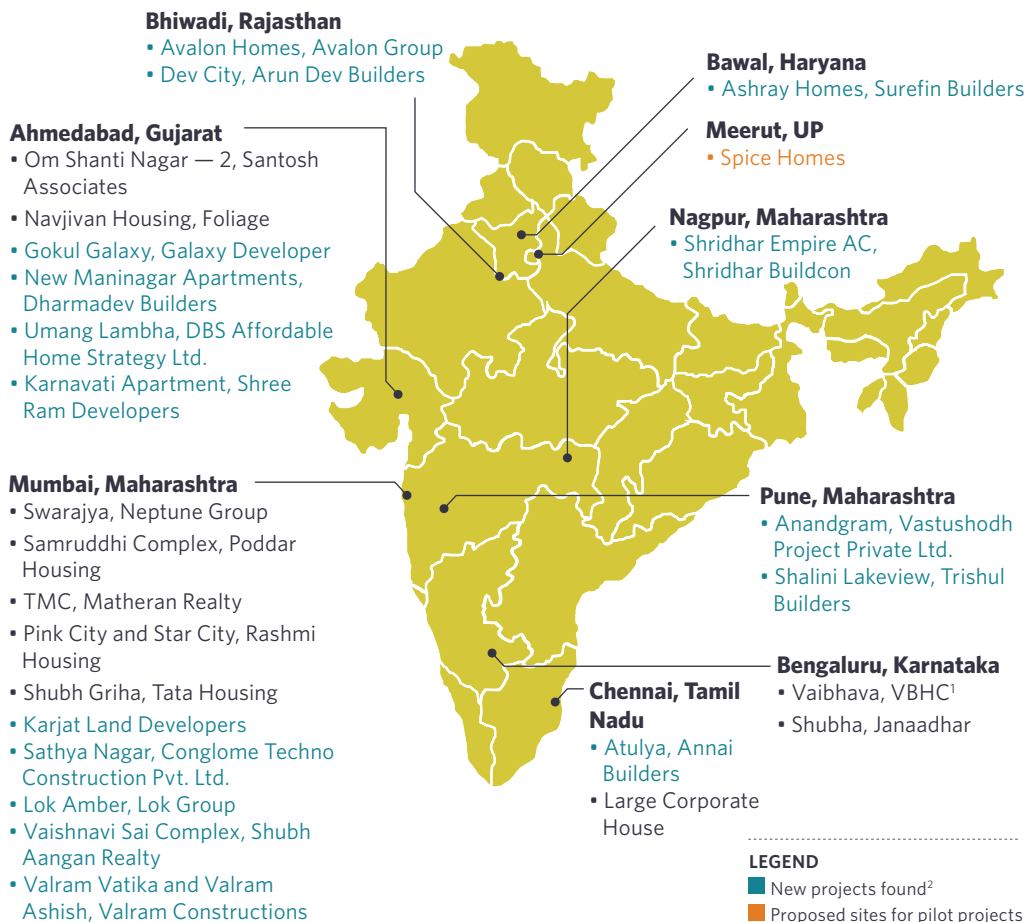


ATTACHED TILED BATHROOM & TOILET

³ Exchange rate of 1 US\$=46.4INR current as of 30 June 2010 is used throughout this document (<http://www.xe.com/>)

⁴ These prices represent the price ranges of the cheapest apartments in a project, since in many cases there are multiple formats and sizes available. Please note that these studies represent the findings of the Monitor team, which are meant to provide indicative and directional guidance as to the state of the market and the supply curve. They do not purport to be an exhaustive listing of all urban, low income housing supply in this price range. For a full list of projects and detailed information reviewed by MIM, please see the study report on the Monitor and NHB websites.

Figure 1: Map of Low Income Housing Projects, 2010



Note: The list provided is not an exhaustive list. It is an indicative list based on our research of the market. We spoke to over 25 developers who are in the process of making LIH supply available for less than Rs. 7 lakhs.

¹ The lowest priced apartment in the Bengaluru project is Rs. 8.8 lakhs — it is included in this map because of the scale at which VBHC plans to build LIH — 1 million units in urban India in the price range Rs. 5 to 10 lakhs over 10 years;




² New projects found indicates that we found these projects as part of our scan for low income housing during the project research, which started in January 2010. SAS Group also has plans to enter the LIH space and is currently in the process of finalizing the pilot project sites

Source: Primary research and interviews of developers, housing finance companies and stakeholders; For a full list of sources used, please see Nodes & Sources and Filtering Long List of Developers for Rs. 3-7 Lakh Homes slides in the Appendix of the full report, which is available in the public domain, and available for download at the NHB and Monitor websites.

Second, the **new mix of developers** contains not only small developers but also larger, more established developers as well as some corporate players. The latter two are entering the space with a view to significant numbers. They are set apart from the smaller developer in that they see the low income housing market as a **scale “manufacturing” opportunity**, and are in the process of doing sizable initial projects to confirm feasibility, as a key step to building successful businesses at high volumes. For example, VBHC has already announced plans to build a million homes (priced below Rs. 10 lakhs) in 10 years, and Neptune (an erstwhile premium builder) has declared intentions to expand from Mumbai to other cities in Maharashtra with its ‘Swarajya’ brand, before expanding nationally.

Third, these developers emphasize the importance of **new ideas**, whether it be the testing of innovative, scale-enhancing construction technologies that reduce construction timelines and increase profitability; whether it be participating in the development of new architectural unit layout designs that amplify comfort and livability in small spaces; or, incorporating sustainability elements that save on cost and reduce environmental impact. Foliage and VBHC, who have long terms plans to build multiple projects, have prioritized sustainability as an essential component of their developments, and are conducting careful research into the feasibility of different options. In their first project in Bengaluru, VBHC is incorporating several sustainable innovations, including solar street lights on the internal roads, which they feel will not only meet sustainability goals, but will also help to keep residents safer⁵. The innovation imperative is critical to successfully serving a customer for whom both low price and high quality are non-negotiable. It also indicates that these players are targeting better quality, better use of space and better customer experiences while holding or lowering prices over time.

Table 1: It's What Customers Want⁶

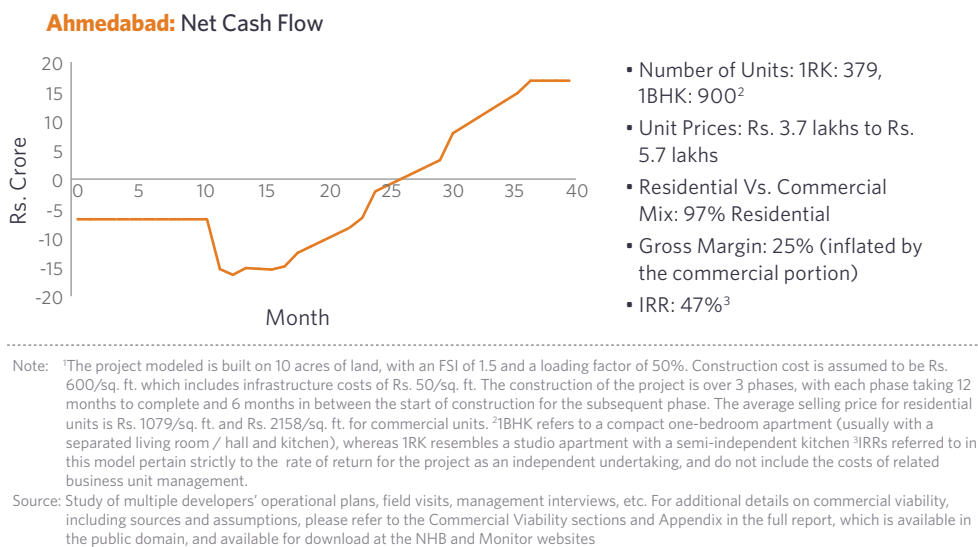
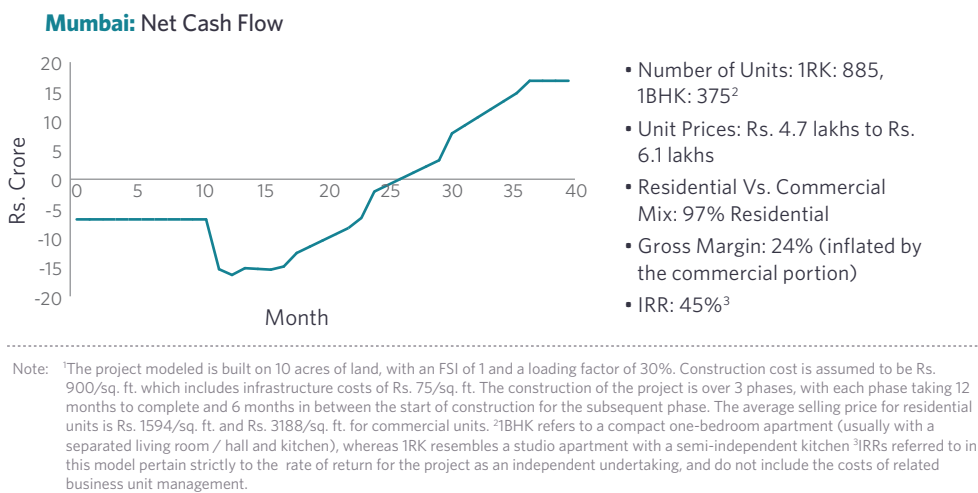
DEVELOPER AND PROJECT LOCATION	HIGH CUSTOMER DEMAND	STRONG CUSTOMER PREFERENCES
 <p>Project Name: Swarajya Location: Ambivali, Mumbai</p>	<ul style="list-style-type: none"> Over 80,000 people have visited the Swarajya project site since launch in March 2009 80% of the units have already been booked (in Phases 1 and 2) 	<ul style="list-style-type: none"> The project team increased the total number of 1BHK units to be constructed, when they saw that the demand for 1BHKs was significantly higher than for 2BHK units
 <p>Project Name: Navjivan Housing Location: Vatva, Ahmedabad</p>	<ul style="list-style-type: none"> All 173 units that were open for booking in October 2009 for Phase 1, sold out quickly Foliage increased prices of units by 10% starting mid-June 2010 due to the high demand 	<ul style="list-style-type: none"> Foliage changed the mix of apartments in the project, increasing the number of 1RK units (and reducing the number of 2BHK units) due to the difference in the volume of enquiries and pace of bookings
 <p>Project Name: Atulya Location: Anakaputhur, Chennai</p>	<ul style="list-style-type: none"> All 224 units in Phase 1 of Atulya were booked on the day of launch in April 2010 	

⁵ Bengaluru's power supply is unreliable, and power cuts may mean dark internal roads, which lead to safety concerns for residents

⁶ 1BHK refers to a compact one-bedroom apartment (usually with a separated living room / hall and kitchen), whereas 1RK resembles a studio apartment with a semi-independent kitchen

All of this activity suggests a business model that is approaching scale through geographic expansion by national or regional players, and subsequent replication by local players. In the fiscal year 2010-2011, therefore, we estimate that there will be between 25,000 to 50,000 houses on sale in the market.⁷ And, given the plans and projections of the new breed of developers (especially the larger developers like VBHC, Neptune, Foliage and Tata Group), which comprise intentions to start numerous additional projects in the coming year or two years, this number should increase exponentially in the near future.

Figure 2: Commercial Viability of Low Income Housing Projects, Mumbai and Ahmedabad¹



7 Fiscal year 2010-2011 runs from 1 April 2010 to 31 March 2011. Many developers we interviewed shared their 2010-2011 plans with us during the course of the study, a cumulative number of more than 20,000 units. A number of others said they were working on starting projects, but were not comfortable sharing numbers. Accounting for this, and for the fact that our study was not exhaustive, we have estimated a market size. We feel that the likely supply will definitely exceed 25,000 units and is more likely to be much higher (in the 40,000 to 50,000 range).

This impetus can be credited to the commercial viability and marketability of the low income housing market. This study provides representative developer economics for two locations, Mumbai and Ahmedabad, based on an in-depth study of current players and our experience (including promoting pilots and incubating companies), and the returns are attractive. Developer project IRRs can be as high as 40%-50% in these locations, with gross margins in the region of 20%-30%.⁸ And the demand for such low income urban housing far outstrips supply, as seen from the pace of sale of units in various project sites (be in Mumbai, Ahmedabad or Chennai). For example, in Ahmedabad, both Santosh Associates (which sold all 674 units within 3 days of launch) and Foliage (which speedily sold the 173 flats up for Phase 1 booking) provide excellent examples of marketability. Similarly, in Mumbai, Neptune's Swarajya project has already sold 80% of its units since launch in March 2009, and has not only increased the number of units on offer in Phase 2, but also changed its mix to reflect greater proportion of 1 BHK (as compared to 2 BHK) due to the strong demand.⁹ Poddar Housing, which launched in March 2010, has already sold 800 units, 600 of which were sold within a month of launch. Atulya by Annai Builders in Chennai sold all 224 units during Phase 1 launch in April 2010 on the day of launch.

INCREASING ACCESS: The Housing Finance Market for Low Income Customers

However, even a strong and sustainable supply of housing would be inadequate in terms of meeting the needs of low income urban customers, without a parallel robust supply of housing finance, which is a key focus of this report.

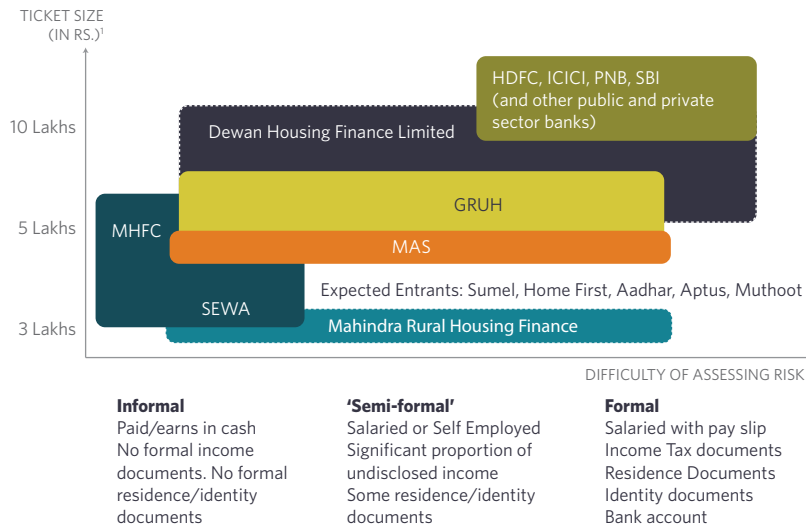
Housing finance has traditionally served only the middle-to-high income formal sector customer—and therefore eliminated a large majority of lower income customers, both formal and informal. Traditional players have been reluctant to play in this market largely due to the high costs of serving this segment, compounded in the informal sector by the perceived high risk (high NPAs, uneven payback patterns, etc.) of the customer base. In fact, if not for the stellar efforts of two pioneers, Gruh and Dewan Housing Finance Limited (DHFL), there would be very few low income informal sector customers served in urban India.

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8 These numbers are based on representative economic models created by Monitor, and assume projects with a mix of residential housing and commercial spaces. IRRs referred to in this model pertain strictly to the rate of return for the project as an independent undertaking, and do not include the costs of related business unit management. For a detailed view of the derivation and assumptions underlying these numbers, please refer to the Commercial Viability and Marketability Sections of the study report on the Monitor and NHB websites.

9 1BHK refers to a compact one-bedroom apartment (usually with a separated living room (hall) and kitchen), whereas 2BHK refers to a larger, two-bedroom apartment. 1RK resembles a studio apartment with a semi-independent kitchen

Figure 3: Representative HFC Market Map — India, 2010



Note: ¹Indicative of the primary product offering (usually average ticket size), though other loan sizes and products may also be offered
 Source: Primary research and interviews with housing finance companies and stakeholders; For a full list of sources used, please see Nodes & Sources slide in the Appendix of the full report; which is available in the public domain, and available for download at the NHB and Monitor websites

Here too, though, we find some encouraging developments when seen from the point of view of the informal sector customer. As Figure 3 shows, there are now dedicated start-ups like Micro Housing Finance Corporation (MHFC) that have identified this very segment as a large business opportunity. Established companies with excellent track records in allied businesses (e.g. MAS in Microfinance and Vehicle Loans and Muthoot Pappachan Group in Gold Loans) have also recently entered or announced their intention to enter this market, seeing both a commercial opportunity and cross-efficiencies. Today, any list of HFCs with some ability to serve the low income urban customer should include, apart from the aforementioned HFCs (GRUH, DHFL, MAS and MHFC), players like Mahindra Rural Housing Finance Limited, and SEWA¹⁰. There are also a number of expected entrants into the space, including SUMEL Housing Finance Limited, Aptus Value Housing Finance India Ltd., Home First Finance Ltd and Aadhar Housing Finance Pvt. Ltd., all of which have either recently obtained or have already applied to NHB for a Certificate of Registration (CoR). Others like Muthoot Pappachan Group, Equitas and Grameen Koota, are in various stages of their strategy and plan to enter the housing finance space in the low income segment¹¹. However, for the next 12 to 24 months, we predict that there will still be a shortfall of loans available to the informal, low income customer in urban India.

¹⁰ Various private sector banks (e.g. HDFC, ICICI) and some PSUs (e.g. SBI, PNB) and large HFCs also play in adjacent spaces, but skew toward middle income semi-formal and formal customers. Mahindra has a substantial amount of operations in rural areas which reduces the average ticket size of its loans

¹¹ Please note this is not an exhaustive list of all active HFCs in India.

These HFCs are also aware of the innovation imperative of serving the low income customer, and even more so, the informal sector low income customer. It is a fundamentally different business from traditional housing finance, as this income group (notably the informal sector workers within it) rarely has the proof of income and expenditure documentation that large mortgage lenders rely upon to conduct their credit assessments. Assessing these customers requires a more field-based approach for cashflow verification: using surrogates, triangulation, and building up knowledge about customer sub-segments to increase assessment reliability (see Table 2). HFC entrepreneurs and managers routinely emphasize that to really succeed in this market, one has to pursue a dual strategy of both investing in comprehensive and innovative customer risk assessment procedures to better understand the low income informal sector customer, as well as in detailed, regular training programs for the loan officers as they are the front-end of this assessment procedure.

Table 2: It's the Person, Not the Document

HFC CUSTOMER RISK ASSESSMENT PROCEDURES	
PROCEDURE	DETAILS
Understand a customer's stability	<ul style="list-style-type: none"> • Visit to home to understand applicant's current housing situation, stability and duration of stay • Interview neighbors to verify duration, understand habits, etc. • Check credit and banking history (if applicable)
Understand a customer's source of income	<ul style="list-style-type: none"> • Visit the applicant's business to observe daily business flows, speak with customers and estimate revenues and costs • Understand the business model and its key strengths and weaknesses, fluctuations in cash flow, risks, etc. • Talk to suppliers, competitors, etc. to triangulate and benchmark estimates
Standardization	<ul style="list-style-type: none"> • Building a database of informal sector customers' income by profession in different localities

These HFCs' view of the opportunity being not only large, but also profitable is underwritten by the economics. An illustrative model Monitor constructed of a pure-play HFC targeting the low-income, informal sector customer, assumes a "hub and spoke" model¹² where the HFC would operate in larger urban areas (Metros and Tier I—III cities¹³), with "hub" retail branches and "spoke" project site kiosks to follow up on new low income construction projects. Over ten years, the HFC would disburse close to 260,000 loans of an average ticket size of Rs. 4 lakhs (and

12 Monitor created an illustrative model based on real data gathered through field visits, management interviews and study of operational data of a number of HFCs in India, who do serve the informal, low-income customer, among other segments. This model assumes a "hub and spoke" model, as opposed to a "developer-based" model where the HFC is only present at low-income housing project sites and sells directly alongside developer-partners

13 Metros are cities with population of greater than 40 lakhs, Tier I cities have a population of between 10-40 lakhs, Tier II cities have a population of between 5-10 lakhs, Tier III cities have a population of between 1-5 lakhs.

an interest rate of 14%)¹⁴. Based on these assumptions, a start-up HFC focused on low income, informal sector customers can turn profitable within 3 years, with a RoA of 2.5% to 2.9% in year 5¹⁵ and a RoE in the ~17%¹⁶ in year 7.¹⁷ Such returns, and the sheer size of the opportunity, should continue to attract more players into this still largely underserved market segment.

CONSTRUCTING THE FUTURE: Emerging Characteristics of the Housing and Housing Finance Markets

At this point, the **commercial viability of a market-based approach** to providing good quality housing in urban areas at prices affordable to low income customers is beyond question. Numerous projects have commenced in the last two years, and almost all the developers currently in the market are planning many more. Developers who down-switched segments to provide low income housing for the first time due to the recession show no signs of abandoning this segment as the economy recovers, and in fact, continue to announce new projects to serve these customers.



The drive toward **scale** in the low income housing business is new. The traditional model of development saw projects delivered by developers who treated land as an ‘asset’, to be held for price appreciation over time. Phased construction of small percentages of large land banks helped to generate high returns, as apartments were sold at increasing prices over time. One of the observations noted earlier in the paper is that the market is seeing a change in the types of developers who are currently entering the market. Larger developers and corporate houses have entered the market, and have announced aggressive plans to construct hundreds of thousands of houses, predicated on a mass-manufacturing model. Such a model is not easy to execute—it involves an ability to design and deliver a quality product at volumes, build systems for replication and scale, deal with multiple stakeholders at many levels, and to market to a new customer segment.

14 We have assumed a loan to value ratio of 80% and loan tenure of 15 years (though our conversations with various HFCs lead us to believe that loans are paid within 8 years or so). We have also assumed an NPA of 1% and target gross spread of 4%

15 Our model leads us to an RoA of 3% in year 10 (RoA for HDFC is 2.7% (FY 2010) and RoA for DHFL is 1.7%).

16 Our model leads us to an RoE of 23% in year 10, which is very robust by the Indian financial industry’s standards (RoE for HDFC is 20%, RoE for DHFL is 21.7%).

17 These numbers are based on representative economic models created by Monitor. For a detailed view of the derivation and assumptions underlying these numbers, please refer to the Commercial Viability and Marketability Sections of the study report on the Monitor and NHB websites

Most of all, it involves developing, using and refining a brand new business model—one that treats housing’s predominant factor input, land, as ‘inventory’ to deplete rapidly, as opposed to an ‘asset’ that is to be held for longer term price appreciation. The new model relocates value in developing a quality product and delivering volumes. It is aimed at managing for a customer with limited affordability, a customer for whom the final price is critical.

As the new breed of developers multiply their operations, and as the geographical coverage of the projects diversifies, so will the sheer numbers of houses coming on to the market. This is an excellent sign, but it will drive the need for **customer financing**. The market is already demonstrating that a housing finance business for urban lower income, even informal, customers is viable, profitable and potentially very large. This has had the expected result—there are already between 5 to 7 players with announced intentions to enter this market.

Here, too, the housing finance companies recognize that the business of serving this customer segment is a fundamentally different business from traditional housing finance, as this income group (notably the informal sector workers within it) rarely have the proof of income and expenditure documentation that large mortgage lenders rely upon to conduct their credit assessments—it therefore requires a **fundamentally different business model**. The innovations of the HFCs who are currently testing and refining their model for assessing these customers in urban settings, are demonstrating some of the different elements of the model: field-based approaches for cash-flow verification, combined with building up databases about customer sub-segments to increase assessment reliability, and investing in training loan officers who are the front-end of the origination and assessment process. This dedication to innovation in the face of a challenge is not surprising. For one common factor that characterizes the new players (and many of the players waiting in the wings) in the housing finance market is they are entrepreneurs (e.g. MHFC) or organizations (MAS, Muthoot Pappachan Group) with **proven track records at taking businesses to scale**.

There is little doubt that these markets will grow. The sheer size of the opportunity in low income housing - estimated at about 21 million un-served urban households (who can afford housing in the Rs. 3 lakh to Rs. 10 lakh band), and a market worth ~ Rs. 1.1 million crore—will ensure that the already rapid growth seen to date continues. The housing finance market is similarly very large, and should see scale in the near future. The commercial impact of building these houses, and the social impact of providing these homes through affordable loans, has the potential to change India’s socio-economic landscape in the years to come.

Monitor Inclusive Markets Monitor Inclusive Markets continues to catalyze markets for market based solutions in India and elsewhere. For more information and partnering opportunities, contact inclusivemarkets@monitor.com and see our website, www.mim.monitor.com.

MONITOR **INCLUSIVE MARKETS**

ANAMITRA DEB

anamitra_deb@monitor.com

+91 22 6658 2099

ASHISH KARAMCHANDANI

ashish_karamchandani@monitor.com

+91 22 6658 2099

RAINA SINGH

raina_singh@monitor.com

+91 22 6658 2001

DESIGN BY OPUS DESIGN LLC
www.opusdesign.us



MONITOR **INCLUSIVE MARKETS**