India “Housing Program for Low and Medium Income Households”

Report Date: September 1998

Field Survey: February 1998

Project Summary

Borrower:	President of India
Executing Agency:	National Housing Bank (NHB)
Exchange of Notes:	September 1990
Date of Loan Agreement:	January 1991
Completion of Loan:	March 1991
Loan Amount:	¥ 2,970 million
Loan Disbursement Amount:	¥ 2,970 million
Procurement Conditions:	General Untied
Type of Loan:	Financial intermediary loan
Loan Conditions:	Interest: 2.5% Repayment period: 30 years (10 years grace period)

Reference

(1) Currency: Rupee (Rs)

(2) Exchange Rate: IFS market annual average rate

Year	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
US$1.00 = Rs	13.92	16.93	17.50	22.74	25.92	30.49	31.37	32.43	35.43	36.31
Rs 1.00 = ¥	9.21	8.5	8.27	5.92	4.89	3.65	3.26	2.90	3.07	3.33

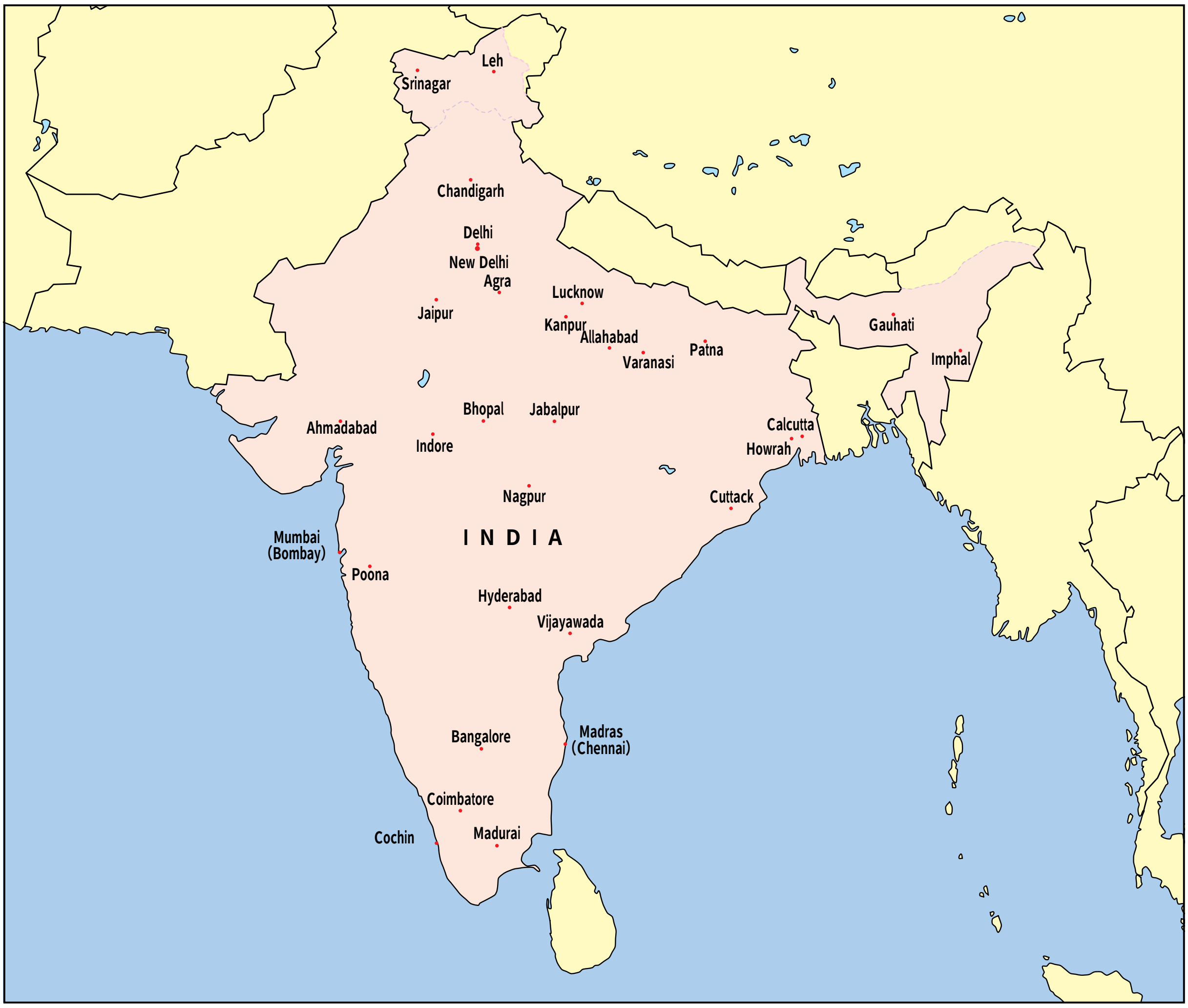
(3) At the Time of JBIC Appraisal: April 1990

(4) Fiscal Year: Fiscal year of the executing agency: July 1 ~ June 31
(Fiscal year of the Indian Government: April 1 ~ March 31)

(5) Units: 1 lac = 100,000
1 crore = 10 million

(6) Terminology:
- HFC.................... Housing Finance Company
- HDFC................. Housing Development Finance Corporation
- HUDCO .... Housing and Urban Development Corporation
- NBO................... National Building Organization
- NHB................... National Housing Bank
- PLs..................... Primary Lenders
- RBI..................... Reserve Bank of India

Project Location



1 Background and its Necessity

1.1 Objectives

The Housing Program for Low and Medium Income Households (referred to below as "this project") aims to support the supply of funds for finance by the National Housing Bank (NHB) to low and medium income households, thus helping to promote the construction of housing for such families.

1.2 Background to the Implementation of This Project and the Need for This Project

This project was made necessary due to the overall shortage of housing in India at that time, and the lack of housing finance institutions to serve the rapidly growing low and medium income segment of the population.

1.2.1 Housing Shortage in India

India has been in a state of constant housing shortage since gaining independence in 1947. Even after the construction of housing was promoted as a matter of national policy, the pressure of rising population and rising numbers of households has prevented a solution to the housing shortage until the present.

According to an estimate from the National Building Organization (NBO), (estimated figures announced in August 1988), the number of housing units in India nationwide in 1991 would be 149 million units, up 30.2% from the 114.4 million units recorded in the 1981 national census.

However, the number of households rose to 160 million, approximately 30% up from the 1981 figure. Moreover, some housing units are unfit for habitation, leaving a housing shortage of 31 million units (equivalent to 19.4% of the total number of households). The NBO also predicts that the housing shortage will continue to grow, reaching 35.9 million units in 1996 and 41 million units in 2001.

Table 1-1 Number of Housing Shortage

(Unit: million)

	1961	1971	1981	1991
Population	439.2	548.2	683.3	841.7
Number of households	83.5	97.1	122.6	160.6
Total number of housing	79.3	93.0	114.4	149.0
Number of housing shortage	15.2	14.5	21.1	31.0

Source: Housing Needs (NBO) in August 1988. Estimated figures for 1991.

1.2.2 India's Housing Policy

Since independence in 1947, India has implemented a series of five-year plans for planned economic development.

Table 1-2 shows that since the First Five Year Plan, the investment in housing has been 9~15%.

This project began at the end of the Seventh Five Year Plan, which is described in Table 1-2. Under the Seventh Five Year Plan, investment in housing was approximately Rs315 billion, around 9% of the total planned investment in the Indian economy. Under the Eighth Five Year Plan the investment in housing was approximately tripled to Rs975.3 billion (12% of the total planned investment in the Indian economy). However, the harsh fiscal situation facing the Indian government raises doubts as to whether this will be implemented.

Table 1-2 Investment in Housing from the Period of First Five Year Plan to Eighth Five Year Plan

(Unit: Rs 1 million, %)

Five Year Plan (period)		Total investment amount	Investment in housing			Share of total investment
			Public	Private	Total	
First Five Year Plan	(FY1951−1955)	33,600	2,500	9,000	11,500	34
Second Five Year Plan	(FY1956−1960)	67,500	3,000	10,000	13,000	19
Third Five Year Plan	(FY1961−1965)	104,000	4,250	11,250	15,500	15
Fourth Five Year Plan	(FY1969−1973)	226,350	6,250	21,750	28,000	12
Fifth Five Year Plan	(FY1974−1978)	475,610	7,960	36,400	44,360	9
Sixth Five Year Plan	(FY1980−1984)	1,560,000	14,910	180,000	194,910	13
Seventh Five Year Plan	(FY1985−1989)	3,481,480	24,580	290,000	314,580	9
Eighth Five Year Plan	(FY1992−1996)	8,200,000	63,770	911,530	975,300	12

Source: Eighth Five Year Plan. Actual value up to Seventh Five Year Plan.

In 1970 the Housing and Urban Development Corporation (HUDCO) which provides mainly development corporations, housing associations and housing committees in each state with funds were set up during the Fourth Five Year Plan as the government agency concerned with the housing shortage. The National Housing Bank (NHB) was set up in 1987, during the Seventh Five Year Plan, to supply funds for housing loans mainly to private sector finance institutions.

At the time this project started, the Indian government had submitted the bill for the National Housing Policy (NHP) to the parliament and the content was being debated. The NHP was drawn up in response to the International Year for Shelter, which was 1987, but the bill included the following objectives.

- To support the creation of housing for the entire population through the development of housing, building materials, finance and technology.
- To work towards an environment conducive to greater housing-related economic activity.

The housing finance elements in the NHP bill aimed to develop a finance system that would work in conjunction with other economic sectors without using subsidies, would secure interest relief for the poor and would create a secondary mortgage market through securitization. The Global Shelter Strategy adopted by the UN in November 1988, which asked each country to set housing policies, was another factor. The NHP was passed by both houses of parliament and became well known around India, as well as being incorporated into the Eighth Five Year Plan.

Before the NHP, housing was seen as a problem to be settled at the individual level. With the rising problems of urbanization and the living environment, housing came to be seen as a social issue.

Furthermore, as the acquisition of private homes, either through new construction or through enlargement and renovation, stimulates housing demand and creates jobs, housing came to be seen as an economic issue and a tool for improving the economy. This approach is also seen in Japan, where any discussion of economic measures to stimulate domestic demand almost invariably turns to ways of encouraging house construction[1].

1.2.3 Housing Finance in India

At the time when this project started, industry and agriculture were made the favored targets for the allocation of new finance under the regulation of the Reserve Bank of India (RBI), the central bank. This did not leave an adequate flow of funds for the housing sector. The low and medium income segments of the population were then growing rapidly, and it was recognized that it was important to bring in public funds to support the supply of sound housing loans for these income groups as a part of housing policy.

Before the NHB was established, formal housing finance came from the Housing and Urban Development Corporation (HUDCO), insurance and investment trust corporations and other government agencies, commercial banks and private sector housing finance institutions. These provided housing-related finance independently of each other.

Looking back over the trends in housing finance for individual borrowers, an early example was the "Special plan for low wage earners", which was included in the First Five Year Plan. Under the plan, the government gave subsidized finance (loans for which the government paid a portion of the interest) directly to households earning less than Rs500 per month. Regional Development Corporations and other such institutions took loans from HUDCO to build and sell developments of housing for medium and low-income households. In some cases the buyers paid by installments, which is effectively a form of housing finance.

Formal housing finance to individuals on a private sector commercial base began with the establishment of the Housing Development Finance Corporation (HDFC) in October 1977. The founder of HDFC took the English Building Society as the model, wanting to set up the same kind of housing finance institutions in India. HDFC was actually established with the assistance of the International Finance Corporation (IFC), a member of the World Bank Group, and it achieved eventual success (the HDFC will be discussed in more detail later).

Thereafter the government became increasingly aware of two points:
(1) The promotion of house construction and private home buying required the development of housing finance system that would target low and medium income households.
(2) The success of the HDFC in the formal finance sector was helping the growth of new housing finance companies.
This awareness prompted the government to set up the National Housing Bank (NHB) in 1987. In doing so, the government was taking the long view of development in the housing sector in promoting the sound development of housing finance institutions.

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1 However, in India there are no figures of the kind kept in Japan for the "private sector housing investment" and "investment in the housing sector" within the gross domestic product. Therefore no specific figures for the investment multiplier effect have been found from the input-output table of industrial relationships.

Refinance Scheme

In India "refinancing" is one of the forms of system finance. Public development finance institutions, which make public investments in sectors accorded policy priority, are equipped with refinancing functions. Banks with refinancing functions are called Apex Banks. In India they include the Indian Industrial Development Bank, the Indian Industrial Finance Corporation, the Indian Import - Export Bank, the National Farming and Rural Development Bank and others, as well as the NHB.

Refinancing is the system whereby certain finance institutions (primary lenders) providing finance according to conditions stipulated by the Apex Bank are provided with loans from the Apex Bank equivalent to the amount they have provided in loans. This process serves to supplement the funds available for lending. Within the refinancing scheme, the Apex Bank does not directly bear the lending risk for the sub-loans provided by the primary lender to the individual borrowers.

The table below compares the characteristics of the NHB's refinancing scheme, which is unique to India, with the public housing finance institutions of other countries. (Note. Malaysia is examined here because, of the Asian countries, Malaysia is the same as India in that public finance institutions under the supervision of the central bank supply housing finance indirectly.)

An International Comparison of NHB Refinancing Against Public Housing Finance in Japan and Malaysia

	India	Japan	Malaysia (for reference)
Providing institution	National Housing Bank	The Housing Loan Corporation, the Pension Welfare Coporation	National Mortgage Corporation (Cagamas Berhad)
Organizational form	The government finance institution fully funded by the Central Bank	Government finance institutions wholly funded by the government.	It used to be a government finance institution fully funded by the Central Bank, but is now 80% privately funded.
Supervisory agency or institution	Central bank	Ministry of Construction, Ministry of Finance, Ministry of Health and Welfare	Central Bank
Supervisory authority over private sector finance institutions	The NHB has authority as a supervising bank (Apex Bank) which directs the operations of housing finance companies.	Supervision does not extend beyond finding whether they can conduct investigations concerned with contracting.	No supervisory authority.
Method of provision	• Indirect supply, refinancing method • Among the housing loans provided by private sector finance institutions (PLs), those which meet NHB stipulations on interest rate and amount will be retrospectively refinanced by NHB based on applications from the PLs.	• Direct supply • Operations are entrusted to private finance institutions which provide housing loans directly to the end user.	• Indirect supply through purchase of loan credits. • Loan credits for housing loans made by private sector financial institutions to low and medium income households are purchased by the National Mortgage Corporation where the private sector financial institution makes such an application.
Content of funds provided	• Equivalent to long-term housing loans at low, fixed interest. • In the past there was an upper limit on interest rates charge to the end user, but this restriction has now been removed.	• Housing loans at long term, low, fixed interest rates. • In the past they received subsidies from the government to enable them to set rates lower than their procurement rates. Now rates are very low, and the interest rates levels are arranged normally.	• Purchase of loan claims for 3~5 years. The purchase price is set by Cagamas according to the claims market rate at the time. • At the end of the purchase period the institution decides whether or not to ask for repurchase, depending on the price at the time.
Source of funds	Bond issues and borrowing from the central bank.	Funded by government finance (post office savings, post office life insurance premiums, welfare pension premiums.)	Bonds (duration at least 1 year) and checks (duration less than one year) are issued.

The main purpose of the NHB is to supply funds through refinancing (please refer to the boxed description of the refinancing scheme) for the private sector housing loans made by commercial banks, building societies and HFCs. The foundation of the NHB has also led to the reclassification and separation of the private sector housing finance companies (HFCs) away from the category of non-bank finance companies. The NHB now acts as the Apex Bank to guide and supervise these institutions (the NHB will be discussed in more detail later).

In 1990, when the JBIC was considering aid for this project and the NHB had only recently been formed, the Indian government was strongly committed to pushing forward housing finance for individual borrowers. The Indian finance sector had just been deregulated, and a gradual liberalization of interest rates was anticipated. In the light of this situation the Indian government hoped to secure a supply of housing loans for low and middle income households at comparatively low interest and good terms. However, the Indian economy was also in a state of crisis at the time. Accordingly, there were great obstacles to the procurement of funds for housing loans and refinance. Later, from 1993-1994, the RBI directed commercial banks to invest 1.5% of the growth in their deposits each year in the housing sector. Beyond the lending of housing loans to individuals, the RBI also supplied funds to the housing sector by providing project funding finance to HFCs and by buying bonds issued by the NHB and HUDCO. However, at the start of this project, there was an awareness of the importance of development in the housing sector but the shortage of funds remained grave. Therefore, with hindsight, the JBIC's support to this project was highly significant, supplementing the shortage of funds at a time when the Indian government was trying to nurture growth in the housing finance industry.

1.3 Summary and characteristics of private sector housing loans in India

Table 1-3 summarizes private sector housing loans in India and compares them with the examples of Japan and Malaysia. (Note. Malaysia was chosen for comparison for the reason noted in the boxed section.) The following points can be described as characteristics of such finance.

(1) The finance period is relatively short, at 15 years.
Most of the housing provided for low and medium income households in India are communal residential buildings known as "pucca" houses (durable houses), which have reinforced concrete columns and floors and brick walls. Therefore, considering durability, it should be possible to set a slightly longer finance period. However, this finance period is based on an overall consideration of factors including the amount of funds available in India, the ability of individuals to repay their loans and the risks involved.

(2) The spread between saving and borrowing interest rates is relatively large.
In Japan and Malaysia the interest rate spread between saving and borrowing is 2~3%, but in India it is relatively high, at 5~7%. The high level of management costs is one factor behind this characteristic.

(3) Physical collateral takes the form of custody of the deeds.
India does not have laws and systems equivalent to Japan's Civil Execution Law. In other words, it has no system or law for foreclosure[2]. Therefore the borrower gives the lender custody of the

[2] This refers to the procedures for compulsorily auctioning property to recover its value when the borrower is unable to keep up the loan payments.

title deeds for the property that is the subject of the loan. If the borrower defaults on repayment of the loan, it can be deemed a debt in default and the house which is the subject of the loan, can be sold to a third party. The amount of the finance is recovered from the proceeds of the sale.

In England, one of the functions of the mortgage is that if the mortgage is deemed to be in default, the house is repossessed and sold to a third party. The method used in India now is similar to this repossession method.

On this matter, India is proceeding with research and preparations for a legal framework for mortgages and for the creation of a secondary mortgage market. The need for a foreclosure system as a prerequisite for a secondary mortgage market is well recognized, and the government is considering establishing such a system in the future.

Supposing a regional development corporation transferred a house to a buyer on a 99 year long leasehold basis, it does not issue title deeds to each buyer. Therefore the details of housing loans are recorded on the list of owners which is retained by the developer, accordingly the rights of the borrower are protected. This same method is employed in cases of purchase by installments.

(4) Where guarantors are given in place of collateral, two jointly and severally liable guarantors are demanded.
All finance institutions demand two jointly and severally liable guarantors for sub-loans. This is intended to ensure sound loans and act as an incentive on the borrower for repayment.

Personal ties between people in India remain strong, and evidence of this can be seen in the frequency with which house buyers receive some financial support from relatives and friends. In contrast to Japan, it is easy to find people to act as guarantors for housing loans. Therefore the housing finance institutions' requirement for guarantors does not pose a great obstacle to the promotion of housing loans.

Table 1-3 International Comparison of Private Sector Housing Finance (India, Japan, Malaysia)

		India	Japan	Malaysia (for reference)
Finance institutions		Commercial banks, housing finance companies, building societies.	Banks, credit associations, credit unions, worker's credit unions, life insurance companies, agricultural cooperatives, fishermen's cooperative associations, housing loan companies	Commercial banks, merchant banks, finance companies, building societies.
Supervision and regulation by government and central bank		A fixed proportion (1.5%) of the increase in the value of a commercial bank's deposits over a year must be invested in the housing sector.	In the first half of the '90s, when real estate prices were rising, the total amount of finance for the real estate sector was regulated, but now it is largely left to the market.	Norms are imposed for the provision of loans to low and medium income households. Regulation is strict, including an upper limit on the total amount of real estate finance.
Content of housing loans	Term	Maximum 20 years (normally 15 years)	Maximum 35 years.	Maximum 35 years (up to age 60).
	Interest	Fixed interest	Variable rate, fixed rate, selectable rate etc.	Variable interest
	Level of interest	15.5~17.0% (at the end of January 1998, HDFC example)	2.4~3.6% (at the end of February 1998, from a city bank)	11.3% (at the end of October 1997, average BLR [Note 1] + 1.75%)
	Interest on deposits (for reference)	10.0% (one year fixed term deposit, HDFC example)	0.332% (less than ¥3 million, new deposit for between one and two years, average). (End of November 1997)	8.77% (one year fixed deposit, average).
	Finance ratio	Normally 70%	Normally 80%	Normally 70%
	Repayment burden ratio	Up to 30% of monthly income	20~40% of annual income	Up to 30% of monthly income
	Collateral	Custody of title deeds, guarantors	Mortgage, institutional guarantor, fire insurance, life insurance.	Mortgage, fire insurance, life insurance.
Securitization of mortgages		Under consideration with the NHB	Securitization under consideration	Already being implemented (sale to National Mortgage Corporation) [Note 2]

Note 1: Abbreviation for Basic Lending Rate, the base interest rate for all banks.

Note 2: An institution for buying home mortgage credits funded 20% by the central bank, with the remainder funded by the private sector commercial banks etc. Funds are supplied retroactively to the housing loan resources of private-sector finance institutions through the purchase of credits.

2. Project Summary

The Indian government's policy is to promote home ownership among low and medium income households. Funds are provided through national housing banks for home buying and construction. Therefore this project serves as an element in that policy, encouraging home ownership among those income groups. A summary of this project follows.

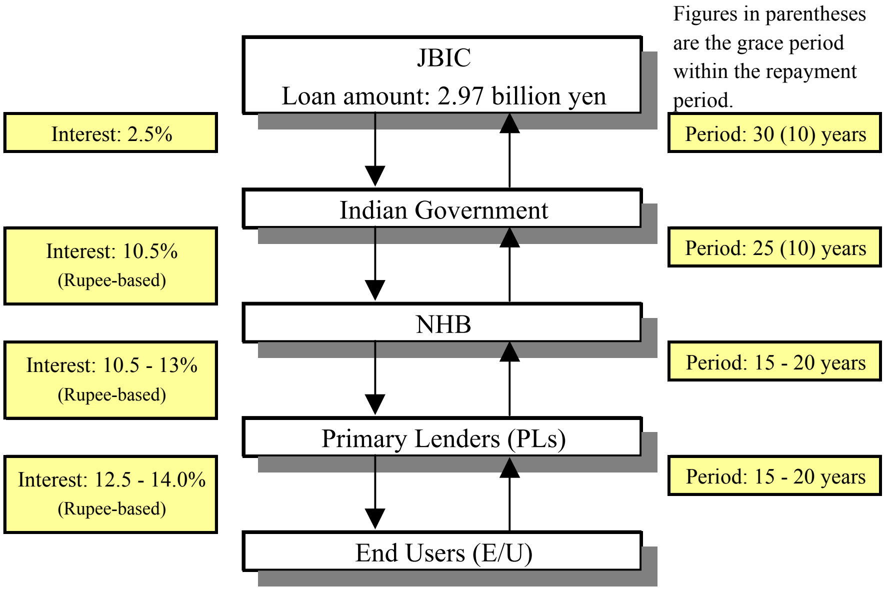
2.1 Overall Project Scheme

The ODA loan served as a source of funds for home loans within the NHB's home loan refinancing operation to enable individuals to buy or improve their homes.

The chart below illustrates the overall scheme of the project. First the loan is borrowed by the Indian government, which re-loans it to the NHB, which is the executing agency. The NHB loans the money to the three types of finance institutions (housing finance companies, building societies and commercial banks) which are eligible for NHB refinancing. These three types of institution are the primary lenders (PLs).

[Project Scheme Chart]

(As of 1991)



Finally, the primary lenders provide finance to the end users. This flow of finance is called a three-step loan. The form of loan implementation used by the JBIC is the reimbursement method.

2.2 Interest Rate and Spread Setting

All the stages that follow after the Indian government receives the loan from JBIC are Rupee-based. Therefore the exchange rate risks between the Yen and the Rupee are borne by the Indian government. The interest rate spread between the government and the NHB (8%) is equivalent to this exchange rate risk and other factors. The re-loan periods and interest rates from the NHB to the PLs and from the

PLs to the end users are exactly as they were for the NHB's existing scheme. The spread between the NHB and the PLs are determined by the PLs' management expenses, and the spread between the PLs and the end users takes into account the management expenses and the risk of loan failures.

2.3 Loan Ratio Between the JBIC and Eligible Primary Lenders

Of the PLs designated as qualified by the NHB, those which provide individual housing loans and whose housing loans match the sub-loan conditions defined by the JBIC are eligible. However, the upper limit for the ratio of ODA loan to the total amount of refinancing provided by the NHB to the PLs was set at 55%. This effectively sets a precondition that loans for land acquisition and other finance types that are not eligible for ODA loan will not exceed an average of 45% of the total. At the time of the JBIC appraisal (1990) the PLs designated by the NHB as qualified were 64 commercial banks, nine housing finance companies and 22 building societies. Of those, the numbers providing sub-loans in line with conditions defined by the JBIC as mentioned above were 13 commercial banks, five housing finance companies and one building society. Among these PLs, a tally of the qualified sub-loans shows that approximately 90% of the JBIC funds passed through the housing finance companies (HFCs), with the remaining 10% passing through the commercial banks and building societies. Within the refinancing directed to the HFCs, approximately 90% went to Housing Development Finance Company (HDFC), which is the largest of the HFCs.

2.4 Sub-loan Conditions

The main condition for JBIC finance eligible sub-loans within the housing loans subject to NHB refinance are that the monthly income of the sub-loan user must not exceed Rs2,200. Other conditions are based on the refinance interest rates and conditions imposed on primary lenders by the NHB, as shown in Table 2-1.

Furthermore, eligible sub-loans shall satisfy the following conditions:
(1) The maximum floor area is 40m^2 and the maximum total cost is Rs150,000.
(2) The limit of finance is Rs100,000.

The refinance ratio from the NHB to the PLs was 100%, accordingly at the time of appraisal the anticipated repayment period was 20 years in the case of housing finance companies and 15 for other PLs.

The above interest and lending conditions constantly depend on the NHB refinancing conditions, which are changed occasionally in line with market movements.

Table 2-1 Refinance Interest and Conditions from NHB to Primary Lenders (at the time of appraisal)

Objective	Housing loan amount	NHB → PLs Refinance interest	PLs → End Users Lending interest	Finance ratio against total cost
New construction	≦Rs 20,000	10.50%	12.50%	80%
	Rs 20,001～50,000	12.00%	13.50%	75%
	Rs 50,001～100,000	13.00%	14.00%	70%
Extention and renovation	≦Rs20,000	10.50%	12.50%	－
	Rs 20,001～30,000	12.00%	13.50%	－

2.5 Revolving Fund Account Setting

The JBIC finance fund (the principal) is managed by the NHB in a separate, independent revolving fund account in order to be refinanced under the same conditions.

3. Analysis and Evaluation

3.1 JBIC Funds within NHB Finance

The total value of individual housing loan finance provided by the NHB up to the end of 1991 was approximately Rs.3.4 billion. Thus the ¥2.97 billion (Rs.413.6 million) of finance provided by the JBIC amounted to 12% of the NHB's total housing loan refinancing up to the end of that year.

The breakdown of the NHB's borrowing shows that its total borrowing in the financial year 1990~91, when the JBIC finance was delivered to the NHB, was Rs.3.4547 billion. This sum included Rs.1.25 billion from the RBI, Rs.1.71 billion of other domestic borrowing, and Rs.494.7 billion of foreign borrowing. The Rs.413.6 million of finance from the JBIC therefore accounted for most of the NHB's foreign borrowing.

3.2 Sub-loans

3.2.1 The state of housing loans eligible for JBIC finance

According to NHB reports, the breakdown of housing loans which were subject to the JBIC primary loan is as follows.

Table 3-1 Breakdown of the Value of Subject Housing Loan Finance

Breakdown by Application of Funds

(Units: millions of Rupees)

New Construction	Extension and renovation	Total
769.97	4.43	774.40
(99.4%)	(0.6%)	(100.0%)

Breakdown by region

(Units: millions of Rupees)

Urban	Rural	Total
728.69	45.71	774.40
(94.7%)	(5.3%)	(100.0%)

The above figures clearly show that, by application, nearly all (99.4%) of the funds are used for new construction. The regional breakdown of housing loans shows that 94.7% went to the urban areas and 5.3% to rural areas.

Therefore over 90% of the JBIC program finance was used as funding support to enable low and medium income households in the urban areas to acquire (buy or build) newly-built houses. This JBIC program, which was intended to promote house acquisition among India's low and medium income households, can be judged to have attained that goal.

3.2.2 Clarification of the Usage of Funds for End Users

A sampling of contract documents to determine whether or not the sub-loan documents used by the PLs give the end users a full explanation of the restrictions on the applications of the funds provided under this scheme revealed the following.

- Fund Applications

  The borrower undertakes "to use the entire amount of the loan for the house construction or purchase stated in the loan application form and not to use it for any other purpose".

Furthermore, in the actual finance procedures:

(1) In the case of "construction finance", the design plans are checked, as is the progress of work on the construction site before the funds are transferred.

(2) In the case of "purchase finance", the transfer contract from the developer is checked before the funds are transferred.

- Obligation to Reside in the Financed House

  The borrower is forbidden to resell the house for which the finance was obtained, or lease it to a third person, or provide it as collateral for another contract.

  This restriction is applied because low-interest housing loans are intended to raise the standard of housing and livelihood of the borrower and his family. They are not applicable to the acquisition of housing for profit.

From the above, it appears that the sub-loan contract gives an appropriate explanation and guidance on improper applications of housing loan funds and use of the financed house for purposes other than that intended. This explanation is highly important for the fulfillment of the aims of housing policy and the sound development of housing finance, and it has been carried out satisfactorily.

3.2.3 Analysis of End Users

The analysis of end users presented here is based on the results of a sample survey (sample size was 117 people) conducted under contract by a local consulting company. The sampled subjects were recipients of loans of funds from the above JBIC program.

- Profession of Borrowers

  Of the borrowers, 86 (73.5%) were employed in companies and elsewhere, and 31 (26.5%) were self employed.

- Gender

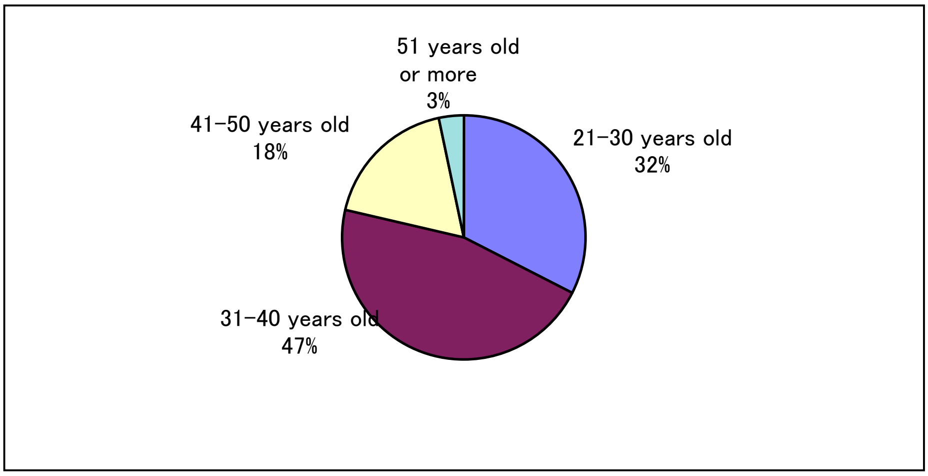
  The borrowers comprised 91 men (77.8%) and 26 women (22.2%).

- Age

  The age distribution among borrowers is as shown in the figure below, with the average age being 35 years.

  The period of a housing loan is 15 years (20 years in some cases), which means that the average age at the end of repayment according to the contract would be 50~55 years. If the average age is 35, most would be able to complete their loan repayments before reaching the age of retirement from their workplaces. For the sake of comparison, the average age of "apartment purchase finance" provided in Japan by the Housing Loan Corporation is 36~37. This is close to the average age of borrowers in this project.

Figure 3-1 Age Distribution of End Users

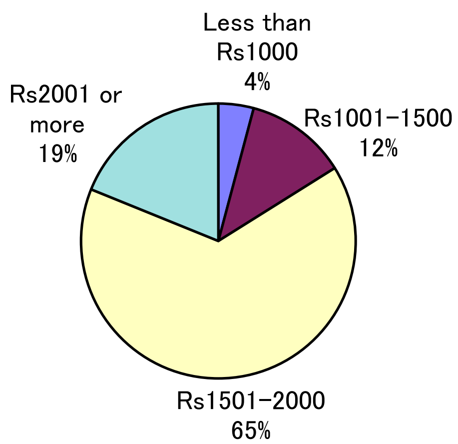


- Monthly Income

The distribution between monthly income brackets is as shown in the figure below, with the average monthly income at the time of the loan application being Rs1,750.

Based on the income classification standards used in the Seventh Five Year Plan, most with this level of income fall into the Middle Income Group (MIG). Referring to the equivalent standards in the Eighth Five Year Plan, when a revision was already under way, the impact of inflation and other changes had put this level of income in the middle of the Low Income Group (LIG).

Figure 3-2 Monthly Income Distribution of End Users



(Reference) Income Classification at the Seventh and Eighth Five Year Plan

Unit (monthly income): Rs

	Seventh Five Year Plan	Eighth Five Year Plan
EWS	~ 700	~ 1,250
LIG	701 ~ 1,500	1,251 ~ 2,650
MIG	1,501 ~ 2,500	2,651 ~ 4,450

Note: EWS = Economically Weaker Section
LIG = Low Income Group
MIG = Middle Income Group

- Applications of Funds

New construction was undertaken by 115 people (98.3%), with the other 1.7% used the funds for extension and renovation. Among those acquiring new houses, 54 (52.1%) built their houses and 46.2% bought them. This largely agrees with the breakdown noted before from the NHB reports on JBIC-financed housing loans, in which 99.4% acquired new houses and 0.6% extended or renovated old houses. The reason why nearly all the funds provided by loans were used for the purchase or construction of new houses is that most low and medium income households in Indian cities acquiring houses do one or other of the following:

(1) Form into housing associations to build their own houses.

(2) Buy houses in developments for low income households from public-sector project developers.

The results of this survey give further evidence of this pattern.

- Duration Until Loan Approval

One indicator for the speed with which finance institutions process loan procedures is the average number of days required between the date of the borrower's submission of an application and the date of finance approval. Table 3-2 states these durations.

Table 3-2 Number of Days to Reach Loan Approval (application ~ approval), Grouped by Intended Use of Funds

(Units: loans, %, days)

		～10 days	～20	～30	～40	～50	～60	～70	～80	～90	91～	Total	Average	Unclear	Total
New construction		3	16	11	0	8	0	10	1	0	3	52	–	9	61
	Share	5.8	30.8	21.2	0.0	15.4	0.0	19.2	1.9	0.0	5.8	100.0	41.5	–	–
Purchase		2	8	9	12	5	6	2	2	2	4	52	–	2	54
	Share	3.8	15.4	17.3	23.1	9.6	11.5	3.8	3.8	3.8	7.7	100.0	48.6	–	–
Renovation		0	0	1	1	0	0	0	0	0	0	2	–	0	2
	Share	0.0	0.0	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	3.8	33.5	–	–
Totals		5	24	21	13	13	6	12	3	2	7	106	–	11	117
	Share	4.7	22.6	19.8	12.3	12.3	5.7	11.3	2.8	1.9	6.6	100.0	44.8	–	–

The breakdown of loans by application shows that the average period for construction finance was 41.5 days and that for purchase finance was 48.6 days. By business type, the HFCs took an average of 45.1 days while the building societies took an average of 40.5 days. Apparently the deliberation period is around one and a half months. The JBIC funds were provided in the early stages of the housing loan industry, and the lack of computerization in internal processing seems to be one of the main reasons for the long duration. We have checked with a number of primary lenders and found that by now the number of days required for finance approval has been reduced from the above averages in most cases, and business operations are becoming more efficient (see Appendix document 1 - Summary of the business operations of JBIC-related primary lenders and the days they require for finance approval).

3.2.4 Revolving loans

According to NHB reports, the quantity of JBIC funds placed in the revolving fund from the JBIC primary loan is as shown in Table 3-3 below.

Within the total value of NHB refinancing for individual housing loans, the amount directed to low and medium income households (JBIC targets) is declining. This is happening because inflation and other factors are pushing up the monthly income bases of low and medium income earners above the standard income level for low and medium income households as defined at the time of the ODA loan. Therefore, when we consider the NHB refinancing operation for individual housing loans as a whole, lending to low and medium income households as defined at the time when the JBIC funds were loaned is declining, while the share of such loans provided with JBIC funds is rising.

Table 3-3 State of Revolving of JBIC Funds After Secondary Loans

(Unit: Rs 1 million)

Fiscal Year	(1) Value of individual housing loan refinancing by the NHB			
		(2) Value directed to low and medium income earners	(3) JBICF funds	(3)/(2)(%)
～91	3,369	N.A.	413.16	—
1991-92	4,675	713	21.0	2.9%
1992-93	3,525	442	22.5	5.1%
1993-94	2,001	153	24.0	15.7%
1994-95	3,104	226	25.6	11.3%
1995-96	2,816	104	26.7	25.7%
1996-97	3,053	73	26.5	36.3%

Source: NHB Business Material

3.2.5 Evaluation of sub-loans

The results of the sample survey presented in the previous section indicate that the initial objective of promoting the construction of housing for low and medium income households in the rapidly expanding suburbs has been attained. As noted above, clauses included in the sub-loan contracts ensure that the end users put the funds to applications that maintain and attain the basic objectives of housing loans. Interview surveys of the PLs concerning scrutiny within the finance process indicate the following:

- The PLs receive people at their branches who want to use housing loans and discuss the matter with them, providing appropriate advice and guidance for home acquisition.
- In their loan appraisal, the PLs check the borrower's rights on the site, income and ability to repay the loan and survey the house costs. They observe procedures correctly and strictly observe duties

of notification to the NHB.

Thus in general, it is clear that the PLs are running housing loan operations well.

3.3 Executing Agency

3.3.1 Summary of Organization and Operations

The NHB, which is the executing agency for this project, was established in July 1988 under the National Housing Bank Act 1987 with the full funding of the Reserve Bank of India (RBI). The bank was established to use finance to support the provision of residential land and the promotion of house construction. The NHB is what is called an Apex Bank, which receives a supply of funds from the Central Bank in the form of refinancing. It then supplies funds in the form of refinancing to commercial banks, housing finance companies and building societies. This is its main task and purpose.

The head office of the NHB is at Mumbai, but its planning department, loan appraisal department and other such functions are located in Delhi. Therefore most of the main operations are conducted in Delhi. The bank had a total staff of 69 in October 1997. The members of the board are designated by the RBI, the Ministry of Finance, the Ministry of Urban Problems and Labor, the Ministry of Rural Problems and Labor, and state governments.

The refinancing scheme that is the main business of the NHB can be broadly divided into two types of application:

(1) Refinancing of individual housing loans implemented by other finance institutions.

(2) Refinancing to Land Development and Shelter Projects (LDSP: housing development projects which accompany the construction of housing infrastructure) and other projects by public institutions.

This project falls in the former group. Since the NHB was established, refinancing of individual loans has constituted between 70% and 90% of the bank's refinancing business.

In FY 1994~95 the NHB decided to start direct financing in addition to its refinancing operations. The value of the NHB's direct finance in 1996~97 was Rs118.2 million. In 1997~98 (up to January 1998) the figure was Rs64 million. The loan projects are some of the LDSPs, housing infrastructure projects not covered by LDSPs and slum redevelopment projects. Slum redevelopment projects are the largest type in this group, accounting for some 70% of the total. The recipients of direct loans are public agencies set up by central and regional governments.

3.3.2 Financial Situation

Figures 3-4 and 3-5 show the summary of the balance sheets and movements in term profits for the NHB in each year. The bank's ratio of owned capital to liabilities has been in the 13~16% range since the refinance operations began running well in FY 1991~92.

The ratio of profits to net worth (net profit on the term/ average owned capital×100), which is regarded as an indicator of profitability within the business state of an enterprise, has averaged 10.8% over the past eight years, as seen in Table 3-5. The NHB is therefore showing a degree of profitability[1]. In FY 1996~97, the NHB's operating return on funds was 15.1%, against a base fund raising rate of 9.9%, which means the NHB was able to secure a profit from its operating revenues.

Table 3-4 Balance Sheet of HNB

(Unit: Rp 10 million)

Fiscal Year	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97
Capital and liabilities								
Capital								
Capital	150.00	200.00	250.00	250.00	250.00	250.00	300.00	300.00
Reserve	31.00	76.00	136.00	141.00	192.00	232.00	285.00	371.43
Profit/loss	0.19	0.19	0.19	0.72	0.47	0.79	0.34	0.40
Sub-total	181.19	276.19	386.19	391.72	442.47	482.79	585.34	671.83
Liabilities								
Special fund	-	-	62.91	72.13	-	-	-	-
Issue securities	80.00	242.43	403.43	452.73	409.76	485.02	502.72	1027.61
HLAS deposit	26.19	84.61	176.27	286.15	394.14	373.17	365.86	240.84
Borrowing	75.03	345.47	757.84	1,032.84	1,282.84	1,264.50	1,221.16	1,977.84
Current liabilities	0.94	19.64	37.58	100.21	173.01	187.66	225.27	273.32
Other liabilities	0.23	0.66	847.96	682.44	582.95	583.98	583.95	582.55
Sub-total	182.39	692.81	2285.99	2626.50	2842.70	2894.33	2898.96	4102.16
Total	363.58	969.00	2,672.18	3,018.22	3,285.17	3,377.12	3,484.30	4,773.99
Capital								
Current deposit	-	5.80	16.13	10.58	14.47	34.91	10.01	39.20
Call deposit	-	10.00	-	-	-	-	-	-
Investment	50.85	94.98	622.72	491.46	468.72	427.89	428.21	595.41
Money lending	131.77	560.43	1,161.64	1571.63	1,773.18	1,911.12	2,060.10	2,334.74
Loan securities	149.05	172.09	97.11	21.80	-	-	-	-
Fixed assets	0.35	0.40	12.93	15.37	17.26	25.35	27.04	33.53
Other assets	5.37	40.69	585.38	621.23	617.40	604.68	593.08	1530.27
HLAS deposit	26.19	84.61	176.27	286.15	394.14	373.17	365.86	240.84
Total	363.58	969.00	2,672.18	3,018.22	3,285.17	3,377.12	3,484.30	4,773.99

Source: NHB Annual Report

[1] The extraordinarily low figures for FY 1992~93 is due to the expansion of "other losses" in the accounts for the preceding financial year which were unrelated to NHB operations. These debts were placed on the NHB mainly because it was involved in a stock scandal (unrelated to the ODA loan). The scandal involved a stockbroker and SBI employee who issued bond sale certificates to the NHB and other banks which were not actually backed by bonds. The NHB paid the purchase price of the bonds to the SBI by check (this payment was entered in the "other losses" section of the accounts). The broker promised to transfer the bond sale certificate to the NHB at a later date and transferred the check to ANZ Gindlys Bank. ANZ paid the check into the broker's own account, and the broker was then unable to repay either NHB or ANZ. The court case on how to resolve the situation is still proceeding, but in 1997 the NHB agreed to pay ANZ Rs9,122,300,000. The RBI provided the NHB with Rs7 billion in finance to assist with the payment, leading to an increase in borrowing in 1997.

Table 3-5 Current Term Profit of NHB

(Unit: Rp 10 million, %)

Fiscal Year	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97
Current term net profit	20.00	44.99	60.00	5.53	50.75	40.32	52.55	86.49
Reserve transfer	19.80	45.00	60.00	5.00	51.00	40.00	53.00	86.43
Profit carried forward	0.20	0.19	0.19	0.72	0.47	0.79	0.34	0.40
Profit ratio of net worth [Note](%)	11.05	16.30	15.54	1.41	11.48	8.37	8.98	12.88

Note: Profit ratio of net worth = Current term net profit/ (capital + reserve)

Source: NHB Annual Report

3.3.3 Refinancing for individual housing loans

(1) Summary

The NHB's housing loan refinance retrospectively finances those housing loans provided by PLs which satisfy the conditions stipulated by the NHB. The refinancing of individual housing loans can be summarized as follows, as of February 1998.

(i) Eligible primary lenders

The eligible PLs are scheduled commercial banks, building societies and HFCs. The qualifications for HFCs directly supervised by the NHB are as follows:

- They must receive NHB approval based on the NHB's guidelines.
- For their collections situation over the past 12 months, the proportion of all full-term credit value which is more than three months in arrears must be less than 5%.
- They must never have fallen into arrears to another creditor.

  As of March 1997, the refinancing applications of 25 companies satisfying the above conditions had been approved.

(ii) Applicable housing loans

Finance institution can make applications for refinance only for those housing loans which satisfy the following conditions:

- They must be housing loans directed to individuals.
- If the loan is to finance the new construction or purchase of a house, its value must not exceed Rs1 million.
- If the loan is to finance extension or renovation of a house, the value limit is Rs100,000 in cities and Rs50,000 in rural areas.
- Not more than 25% of the applications made for refinance each year can be for extension and renovation finance.
- The value of each refinance application must be at least Rs500,000.
- HFCs must present their applications within one year of providing the related loan.

(iii) Refinance interest and conditions

The NHB's refinancing interest and conditions have been reviewed occasionally since the time of the JBIC appraisal in response to finance market conditions. Therefore it is worth analyzing those changes here. The JBIC funds have been loaned through the executing agency, mainly to the HFCs, thus we will examine the HFCs here.

Looking at the broad situation first, the NHB has set an upper limit on the rate of refinancing interest, while taking the state of housing loan interest into account. However, the interest rates charged on some relatively large loans have been liberalized since May 1994. This step was taken in anticipation of the relaxation of the RBI's regulations on interest rates on loans from commercial banks (October 1994). Since December 1996 the rates of interest have been liberalized in all categories except small-value loans. Checking this against Table 3-4, the liberalization of May 1994 was implemented when interest rates were about to fall, but at the time of the liberalization of December 1996 interest rates were rising across the board.

Figure 3-3 shows that in each case the upper limit on the amount of refinance was raised substantially. This step was taken to counter a potential rise in housing loan interest rates following rate liberalization, and appears to have been the result of the raising of the overall value of finance. The raising of the finance value limit was intended to engage the segments of the population who could bear large loans, and appears to have preserved the sound operation of the system as a whole.

Continuing on from the above observations, a more detailed evaluation of the NHB's refinance interest and conditions shows the following two points.

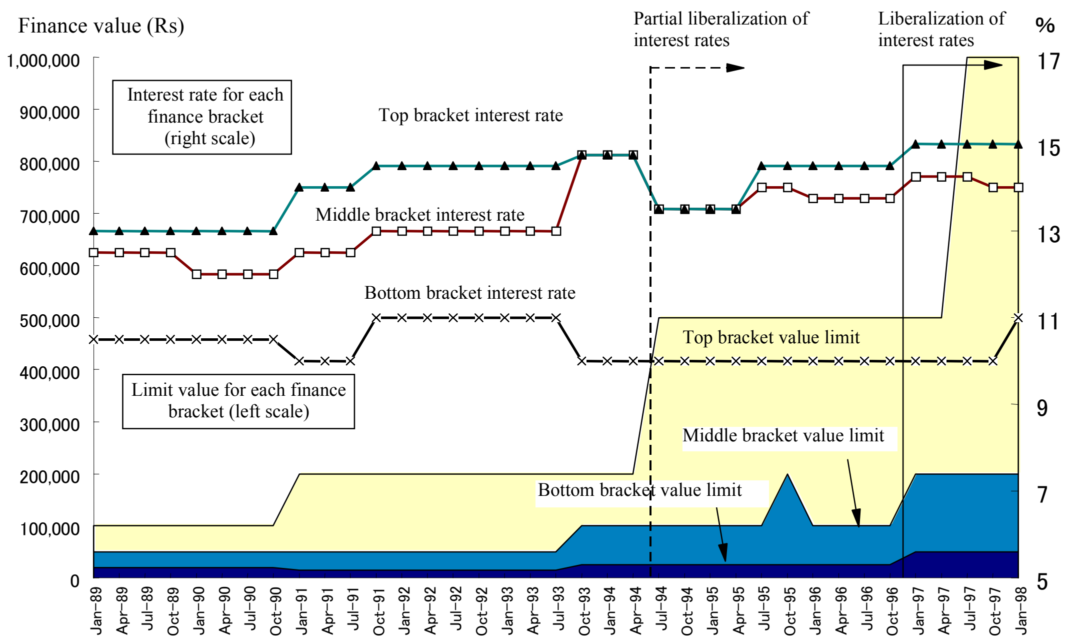
(a) Skillful combination of the amounts of loans and their interest rates has been used to give greater consideration to low and medium income borrowers.

Figure 3-3 shows that in January 1991 the maximum loan limit for the top interest rate bracket was doubled from Rs100,000 to Rs200,000, and the corresponding interest rate was also raised. Conversely, at the same time the minimum finance bracket was lowered and the corresponding interest rate was reduced. These steps appear to have been taken in response to the demand for larger loans brought about by the development of the domestic economy, rising house prices, the increase in urban incomes and other factors. High interest rates are used to make the users of large loans, i.e. the rich, pay a reasonable burden, while the users of small loans, who have lower incomes, are favored. The loan value limit for the top bracket varied widely after that, but the constant trend has been to keep the limit for the bottom bracket of loans low and keep the interest rates down as well. Therefore the refinancing system as a whole has maintained its significance as an instrument of housing policy for low and medium income households.

(b) Appropriate reviews are conducted in response to market movements

Figure 3-4 shows the movements in refinancing interest rates between the NHB and HFCs, and in the interest rates for loans from HFCs to individuals (middle bracket interest rates). It shows that until 1993 the interest rates were being gradually raised as they approached the market rates (in this case we have compared interest rates against the long-term prime rate from the State Bank of India (SBI) as an example of a long-term loan interest rate directed to industry). Since 1993 the rates have largely moved in parallel with the movements of the market. This indicates that rather than adhering rigidly to a regulated interest rate, the rate was made to converge gradually with rates reflecting market conditions. By phasing the approach to market rates and finally linking the rates to the market, the NHB was able to reach a reasonable interest rate spread between deposits and loans, and set a level of interest acceptable to other housing finance institutions and end users. Compared to the SBI's long-term prime rate, the positions have reversed since the first half of 1996 when housing loan rates rose above the long-term prime rate.

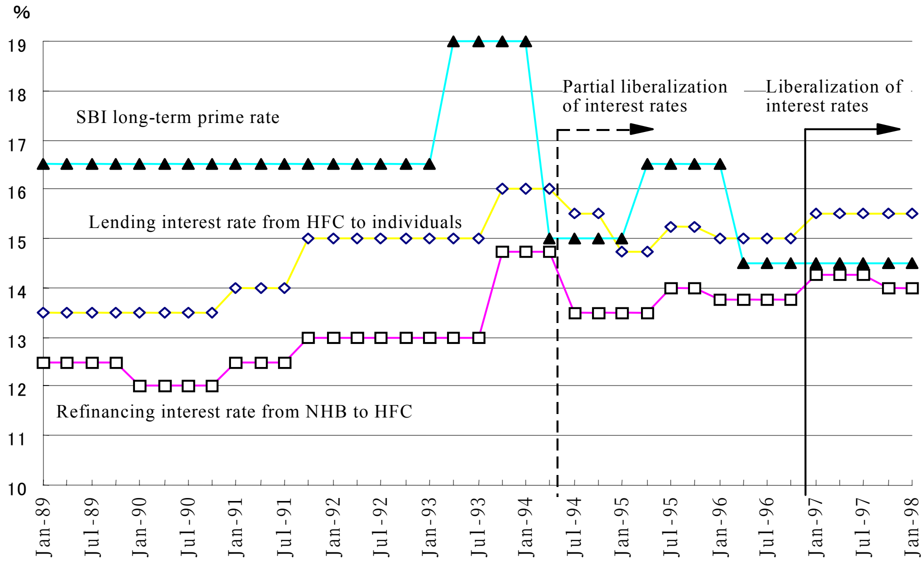
Figure 3-3 Changes in NHB Refinancing Conditions



Note: For each revision of the refinancing conditions the NHB sets loan value brackets and the corresponding interest rates for each bracket. Here the finance value limit and interest rate for the highest bracket are the top bracket value limit and interest rate, the finance value limit and interest rate for the bracket in the middle are the middle bracket value limit and interest rate, and the finance value limit and interest rate for the lowest bracket are the bottom bracket value limit and interest rate.

Source: NHB Material.

Figure 3-4 NHB Refinancing Interest (for middle bracket finance value) and the Ordinary Lending Rate



Note: Since the interest rate liberalization, the actual HDFC interest rate was taken as the interest rate from HFCs to individuals.

Source: NHB Material.

The interest rate of housing loans should basically be fixed over long periods (normally 15 years in India). That is why the interest rates are higher than those for loans for industrial funds, which are of comparatively short duration. As old artificial regulations on interest rates have been relaxed and liberalization has progressed, the old state of interest rate levels has reversed, leaving the natural interest rate gap to form gradually between long term and other rates.

(2) Procedures

The refinancing procedures between the NHB and the HFCs are largely as described below. The HFCs set and implement business plans for each financial year and for each quarter.

(i) Submission of a yearly forecast (HFCs → NHB)

By 30th April of each year, each HFC must submit to the NHB a forecast of their implementation of housing loans for the coming financial year (July ~ June).

The NHB then decides its approval limit for the following financial year and informs each HFC. The decision is based on that HFC's finance records for the preceding three years, the state of their repayments to the NHB and the regulations on the total amount of refinancing. (The refinance balance to each HFC must not exceed five times that HFC's net worth).

(ii) Submission of quarterly forecasts (HFCs → NHB)

Each HFC must submit quarterly forecasts of housing loan implementation to the NHB at least three months in advance. The NHB prepares its finance procurements on the basis of these quarterly forecasts.

(iii) Monthly fund implementation

Each HFC must submit reports of the value of loans implemented each month to the NHB by the 15th of the following month. If the HFC is unable to ascertain the total value of loans implemented by each of its branches in time for the submission date, they can make a combined application the next month.

The NHB supplies refinancing on the basis of the monthly record reports within 15 days of receiving the reports.

The actual content of this series of procedures was checked in the field studies of each PL and will be described later in this report.

The NHB is to move over to computerized processing of its refinancing operations, which is likely to enable it to supervise loans in more detail.

(iv) Repayment of refinance funds

In the case of loans by PLs with a finance period of 15 years, the PL must repay the principal in four equal quarterly payments each year for a total of 60 installments.

The interest is calculated on a daily base with a weighted average interest rate applied to the balance for each type of refinance. Interest payable is rounded down to the nearest Rs1,000. The interest calculated in this way must be paid quarterly.

In the event of arrears, no penalty is applied if the delay does not exceed three business days, but if the delay in payment is four business days or more, a 2% interest surcharge is added to the maximum interest rate on the remaining refinance. The arrears damages calculated in this way must be paid separately.

(v) Prematurity redemption

Prematurity redemption of some or all outstanding refinance is permitted, provided notification is given to the NHB at least two months in advance. No penalties for breach of contract are charged in such cases. In the case of partial prematurity redemption, the repayment period is shortened for the balance after the portion is repaid early.

India does not have any of the kind of finance institutions seen in Japan which will take over housing loans from other institutions. This means that there is little likelihood of the HFIs being threatened by prematurity redemption. The incidence of prematurity redemption of the NHB's refinancing funds is also low[2]. In fact some commercial banks and HFCs which are subsidiaries of commercial banks have judged the cost of NHB refinancing funds to be relatively high and this

[2] If housing loans are long-term fixed-interest loans, finance institutions can come under pressure at times of rising interest rates due to the increasing cost of fund procurement. Conversely, if interest rates are falling, borrowers start to opt for prematurity redemption and anticipated profits are lost. Recently in Japan falling interest rates and the promotion of loan replacement by private sector finance institutions has led to large-scale prematurity redemption of fixed-interest loans from the Housing Loan Corporation.

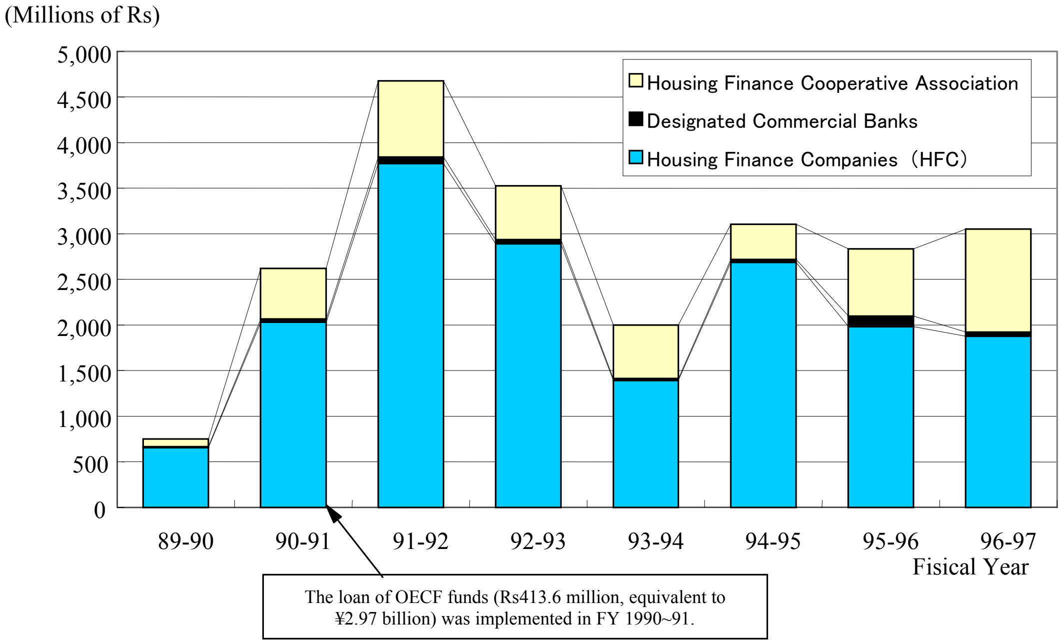
leads to some prematurity redemption.

At present the supply and demand of funds for the NHB as a whole is somewhat tight and they tend to view prematurity redemption as beneficial, as it eases their supply and demand situation. They do not see the loss of interest on such early repayments as a business risk.

(3) Recorded performance

Figure 3-5 shows the record of housing loan refinance from the NHB to each type of PL since FY 1991~92. (refinance to residential land development projects is excluded).

Figure 3-5 Value of Refinancing Implemented by Each Type of PL (loans to individuals)



Source: RBI "Report on Currency and Finance", NHB Material

The record of refinance implementation in FY 1990~91, when the JBIC funds were loaned, and in the next financial year show rises of 3.5 times and 1.8 times respectively.

The shares for the types of PLs are 76% for HFCs, followed by building societies with 22% and designated banks with 2%.

The largest portion of refinance passed through the HFCs for the following reasons:

(i) Most housing loans are delivered by HFCs, which are specialist finance institutions, and one of the objectives of the NHB's foundation was to nurture the HFCs.

(ii) The volume of deposits held by HFC, which are the main source of funds for their loans, is not as great as that held by the commercial banks, accordingly they must rely more heavily on refinance from the NHB.

This seems to be an appropriate development.

(3) The state of repayment of refinanced funds

Even if repayments from the end users fall into arrears, the PLs are obliged to repay their loans to the NHB as contracted. Therefore the debt security of the refinance funds is guaranteed, provided the PLs do not fall into any operational crisis.

However, if there is a critical decline in the repayments from end users to the PLs, there could ultimately be an impact on repayments to the NHB. That is why the NHB includes the condition "the PLs must reach a debt recovery rate from their end users of at least 75%" in the contracts for new refinance to PLs.

In fact, the Maharashtra Building Society suffered a decline in repayments from the various building societies that were its end users, with the result that their debt recovery rate fell below 75%. The NHB then cut off the supply of new refinance. The suspension of refinancing to a public institution such as a building society which is an instrument of policy must have had difficult political repercussions, but the NHB was strict in this regard.

(4) Debt protection of the refinanced funds

The NHB maintains the integrity of refinancing loans made to the PLs by using a negative pledge[3], provided the PL concerned is on a sound business footing and no other lenders are demanding collateral from that PL. In all other cases, the NHB will demand assets owned by the PL as collateral. In other cases the assets of the PL will be demanded as collateral on the condition that they are not subordinated to another creditor. In practice the recovery rate for housing loan debts to the commercial banks and most of the HFCs has been good, and therefore it appears that there will be no problems with these PLs.

However, some HFCs which have expanded their corporate finance have suffered from a declining record of debt recovery due to the worsening economic situation. There is also a habitual problem in the recovery rate achieved by the building societies.

Considering these problems, much greater care must be given to debt protection and there are strong grounds for considering a system such as institutional guarantee[4].

3.3.4 Supervisory system for housing finance institutions

(1) Supervision and regulation of HFCs

The NHB has the authority and functions of a supervisory bank (Apex Bank) for the HFCs, which are the PLs specializing in housing finance. As such, it must work to protect the HFCs' users and investors and to promote the sound development and progress of the housing finance industry. To that end it

3 The negative pledge restricts the creditor from providing collateral to a third party in the future for the third party's debts.

4 For example, in Japan it is difficult for borrowers to provide guarantors. Therefore the banks and credit unions, which are the main providers of housing loans, have established credit guarantee institutions for each type of lender that act as housing loan guarantors. The borrower pays a guarantee fee to the credit guarantee institutions and if the borrower becomes unable to maintain the loan the credit guarantee institution will repay the debts to the lender in place of the borrower. This protects the credits of the lenders. Guarantors who are not ordinary individuals are known as institutional guarantors.

carries out the necessary supervision and regulation of the business operations of HFCs.

(i) Obligatory registration with the NHB

HFCs with Net Owned Funds (NOF)[5] of Rs2.5 million or more must register with the NHB. When the NHB receives an application for registration it conducts an appraisal of the applicant regarding questions such as whether it has problems repaying depositors and whether it can live up to the public confidence. A registration certificate is issued to HFCs which satisfy all criteria.

At the end of June 1997 there were 379 HFCs and the NHB was proceeding with their registration. Of these 379 HFCs, 100 HFCs (including 24 which are recipients of NHB refinance) have submitted reports on their financial situations to the NHB.

(ii) Setting of borrowing limits

The NHB sets a limit on total borrowing (excluding refinance from the NHB) for each HFC based on the size of its net owned funds (NOF). If the value of NOF is below Rs100 million the borrowing limit is set at ten times the amount of NOF. If NOF is between Rs100 million and Rs200 million, the limit is 12.5 times NOF, rising to fifteen times NOF where NOF exceeds Rs200 million.

(iii) Targets for ratio of net owned funds to deposits

The NHB sets targets for the ratio of net owned funds to deposits for HFS with NOF of Rs5 million and above as a means of maintaining their sound financial development. These targets are set in coordination with the guidance given to nonbank institutions by the Reserve Bank of India (RBI, the central bank).

The specific targets are set in phases as follows:
Target up to 30th September 1995: 6%
Target up to 31st March 1996: 8%

At the end of March 1997, 24 of the 25 HFCs eligible to make refinance applications had attained the targets. The target of 8% is the same level set by the Bank of International Settlements (BIS) for banks engaging in international business.

(iv) Acquisition of ratings

Since January 1995 the NHB has asked the PLs to obtain a certain minimum rating from a domestic Indian ratings agency in order to accept deposits. They are obliged to obtain such ratings at least once every year. An HFC that is unable to reach the required rating is barred from accepting new deposits or renewing deposits which mature until the balance of their total deposits falls below 40% of their net owned funds.

[5] Net Owned Funds = Capital deposited + legal reserve funds + share premium + capital reserves - funds lent to subsidiaries - intangible assets and their losses.

(v) Obligatory implementation of external audits

All HFCs are expected to receive an annual external audit by an auditing company. When they choose an auditing company, and when they change between auditing companies, they are directed to obtain prior approval from the NHB. They are also advised to receive audits from the same auditor up to four times. This system is used to maintain checks on the financial conditions of the HFCs.

(2) Education and guidance of the HFCs

The training in the field of housing finance generally available in India is limited, and there is a strong need for specialist training for HFCs. The NHB has prepared a variety of educational programs aimed at staff of the HFCs and also holds training seminars.

The seminars are held in the NHB branch in Delhi also in other parts of the country when requested.

(i) Training seminars in finance appraisal for customer service staff

Beginner-level training is provided for the customer service staff who receive finance applications to enable them to appraise the content of applications. 24 such seminars have been held so far and 479 students have attended.

(ii) Lecture courses for middle and upper-level staff

Lecture courses have been held on the following themes:

- Regulation and supervision
- Risk management
- Securitization (conversion of housing loan credits into securities)
- Legal issues pertaining to housing finance
- Project finance

Housing finance is a relatively new field in India and new institutions are still entering the market. The NHB, as the Apex Bank for the HFCs, has the task of guiding the entire housing finance industry in a suitable direction. Holding lecture courses such as those listed above to train the staff of the HFCs is one part of that role, contributing to better handling of the HFCs' business and, by extension, to the sound development of the industry as a whole.

The NHB is also positively engaged in its own internal training. For example, NHB staff have received training overseas with the cooperation of USAID in subjects such as the US housing finance system, and the workings of the secondary mortgage market.

(3) Investigations

The NHB conducts ledger checks and on-site investigations. Specifically, they are checking whether the HFCs are conducting their business properly, whether they are making all the required notifications to the NHB, whether their business position is sound and other aspects. This is intended to ensure the sound operation of all HFCs. The NHB can also apply administrative penalties. These measures are intended to protect the HFCs' investors and depositors, to ensure the proper administration of NHB refinance operations and to protect their credits.

Document scrutiny

The NHB's Department of Refinance Operations is responsible for the scrutiny of refinance applications from PLs. Checks on the business reports submitted by the PLs are conducted by the Department of Regulation and Supervision.

On-site inspection

The NHB department responsible for inspection is the Department of Regulation and Supervision, which forms a special investigative team for each inspection.

The frequency of inspections is once in three years for highly-rated HFCs and HFCs which are subsidiaries of banks. Other HFCs are inspected annually.

The inspection covers capital composition, business operation, adherence to notification duties, nature of assets and profits and a wide range of other details. In addition, several finance examples are chosen, and the related documents are compared against the property for which the loan was taken.

The duration of the inspection is approximately one month for large HFCs and around 10~15 days for smaller HFCs.

The NHB is an Apex Bank, thus it is not necessarily appropriate to compare it to Japan's Housing Loan Corporation, but the NHB conducts inspections more frequently than the Housing Loan Corporation does (the Housing Loan Corporation conducts an inspection once in three years to check the state of the business operations of private sector finance institutions to which it contracts business). As the duration of the inspection also appears to take an adequate number of days, the NHB seems to have set up an appropriate inspection system.

(4) Conclusions on the HFC's supervision

Our overall evaluation of the NHB's systems for the guidance and supervision of the HFCs suggests the following points:

(i) For safe operation and financial soundness, the NHB sets standards for borrowing limits and net owned funds ratio which are reasonable in comparison with international standards, and these standards are strictly observed.

(ii) HFCs are well exposed to market evaluation through external audits and the acquisition of ratings, and market checks act on their operations.

(iii) The NHB performs document inspections and on-site inspections for itself to check whether business operations are conducted properly, whether the HFC's business is running well and so on, giving guidance and taking action as necessary.

In short, the NHB has built a supervision and regulation system which is effective and emphasizes the safety and soundness of the HFCs' operations. The NHB is well aware of its role of an Apex Bank. It has proven itself suitable to be the executing agency of an ODA loan project.

As well as training its own staff, the NHB is educating and training the staff of the HFCs and contributing to the professional development of the personnel who support the housing finance industry. The fact that the NHB is taking its responsibility for the development of India's housing finance to include the training of the personnel is highly commendable.

3.4 Primary Lenders

The JBIC's finance funds pass through the NHB to be applied to refinancing, mainly by HFCs. Therefore we will analyze the HFCs in greatest detail among the primary lenders. (Our analysis of the primary lenders is mainly based on the results of a survey contracted to a local consulting firm.)

The survey subjects were five institutions which have received funds under the JBIC program.
1. PNB Housing Finance Ltd.
2. Gruh Finance Ltd.
3. CanFin Homes Ltd.
4. Dewan Housing Finance Corporation Ltd.
5. Housing Development Finance Corporation

We will now check the status of these HFCs from the points of view of their housing finance situation, the significance of NHB refinance funds and their record of supplying housing finance.

3.4.1 Housing Finance Situation and NHB Refinance

Table 3-6 shows the movements in the total value (on an outstanding balance base) of housing-related finance from the HFCs. Since 1990~91 the total value has been steadily rising year after year. The average year on year growth rate is an impressive rate of 23.4%. Among the companies, the HDFC has an overwhelming share (each year it takes an 80~90% share of the total for the above five companies).

Table 3-6 Total Value of Housing Finance (balance)

(Unit: Rs 1 million)

	90-91	91-92	92-93	93-94	94-95	95-96	96-97
PNB	294.1	655.2	858.5	1,056.8	1,154.0	1,227.7	1,341.3
Gruh	141.8	218.3	313.8	482.1	962.5	1,528.1	2,135.5
CanFin	1,474.8	2,152.9	2,417.4	2,593.3	2,821.4	3,228.1	3,614.5
Dewan	226.4	796.4	1,548.0	2,404.5	3,322.8	3,870.8	4,211.0
HDFC	17,260.0	21,290.0	25,610.0	30,710.0	37,470.0	47,400.0	57,090.0
Total	19,397.1	25,112.8	30,747.7	37,246.7	45,730.7	57,254.7	68,392.3
Growth rate on the preceding year (%)	—	29.5	22.4	21.1	22.8	25.2	19.5

Source: Annual reports etc. from each housing finance company.

Table 3-8 shows movements in the total outstanding balance of refinance from the NHB to the HFCs. It shows that FY 1991~92, the year after the ODA loan was implemented, produced a 90% increase on the preceding year. This illustrates the Indian government's enthusiasm for progress in housing finance immediately after the NHB was established. At that time the supply of refinance provided the HFCs, which were newly-established finance institutions, with a source of fund for loans. It also earned them the trust of investors and society in general. On an outstanding balance base, Dewan's finance operation grew 3.9 times.

However, the balance of the NHB's refinance to these five companies grew steadily from FY 1991~92 until FY 1994~95, but the growth slackened off sharply from FY 1995~96. For the largest, the HDFC, there was actually negative growth in FY 1995~96 only.

Table 3-7 Refinance from NHB to HFCs (balance)

(Unit: Rs 1 million)

	90-91	91-92	92-93	93-94	94-95	95-96	96-97
PNB	1.6	132.2	323.1	335.2	334.2	228.6	91.2
Gruh	110.3	180.6	229.9	365.5	537.4	561.7	771.0
CanFin	365.2	601.0	768.0	863.0	1,054.0	1,238.0	1,413.0
Dewan	155.1	599.2	957.9	1,391.9	1,732.1	2,075.7	1,951.1
HDFC	1,576.6	2,780.9	4,031.8	4,220.7	5,816.2	5,399.7	5,549.0
Total HFCs of 5 Companies	2,208.8	4,293.9	6,310.7	7,176.3	9,473.9	9,503.7	9,775.3
Growth rate on the preceding year (%)	—	94.4	47.0	13.7	32.0	0.3	2.9

Source: NHB Material.

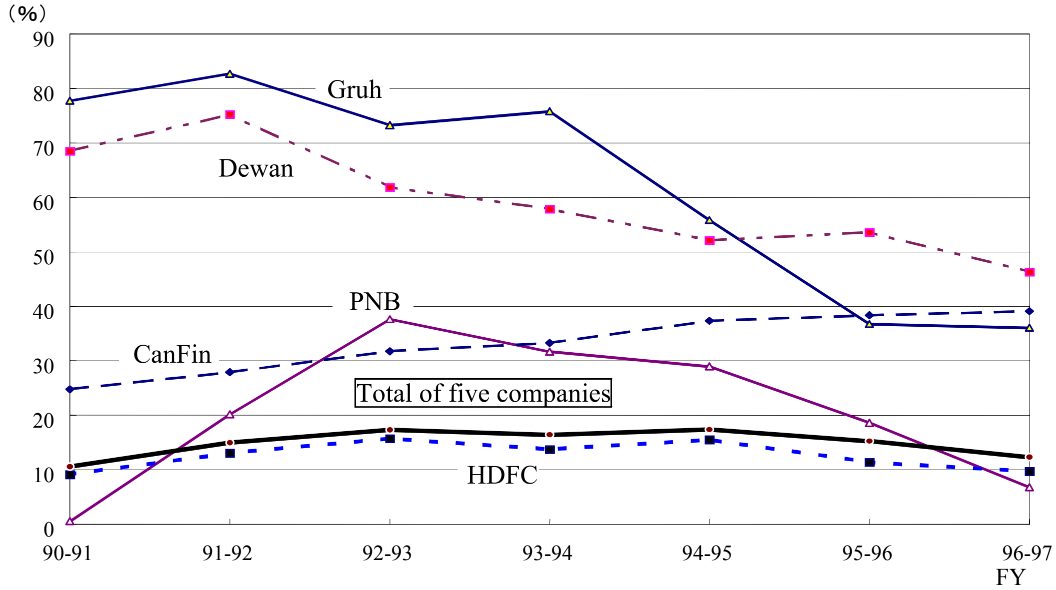
Table 3-8 Ratio Against NHB Refinance Balance (including for HUDCO)

(Unit: Rs 1 million)

	90-91	91-92	92-93	93-94	94-95	95-96	96-97
Total HFCs of 5 Companies	2,096.9	3,981.1	5,757.7	6,475.6	8,602.3	8,713.4	8,913.1
NHB Refinance Balance	4,681.0	9,517.5	12,835.7	14,369.0	15,870.5	16,936.1	18,875.8
Share (%)	44.8	41.8	44.9	45.1	54.2	51.4	47.2

Source: NHB Material

Figure 3-10 The Share of NHB Refinance Funds within the Procurement of Housing Loan Funds by Each HFC



Source: Calculated based on the NHB and HFCs material.

This decline in refinance to the HFCs seems to have been partly due to the impact of loan restrictions imposed by the NHB (including the regulation that the outstanding balance of refinance to each HFC must not exceed five times its net owned funds). The share of the total outstanding balance of NHB refinance (including that to HUDCO) taken by refinance to these five HFCs has been declining since FY 1995~96.

This situation has forced the HFCs to redouble their efforts to find their own sources for lending funds . Figure 3-10 shows the shares of housing loan lending by each HFC which are provided by NHB refinance funds. Until FY 1994~95 the share was growing, or at least static, but the table shows that the shares have been falling since a turning point in FY 1995~96.

The HFCs can be divided into three groups according to the type of institution which created them. The three groups are as follows:

(i) HFCs which are independent enterprises (referred to below as independent HFCs).
(ii) HFCs which are subsidiaries of commercial banks.
(iii) HFCs which are subsidiaries of insurance companies (LIC, GIC etc.).

HFCs as subsidiaries can easily procure funds from the commercial bank or insurance company which is their parent company. Figure 3-10 shows that PNB and CanFin, which have commercial banks as their parent companies, and Gruh, which has a state government as a parent institution, use a relatively low share of NHB refinance in their loans. This shows the low degree of importance they attached to funding support. The fall in the PNB's refinance balance was due to their easy supply of cheap finance from their parent bank, the Punjab National Bank, which led them to repay their refinance to the NHB early. However, the loan period of the funds they procure from their parent bank is 10 years at the most. Therefore if they want to provide end users with loans of more than 10 years in duration they call on NHB refinance if they are unable to find the funds from deposits or other sources.

Independent HFCs must procure funds by their own efforts from individual deposits and from the finance and funds markets. Figure 3-10 shows that Dewan, which is purely an HFC, uses a high proportion of refinance. The HDFC, which is the largest HFC, procures foreign funds from the Asian Development Bank and other sources besides the domestic capital market. Thus the share of the HDFC's loans provided by NHB refinance is low, even though the volume is high.

3.4.2 State of Arrears

The NHB's definition of "non-performing asset (NPA)" as applied to HFCs has been revised as listed below:

Account period to 31/3/96: More than four quarters in arrears.
Account period to 31/3/97: More than three quarters in arrears.
Account period to 31/3/98: More than two quarters in arrears.

Table 3-9 shows the proportion of end users in arrears in their payments to HFCs, based on the stricter "three months or more in arrears" standard.

According to the RBI, the NPA ratio for eight state banks averaged 6.88% in FY 1995~96 and 7.70% (estimated figure) for FY 1996~97. The arrears ratio for the above HFCs is only around 2~5%, even applying the "three months or more in arrears" standard. Their recovery rate is, therefore, considerably superior to that of ordinary bank lending.

Table 3-9 State of Arrears for HFCs

(Unit: %)

	93-94	94-95	95-96	96-97
PNB	–	0.04	0.51	0.18
Gruh	3.44	1.4	1.9	4.45
CanFin	–	3.96	4.7	4.63
Dewan	2.08	3.61	3.5	2.89
HDFC	1.68	–	0.87	2.06

Note: 1. Each of the figures in the table shows the percentage of asset that is more than 3 months (90 days) in arrears.
2. PNB is related to individual loans, excluding for private enterprises.
Source: HNB business material.

In general there is a very strong incentive on the end users of individual housing loans to repay their debts in order to preserve the basis of their livelihood. Arrears are uncommon as a result. As many of those connected with housing finance said, the reason is that "there is a general trend among Indians to prefer to remain settled in one place rather than move around the country. Their home is the most important thing and they make housing loan repayments the highest priority to avoid losing that home". We have not been able to prove how far that tendency is reflected in practice, but the following are structural reasons for the good record of recovery.

(i) The expansion of the domestic economy has raised prices and wages. The repayments for fixed interest loans do not change in their nominal value, accordingly their effective burden of repayment gets lighter.

(ii) The loan repayment (recovery) method is ingenious.

(The only deposits received by HFCs are fixed-term deposits and, therefore, they cannot use the "automatic debit from a savings account" method practiced in Japan. Therefore they either take post-dated checks for every payment up to the last one, or negotiate with the borrower's employer to have the payments deducted at source from the borrower's pay packet).

The second point here has required immense efforts on the part of the HFCs and they deserve credit for the success of such measures.

3.4.3 Evaluation of the Record of Housing Finance

(1) Achievement of the objectives of the Eighth Five Year Plan

An evaluation of the degree of contribution to housing finance as a whole by the PLs as a group, based on the fund investment targets of the Eighth Five Year Plan, shows that the commercial banks and HFCs alone have a 37.5% share (recorded and forecast) of the total. As for the degree of attainment of initial targets, nearly all of the HFCs (90%) reached their targets, while only 55.4% of commercial banks did.

As well as providing finance directly to individuals and to housing-related companies, the commercial banks supply the HFCs with funding for lending. Therefore when the supply of funds from the commercial banks slows down, the result is that the volume of housing loan lending by the HFCs to individuals diminishes. It follows that the commercial banks are expected to follow the lead set by the Bank of India in doing all they can to supply funds to the housing sector.

Table 3-10 Targets under the Eighth Five Year Plan for Inflow of Funds to the Housing Sector and the Degree of Attainment

(Units: Rs 10 million, %)

		Target	Interim results	Final results (forecast)		Attainment forecast		Attainment rate
		1992-97	1992-95	1992-97	Shares (%)	1995	1997	1992-97
Life Insurance Corporation	(LIC)	5,500	3,129	4,500	23.2	▲ 171	▲ 1,000	81.8
Non-life Insurance Corporation	(GIC)	700	508	700	3.6	88	0	100.0
Commercial Banks	(SCBs)	5,000	1,227	2,770	14.3	▲ 1,773	▲ 2,230	55.4
National Housing Bank	(NHB)	0	1,127	1,800	9.3	1,127	1,800	100.0
Employee Pension Fund	(EPF)	5,400	2,450	3,900	20.1	▲ 790	▲ 1,500	72.2
Housing Finance Company	(HFCs)	5,000	3,550	4,500	23.2	550	▲ 500	90.0
Securitization		2,000	0	0	0.0	▲ 1,200	▲ 2,000	0.0
Others		1,400	560	1,200	6.2	▲ 280	▲ 200	85.7
Total		25,000	12,551	19,370	99.9	▲ 2,449	▲ 5,630	77.5

Source: NHB 'Report on Trend and Progress of Housing in India 1995'

Among the PLs, as the lenders of housing loans to individuals, the HFCs are pushing strongly to open up the market, with the backing of NHB refinance. They are making a solid contribution to house ownership and a better way of life for the Indian people. In particular, the HDFC has built a commendable record as a pioneer in the market.

(2) Investment effects

There is no documentation concerning the investment effects of housing finance provided by the HFCs as a whole, but we can discuss the investment effects of the housing finance (both to individuals and to companies) implemented by the HDFC, which is the largest of the HFCs.

Figure 3-11 shows that the investment record of the HDFC has been one of steady expansion since 1992. The ratio between the value of housing finance implemented and the value of housing investment has been an average of three times (the value of investment is three times the value of the finance).

If we look next at the relationship between total investment value and GDP, the proportion of housing investment value enabled by HDFC housing finance within the total fixed asset formation is 1.3~1.8%.

Within the Eighth Five Year Plan, (1992~97) the HDFC's record of loan approval amounts to Rs79.716 billion for approximately 500,000 homes. The housing shortage in the whole of India in 1991 was 18.5 million units, thus as a simple calculation, the HDFC contributed to relieving around 2.7% of the national shortage.

Over that period, NHB refinance supplied the funds for over one tenth of the HDFC's finance. Therefore around one tenth of the HDFC's finance record can be attributed to the investment effects of NHB refinance.

Table 3-11 Housing Loan Amounts of HDFC (for individuals and private enterprises)

(Units: Rs 1 million, %)

		90-91	91-92	92-93	93-94	94-95	95-96	96-97
a	Loan approval amounts	8,138.0	7,119.0	8,591.0	10,248.0	14,946.0	20,715.0	25,217.0
	Growth rate on the preceding year	–	▲ 12.5	20.7	19.3	45.8	38.6	21.7
b	Loan disbursed amount	6,685.0	6,278.0	7,199.0	8,891.0	12,117.0	16,836.0	21,008.0
	Growth rate on the preceding year	–	▲ 6.1	14.7	23.5	36.3	38.9	24.8
c	Housing investment amounts		–	–	22,223.0	38,623.0	47,911.0	62,786.0
	Growth rate on the preceding year	–	–	–	–	73.8	24.0	31.0
d	c/a	–	–	–	2.17	2.58	2.31	2.49
e	c/b	–	–	–	2.50	3.19	2.85	2.99

Source: HDFC 'Annual Report', RBI 'Report on Currency and Finance'

Table 3-12 Investment Effects of HDFC's Housing Loan

(Unit: Rs 1 million)

		93-94	94-95	95-96	96-97
c	Housing investment amounts	2,222.3	3,862.3	4,791.1	6,278.6
f	Total fixed asset formation	174,996.0	214,038.0	270,263.0	–
g	Share (c/f)	1.27	1.80	1.77	–
(Reference)	f/GDP	21.61	22.44	24.60	–

Source: HDFC 'Annual Report', RBI 'Report on Currency and Finance'

4. Project Effects

This project financed a portion of the funds at the time when the NHB's refinance program for individual housing loans was just starting up. Therefore we will mainly examine the measured effects of the entire NHB individual housing loan refinance program, and discuss the significance of the funding assistance from the JBIC within those effects.

4.1 Quantitative Effects of NHB Refinance

4.1.1 Numbers of Houses Constructed with NHB Refinance

The total number of housing units refinanced by the NHB's individual housing refinance project (excluding refinance for development for residential land projects and HUDCO) was 598,000 by 1997. The breakdown within this number is as shown in Table 4-1. HFCs accounted for approximately 60%, the building societies for approximately 33% and the commercial banks for 7%.

Compared to the housing shortage of 18.5 million units in 1991, those constructed with NHB refinance account for some 3.2%. According to figures for the Eighth Five Year Plan (1992~97), the planned number of houses to be constructed for low and medium income households was 5.42 million units. Compared to this, the 298,000 housing units built with NHB refinance over the same period represents a 5.5% share.

Table 4-1 Numbers of Houses Constructed through NHB Refinance from Each Type of Finance Institution
(Cumulative figures to 1997)

(Units: household units, %)

	Cumulative total	(Share)
HFCs	360,973	60.3
Commercial banks	41,255	6.9
Co-op.HFC	196,008	32.8
Total	598,236	100.0

Note: Excluding refinance for development for residential land projects and H

Souce: NHB business material

4.1.2 Employment Creation due to Refinance Funds

The labor force required for housing construction can be broadly divided between labor for development of residential land and labor for the construction of buildings.

As it is difficult to allocate an amount of labor for development of residential land to each housing unit, we will only make an approximate calculation for the employment created in the construction of buildings by the NHB's refinance. We have made the following assumptions concerning the types of houses based on the actual types of house financed:

(Assumed conditions) The houses constructed are assumed to be low-income houses from the Regional Development Corporation of the standard-type housing block with 12 housing units. The construction of one block requires 20 laborers working 25 days per month for one year.

If we consider, for example, the Eighth Five Year Plan, the average employment creation per year based on these assumptions would be 29.8 million man days.

Employment creation effect =

(298,000 housing units / 12 units / 5 years) × 20 people × 25 days × 12 months

29.8 million man days

4.2 Qualitative Effects of NHB Refinance

4.2.1 Promotion of the Supply of Housing Loans to the People and Raising the Ability of the Public to Buy Houses

(1) NHB refinance supplied long-term, low-interest funds

The biggest problems with housing loans is the duration mismatch when they must lend short-term funds over a longer duration.

In general, private-sector finance institutions rely on deposits and external borrowing to procure their funds. India's HFCs are only allowed to accept deposits for fixed terms of between six months and seven years, and the longest loan available to them from commercial banks is for five years. Finance for ten years or more is only available from NHB refinance and from life insurance companies. The availability of NHB refinance funds makes it possible for private-sector finance institutions to provide end users with extra-long term housing loans.

This makes it possible for the finance interest rates on sub-loans from refinance to be lower than the general lending rate from commercial banks. The resulting loans are attractive to borrowers.

(2) Funds are supplied to wide areas

The funds are supplied through a large number of PLs and each PL can meet the demand for funds from a wide geographical area through its network of branches.

End users are able to use private-sector finance institutions located close at hand, which is very convenient.

In general, housing problems are becoming more severe with the advance of urbanization, thus they tend to be seen within the framework of urban problems. The NHB refinance was also directed largely for the people in the cities. However, the rural areas of India also suffer from a grave housing shortage. The customer services of primary lenders can reach out to these areas.

(3) The ability of the public to buy homes is enhanced

Before there were formal-sector housing loans, those who lacked funds when buying a home had to borrow from street money lenders. The finance period was short and the interest rates were extremely high at 20~30% per annum. Faced with such terms, many must have abandoned the idea of buying a home.

The introduction of the NHB refinance system helped the development of private-sector housing loans and, as a result, borrowers with the same income could borrow a larger sum because the size of the monthly repayments would be reduced. This raised the public's ability to buy houses.

(4) People of low income are able to buy houses

The NHB refinance which was subject to JBIC finance targeted low and medium income households and the conditions were classified by the size of the loan. Under the system adopted, interest rates on smaller loans are lower.

This system allows low and medium income households in the cities, which had little access to formal housing finance in the past, to escape from the poor living environment of privatery-operated rented accommodation and buy their own homes. People who have bought their own homes can maintain their privacy in houses equipped with private kitchens, toilets and bathrooms and live with peace of mind.

4.2.2 Contribution to the Development and Improvement of Housing Finance Companies

(1) Heightened public esteem for the housing finance companies

The establishment of the NHB and the start of its refinance provision heightened public trust in the HFCs, which were then in their early stages. This led to increased deposits and contributed to their development and progress. Housing finance backed by refinance was seen as an attractive business and the number of HFCs qualified to receive refinance funds grew steadily.

Thus NHB refinance has been contributing to the development and improvement of HFCs and India's other housing finance institutions.

(2) Supply of funds to housing finance companies

HFCs which are subsidiaries of commercial banks and life insurance companies can borrow from their parent companies. However, HFCs which are independent and entirely in the private sector face a struggle to procure funds. This makes NHB refinance essential for these purely independent HFCs.

Even though some subsidiary HFCs such as the PNB repay their refinance funds before maturity, they still rely on refinance funds for extra-long term funds.

4.3 Overall Evaluation of NHB Housing Loan Refinance Funds

As we have seen, NHB refinance has made a contribution to the development of India's housing finance sector (in particular the birth and growth of the HFCs) and effectively helped the public to buy their own homes. It has made a great and commendable contribution in raising the housing standards of the poor, which is a major policy objective.

By now, private-sector housing loans backed by NHB refinance have taken a solid position in the way the Indian people buy their homes. For example, when an average working household in Japan buys a home, they first plan to obtain housing finance from the Housing Loan Corporation and pension funds, and NHB refinance-backed loans are regarded in the same way in India.

The direct effect of house construction through JBIC funding is somewhat limited when seen next to India's enormous demand for housing. However, the delivery of JBIC funds shortly after the NHB was established contributed to the successful birth of the institution which now underpins India's housing sector. Before the NHB was established, the supply of funds for housing loans backed by public funds was inadequate. Therefore, the NHB loan finance has also had a significant effect in raising the level of the executing agency.

The task now facing the NHB is that it still lacks the funds to meet the demand and it is expected to find enough funds to do so. Housing finance is still a developing field in India for the HFCs and others, and continued guidance and support are required. Refinance will remain necessary as a system to support long-term low-interest housing loans.

However, the following points must be considered concerning future support for this system:

(i) There is a risk that the repayment of private-sector housing loans could be controlled by domestic economic conditions. To date, some degree of economic growth has been continuing, and that has had the effect of keeping the burden of repayment on household finance from becoming too onerous. The aid scheme for the future should take into account the possibility that this economic situation could change in the future.

(ii) In the future the "securitization of housing loan credits" which is now being studied in India could be implemented. This would create a much stronger circulation of funds and could meet the funding needs of the housing sector. When that happens, the NHB can be expected to expand its guarantee functions as FNMA in the US has done. From then on, the need for refinance will gradually fade away, and the role of the NHB will change to that of a facilitator. However, the construction of a regulatory framework for such a system will take time, which means the refinance operation will remain significant. Consideration of the method of support to employ must be based on a close grasp of changes in the housing finance sector.

5. Lessons Learned

Nothing in particular.

Appendix 1 Business Summary of Primary Lenders Eligible for ODA Loans (Surveyed as of February 1997)

(1) Business Summary

Name of financial institutions	Established	Location of head office	No. of branches	Head office staff for appraisal	Branch authority for loan approval (Rs 1,000)	Head office authority for loan approval (Rs 1,000)	Loans for individuals (%)	Loans for private enterprises (%)	Other loans (%)
CanFin Homes	1987	Bangarolre	34	7	500	2,500	79.0	1.5	19.5
Dewan Housing	1984	Mumbai	27	4	0	1,000	90.7	0.7	8.6
Gruh Finance	1986	Ahmedabad	5	32	Fixed level	2,500	62.6	23.2	14.2
HDFC	1977	Mumbai	39	30	Fixed level	5,000	66.9	31.8	1.3
PNB Housing	1988	New Delhi	11	2	750	3,000	24.2	14.3	61.5
Andhara Bank	–	Hyderabad	974	6	100	No upper limit	30.0	70.0	0.0
Bank of India	1906	Mumbai	2476	3	Fixed level	Varies by scheme	18.7	81.3	0.0
Vijaya Bank	1980	Bangarolre	856	6	35,000	No upper limit	10.0	90.0	0.0
Vysya Bank	1931	Bangarolre	353	6	Fixed level	No upper limit	28.0	72.0	0.0
Maharashtra State Co-op. HFC	1961	Mumbai	30	22	0	No upper limit	38.0	0.0	62.0

(2) Summary of Individual Housing Loans

Name of financial institutions	Borrowing interest rate of Rs200,000(%)	Type of interest rate	Repay-ment period (year)	Grace period (year)	Loan limit amount	Maximum loan proportion (%)	Maximum repayment burden rate (%)	Target borrower segments Note 2	Administrative cost (%)	Loan handling charge (%)	Days required for loan approval	Penalty rate for arrears (%)	Days grace before penalty charge
CanFin Homes	15.0	Fixed	15	0	2,500	80	35	L/M/H	1.0	1.0	7	24.0	15
Dewan Housing	12.0	Fixed	15	0	1,000	70	33	M/Mh	1.0	0.0	8	24.0	6
Gruh Finance	15.0	Fixed	15	0	2,500	85	33	M/H	0.8	1.2	21	16.0	7
HDFC	15.5	Fixed	15	0	5,000	85	35	M/H	0.8	1.0	3	18.0	10
PNB Housing	15.0	Fixed	20	0	No upper limit	80	40	M/H	0.8	1.0	3	24.0	7
Andhara Bank	13.5	Fixed	15	1.5	No upper limit	75	30	M/H	Differs from loan amounts	0.0	16	24.0	Differs from loan amounts
Bank of India	14.0	Fixed for loan value up to Rs200,000. Variable above	20	0	1,000	85	30	Not specified	1.0	1.0	30	24.0	30
Vijaya Bank	13.0 Note 1	Fixed	10	1.5	2500	75	30	M/H	(Rs. 300)	0.0	56	24.0	30
Vysya Bnak	13.5	Fixed	15	0	No upper limit	40 –		L/M	(Rs. 250)	0.0	10	24.0	29
Maharashtra State Co-op. HFC	15.3	Fixed	15	0	350	70	35	L/M/H	(Rs. 500)	0.0	38	0.0	–

Note 1: Interest rate of Vijaya Bank means that interest tax will be added.

Note 2: L=Low income group, M=Middle income group, Mh=Middle-high income group, H: High income group

Appendix 2: Analysis of the results of interviews with end users

When we undertook the field survey for the purpose of detailed evaluation, we visited the homes of end users in the "Delhi and environs" region and had the opportunity to directly interview a housing society in the city of Nashik (an industrial city in Maharashtra state). The scope of the interviews was somewhat limited, but we were able to gain some insights into the Indian people's motives for buying their own homes, how their lives have been changed by buying homes and their opinion about housing loans. (The findings from interviews with individuals are broadly as listed in the attached tables).

We also inquired to the HFCs regarding the situations of their end users, but they had not conducted any survey of housing loan users and had not prepared and data on their age, income, loan sizes etc.

Therefore we will evaluate and analyze the end users on the basis of the interview findings gathered in the two areas where we conducted interviews.

I. "Delhi and environs" region

1. Housing supply system

In and around the city of Delhi, the Development Authority, which was established between local public bodies, is responsible for large-scale housing projects, and housing construction. It mainly constructs group projects for sale to low-income buyers. Of the 11 end users interviewed, nine had bought homes in these developments by the Development Authority. The homes bought were all in joint housing for economically weak (EWS) or low income (LIG) buyers.

Thus a public-sector project developer constructed policy-based housing to be subdivided for sale to low-income buyers who were provided with private-sector housing loans backed by NHB refinance. Low-income households were able to buy their own homes and improve their residential environment.

2. Characteristics of the end users

2.1 Common motive for buying homes

The common motive among end users for buying their homes was "because we wanted our own home". In some cases they wanted to buy a home because they were asked by landlords to leave their rented accommodation.

2.2 Improvement in the residential environment

Most buyers had been living in private-sector rented accommodation before, where around half did not have private toilets or bathrooms. Some did not have their own kitchen either, and had been living with five family members in one room, obtaining their drinking water from outside the house.

Their present homes had floor areas of 25~42m^2 each, with most having one or two bedrooms and a kitchen. Of course, all were equipped with private kitchens, toilets and bathrooms and represented a great improvement in living standards. In particular, many housewives (borrower's wives) commented on the increased convenience of daily life.

In India many people invest in rental properties to support themselves after retirement by using the land they own for constructing a rental house. Such properties are partitioned into single rooms or pairs of rooms and in many cases the kitchens are the only private facilities. The end users in this interview survey were living in such private-sector rented accommodation.

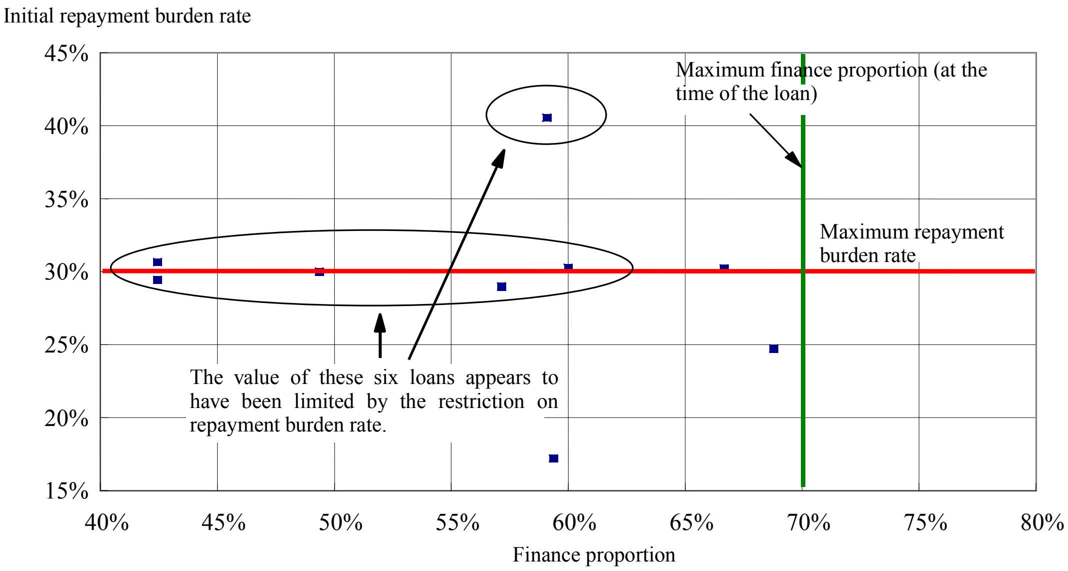
Thus, although these urban poor may earn some regular income from their work, they cannot receive housing from their workplace and the standard of their housing is poor. They know that their only way out of that situation is to buy their own home. In India there is no supply of high-quality public-sector housing. So buying a home is the only way to improve the living environment.

2.3 Finance proportion

The simple average of the ratio between the loan provided and the total value of housing loan finance (the purchase price) and is approximately 56%, with the other funds coming from savings and the support of friends and relatives (mainly in the form of grant).

Looking at the relationship between housing loan finance proportion and repayment burden rate (monthly repayment/ monthly income), there were seven loans with repayment burden rates of 30% or more, of which six had finance proportions of 60% or less. For these six loans the size of the loan was apparently limited by the restriction on repayment burden rate. That means that those borrowers were taking the largest loan they were allowed at their income level.

Relationship between Finance Proportion and Initial Repayment Burden Rate



2.4 Repayment burden rate

The simple average of the initial repayment burden rates was approximately 31%, roughly the level of the 30% limit. However, this decreases due to rising income after the loan is taken, reaching an average of around 10% by now. Therefore, provided there are no unexpected developments such as the death of the head of the household or severe illness of a family member, there will be ample funds in the family budget to cover repayments.

2.5 Desires to move house

The end users in Delhi were not greatly interested in moving to another house. They were satisfied with their homes and did not want to buy another and move.

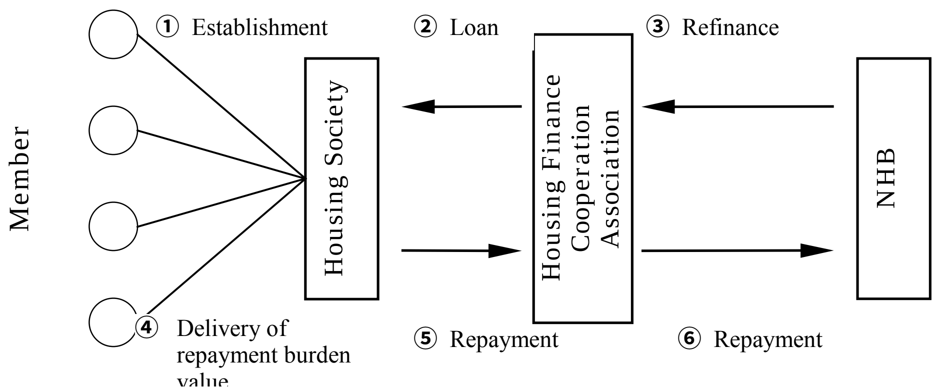
In the Delhi suburbs those in EWS housing wanted to move to LIG housing and those in LIG housing wanted to move to more spacious homes. Each group wanted to change up to the next higher grade of house.

In each housing development there were many units that had been improved in some way, despite the fact that they were in shared buildings. This indicates a strong desire among residents to improve their living environments.

II Nashik city

1 Housing supply system

In Nashik city, we conducted interviews concerning the housing society called the Maharashtra Housing Finance Cooperation Association. In this case the housing societies are the end users and the individuals who buy the houses are members of the housing society. The diagram below shows the relationships between those involved.



In fact, there are specialist coordinators who gather together prospective home buyers to form housing societies and make arrangements for land, construction materials, workers, funds and other aspects. The homes produced are all shared units.

The housing finance cooperation associations are institutions which serve to supply funds to encourage this kind of building activity by housing societies. They are public financial institutions established under the laws of each state. They are intended to help in alleviating the housing shortage, and in fact this independent method for low and medium income households to build their own homes through housing societies is taking root in India and becoming more popular.

This "independence" is the greatest feature of the housing society approach. The society members are involved from the design stage onwards, taking shared responsibility for site selection, the layout of each unit, expenses and other aspects. The result is that the occupants are highly satisfied with their homes.

There is also no "black money"[1] involved, which means low and medium income households can buy their homes without facing an unreasonable burden.

In Japan there is also the cooperative house method in which individuals group together independently to construct a shared building from the design stage onwards. The Housing Loan Corporation even has finance options tailored to this method. However, as it is difficult to make the land purchase arrangements and to coordinate the opinions and rights of the individuals involved, the number of such cases is very small.

2 Characteristics of users

The finance proportions and repayment burden rates are largely the same as those described above for Delhi and surroundings.

However, the housing society is central to the systems for housing supply and finance, and as such the users have the following characteristics.

(i) As noted above, the users are involved from the building construction stage and are highly satisfied with the homes they have bought.

(ii) The occupants are enthusiastically involved in the maintenance of the entire building. They are well aware of the need for funds to maintain the home, which is their own asset, in good condition. (In the case of housing developments sold as private homes by development corporations, maintenance is carried out by the corporation using community fees paid by the occupants, but the fees were not sufficient to maintain the buildings in good condition).

(iii) The society is responsible for collection of funds to repay the housing loan.

III Significance of individual housing loans

First let us examine whether each end user would be able to buy a home if there were no housing loans.

If using a housing loan from the formal finance sector is not an option, prospective buyers would have to borrow their house buying funds from money lenders in the informal finance sector. In that case the interest rate would be around 30% and the repayment period would be very short, resulting in much larger payments on the same size of loan.

As described above, there are set limits[2] on the rate of burden borne by housing loan borrowers. This means that when money lenders take repayments far above those required for housing loans, they are far exceeding the limit of repayment burden rate, and there is a strong risk of overwhelming the borrower's family budget. As a result, most potential end users choose not to borrow from money

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[1] Black money is a fixed surcharge added to the amount recorded in the sale contract when a housing unit is bought from a private-sector developer. It is apparently viewed as standard practice in India, but as the range of operations of public-sector project developers broadens, black money is disappearing (according to interviews with those concerned).

[2] This limit is the maximum amount that the HFIs expect can be repaid without problems, based on their finance appraisal. It is also the limit on the repayment burden rate which end users will be able to repay without placing an unreasonable burden on their finances.

lenders and give up the idea of buying their own home.

Thus the existence of long-term, low-interest loans is what makes it possible for low-income families to buy their own homes.

Now let us examine the burden of housing costs.

The simple average of rent burden rate (monthly rent/ monthly income) among those who lived in private-sector rented accommodation before buying their homes was 30%. This is roughly the same level as the loan repayment burden rate.

Supposing one of the end users stayed in rented accommodation instead, rent would rise by about the same rate as income, accordingly the rent burden rate would change little. This comes out more expensive than the case when they bought their home and the housing loan repayment burden rate dwindled to around 10%[3].

The above is the situation that would apply when the economy is growing at a relatively high rate. Supposing the economy went into recession and a period of low growth began, income would not rise much (and could fall), bringing the risk that the housing loan repayments could become a heavy burden on the end user's family budget. Therefore it is important to consider the future expansion of housing loans in India prudently, remembering that under low growth there would be little growth in incomes.

[3] Of course house buying requires some capital up front, and the repayment of this capital is another cost which must be considered. On the other hand it should be considered that the end users and their families have increased their utilities due to their improved living environment. In this example we are comparing the cost required to reach the same standard of living environment as that available from private rented accommodation, thus we have overlooked this consideration.

Appendix 3: Support to the NHB from other international agencies

1. U.S. Agency for International Development (USAID)

In FY 1990~91 USAID gave the NHB fund procurement support worth US$25 million from the US capital market under the Housing Guarantee Programme. USAID also supports the training of NHB staff.

2. Asian Development Bank (ADB)

The ADB provided the NHB with US$130 million in finance in 1998 under the India Housing Finance Project.

3. World Bank (WB)

The World Bank is not giving any direct support to the NHB. Instead the WB is financing the HDFC directly, providing US$250 million in finance in 1988.

① Houses for low income households financed by Housing Finance Company (Suburb of Delhi City)

② Houses for middle income households financed by Housing Finance Company (Nasik City 200km northeast of Mumbai (Bombay) City)