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Towards An Inclusive Formal Housing Finance Sector: A Case for Rural Population

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Abstract

Shelter is one of the basic human needs and is universally construed as a human right that is vital to the attainment of the right to live with dignity. Given the rapid pace of urbanization and rising personal incomes, urban housing finance has become increasingly attractive for lenders. However, the rural population has been neglected or at best, served out of compulsions of regulatory requirements. Rural households depend more on government sponsored housing projects and subsidized credit rather than on the formal housing finance system. In this context this article analyzed the trends in the rural demand for formal housing finance with the purpose to gauge the extent of inclusiveness in the Indian housing finance system and carried out a preliminary econometric investigation into the selected economic factors that may have a role in influencing rural demand for formal housing finance.

Keywords: Demand for Home Loans, Rural Population, Scheduled Commercial Banks, Home Loan Interest Rates.

Introduction

Shelter is one of the basic human needs and is universally construed as a human right that is vital to the attainment of the right to live with dignity. In the simplest form, housing is an abode as much for the poorest as for the most affluent of persons. This is because housing comprises one of the prime aspirations for progressive lifestyles among all income groups. More importantly, the security of home ownership increases welfare of the households by enhancing productivity, efficiency and creativity (Desai, 2002). Housing provides vital services like privacy, independence, security and comfort. The National Housing Bank (NHB) of India acknowledges that a dwelling place is a workshop that facilitates people for constructive roles. But at the same time for any household owning or producing a dwelling unit involves high capital formation that commands savings of an entire lifetime or even more (Palvia 1980).

The importance of a dwelling place underlines the significance of related issues such as the adequacy of its supply, its affordability particularly for the lower income groups, the access to finance etc. It is for this reason that provision of housing finance forms critical aspect of housing policies of the government. Needless to say, the significance of housing for an individual as well as to the economy entails an inquiry into various aspects of its accessibility, availability of housing finance being one of the important components.

As per the 2011 census, 68.8 per cent of total population of India lived in the rural areas. Rural population in India was last measured at 67.25 per cent in 2015, according to the World Bank data. With such a high proportion of population residing in rural areas, the problem of housing shortage and lack of basic amenities in the rural areas becomes a serious cause for concern. NHB estimated rural housing shortage over the 12th five year plan period of 2012-17 to the tune of 55 million. The central and state governments have various dedicated housing programmes for the rural poor based on subsidized credit and budgetary provisions. These rural housing schemes are mainly variants of the housing scheme 'Indira Awas Yojna', operational since the mid 1980s, with the emphasis of providing housing to the homeless. Assistance is also provided by the government refinance extended through the NHB. In order to increase the flow of funds from formal housing finance sector to rural housing, NHB launched the Golden Jubilee Rural Housing Finance Scheme (GJRHFS) in 1997 under which public sector Scheduled Commercial Banks, scheduled State Cooperative Banks, Regional Rural Banks, Housing Finance Companies, Apex Cooperative Housing Finance Society and Agriculture and Rural Development Banks were expected to lend for rural housing. The Draft 'National Rural Housing & Habitat Policy, 2007' of the NHB has laid down comprehensive plans to increase the flow of funds to rural areas by creating conditions that encourage financial institutions to lend. Along with focus on improving access to funds it has also incorporated promotion of infrastructure and habitat development, sustainability concerns, technology transfers and other essential measures for an all-encompassing approach to improve housing conditions for the rural population. Under the 'Housing for All' scheme the government of India has the goal to build 29.5 million rural houses by the year 2022 through Centre-State participation in sharing the financial burden, and borrowings from National Bank for Agriculture and Rural Development (NABARD). Under the scheme financial assistance would be provided for construction of pucca house to homeless and households living in dilapidated houses.

Notwithstanding government provision for rural housing, attempt should also be made to make the market-based formal housing finance sector more inclusive by targeting rural population. As far as the provision of market-based formal housing finance is concerned, the role of banks and financial institutions in lending to rural population is found to be minimal, compared to their role in the housing upsurge in the urban centres. The commercial banks in India, both public and private – domestic as well as foreign, have concentrated on the urban demand for home loans as is evident in the compound annual growth rate of 25 percent in outstanding home loans of scheduled commercial banks extended to non-rural population over the period from 1990-91 to 2014-15. In fact increased urbanization may have led to further neglect of the rural borrower as a result of profit maximizing behaviour of lenders. Volatility in agricultural incomes, poor affordability, absence of dynamic property markets and poor rural infrastructure make for dismal prospects for market-based housing finance sector in the rural areas. Most government programmes are aimed at the rural poor - those below the poverty line. The people above the poverty line, but with low and variable incomes also need to be focused upon. The practice of rural households to borrow from moneylenders at high rates of interests, and from other personal sources provides evidence of their housing aspirations and affordability. In this context this article analyses the trends in the rural demand for formal housing finance with the purpose to gauge the extent of inclusiveness in the Indian housing finance system and carries out preliminary investigation into selected economic factors that may have a role in influencing rural demand for formal housing finance. For this purpose, extensive survey of literature was done to assess the kind of studies conducted in the area of housing finance. The following section provides the essence of the studies reviewed.

Review of Literature

Notwithstanding the dynamism, the recorded history of the housing finance sector in India is relatively young. As regards studies on housing finance issues in India, the focus has been more on the budgetary measures of the government, the status of low and middle-income housing, the role of the National Housing Policy and the National Housing Bank in the provision of housing finance, structure of housing finance in India, development of financial institutions, case studies on housing finance by institutions, etc. Most studies are those that address the issues of the role of government vis-à-vis the market, resource mobilization and allocation for housing, policies and reforms in the housing and housing finance sectors, issues of home ownership and housing affordability, marginalisation of the poor in the access to housing finance, and so on. These are depicted by authors such as, Gupta (1985), Lall (1987), Kundu (1988), Wadhwa (1988), Mehta and Mehta (1987, 1988, 1991), Kapadia (1992), Nair (1999), Mahadev (2001, 2005, 2006), Khan (2003), Rao and Apparao (2012), Sandhu (2013), Singh, et al (2014), Gopalan and Venkataraman (2015), etc.

Bhide et.al. (2009) point out the reluctance of bankers to cater to the rural market unless pressurized by the government. Moreover, the stringent conditions at which loans are extended discourage potential rural borrowers. Hirway (1987) has discussed the effectiveness of government's efforts to solve the rural housing problem based on high proportion of subsidy and use of the labour of the poor to construct their houses. She laments the tendency of planners to apply the urban norms of housing to rural setups while ignoring the way of life of the rural households. Mahadev (2009) highlights the urban bias of the Indian housing finance sector. Tiwari (2007) in his report on rural housing points out that a large proportion of rural households find themselves in an unfavourable position in the context of housing as they do not qualify for market-based formal housing finance.

Studies examining the determinants of housing finance or the economic behaviour of borrowers and lenders are found with limited treatment in terms of institutions, regions or aspects covered and include works of Kirby (1976), Starr (1977), De Rosa (1978), Renaud (1996), Tiwari (2001), Khan (2003), Saravanan and Nagarajan (2007), Bandyopadhyay and Saha (2009), Bhide et al (2009), Chandrasekar and Krishnamoorthy (2010), Fulwari (2012), and Kumar and Fulwari (2012, 2016). The variables affecting the demand for housing finance as identified in these studies include the rate of interest, rate of inflation, income in its various forms, such as transitory or permanent and regular or variable, credit terms such as maturity period, down-payment requirements and other payment terms.

Objectives and Research Methodology

Most of the studies on rural housing focus on the analysing government efforts in solving rural housing shortage. Studies that examine the impact of economic factors on the demand for housing finance are essentially with reference to the urban households. No study is found that undertakes an examination of the trends of rural demand for formal housing finance system. No attempt has been made to investigate the behaviour of rural demand for housing finance with respect to changes in the cost of credit or income levels. With this premise this article seeks to examine the pattern and growth of the formal housing finance in rural India. Attempt is also made to explore the sensitivity of rural demand for market-based housing finance in India to interest rates and income which a priori are the most important factors influencing the demand for home loans.

The study uses simple statistical tools of ratios and growth rates to gauge the trends in rural demand for home loans. It is based on data on outstanding home loans of rural population with the scheduled commercial in India over a period of 25 years from 1990-91 to 2014-15. The number of home loan accounts and the average home loan size of rural population have been employed as alternative measures of their demand for home loans. The data has been sourced from the Basic Statistical Returns of the Scheduled Commercial Banks published by the Reserve Bank of India.

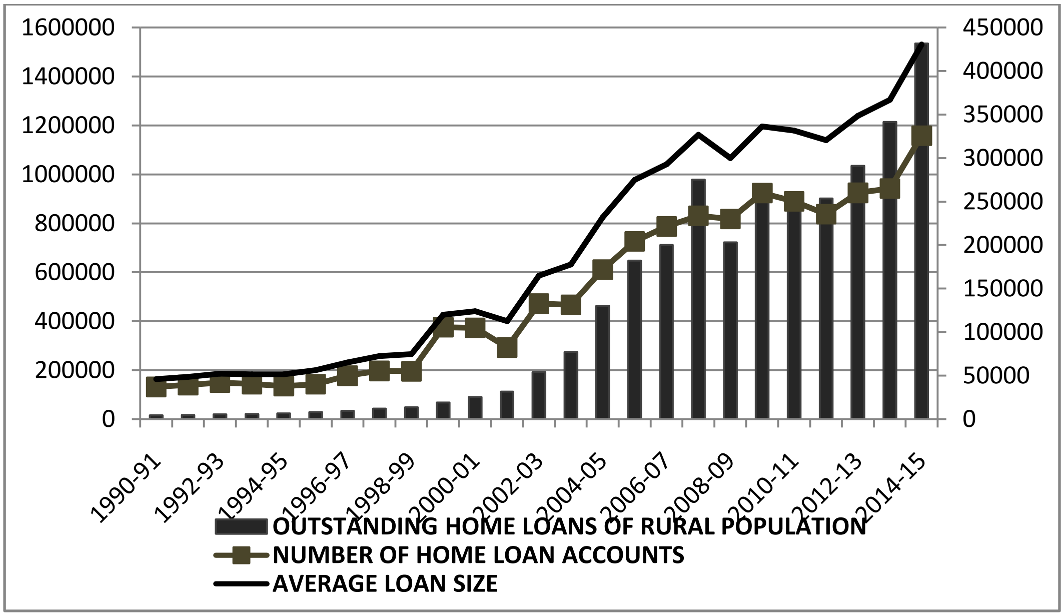
The study also conducts an econometric analysis of the rural demand for home loans. Being a preliminary investigation, it uses simple and multiple regression techniques. The level of outstanding home loans of the scheduled commercial banks is taken to represent the demand of rural households for housing finance at the existing rates of interest and income levels. As regards the home loan interest rates, the prime lending rates of five major public sector banks have been used as a proxy variable. Income is another major factor in the decision to avail home loans. Since separate data on rural income is not available, the per capita gross domestic product of agriculture and allied activities at factor cost has been used as a proxy variable. The per capita values have been obtained by dividing gross domestic product of agriculture and allied activities by rural population. The data on rural population are derived from the World Bank Staff estimates based on United Nations, World Urbanization Prospects. The All variables have been taken in their log forms.

Analysis of Rural Demand for Formal Housing Finance

The level of outstanding home loans of the rural population is an expression of their preference to hold the housing loan liability at the existing rates of interest and income levels. By this implication, it can be considered a representation of their demand for home loans. Alternatively, the number of home loan accounts and the average loan size also give a fair idea of the trends in rural demand for housing finance. The average home loan size is computed as a ratio of outstanding home loans to number of home loan accounts.

Figure I depicts the growth in the demand for home loans by rural population in terms of outstanding loans, number of home loan accounts and the average home loan size for the period 1990-91 to 2014-15. The primary axis shows the scale of outstanding home loans in INR million and the average home loan size in INR while the secondary axis represents the scale of number of home loan accounts. From merely Rs. 4207.1 millions in 1990-91 to Rs.19070 millions in 1999-2000, the rural demand for housing finance grew at a compound annual growth rate (CAGR) of 18.29 per cent in the first decade under examination. The second decade under study which witnessed the peak in the home loan sector in India is also reflected in the case of home loans to rural population with a remarkable increase at a CAGR of 29.4 per cent. The last five years of the study period saw a slowdown in the pace of growth in the outstanding home loans of the rural population at a CAGR of 11.45 per cent. This is in line with general setback in the housing sector across the country, although the last three years show signs of acceleration.

Fig. I Trends in Home Loans of Rural Population



Source: Various issues of Basic Statistical Returns of SCBs, RBI publications.

As regards the number of home loan accounts, there is an improvement over the years indicating that more rural households are demanding home loans. On a compound annual growth rate basis, the number of accounts grew at the rate of 9.5 per cent. From 131,152 at the beginning of the period under study, the total number of rural home loan accounts stood at 1,158,239 in the year 2014-15. The robustness of this trend is further substantiated by increase in the average home loan size of the rural population. Not only have more rural households opted for market-based housing finance, the loan size per home loan account has also shown an increase. In the first decade there was a flatter increase in the average loan size from Rs.32078 to Rs. 50828 as is evident in Figure 1. However, the last 15 years of the study period witnessed a much higher increase in the average home loan size. In the year 2014-15 it stood at Rs.372,602 registering more than sevenfold increase over average home loan size in the year 1990-91. It can be attributed to the growing affluence of the rural households and the lowering of interest rates, and to the general vibrancy in the housing finance sector.

The above enumeration brings to surface the expansion in the rural demand for formal housing finance. Notwithstanding the growth in absolute measures of home loans to rural households, in relative sense the picture is not as encouraging. While the share of home loans to rural population in the total credit of scheduled commercial banks to all sectors has definitely grown from a meagre 1.6 per cent in 1990-91 to 6.6 per cent at the end of the study period, that is, 2014-15, its relative position within the population group-wise distribution has deteriorated. The relative share of rural population in total home loans of scheduled commercial banks across India declined from 12.7 percent in the year 1990-91 to as low as 6.7 in the year 2014-15. Much of this loss has gone in favour of metropolitan population. On an average, over the entire study period rural population received nine per cent of total home loans, whereas semi-urban, urban and metropolitan population received 17 per cent, 28 per cent and 45 per cent share respectively on an average. A crude measure of the skewness in the population group-wise distribution of home loans can be had from the fact that the share of home loans of semi-urban, urban and metropolitan population is roughly two times, three times and five times, respectively, more than that of the rural population.

The analysis of the trends in housing loans of rural population brings forth the dynamism in the sector. The rural population may lose out on market-based housing finance on account of irregular nature of income and may have to rely more on informal sources of finance. Nevertheless, the trends in housing loans to rural population follow the pattern observed in the Indian housing loan sector in general. It shares similar characteristics like slow paced growth in the 1990s followed by rapid rate of growth in the 2000s, only to slow down in the latter years of the decade of 2000-10 (Fulwari and Kumar, 2016).

Apparently, rural housing loans have moved in alignment with significant changes in the Indian economy such as a phase of interest rates and income levels that were highly conducive to the housing finance sector, followed by unfavourable trends owing to global economic slowdown and poor macroeconomic fundamentals within the country. In the recent years rural home loans have regained the momentum with the general recovery in the economy. This warrants an investigation into whether rural households exhibit the same sensitivity as the general housing finance sector, to economic variables, namely, the rate of interest and income levels that *a priori* affect the demand for housing finance. While many studies in the literature so far have reported significant impact of these variables on the demand for housing or housing finance, there is no study that focuses exclusively on the rural demand for home loans. The following section makes a preliminary examination of the same to fill the gap.

Econometric Analysis of the Rural Demand for Formal Housing Finance

The objective of this section is to investigate if the rural borrower is sensitive to economic factors that traditionally appear in the demand function for home loans. The hypotheses tested are as under:

1. Home loan interest rate has a negative impact on the demand for home loans.

2. Income has a positive effect on the demand for home loans

Results and Interpretation

The results of the alternative models examined in the article are exhibited in the Table 1.

Table 1. Demand for housing loans by rural population (RD_{HL})

Variable	1	2
Constant	24.697 * (6.711) *p* value 0.000	–98.163* (–5.058) *p* value 0.000
Interest Rate	–5.533* (–3.873) *p* value 0.001	– 0.838 (–0.756) *p* value 0.459
Income	-	12.509 * (6.368) *p* value 0.000
R^2 (adjusted)	0.400	0.799
D-W	0.398	0.887

a.

Figures in bracket are *t* values. * Significant at 1 per cent level.

MODEL 1: $RD_{HL} = \alpha + \beta_1 r + \varepsilon$

The first model regresses rural demand for home loans on the home loan interest rate. The model explains 40 per cent variation in the dependent variable. Notwithstanding the low explanatory power, the model brings forth the significant impact of interest rate as a cost variable in the demand function for home loans. The negative sign of the beta coefficient of the interest rate meets *a priori* expectation that the demand for credit is inversely related to its cost and it is also found to be statistically significant. As the income variable is excluded in the first model, the interest rate exerts much greater impact on the demand for home loans as is evident from the high interest elasticity value of more than five. This is expected as the rate of interest represents the cost of borrowing. The results support the first hypothesis under study that interest rates have a negative effect on the demand for home loans. The acceptance of the hypothesis is further strengthened by the positive sign of the constant term as it substantiates the negative slope coefficient of the demand for home loan equation. At the same time the results also suggest that the rate of interest is insufficient to explain the total variations in the demand for home loans. This is borne out by the poor value of the D-W statistic.

MODEL 2: $RD_{HL} = \alpha + \beta_1 r + \beta_2 PCI + \varepsilon$

In order to capture the combined impact of the cost and scale variable, the second model includes both home loan interest rate and per capita rural income. In the presence of the income variable, the interest cost of home loans continues to bear a negative sign but is not found to be statistically significant in determining the demand for home loans. The second hypothesis regarding positive effect of income on the demand for home loans is found to be true. Income is found to have a strong and statistically significant effect on the demand for home loans borne by the high elasticity value of more than 12. Interestingly, the constant term which exhibited a positive sign in the first model now bears a negative sign which is consistent with the significant role of the income variable. The negative sign of the constant term indicates that households can demand home loans only after their income reaches a certain critical minimum level of eligibility.

The D-W statistic of the model has improved; however, being much less than two it suggests presence of autocorrelation in the residuals. This is expected because the housing finance sector is highly segmented and diverse as far as the terms of lending are concerned. These include differential treatment of home loans on fixed versus floating rates, varying maturity periods and quantum of loans, and of borrowers with regular versus variable incomes, etc. These aspects do not get reflected in the generic variables used in this study. Nonetheless, it establishes the fact that income of borrowers has a positive effect on the demand for home loans as expected on a priori basis. The results match with those of similar studies on urban housing finance like Bandopadhyay and Saha (2009), Chandrasekar and Krishnamoorthy (2010), Fulwari (2012) and Kumar and Fulwari (2012, 2016).

Research Implications and Policy Recommendations

The study has shown that the behavior of rural population is no different from its urban counter as regards demand behavior for home loans is concerned. However, the poor proportion of market-based formal housing finance going to the rural population vis-à-vis non-rural population implies that concerted efforts are needed through policy intervention so that more rural households can be brought under the fold of organized housing finance sector. The analysis clearly brings out the significant role of income and interest rates in the demand for housing finance in rural India. The high interest-elasticity of the demand for home loans implies that adopting a policy of moderate home loan interest rates would enable many more rural households to meet their demand for housing through formal housing finance. This is particularly important in the light of the immense favourable effects of home ownership. Empirical results show that interest rate becomes insignificant as an argument in the demand for home loans function in the presence of the income variable. That is, borrowers with sufficient income are less sensitive to interest rates. Therefore, subsidized interest rates on home loans can be an effective policy tool for increasing the demand for home finance, particularly when targeted towards low income households. It is recommended that interest rate subsidies be linked to the income levels of the borrowers. Additionally, government must come out with land title regularization programmes so that it doesn't become a hindrance to lending.

Since affordability factors are found to play significant role in the demand home loans, it also suggests that the market-based housing finance system tends to cater to those with regular incomes. Large number of rural households has variable incomes which make them ineligible for formal housing finance. Cognizance should be taken of the fact that the rural households are nonetheless availing and servicing loans taken from informal sources such moneylenders, relatives and friends at much higher rates of interest but with an element of flexibility in repayment to suit their income pattern. Also, the practice by lenders to bend rules for personal gains and extend loans to those who do not meet the income criteria but have the ability to repay, is public knowledge. Irregularity in income does not equate to inability or unwillingness to service the loans. Information on the pattern of household income must be scrutinized so that the repayment schedules can be customized with the aim of making the formal housing finance sector more inclusive. Home loans taken by rural households from informal sources need to be examined for various dimensions such as the amount, cost and duration of loans, the flexibility offered in servicing the loan, the repayment history of borrowers, and demographic characteristics of the households who availed the home loans, etc. This could provide useful insight into the dynamics of the rural housing finance sector which can then be appropriately incorporated into the instruments of formal housing finance for rural population. With such an orientation, lenders should be allowed to design more liberal and flexible credit terms through necessary policy intervention. The US Department of Agriculture, for instance, targets home loans to rural population by doing away with down payment and allowing repayment over a span of 33 or 38 years for applicants with low income levels just so as to show repayment ability. Family income from all sources is taken into account to decide eligibility. Thus policy makers need to be proactive in creating an enabling environment for extending the reach of the housing finance sector by developing specialized housing finance instruments that suit the characteristics of the rural borrower. This would serve dual purpose. Not only would the housing finance sector become more inclusive and bring more borrowers in the fold of organized housing finance sector, it would also augment the avenues for profitable lending for the banking sector. The subsidized housing projects undertaken by government under various rural housing schemes can then be focused on the truly needy among the rural population, who do not qualify for market-based housing finance.

Limitations of the Study and Scope for Further Research

The findings of the present study need to be interpreted in the context of the limitations of the aggregative nature of the time series data and the research methodology employed. The generic nature of the variables limits the extent to which the finer aspects of rural housing finance can be deduced. With suitable research methodology such as case studies and the use of micro level data, the results of the present study can be put to further test. The peculiarities of rural demand for home loans would be better understood by examining sample data of home loan accounts of rural population.

Conclusion

The analysis substantiates a priori proposition that the rural demand of market-based formal housing finance is elastic to economic factors, namely, the cost of credit and the income level, although the latter has an overpowering impact when taken together. The institutional lenders to the rural households can incorporate this fact into innovative housing finance schemes and products specially designed for the rural borrower. Instead of imposing the urban model of house construction and housing finance, cognizance should be taken of the cultural and social environment of the rural setup and their peculiar needs. This would help integrate market-based housing finance with the nature of affordability of the rural households. Not only would this help bring more rural households within the fold of the formal housing finance sector, it would also reconcile the concerns of the lenders of housing credit regarding economic viability and sustainability of their operations.

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