India

Chapter 2

The Mortgage-Backed Securities Market in India

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Introduction

Equity offerings in India, which boasts the largest number of listed companies in the world, have caught the interest of investors worldwide since the start of the financial liberalization program in 1991. At the end of March 1998 foreign institutional investors (FIIs) had over US$9 billion in cumulative net investments in the Indian capital market. This amount may not be very large by international standards, but the fact that most of the investment has occurred within the last two to three years makes it nonetheless significant. Even as the FIIs have invested substantially in the equity markets, however, they have largely stayed away from the debt market.

The Indian government securities and corporate bond market has grown in volume as a result of recent structural changes and reforms. In Asia, the Indian debt market is next in size (value of bonds outstanding) only to the Japanese and Korean bond markets. Given the crisis in Southeast Asia, now is the time to implement further reforms and remove the obstacles to the growth of the Indian debt market.

MARKET STRUCTURE AND DIMENSIONS

The public-sector debt instruments mainly comprise central and state government securities, which account for about 65 percent of the country's debt market, and public-sector bonds issued by companies in the public

sector. Other debt instruments in the market are certificates of deposit and commercial paper in the short-dated sector, and corporate bonds in the medium- to long-dated sector.

The debt market is an important source of funding for the corporate sector as well as the government. The borrowing rate of the government determines the risk-free rate in the market and is the benchmark against which all other paper is priced. The size of the Indian debt market is estimated at about Rs 4,172 billion, as of 31 March 1998 (see Table 1).

Table 1 *Profile of the Indian Debt Market, 1990–1998 (Rs billion)*

Debt Securities Outstanding	1990	1991	1992	1993	1994	1995	1996	1997	1998
Bond Market Instruments									
Central government bonds	625	697	777	852	1,132	1,305	1,570	1,928	2,254
State government bonds	129	155	190	225	261	305	331	373	493
Government-guaranteed bonds	274	312	241	264	364	315	270	244	203
PSU bonds	110	164	216	230	270	332	365	435	451
Corporate bonds (estimated)	290	300	330	330	330	300	405	411	432
Total bonds outstanding **[A]**	1,392	1,590	1,825	1,978	2,357	2,614	2,941	3,391	3,833
Money Market Instruments									
Treasury bills	252	70	88	193	267	392	437	165	181
% held by RBI	94%	72%	70%	87%	85%	64%	65%	7%	n.a.
Certificates of deposit	0	48	70	117	59	35	59	121	143
Commercial paper	0	0	2	15	33	30	35	6	15
Money market instruments outstanding **[B]**	252	118	160	325	359	457	531	292	339
Debt Securities Outstanding **[A+B]**	1,644	1,708	1,986	2,303	2,717	3,071	3,472	3,650	4,172
Average Exchange Rate (vs. US$)	17.30	19.64	25.89	31.24	31.37	32.75	34.50	36.35	39.50

Note: Data are as of the end of the fiscal year (31 March). “n.a.” stands for “not available”
Sources: ICICI Securities and Finance Co. Ltd. *Handbook of Statistics on the Indian Economy;* RBI, 1998

The development of the debt markets in India has been constrained by the limited number and variety of instruments, lack of liquidity, and dearth of investors. New debt instruments would add depth and volume to a market that today comprises mostly government securities.

The main instruments in the Indian debt market are discussed briefly below.

Government of India Securities

Government of India securities (GOI securities), also called dated securities, are medium- to long-term obligations of the government that are

issued on its behalf by the central bank, the Reserve Bank of India (RBI), and are registered in the holder's name at the Public Debt Office of the RBI. The RBI also acts as the depository and maintains subsidiary general ledger accounts for banks and other select investors such as primary dealers, financial institutions, mutual funds, insurance companies, and provident funds. FIIs have recently been permitted to invest in GOI securities and to repatriate the profits from the investments. Banks, nonbank finance companies (NBFCs),[1] and housing finance institutions (HFIs)[2] are required to invest in government securities to satisfy their statutory liquidity reserve (SLR) requirements.

Dated securities usually have a maturity period of two to ten years, and the issue size varies from Rs 20 billion to Rs 50 billion. The outstanding GOI securities as of 31 March 1998, excluding securities issued by public-sector units which carried a central or state government guarantee, amounted to about Rs 2,254 billion. In 1997–1998, primary auctions of GOI securities had yields ranging from 11.15 percent to 13.05 percent for securities with a maturity of three to ten years.

To boost the retail sector and give greater liquidity to retail investors, the RBI in October 1997 allowed banks to buy GOI securities and then sell them at prevailing market prices immediately after. Previously, there had to be an interval of at least 30 days between the purchase and resale of the securities.

Treasury Bills

Treasury bills (T-bills) are short-term rupee-denominated obligations issued by the RBI on behalf of the GOI. They are issued for maturity periods of 14 days, 91 days, and 364 days. In addition, the RBI plans to introduce a 28-day T-bill. The typical auction size is Rs 5 billion for the 91-day T-bill, and Rs 200 million to Rs 20 billion for the 364-day T-bill. Outstanding T-bills amounted to about Rs 181 billion as of March 1998, compared with Rs 165 billion in March 1997.

Investors in T-bills include banks, primary dealers, financial institutions, mutual funds, corporations, NBFCs, HFIs, state governments, and

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[1]Nonbank finance companies (NBFCs), as the name suggests, are residual financial companies that are not permitted to operate as banks and are not allowed to accept money in savings accounts with a checkbook facility. In June 1997, there were about 10,194 NBFCs in the country.

[2]Housing finance institutions (HFIs) are specialized institutions that provide housing loans. For details of the functions of HFIs, see page 137.

insurance companies. The new monetary and credit policy for the first half of 1998–1999 allows FIIs to invest in T-bills. Nonresident Indians (NRIs) and overseas corporate bodies (OCBs) may similarly invest in T-bills, but cannot repatriate the profits.

In the second half of 1997–1998, the RBI announced plans to introduce a uniform price auction for 91-day T-bills, to deal with the problem of "winner's curse"[3] and to broaden market participation.

Sovereign Bonds

India has not yet issued sovereign bonds in the international market. The country's sovereign rating is based on the ratings assigned to bond and debenture issues of public-sector Indian companies in the international market. Despite the country's "low investment" or "high non–investment grade" ratings, Indian corporations have generally been able to obtain funds abroad on better terms than what the sovereign ratings might signify.

Some of the advantages of issuing sovereign bonds are:

- The government would have less need to borrow in the domestic market.
- Corporations could use the bonds as a benchmark against which they could price their issues.
- The bonds would broaden the investor base in the international markets and help mobilize long-term finance for infrastructure projects.
- The cost of borrowings would be reduced relative to the domestic market.

The drawbacks could, however, outweigh the advantages. For the sovereign bonds to gain credibility in the international market, the government will need to have a sizeable presence in the market and not merely undertake a token borrowing. Its external debt would therefore increase. Moreover, sovereign bonds are classified as external commercial borrowings (ECBs), on which India has set a ceiling.[4] A foreign-currency bond may carry a lower nominal interest rate than a rupee-denominated government security with the same maturity, but the foreign-currency

[3]This refers to the problem of uninformed participants in a competitive bid, who overbid and thus wind up with overvalued assets. The second bid, according to a corollary to the theory, is more likely to be based on the correct valuation.

[4]The absence of a limit on ECBs in some Southeast Asian countries has been identified as one of the factors that caused the Southeast Asian economic reversals.

bond also entails an exchange-rate risk. Depending on the exchange rate, the sovereign bond could turn out to be much more expensive for the government than local borrowings.

Public-Sector Undertaking Bonds (PSU Bonds)

These are medium- to long-term obligations issued by public-sector corporations. The total value of outstanding PSU bonds as of March 1998 was Rs 654 billion, including Rs 203 billion in government-guaranteed bonds.

Public-sector corporations issue three types of bonds: taxable bonds, tax-free bonds, and government-guaranteed bonds. To allow public-sector units in priority sectors to raise money in the markets at low rates, the government has either guaranteed their bond offerings or made the interest on the bonds tax-free to investors. The PSU can thus raise money from the capital markets at concessional rates.

PSU bonds have a maturity period of three to seven years and an issue size of Rs 100 million to Rs 15 billion. The main investors in PSU bonds are banks, cash-rich corporations, financial institutions, insurance companies, trusts, FIIs, provident funds, mutual funds, NBFCs, HFIs, and a few individuals.

Most PSU bonds are issued through private placement, although public issues are gradually gaining in popularity. Seven public-sector units raised Rs 29 billion through privately placed bonds in 1997–1998; the year before, ten public-sector units raised Rs 33 billion through private placement. In the second half of 1997–1998, the RBI announced that it would allow repurchase agreement (repo) transactions in PSU bonds, held in dematerialized form in a depository, to take place on the recognized exchanges.

Certificates of Deposit

Certificates of deposit (CDs) are short-term, rupee-denominated instruments issued by banks and development finance institutions (DFIs).[5] DFIs issue CDs with a maturity of one to three years. In March 1998, outstanding CDs amounted to Rs 143 billion. To attract more investors in the money market, the RBI, in October 1997, halved the minimum amount that a single investor can invest in CDs, from Rs 1 million to Rs 500,000.

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[5]There are three DFIs in India: the Industrial Development Bank of India (IDBI), the Industrial Credit and Investment Corporation of India (ICICI), and the Industrial Finance Corporation of India (IFCI). DFIs provide term loans for industrial development.

The main investors in CDs are DFIs, cash-rich corporations, insurance companies, mutual funds, NBFCs, HFIs, provident funds, and some individuals. FIIs are not permitted to invest in CDs. NRIs may invest in CDs, but the investments are nontransferable and nonrepatriable.

Earlier, CDs had a mandatory initial holding period of 30 days during which the instrument was rendered illiquid. This lock-in period was shortened to 15 days in April 1998.

Commercial Paper

Indian corporations finance part of their working capital requirements by issuing these short-term negotiable promissory notes, which are denominated in rupees and are unsecured. Issuers must satisfy RBI guidelines relating to creditworthiness to issue commercial paper (CP), and must have the CP rated by at least one rating agency.[6]

The maturity period of CP varies from 91 days to a year. The required minimum issue size is Rs 2.5 million, but the actual size can vary substantially and averages between Rs 20 million and Rs 100 million. The outstanding amount of CP reached a historic high of Rs 52 billion in January 1998, but then dropped sharply to Rs 15 billion in March 1998. FIIs are not permitted to invest in CP.

Corporate Bonds and Debentures

These are medium- to long-term obligations issued by private-sector companies, either through a public issue or more often through private placement, for their medium-term working capital requirements or for project financing. The debentures are usually secured with a first or pari passu charge on assets of the issuing corporation. On the average, the maturity period of debentures ranges from three to seven years. Bonds and debentures with a maturity beyond 18 months must be rated.

Outstanding bonds and debentures in March 1998 totaled an estimated Rs 432 billion. Banks, DFIs, insurance companies, FIIs, mutual funds, NBFCs, and individuals are the main investors. FIIs can purchase only debentures that are listed or that the issuer plans to list.

A listing in the stock market can sometimes provide liquidity to bonds and debentures, although these tend to be illiquid in actual practice and even those that are listed are hardly traded in the secondary market.

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[6]See page 111 for a discussion of rating agencies.

Bonds and debentures that are issued through private placement are often unlisted.

Besides the traditional nonconvertible debentures, corporations also issue equity-linked debentures, which are very popular with all classes of investors, especially individuals. A partly convertible equity-linked debenture, as the name implies, is convertible only in part into equity shares, while a fully convertible equity-linked debenture is convertible in its entirety into equity shares. The conversion price and period are usually specified in the indenture. Conversion into equity is usually automatic, and call and put options are normally not provided. The coupon rate paid on the debentures depends on their convertibility. Fully convertible debentures carry the lowest coupon rate, and nonconvertible debentures the highest coupon rate.

Recently, a variety of instruments such as step-up and step-down bonds, deep-discount bonds, floating-rate bonds, staggered redemption bonds, bullet redemption bonds, and other innovative instruments have been introduced to suit various investor profiles. Deep-discount bonds, which are long-dated (20- to 25-year) bonds issued by DFIs and some large corporations, have proved to be very popular among individual investors who can expect to earn a considerable amount of money from an affordable investment of only about Rs 5,000. The bonds usually come with call and put options exercisable every five years. Interest is compounded and paid with the principal at maturity.

All corporations that issue bonds or debentures through public issue must set up a debenture redemption reserve (DRR), according to Securities and Exchange Board of India (SEBI) guidelines, and transfer a certain amount to the reserve each year out of retained earnings. The reserve must be funded in equal amounts over the life of the debenture so that when it matures at least 50 percent of its redemption value should be covered by the balance in the DRR. The transfer to the DRR is only a book entry. Although dividend-paying capacity is reduced (the reason for the unpopularity of the measure), the corporation is not restricted in how it chooses to invest the DRR. The transfers therefore continue to be invested in the business of the corporation.

ISSUANCE OF DEBT SECURITIES

GOI securities have generally been issued through auction in recent years, but have also been issued at preset interest rates from time to time. Government securities do not follow a fixed schedule of issuance; the

government's large borrowing program, however, compels it to enter the market frequently. Auction details are announced a few days before the issue date. Investors in the securities must quote the yield per year, and bids up to the RBI cut-off yield are accepted.

Every Friday, 91-day T-bills are auctioned for an amount announced in advance by the RBI. Primary dealers and the RBI underwrite the issue and take up whatever is left unsubscribed at the cut-off price decided at the auction. The RBI has announced its intention to move over to uniform price auctions for 91-day T-bills.

An auction in 364-day T-bills is held every other Wednesday. Unlike 91-day T-bills and government securities, the amounts, until recently, were not announced in advance for 364-day as well as 14-day T-bills. In April 1998, however, the RBI decided to announce the amounts for competitive bids in all Treasury bill auctions and to keep noncompetitive bids outside the purview of those amounts. T-bill auctions are done in competitive French-style: those who bid at less than or equal to the cut-off yield get allotments at their bid; higher bidders get pro rata allocations. Successful bidders receive their allotments at their bid price and not at the cut-off price.

Corporate debentures are issued mostly through private placement and therefore do not have to be rated. The mandates are given to merchant bankers, who are in touch with potential investors. The terms and price of the bonds are fixed by agreement among the issuer, the merchant banker, and the potential investors. The rating the issuer receives for its debt issuance affects the pricing of the issue.

Private Placement

Large quantities of PSU and corporate bonds have been issued through private placement, which is an invitation to qualified investors to invest.[7] The maximum number of investors in a private placement used to be unlimited but has recently been set at one hundred.

Private placements have emerged in recent years as an important means by which public- and private-sector companies can raise funds. In 1997–1998, when the market in new issues was generally subdued, banks, finan-

[7]Qualified investors are not defined in the Indian market. A typical investor is expected to ascertain the risk profile of an investment on his own, given the information supplied by the issuer and his own knowledge of the market.

cial institutions, and public- and private-sector companies raised Rs 270 billion, or 85.3 percent of total funds raised, through private placement. The comparative figure for the previous year was Rs 150 billion, or 49.3 percent of the total funds raised.

Privately placed bonds have emerged as the corporate sector's fund-raising instrument of choice. The popularity of private placements can be attributed largely to the lower issuance costs as well as the shorter time required to make an issue, compared with a public issue. Also, private placements can be tailored to the specific needs of large investors. From the issuer's point of view, the most important advantage of private placements is that, unlike public issues, they are not strictly regulated. For example, an issuer of a privately placed bond does not have to set up a DRR.

On the other hand, movements in the volatile short-term money market can affect investor sentiment and pricing in the bond market, particularly private placements, which take at least 15 to 20 days to complete. The book-building or price discovery mechanism has begun to be adopted to get around this problem.

The increasing popularity of private placements has made it necessary to deal with the matter of investor protection. Particularly for retail private placement issues, it would be advisable to augment the disclosure requirements in the memorandum of information and ensure greater transparency in the issue documents. In developed markets, the regulatory authorities set the parameters for private placements, including the maximum number of investors who can participate and the criteria for identifying the investors who are qualified to receive the private placement offer.

With proper regulations and greater transparency, the private placement market can become an integral and important part of the primary market.

RATING OF DEBT INSTRUMENTS

The Securities and Exchange Board of India (SEBI), the watchdog of the Indian capital markets, has recently announced that credit rating will eventually be mandatory for all debt instruments. As of now, only publicly issued debt instruments with a maturity period of at least 18 months must be rated.

The three main rating agencies in India are the Credit Rating Information Services of India Limited (CRISIL), Investment Information and Credit

Rating (ICRA), and Credit Analysis and Research Limited (CARE). These rating agencies are backed by the three DFIs in India: CRISIL by the Industrial Credit and Information Services of India Limited (ICICI), ICRA by the Industrial Finance Corporation of India (IFCI), and CARE by the Industrial Development Bank of India (IDBI). Therefore, DFI issues must be rated by two agencies, under SEBI regulations, for the sake of impartiality. The SEBI, however, has not yet decided how conflicts in agency ratings should be resolved.

SEBI guidelines issued in March 1998 allow corporations with a net capitalization of over Rs 1 billion for the last five years to set up a credit-rating agency. International credit-rating agencies that propose to rate Indian debt instruments, including those that have entered into joint ventures with Indian credit-rating companies or hold an equity stake in such companies, must register with the SEBI.

Credit-rating agencies are regulated more strictly to ensure that they function effectively, especially in view of the failure of some of them to warn investors of the impending financial crisis.

INVESTORS IN DEBT INSTRUMENTS

Besides the lack of variety in debt instruments, the dearth of investors has also deterred the growth of the debt market. The main investors are commercial banks, insurance companies, provident funds, specialized debt funds, NBFCs, HFIs, and some cash-rich corporations. Commercial banks, NBFCs, and HFIs invest in government securities and other debt instruments to comply with their SLR requirements. The lack of liquidity in the market prevents individuals from participating actively.

SLR REQUIREMENTS

Banks, NBFCs, and HFIs are required to invest in government securities and other approved debt instruments and securities[8] to comply with the SLR requirements of the RBI. The SLR, which is the minimum level of investment in approved securities, computed daily, is a percentage of the outstanding net demand and time liabilities (NDTL) of banks. For NBFCs and HFIs, SLR is a percentage of their outstanding public deposits.

[8]Eligible SLR investments are central government securities, Treasury bills, state government securities, and government-guaranteed bonds.

SLR ratios are announced by the RBI together with the monetary and credit policy. Typically, this is done twice a year, in April and October, although recently the guidelines have been revised more frequently. The SLR for commercial banks peaked at 38.5 percent of their outstanding NDTL in 1992–1993 but was gradually reduced until October 1997, when the RBI fixed it at 25 percent.

Still, most commercial banks hold SLR securities far in excess of their requirement—about 12 percent more than the current SLR of 25 percent—to comply with the required capital adequacy and prudential ratios. Investments in government securities have no risk weight unlike some other fixed-income securities which carry a risk weight of 100 percent. Commercial banks in India are required to maintain an 8 percent capital adequacy ratio.

In the case of NBFCs and HFIs, the SLR applies only to public deposits and not to other term liabilities (as is the case with commercial banks). The SLR for NBFCs was set at 12.5 percent on 1 April 1998, and will be raised to 15 percent on 1 April 1999. HFIs, on the other hand, must maintain their SLR at 10 percent, divided equally between government securities and bank deposits, versus the previous allocation of 25 percent for government securities and 75 percent for bank deposits.

MARKING TO THE MARKET

Mark-to-the-market requirements are laid down by the RBI for commercial banks and NBFCs, and by the National Housing Bank (NHB) for HFIs. In 1997–1998, commercial banks were permitted to invest up to 40 percent of their investible funds in a permanent portfolio of government securities, for which no provision for depreciation was required. The remaining 60 percent of their investments were classified as current portfolio which the banks had to value at market prices (mark to the market). The RBI has, however, increased its mark-to-the-market requirements over the years. In 1998–1999, commercial banks have to mark to the market at least 70 percent of their investment in government securities as against the previous 60 percent. For nongovernment paper, there are no explicit mark-to-the-market requirements.

NBFCs and HFIs must take a different mark-to-the-market approach than the commercial banks. They must classify their investments, both equity and debt, into a permanent portfolio and a current portfolio, but the specific percentages are not prescribed. The classification is made at the

time of investment and approved by the board of directors of the company or its authorized representative, taking into account the investment horizon planned by the NBFC or HFI. If the institution intends to sell within the year, it should classify the investment as current portfolio, but if it intends to hold on to the investment for a longer period, it can classify the investment as permanent portfolio. All current investments must be marked to the market; investments in the permanent portfolio, on the other hand, can be carried on the balance sheet at their original cost.

A substantial portion of the government securities portfolio of many commercial banks is made up of low–coupon rate securities acquired before yields on government securities were freed to market determination. Securities reclassified from permanent to current portfolio must have provision for depreciation, since the acquisition cost of older securities significantly exceeds current market prices.

Most of the older commercial banks have adopted the RBI's mark-to-the-market requirements, retaining a permanent portfolio of government securities to reduce their provision for depreciation and show higher profits. But some newer private-sector banks have adopted the more transparent practice of marking to the market their entire portfolio of government securities.

TAX PROVISIONS

Except for tax-free bonds, which some public-sector units have been permitted to issue, and unlike the dividend paid on equity and preference shares, which is tax-exempt to investors,[9] interest on debt instruments is taxable.

The Income Tax Act requires the corporation that pays interest on bonds or debentures to deduct the tax at source. The rate of the tax varies from 10 percent to 20 percent depending on whether the interest is being paid to an individual or to a corporation.

TRADING SYSTEM

Because of the limited number of players, deals in the institutional debt market are normally made directly between the parties concerned or through a broker. Banks rely on the telecommunications network to broker deals and keep track of the market. With the setting up of the whole-

[9]The corporation paying the dividend must, however, pay a 10 percent tax on the total dividend paid.

sale debt market under the National Stock Exchange (NSE) and the requirement to report trades, the system of trading has become more transparent and efficient.

Government securities and T-bills are dematerialized insofar as deals are made and settled on a delivery-versus-payment basis through the subsidiary general ledger (SGL) account at the RBI.

REPO MARKETS

A repo (short for *repurchase agreement*) is a contract to sell a security and to buy it back at a fixed price on an agreed future date. Market participants use repos to meet their short-term liquidity needs or reserve requirements. More importantly, the repo market enables the RBI to conduct open-market operations for monetary control. A repo transaction is for a minimum of three days and a maximum of 14 days.[10] Currently, only central government securities and all T-bills are eligible for repo, and only banks, primary dealers (PDs), and satellite dealers (SDs) may enter into repo transactions. In December 1997, 19 nonbank entities were allowed to enter into reverse repo[11] transactions.

Repos in GOI securities were banned in mid-1992, following the discovery of a huge fraud in the securities market. Repos resumed on a limited scale between the RBI and banks in December 1992, and interbank repos in some new issues of GOI securities were later permitted to attract investors. Currently, repos are permitted in all GOI securities. In the second half of 1997–1998, the RBI announced that it would allow repos in PSU bonds as soon as the regulations relating to forward contracts are amended.

CLEARING AND DEPOSITORY SYSTEM

The passage of the Depositories Act by Parliament in August 1996 paved the way for the establishment of several depositories, which are expected to improve the efficiency of the capital market. The National Securities Depository Limited (NSDL), the first electronic depository for equity and debt securities in India, began operations in October 1996. It is sponsored jointly by IDBI, the Unit Trust of India (UTI), and the NSE.

[10]Some analysts believe that extending repo maturities beyond the 14-day maximum and increasing the number of participants in the market will help provide liquidity to the debt market and eliminate distortions in the yield curve.

[11]A reverse repo is the opposite transaction to a repo. To meet settlement or delivery requirements a trader agrees to buy securities from an investor who, in turn, agrees to repurchase them at a later date.

Dematerialization of equity shares is fairly straightforward since the central government, which imposes stamp duty on the transfer of shares, charges a uniform rate of 0.50 percent of the market value of the shares. Stamp duty on the transfer of bonds and debentures, on the other hand, is a state government issue and is therefore subject to a variety of regimes. For this reason the NSDL has found it difficult to dematerialize these instruments.

The RBI has already introduced the delivery-versus-payment system for government securities through the SGL account. There have also been suggestions to dematerialize money-market instruments such as commercial paper and certificates of deposit, as well as all T-bills and GOI securities, to improve clearing and settlement.

UNDERWRITING OF DEBT INSTRUMENTS

The RBI used to pay a commission to primary dealers (PDs) based on their purchases (including development) of government securities in the primary market. Since June 1997, the RBI has been paying them instead an underwriting fee based on the underwriting amount offered by the PDs on a voluntary basis through competitive bidding.[12] Under this scheme, PDs offer to underwrite at least 50 percent of the issue amount.

Satellite dealers (SDs) form the second tier in the trading and distribution of government securities. They have recently been allowed to underwrite government securities issues, up to a maximum exposure of twice their net worth in each issue. SDs and PDs are moreover allowed to subunderwrite their commitments.

YIELD CURVE DISTORTIONS

The yield curve is distorted at various points. The rates are very low at the short end (91-day T-bills), then rise sharply for securities of two-year maturity, and generally flatten after the five-year maturity. Plotting a benchmark yield curve is therefore difficult. Several factors are responsible for the distortions.

Although 91-day T-bills are auctioned in a predetermined amount, the RBI participates in the auctions and can control interest rates. Large

[12]Bidding for the underwriting fee is done through Dutch-type auction, where all bidders receive a uniform underwriting fee.

noncompetitive bidders, such as state governments and provident funds, also contribute to the distortion in the yield curve when they make large bids without naming their price. To deal with this problem, the RBI in April 1998 said that it would announce the amounts for competitive bids in all T-bill auctions and keep noncompetitive bids beyond the purview of such amounts.

Also until April 1998, the borrowings of the central government under its Ways and Means Advances (WMA) were linked to the 91-day T-bill rate. In 1997–1998 these borrowings were 3 percentage points below the 91-day T-bill cut-off price, exerting tremendous downward pressure on the 91-day T-bill rate. In April, the RBI announced that henceforth the WMA would be linked instead to the bank rate.

The RBI participates as well in primary auctions of GOI securities and can determine the cut-off yield. There is an implicit reluctance to allow the rate for the maximum maturity (ten years) to exceed a stipulated interest rate. Rates for short-term maturities therefore tend to be significantly higher than market.

The small number of players in the market results in lack of liquidity and pricing inefficiencies. Investors do not communicate yield expectations among themselves. These factors also distort the yield curve.

RECENT REFORMS IN THE DEBT MARKET

The following initiatives have recently been taken to develop the debt markets:

- The Securities Trading Corporation of India (STCI) was established in May 1994 to provide an efficient infrastructure for an active secondary market in GOI securities.
- A comprehensive system of PDs was set up in March 1996. Six PDs now offer two-way quotes with bidding commitments in the auction of dated securities as well as 91- and 364-day T-bills. In June 1997, underwriting fees replaced commissions paid to PDs on their primary purchases. In August 1997, the minimum amount that PDs offer to underwrite was raised to 50 percent of the issue amount (from the previous 25 percent). In December 1996, a second-tier dealer system of SDs was introduced to increase the scope of organized dealing and distribution.
- In January 1997, the RBI allowed FIIs to invest in GOI securities either in primary-market auctions or in the secondary market.

- The monetary and credit policy for the first half of 1997–1998 lifted the 5 percent limit on investments by banks in corporate preference shares and debentures/bonds. Investments by banks in corporate debt should eventually increase as a result.
- In the second half of 1997–1998, the RBI announced that it was extending repo facilities to all government securities and that non-bank entities holding SGL accounts with the RBI could enter into reverse repo transactions with banks and primary dealers.
- As the primary market gradually acquired some depth, several innovative instruments were introduced. Among these were zero-coupon bonds, tap stocks, partly paid stocks, and auctioned T-bills convertible into term security. Investors can also improve their cash management by choosing among T-bills of varying maturities, and hedge against inflation by investing in capital indexed bonds.

WHOLESALE DEBT MARKET

Debt instruments are usually listed on the NSE. In 1997–1998, 418 securities were listed in the wholesale debt market (WDM) of the NSE versus the previous year's 307. These debt instruments had a total market capitalization of Rs 3,431 billion, as of March 1998, as against Rs 3,291 billion at the end of March 1997. GOI securities and T-bills accounted for over 90 percent of the total turnover in the wholesale debt market in 1997–1998.

The percentage shares of the various participants in the NSE wholesale debt market in 1996–1997 are given in Table 2.

Table 2 *Participants in the NSE Wholesale Debt Market, 1996–1997*

Participants	% Share
Foreign banks	37
Indian banks	30
Primary dealers	10
Foreign institutional investors, mutual funds, corporations, provident funds, individuals, and overseas corporate bodies	23

Source: RBI Annual Report, 1996–1997

THE DEBT MARKET IN 1997–1998

The debt market made significant strides in 1997–1998. One reason was a very subdued equity market. During the year the net yields on

government securities came down by 132 to 182 basis points across maturities. The fall in yield was greatest for paper with three- and four-year maturities. Ten- year government paper stood at about 12.05 percent at the end of the fiscal year compared with 13.56 percent at the end of the previous fiscal year. The net fall in yield would have been greater had the RBI not taken strict measures in January 1998 to curb the volatility in the forex market. Ten-year government paper, for example, hit a low of 10.8 percent in November 1997 before moving to a high of 13.5 percent in the last week of January 1998 and finally stabilizing at around 12 percent.

The gross central government borrowing amounted to Rs 596 billion in 1997–1998, as against Rs 362 billion raised the previous year. Of the gross borrowing, Rs 162 billion was raised from 364-day T-bills in 1997–1998 as against Rs 82 billion in 1996–1997. The implicit cut-off prices of 364-day T-bills declined from 10.10 percent at the end of March 1997 to 7.98 percent between October 1997 and March 1998. For 91-day T-bills, the implicit yield at cut-off prices ranged from 5.72 percent to 7.33 percent in 1997–1998 as against 6.92 percent to 12.97 percent in 1996–1997.

The aggregate turnover in government securities comprising outright transactions in GOI securities and T-bills reached Rs 15,679 billion in fiscal year 1997–1998 compared with Rs 9,393 billion the previous year. This level of turnover was made possible by the surplus liquidity in the banking system due largely to the low credit offtake during the first nine months of the fiscal year.

More than Rs 2,254 billion was raised in the bond market, comprising both public-sector bonds and corporate bonds, in fiscal year 1997–1998 compared with Rs 1,507 billion the previous year. The 1997–1998 figure excludes large borrowings by the DFIs through negotiated deals and on-tap offerings. PSUs and state-level corporations issued Rs 997 billion worth of bonds during the year; DFIs, Rs 723 billion (excluding negotiated deals and on-tap offerings); and private corporations, Rs 534 billion. The bond issues were made primarily through private placement, and their success was largely due to the subdued equity markets, as mentioned earlier, as well as surplus liquidity during the fiscal year.

Interest rates remained low for most of fiscal 1997–1998, compared with 1996–1997 rates. This encouraged corporations to enter the market. The rates steadily moved downward in the first three quarters of the year

but increased in the fourth quarter in response to the tight money measures introduced by the RBI to control the forex market.

A number of corporations had their CP programs rated during the fiscal year. The outstanding CP of corporations increased significantly to a high of Rs 314 billion for the fortnight that ended 28 February 1998. The minimum period of maturity of CP dropped from three months to 30 days.

The secondary market for corporate paper remained dull and stood at around 5 percent of the total volume in the wholesale debt market, with trading taking place in less than 10 percent of the outstanding corporate securities listed in the market.

Obstacles to the Development of the Fixed-Income Securities Market

SHORTCOMINGS OF THE INDIAN DEBT MARKET

Despite the recent and rapid advance in the debt market, there are some pressing concerns at the institutional as well as the retail level.

Limited Number of Large Investors

The lack of secondary debt market infrastructure is one of the greatest impediments to market liquidity. The NSE may have moved to screen-based trading, yet liquidity in the secondary market remains thin. This is primarily due to the fact that there are only a few large investors in the market. Thus, for the secondary debt market to develop, it must have more players.

Currently the major investors behave as one investor class, holding similar perceptions of the market, such that the market movement is unidirectional. As the India Infrastructure Report of the Rakesh Mohan Committee noted, a market cannot operate efficiently if there are not enough players to provide anonymity and varied opinions.

Limitations on Investments by Insurance Companies and Provident Funds

In developed countries, long-term finance for housing and infrastructure projects is raised from institutional investors, such as insurance companies and provident funds, through the bond markets or through direct pri-

vate placements. In India the insurance business is nationalized. The two insurance companies—the Life Insurance Corporation (LIC) and the General Insurance Corporation (GIC)—are both government-owned and are limited in their choice of investments. The cash-rich provident funds (the Public Provident Fund had funds totaling over Rs 1,800 million in 1997–1998) must similarly follow strict investment guidelines that are not conducive to efficient fund management and yield maximization.[13]

The Malhotra Committee, which was set up in 1994 to review the laws relating to the insurance business, recommended opening up the business to the private sector, among other reforms. The recommendations have not yet been implemented by the government, although there are indications that the government does plan to open up the insurance business to the private sector on a selective basis. Such a move would increase the number of players in the insurance business and attract potential long-term investors in the debt market.

Additionally, reforms are also needed in the investment guidelines and the government must reduce the extent of its preemption of funds to encourage investments by insurance companies and provident funds in private infrastructure bonds and mortgage-backed securities.

Lack of Depth in the Secondary Market

Institutional investors, especially banks, hold a large portion of GOI securities and PSU bonds in excess of their statutory limits and are reluctant to trade in them. The main reason is the substantial decline in the value of the portfolio of old securities, on account of their low coupon rates, such that the investors would have to sell at a huge discount to the face value of their investment. The solution is to increase the level of marking to market of securities gradually to 100 percent.[14] This would draw the commercial banks into the trading arena. Foreign and new private banks that have been marking their securities to market are currently active in the secondary market.

The secondary market in debt securities can also be strengthened by increasing the number of instruments. Currently, there are not enough instruments available for trading. Mortgage-backed securities, when introduced, could help fill the gap.

[13]For details, see page 139.

[14]The level has been increased from 60 percent in fiscal year 1997–1998 to 70 percent in fiscal year 1998–1999.

Trading Time-Lag

The long settlement period for PSU bonds is another major drawback. A PSU bond traded today can be traded again only after about two months or even longer because of the time it takes the public-sector unit to record the transfer of title in its records. This problem can be solved by establishing a depository for all forms of securities.[15] The NSE is dealing with this problem and is negotiating with the NSDL for the dematerialization of PSU bonds.[16]

Lack of Investment in Infrastructure

The undeveloped market for corporate debt hinders private investment in infrastructure development. Besides the central and state governments, which already actively mobilize debt resources, other public-sector entities, such as urban development authorities, municipal corporations, and state government infrastructure corporations, should be allowed to issue bonds to expand the institutional issuer base. This would provide credit enhancement as well as increase market depth. Debt is particularly suitable for funding infrastructure projects with large costs and long gestation periods. A vibrant domestic bond market would also attract inflows of foreign capital.

The India Infrastructure Report submitted by the Rakesh Mohan Committee advocated the use of revenue bonds to finance power, water supply, housing, and other public projects. Repayments on such bonds are linked to the revenue from the assets created.[17]

Problems at the Retail Level

Little has been done to induce retail investors to invest in the debt market. These investors have generally stayed away because of their lack of access to the electronic clearing and settlement systems at the RBI and the lack of liquidity at the retail level. Aside from the safety of their investments, retail investors in debt instruments must be assured of a good return and an easy exit route.

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[15] A depository system now exists for GOI securities in the form of an SGL account with the RBI.

[16] The NSDL, India's first depository, was set up in October 1996 to promote scripless trading. So far, dematerialization has taken place primarily in equity shares.

[17] The other type of municipal bond mentioned in the report is the general obligation bond. Repayments on this bond are linked to the general fiscal strength of the issuer.

The government has approved the establishment of dedicated gilt funds (DGFs) to remedy the problem of low liquidity. DGFs are mutual funds that invest only in gilt securities and have no minimum lock-in period, unlike money market mutual funds (MMMFs). Individual investors buy units in a DGF which in turn makes block investments in GOI securities. DGFs may borrow up to 20 percent of the outstanding value of the fund from the RBI against the collateral of government securities.

But DGFs have their drawbacks despite their attractions. The biggest drawback is that there are no special fiscal concessions for investors other than the tax exemptions generally granted under the Income Tax Act.[18]

The Rakesh Mohan Committee gave these four prerequisites for the development of an active and vibrant bond market:

- A broader institutional investor base;
- Enhanced liquidity in the secondary market through more efficient trading and settlement systems;
- Financial intermediaries to provide credit enhancement and risk insurance; and
- A secondary mortgage market through the securitization of housing loans.

SUGGESTED REFORMS IN THE DEBT MARKET

An active government securities market is a necessary precursor to an integrated debt market. In this context, certain policy initiatives concerning the debt market must be undertaken.

Structural Reforms

A market-driven benchmark rate will allow truer pricing of debt instruments. Debt instruments are now priced arbitrarily and there are no benchmarks for players with a long-term view of the market. A benchmark rate could usher in interest-rate futures and thus provide the debt market with the hedging instrument that it now lacks. It could also help smooth distortions in the yield curve.

The government's ad hoc debt issuance program, often criticized as unstructured and lacking in transparency, makes it difficult to use government debt issues as a benchmark for the corporate debt and other related

[18] See page 125.

markets. The government's borrowing program should therefore follow a regular and well-publicized schedule. The transparency and efficiency of the interbank call and term money markets should also be improved to facilitate the development of benchmark rates.

The delivery-versus-payment settlement system is expected to facilitate settlement by synchronizing the transfer of securities with the cash payment. Such a system is already in place in the government securities market, but depository and settlement systems have yet to become fully operational in the PSU bond market and the private corporate bond market.

Related to this is the need to examine the possibility of rationalizing or even eliminating the stamp duty on the transfer of bonds and debentures, whose application is subject to a variety of state government regimes.

Regulatory Reforms

The bond market should have only one and not many regulators, as is now the case.

The value date for the forward markets should be extended beyond the 14-day maximum allowed under the Securities Contracts (Regulation) Act of 1956 (SCRA).

All the state governments should impose a uniform stamp duty on primary issues of debt securities. Also, the stamp duty on secondary market transactions, which hinders trading in the secondary market, should be eliminated.

The legal framework for loan securitization should be simplified. This would facilitate the issuance of mortgage-backed securities and thereby add depth to the debt markets.

The existence of a when-issued market would allow market participants to trade in a security after the issue is announced but well before its actual listing, thus creating liquidity in new issues before the payment date, building demand for the paper, and aiding in price discovery. But such a market would be possible only if the SCRA, which prohibits short selling, is amended.

Reforms in Debt Instruments

Mutual funds should be allowed to borrow in the interbank money market, within their overall borrowing limits. Provident funds should be permitted to invest either directly in debt instruments or in specific debt funds.

More PDs should be appointed. To strengthen their role, PDs should be allowed to do a repo on a general lien of securities rather than on specific securities. The RBI could provide liquidity support at a lower rate. The tax on interest earned by PDs on government securities should be waived.

No tax should be payable on the interest earned on debt instruments. This matter is the subject of an ongoing dispute fueled by the classification of these instruments as investments and not loans and advances, under the Indian Companies Act of 1956. The Income Tax Act now requires credit institutions[19] to pay a tax of 2 percent on the interest they earn by granting loans and advances. Interest earned on loans to other credit institutions, however, is not taxed.

To attract FIIs, the withholding tax on their investments in debt securities should be removed or rationalized.

The maximum and minimum periods of repo transactions should be liberalized. Further, repos in corporate bonds should be allowed.

In the case of infrastructure projects with long gestation periods, the creation of a DRR in addition to provisions for depreciation places an unnecessary burden on companies especially with regard to their dividend payment policies.

STRIPS (separate trading of registered interest and principal of securities), if introduced, would create demand for a different class of long-term securities among individual investors and provident funds, and make the secondary market more liquid.

DEBT MARKET OPPORTUNITIES AND PROSPECTS

The government is creating a climate conducive to the entry of FIIs into the debt market. They are already permitted to invest in GOI securities and can cover their exposure in the forward exchange market. Next fiscal year, they will be able to trade in T-bills, as the Finance Secretary has indicated.

But banks are still the dominant players in the GOI securities market. The fact that short-term liquidity pressures in the banking system cause more than disproportionate increases in the yield-to-maturity (YTM), albeit only for short periods, reflects the lack of depth in the Indian market. This, however, provides a trading opportunity to participants in

[19] These include banks, DFIs, HFIs, and all types of finance companies.

the market with perceptions and liquidity needs different from those of banks.

In January 1998, the increase in the cash reserve ratio, cut in refinancing, and rise in the bank rate produced a liquidity crunch that led to distress sales as banks panicked and sought to raise cash by unloading their securities. In the week that ended 30 January 1998, GOI securities of one-year maturity were traded with YTMs as high as 32 percent, and 91-day and 364-day T-bills with YTMs of 29 percent.

There has been a concerted effort of late to stimulate the debt market. The sheer increase in the size of the market, which is 4.5 times its size a decade ago, is a clear indicator. As of 31 March 1998, the debt market is estimated to have grown to almost Rs 4,172 billion, while the Indian equity market is about Rs 4,910 billion.

But the debt market has not grown as fast as the equity market, mainly because of the limited number of investors, the lack of variety in debt instruments, and the lack of liquidity. Trading is primarily in GOI securities and mostly between banks, insurance companies, mutual funds, and financial institutions. The NSE is ideally positioned to facilitate the trading of debt instruments, but because there are few players in the market, buyers and sellers negotiate rates off the exchange floor. Besides, while equity investors have reaped the benefits of online trading, the secondary debt market has to settle for rudimentary telephone trading and physical settlement.

Now, more than ever, there is a need to promote an active secondary market in debt instruments. On the one hand, the appetite for resources has increased several times over; on the other hand, there is pressure to globalize the Indian financial system. Secondary market activity can, however, pick up only when there are more players and more instruments, such as mortgage-backed securities, in the market.

It is a fallacy to assume, as some have, that debt markets tend to become more active in a dull equity market. In fact, these two markets are complementary and interdependent, and both are necessary for the development of an efficient financial system. While the debt market holds tremendous opportunities, rapid reforms are needed to increase secondary market liquidity and attract investors with diverse market perceptions and needs. The authorities have identified the problems and the reform process is on track. Only the most crucial factor—implementation—needs to be speeded up.

THE MORTGAGE-BACKED SECURITIES (MBSs) MARKET

The recent past has seen a substantial growth in the number of NBFCs. The RBI report on banking progress in India noted that there were 10,194 NBFCs in India in June 1997. These compete with each other and with HFIs as well as the entire banking system for the limited resources in the market.

Funds for housing are in short supply even as the demand for housing keeps rising. The result has been an acute housing shortage. The creation of specialized HFIs has helped ease the problem to some extent, but the HFIs need continuous funding to match the demand for housing loans. According to the working group on housing for the Ninth Plan,[20] HFIs must mobilize Rs 95 billion between 1997 and 2002. This sum will be very difficult to mobilize from existing sources as the market becomes increasingly crowded and competitive. The HFIs must therefore be provided with continuing access to resources through innovative methods.

Loan securitization is the only long-term solution to the problem of raising resources for HFIs, the main providers of housing loans in the country. Through securitization, HFIs can recycle the amounts they have advanced by raising cash from their loan assets as soon as these are created. Mortgage-backed securities (MBSs) can help increase the depth of the fixed-income debt market while at the same time channeling resources from the capital market to the housing sector. Securitization will also improve the HFIs' capital ratios and give them a healthier balance sheet. Further, HFIs can alter their risk asset profile through securitization by disposing of the riskier assets in their portfolio.

Legal Impediments to Housing Loan Securitization

Securitization of mortgage receivables by creating pass-through certificates or mortgage-backed securities could provide a cheap source of liquidity for mortgage lenders. However, the development of a secondary market for mortgage receivables has been hindered by certain factors such as high rates of stamp duty, a weak legal system particularly with respect to foreclosure laws, and the absence of a liquid secondary debt market, besides the operational, administrative, and marketing issues discussed later on in this study.

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[20]See page 152.

Stamp duty

The ultimate aim of securitization is to sell or transfer the underlying loans to another entity in exchange for cash which the original lender can then use to create a new loan portfolio. Thus, securitization is centered on the assignment of debt: the original lender transfers or assigns to another entity his right to receive funds directly from borrowers.

Except in three states, the stamp duty payable on such assignment of debt is very high.[21] The rate ranges from 0.1 percent in the states of Maharashtra, Tamil Nadu, and Karnataka to 15 percent in the state of West Bengal. This high rate of stamp duty on assignment of debt has made securitization unviable in India.

Section 9 of the Stamp Act of each state empowers the state government to reduce, remit, or compound the stamp duties on any instrument in the public interest. It would be in the public interest to remit the stamp duty on housing loan originators and thus increase the funds available for housing, or at least to reduce the duty so as to make securitization financially viable.

It is important to note here that mortgage securitization documents can be executed in any state in India, with no legal restrictions other than that they must be stamped by the time of their execution, in accordance with the stamp law of the state where the documents are executed. Thus, for securitization, it may be possible for the HFI to execute the documents in a state where it has an office/branch and the stamp duty is low, not necessarily the state where the loans were originated or where the property is located. But if the documents executed in one state are later brought to another state (such as the state where the borrower's property is located, for the institution of foreclosure proceedings), the difference in stamp duty between the two states must be paid.

Stamp laws were devised many decades ago,[22] at a time when the negative impact of high stamp duties on transactions such as asset securitization could not have been foreseen. The stamp duty rates were designed originally for individual one-to-one transactions and are no longer relevant. Margins today are thin and a high stamp duty can only frustrate attempts at asset securitization.

[21] Stamp duty in India is largely a state subject and each state fixes its own rates. Many Indian states impose high rates of stamp duty on most instruments associated with property deals. Stamp duty is levied not only on the sale deed but also on the conveyance and mortgage deeds. Three states have recently reduced to 0.10 percent the rate of stamp duty on assignment of loans.

[22] The Indian Stamp Act of 1899 is one of them.

Since the states each have their own stamp laws and rates of stamp duty, the approach to asset securitization should be standardized by having uniform exemption provisions. One way would be for the state governments to exercise their authority to reduce, remit, or compound duties (Section 9 of the Indian Stamp Act) by issuing notifications under the various Stamp Acts granting exemption from stamp duty. Another way is to amend all stamp laws to include an exemption clause in the article on conveyance.

Foreclosure of mortgages

Section 58 of the Transfer of Property Act (TP Act) provides for various types of mortgages. The two types that are relevant to this study are legal mortgage and equitable mortgage (also called mortgage by deposit of title deeds). A legal mortgage requires a stamped and registered mortgage deed. In view of the high stamp duty involved,[23] HFIs normally do not use this form of mortgage but instead obtain an equitable mortgage.

An equitable mortgage:

- Can be created anywhere in India;
- Requires no stamped or registered mortgage deed or other mortgage document, and therefore no stamp duty at the time the mortgage is created (the loan agreement can be executed on a Rs 20 stamped paper);
- Can be created merely by depositing the title deed with the HFI as loan security; and
- Allows the HFI to sell the mortgaged property through the intervention of the court in case of borrower default.

Effective foreclosure laws are a prerequisite for the successful development of an efficient secondary market in mortgages. In India, however, it is extremely difficult for a mortgage lender to foreclose and enforce the mortgage if the borrower defaults. Given the huge backlog of cases in the civil courts and the complex foreclosure procedure envisaged in the Civil Procedure Code, a suit to recover a housing loan or enforce a mortgage can take from eight to ten years. The lender has to proceed against the defaulting borrower in the civil courts and must first establish its claim

[23]The stamp duty payable on such an instrument could be as high as 10 percent in certain states.

before a court will issue a preliminary decree directing the borrower to pay the lender. If the borrower does not comply, the lender can apply for a final decree directing the sale of the mortgaged property and the payment of the proceeds to the court to pay the borrower's dues. But even after the final decree, enforcement is often arduous, time-consuming, and disproportionately costly. Appeals by the defaulting borrower can further delay and frustrate the lender.

This slow and ineffective adjudication machinery for the recovery of housing loans in default has been a major deterrent to the establishment of a secondary market in mortgages. Since the loans will be sold or transferred without recourse, the buyer or transferee must be assured of easy recovery of dues in case of default by borrowers.

To speed up the adjudication and recovery of debts due to banks and financial institutions, particularly those to whom a debt in excess of Rs 1 million is owed, the Indian Parliament has passed the Recovery Act, which provides for the establishment of special courts. Once these courts are established, they are expected to adjudicate a case within a year or so. For the purposes of the Recovery Act, the category *financial institution* is taken to include a public financial institution as defined in Section 4A of the Companies Act of 1956, as well as other institutions identified as such by the central government by virtue of their business activity. HFIs, if proclaimed by the central government to be financial institutions for the purposes of the Recovery Act, can quickly recover the debts due them through the courts.

Another way to speed up recovery would be to authorize the HFIs under the National Housing Bank Act of 1987 (NHB Act) to recover dues from defaulting borrowers by taking possession of the property mortgaged to them. Such powers are contained in Section 29 of the State Financial Corporations Act of 1951 (SFC Act) and Section 20 of the Industrial Reconstruction Bank of India Act of 1984 (IRBI Act). HFIs could also be empowered to recover the amounts due them as arrears of land revenue along the lines of the provisions of Section 32G of the SFC Act.

Likewise relevant in this regard is the right of private sale without court intervention, which is conferred on the mortgagee under certain circumstances stated in Section 69 of the TP Act. Such a right is available only to a limited extent and has not been granted to HFIs.

Tax Issues Related to Securitization

Tax is a complex area and is in a constant state of flux. Several tax considerations arise in securitization. Sections of the IT Act that could affect securitization are discussed below. Some of the issues merely require clarification from the Central Board of Direct Taxes (CBDT). But until then, it will be difficult for securitization to take off in any meaningful way.

Tax rebate on repayment of housing loans from approved institutions

Under Section 88 of the IT Act, an individual can claim a rebate of 20 percent of the amount of housing loan that is repaid in a year, up to a maximum rebate of Rs 2,000 in a financial year. The rebate can be offset against the income tax payable by the individual. The benefit under the section can, however, be claimed only for loans from approved sources. Besides HFIs, these sources include banks, LIC, NHB, and the borrowers' employers.

This provision has an important bearing on securitization. Although the securitized loan may have been originated by an HFI, income tax authorities may take the view that the lender is not the originating HFI but the ultimate investor in MBSs. If this view prevails, borrowers who have taken out housing loans could unfairly be denied the tax concession unless the MBSs are held by institutions approved under Section 88.

Deduction of interest payable on housing loans

The interest payable by an individual on a housing loan can be claimed as a deduction from his taxable income. This deduction, as provided for in Section 24(1)(vi) of the IT Act, is currently restricted to Rs 30,000 yearly for an owner-occupied house. For a rented house, the entire interest can be offset against the rental income received from the property. If the interest payable on the loan exceeds the rental income, the excess can be offset against the individual's other income. Unlike Section 88, the benefit under Section 24 is not restricted to loans from specified sources. The borrower can therefore continue to avail himself of this benefit even after securitization.

Taxability of transferred income

Under Section 60 of the IT Act, income that is transferred will continue to be taxed as the income of the transferor if the underlying assets that give

rise to the income are not themselves transferred. The provisions of this section must be kept in mind when deciding on the securitization method. A mere transfer of the beneficial interest in housing loans by an HFI to a SPV without the sale of the underlying loans may fall under this provision such that the HFI continues to be taxed for the interest income.

Representative assessees

Section 160 of the IT Act defines *representative assessee* to mean, among others, an appointed trustee who receives or is entitled to receive income for another person. The HFI may constitute itself as a trustee for the investors in respect of the securitized loans and would receive payments on the underlying mortgages on their behalf. The HFI could thus be regarded as a representative assessee under Section 160, and could be taxed for income received on behalf of investors, under Section 161 of the Act.

Section 166 of the IT Act gives income tax authorities the option in such cases to make an assessment under Section 161 either on the representative assessee or directly on the persons beneficially entitled to the income. The CBDT could therefore instruct the income tax authorities to make a direct assessment on the individual investors instead. The CBDT should clarify this matter.

Deduction of tax at source

Under Section 194A of the IT Act, entities other than individuals that pay interest must deduct the tax at source when paying the interest. This section, however, does not apply to income credited or paid to notified institutions including HFIs. Therefore no tax has to be deducted by corporations that pay interest on housing loans to HFIs.

In the case of securitization of corporate loans, the company that received the loan must deduct the tax when paying interest, unless the payment is made to an entity that is exempt from the provisions of the section. Thus, the SPV that purchased the loans from the HFI will have to be notified under Section 194A.

Further, when paying interest to investors, the SPV will have to deduct tax at source irrespective of whether the securitized loans relate to individual borrowers or corporate borrowers. There is no enabling provision under Section 194A under which the SPV that pays interest can be notified for nondeduction of tax. A representation to this effect would have to be made to the government.

Tax treatment of sale of loans

Another issue that needs to be resolved is the tax treatment of the sale of loans. In other words, if the HFI sells the loans at a price higher than their book value, how is the resultant profit taxed—as normal business income (current tax rate: 35 percent) or as capital gains (current tax rate for long-term capital gains: 20 percent)?

HFIs grant housing loans to obtain a fixed income stream from the loans. This is akin to a person who invests in a debt instrument not with a view to profiteering but with the objective of earning a fixed income. In such cases, any profit earned on the sale of the debt instruments is taxed as capital gains and not business income. By the same token, the premium received by an HFI on the sale of its loans should be taxed as capital gains and not business income. This issue must be clarified.

Residential Mortgage Financing

INTRODUCTION

India has traditionally accorded low priority to housing finance in policy formulation compared with other sectors. Housing finance constitutes a small percentage of GDP and, notwithstanding its enormous growth in volume in recent times, still falls short of the country's requirement. The share of mortgage finance in total housing investment is estimated to be about 10 percent, compared with 85 percent in OECD countries (Buckley 1994).

Successive governments have issued pronouncements about the need to provide adequate housing particularly to the less privileged, but concrete action in this regard has not gone beyond the routine allocation of resources to property development agencies of the government. Moreover, government legislation in the 1970s (such as the Urban Land Ceiling Act) neutralized whatever benefits public funding of housing development might have brought about by making housing unaffordable to large sections of the population. To compound the problem, home-buyers until the late 1970s had no access to formal mortgage finance. Although this began to change with the establishment of the Housing Development Finance Corporation Ltd. (HDFC) in the late 1970s, it was not until the late 1980s that more mortgage lenders entered the market.

Yet, despite these hindrances, mortgage financing in India has been growing at an annual rate of about 25 percent, driven largely by the

increase in population and household formation, increased urbanization, and general economic development, as well as the consistent fall in property prices during the last three years (which is making housing more affordable to the middle class).

The state of the housing finance market reflects the shallowness of the financial system in India. Years of financial repression have not only marginalized the formal sector in housing finance but have contributed to high property prices because negative real interest rates favored investment in real assets. Housing finance in India has developed substantially in the past two decades. However, the controlled financial regime still hampers the flow of resources to the sector.

HOUSING SHORTAGE IN INDIA

The number of households in India grew by 92 percent between 1961 and 1991. This growth, which occurred mostly in urban areas, can only accelerate as the economy becomes more developed.

Home-buyers in India are traditionally debt averse and resort to external funding only when it is absolutely necessary. As a result, only about 25 percent of the funding for housing has been through formal sources. The remaining amount has been met with personal savings, sale of assets, or borrowings from informal sources (friends and relatives). With the easier availability of mortgage financing and an increasing acceptance of debt as a means of financing the purchase of a house, the above percentages should grow over time.

The 1991 census placed the total number of households in the country at 153.2 million as compared with 123.4 million in 1981, indicating an annual growth rate of 2.4 percent during the intervening period. During this period, the annual growth rate of households in urban areas was 4 percent, compared with 1.9 percent in rural areas. The higher rate in urban areas is attributed to the high rate of urbanization, industrialization, migration from rural to urban areas, and disintegration of joint families into nuclear units. Table 3 summarizes the number of households and the housing stock from 1971 to 1991.

Between 1961 and 1991, India's population grew at a compounded annual rate of 2.2 percent, while the number of new households grew at almost the same rate (2.4 percent). The available housing stock in usable condition, on the other hand, grew at the rate of 2 percent yearly during this period, such that by 1991, there was a demand-supply gap of

Table 3 *Number of Households and Housing Stock, 1971–1991 (millions)*

Year	Number of Households	Usable Housing Stock	Increase over Previous Decade: Households	Increase over Previous Decade: Housing Stock	Housing Shortage
Total					
1971	97.10	82.50	—	—	14.60
1981	123.40	101.50	26.30	19.00	23.30
1991	153.20	133.80	29.80	32.30	22.90
Rural					
1971	78.00	66.40	—	—	11.60
1981	94.10	77.80	16.10	11.40	16.30
1991	112.50	97.80	18.40	20.00	14.67
Urban					
1971	19.10	16.10	—	—	3.00
1981	29.30	23.70	10.20	7.60	7.00
1991	40.70	36.00	11.40	12.30	8.23

Source: National Building Organization, *Prominent Facts on Housing*, 1997

31 million units, according to a study made by the National Building Organization. About 30 percent of the shortage was in urban areas. The study concluded that the demand for housing across the country was about 4.5 million units yearly whereas the supply was about 3.5 million units yearly. In other words, the housing shortage, which stood at 31 million units in 1991, was increasing by about 1 million units yearly. At the turn of the century, the shortage of housing in India is expected to be around 41 million units.[24]

INCREASING URBANIZATION

Economic development in India has brought increased urbanization in its wake. In 1961 only 18 percent of India's population lived in urban areas. This figure had risen to 25.7 percent by 1991, according to the census that year, and is expected to rise further to about 30.5 percent by the turn of the century and to 36.6 percent by the year 2011.

These figures would indicate that demand for housing will rise more rapidly in urban areas over the next ten to 15 years as debt gains acceptability as a means of financing. However, for a number of reasons indicated later, the supply of housing is unlikely to grow as quickly, unless legislative changes are made.

[24]Reliable statistical data on housing shortages are not easily available and estimates of the projected shortage of housing units in 2001 vary widely from about 20 million units to 41 million units.

CONSTRAINTS ON THE GROWTH OF HOUSING STOCK

During the past three to four decades, the supply of housing stock in urban areas has not grown as rapidly as the demand for houses. This has largely been due to the existence of two laws, the Urban Land Ceiling Act and the Rent Control Act.

Urban Land Ceiling Act

The Urban Land Ceiling Act (ULC), which was introduced in 1976, limits the amount of vacant land that can be held in urban areas,[25] and empowers the government to acquire land in excess of the ceiling, to be used for low-cost housing. The ULC was passed to prevent the concentration of land in urban areas in the hands of a few and to eliminate speculation and profiteering. Unfortunately, the act has not solved the land problem. Landowners have fiercely contested government orders directing the acquisition of land at the price set by the government, and the land available for development has been virtually frozen at the pre-1976 level.

Meanwhile, the demand for housing has increased substantially, and speculation has hiked the price of the limited amount of land that is available for construction. Those who suffer most are the poor. Although successive governments have talked about the need to amend or repeal the ULC, nothing constructive has been done as yet. A proposal to repeal the ULC announced by the Finance Minister during his budget presentation in June 1998 met with opposition in the Parliament, and the matter has been referred to a select parliamentary committee.

Rent Control Act

The Rent Control Act was passed during World War II and has been essentially unchanged since then. Because of it, rents have practically been frozen since 1940 and landlords have found it almost impossible to evict tenants. A large number of properties have thus been put out of circulation, and the incentive to build and maintain rental properties has been sapped.

Rent control in India, like stamp duty, is a matter for the individual states to decide. The Bombay Rent Act, now more than 50 years old, sets the standard rent and offers protection against eviction. It overrides the

[25]In Mumbai and other metropolitan areas the limit is 500 sq m.

general law governing leased premises, which allows the landowner to terminate the tenancy at the end of the contract period or to give notice where no contract period is stipulated.

Real estate prices in Mumbai and Delhi, among the highest in the world, are a significant disincentive to home ownership. Although prices in other major metropolitan centers are lower, the average house price was at one time estimated to be over 20 times the average urban income. (Over the last three to four years, property prices and tax rates have fallen while income levels have increased, making housing more affordable. The cost of a house has dropped from 20 times the annual income of an HDFC borrower to only about 5.5 to 6 times.) In western Europe and North America, house prices are only about six times the average urban income. This distortion in the domestic land market is primarily a function of government regulations (the ULC Act and rent control) as well as a legal system that offers no quick and easy mortgage foreclosure options. These outmoded policies will no doubt be phased out eventually considering the importance of the housing sector to other crucial sectors of the economy. Demand for urban housing, estimated at 30 percent of total housing demand (this percentage is increasing every year), will be greatly boosted by such changes.

EVOLUTION OF HOUSING FINANCE IN INDIA

Housing finance in India has evolved in three distinct phases. The first phase occurred before the 1970s when the government, through its various social schemes for public and low-cost housing, was the sole provider of housing finance. The government implemented its schemes through state housing boards, which were responsible for allocating serviced land and houses to individuals according to the principles of social equity.

The 1970s saw two major developments in housing finance. A public-sector housing company, the Housing and Urban Development Corporation (HUDCO), was established in 1970, and a private-sector company, the Housing Development Finance Corporation (HDFC), was established in 1977. HUDCO was formed to assist and promote housing and urban development programs with government agencies. HDFC pioneered individual lending for home ownership in India based on market-oriented principles. The success of HDFC over the years indicates that housing finance can be a profitable business. Many new companies have thus been induced to venture into the business.

An important event in the 1980s was the formation of the National Housing Bank (NHB) in 1988. One of its objectives was to channel formal-sector resources to housing finance (urban and rural) by promoting a sound, healthy, and cost-effective housing finance system. The role of the NHB is discussed below.

By the end of the 1980s, the government had come to recognize the integral role of housing in the overall improvement of human settlements and economic development. Accordingly, the government, in 1988, drew up a draft National Housing Policy, which was tabled in Parliament. A revised version was tabled in Parliament in 1992 and adopted by both houses of Parliament in August 1994. This document forms the nucleus of the policy framework for the housing sector. It envisages the removal of the legal and regulatory constraints on the creation of a secondary market in housing loans.

Also in the late 1980s, the government directed insurance companies, commercial banks, provident funds, the Unit Trust of India (UTI), and other agencies to invest part of their annual incremental resources in housing. Guidelines issued by the RBI in 1989 have helped secure for the commercial banks a role in the housing sector. They require commercial banks to set aside at least 1.5 percent of their incremental deposits for housing finance, direct or indirect. Most banks have preferred to satisfy their priority-sector lending requirements through indirect financing, which includes the refinancing provided by banks to eligible HFIs, and the subscription by banks to guaranteed bonds and debentures of the NHB or HUDCO.[26] Other banks have set up their own housing finance subsidiaries.

Table 4 indicates the contribution of the banking sector to housing.

Table 4 *Housing Loans Disbursed by Banks, 1991–1996 (Rs million)*

<table>
<tr><th>Bank Group</th><th>1991–92</th><th>1992–93</th><th>1993–94</th><th>1994–95</th><th>1995–96</th></tr>
<tr><td>SBI Group</td><td>576.5</td><td>634.4</td><td>1,035.2</td><td>548.7</td><td>1,436.6</td></tr>
<tr><td>Nationalized Banks</td><td>2,010.8</td><td>1,923.0</td><td>1,968.0</td><td>4,229.3</td><td>4,645.6</td></tr>
<tr><td>Private Banks</td><td>88.7</td><td>82.9</td><td>335.2</td><td rowspan="2">2,708.1</td><td>1,455.5</td></tr>
<tr><td>Foreign Banks</td><td>666.0</td><td>419.9</td><td>914.2</td><td>454.1</td></tr>
<tr><td>Total</td><td>3,342.0</td><td>3,060.2</td><td>4,252.6</td><td>7,486.1</td><td>7,991.8</td></tr>
</table>

Source: NHB, 1996

[26]According to the guidelines, the rate of refinancing provided to HFIs has to be lower than the prime lending rate (PLR) of the bank.

The two insurance companies in India, LIC and the GIC, support housing directly as well as indirectly. LIC is required by law to invest 25 percent of the net increase in its investible funds in socially oriented schemes such as housing, electrification, water supply, sewerage, and road construction. Besides subscribing to bonds of HUDCO and state housing boards/development authorities, LIC grants loans to state governments for their rural housing programs and to state cooperative housing societies and public-sector companies for their employee housing needs.

LIC created its own housing finance subsidiary, LIC Housing Finance (LICHF), in 1989. LICHF is now a publicly listed company and the second largest HFI in the country with a share of about 24 percent of the outstanding housing loans of HFIs as of 31 March 1997. LIC holds 38 percent of LICHF's shares. LIC's investment in the housing sector is summarized in Table 5.

Table 5 *LIC's Investments in the Housing Sector, 1990–1995 (Rs million)*

Receivers	1990–91	1991–92	1992–93	1993–94	1994–95
State governments	1,047.2	1,276.1	1,458.3	1,572.9	1,849.5
Apex coop housing finance societies	1,755.8	1,843.2	1,755.2	1,315.2	1,380.0
Housing boards	—	—	—	—	—
HUDCO	—	—	500.0	500.0	—
Police housing	—	110.0	35.0	36.0	19.0
HDFC	276.0	303.6	334.0	—	—
LICHF	985.2	2,261.9	3,750.0	3,632.8	3,970.0
NHB	1,710.0	2,710.0	2,750.0	2,500.0	—
LIC housing scheme	2,263.0	2,531.4	1,883.3	1,149.8	1,106.7
Total	8,037.2	11,036.2	12,465.8	10,706.7	8,325.2

Source: LIC Annual Report

GIC and its subsidiaries are required to lend to socially oriented sectors, including housing for the economically disadvantaged, using 35 percent of the annual increase in their investible funds. GIC supports housing indirectly by subscribing to bonds and debentures floated by HUDCO, state housing boards, and development authorities. Like LIC, GIC also set up a specialized HFI in 1990. GIC Housing Finance (GICHF), 33 percent of which is owned by GIC, had a share of about 3 percent of the outstanding housing loans of HFIs as of 31 March 1997.

Summarized in Table 6 below is the market share of disbursements by the different HFIs during the financial year that ended March 1998.

Table 6 *HFIs' Market Share of Disbursements, 1997–1998*

HFI	% Share
HDFC	63.0
LICHF	18.4
CanFin Homes	3.1
GICHF	3.0
Dewan Housing	2.1
SBIHF	2.0
Others	8.4

Source: Morgan Stanley research report, 1998

Provident funds play a relatively small but nonetheless important role in housing finance. Unlike banks, they are not required to lend for housing or to invest in housing activities. According to their prescribed investment pattern, provident funds must invest 25 percent of their funds in securities issued by the central government, 15 percent in securities issued by state governments, 40 percent in PSU bonds specifically approved for the purpose, and CDs of banks. The remaining 20 percent can be invested in any of the foregoing ways.

While provident funds do not invest directly in housing, they support housing finance indirectly by providing housing loans to their members, supplementing the resources of the salaried class. Loans are provided to members who meet certain eligibility criteria. Further, a member can withdraw an amount for his housing needs only to the extent of his balance in the provident fund account.

Following the success of HDFC, a number of other specialized HFIs have been set up since the mid-1980s. As mentioned above, some commercial banks have attained their priority-sector lending targets by setting up specialized HFIs on their own or with HDFC or other institutions like the Unit Trust of India (UTI). LIC and GIC have also set up their own HFIs. Twenty-five HFIs have been approved by the NHB, which regulates HFIs. Thirteen of these were set up by commercial banks, and two by insurance companies. As of March 1997 the HFIs had total mortgage loans outstanding of about Rs 107.8 billion. Of this amount, HDFC accounted for a little over 53 percent with outstanding loans of Rs 57.09 billion. LICHF, the second largest HFI, had outstanding loans totaling Rs 26.05 billion.

Table 7 summarizes the outstanding housing loans of HFIs as of 31 March 1998.

Table 7 *Outstanding Housing Loans, as of 31 March 1998 (Rs million)*

Company	Cumulative Sanctions	Cumulative Disbursements	Outstanding Loans
HDFC Ltd.	148,378.80	122,329.90	69,440.75
LIC Housing Finance Ltd.	43,153.50	36,786.40	30,774.03
CanFin Homes Ltd.	10,937.20	9,110.60	5,384.27
Dewan Housing Finance Ltd.	6,750.60	6,121.10	4,444.59
GIC Housing Finance Ltd.	6,798.40	5,341.10	4,026.68
SBI Home Finance Ltd.	9,543.88	7,897.71	3,359.16
Gruh Finance Ltd.	4,397.95	3,555.84	2,648.28
Ind Bank Housing Ltd.	2,407.20	2,218.70	1,492.60
PNB Housing Finance Ltd.	2,609.30	2,228.90	1,155.98
AB Home Finance Ltd.	1,119.26[a]	992.31	817.63
Vysya Bank	1,680.60	1,396.40	1,062.30
BOB Housing Finance Ltd.	1,769.70	1,498.40	1,092.06
Cent Bank Housing Finance Ltd.	1,646.40	1,247.50	798.30
GLFL Housing Finance Ltd.	n.a.[b]	1,000.00[c]	839.18
Hometrust Housing Finance Ltd.	858.44	740.74	597.37
Vijaya Home Loans	n.a.	n.a.	207.71[a]
Weizmann Homes	475.00	411.60	272.00
Livewell Housing Finance Ltd.	151.17[a]	133.55	123.13
VI Bank	257.50	219.00	202.10
Saya Housing Finance Ltd.	n.a.	n.a.	29.53[a]
Mercantile Housing Finance Ltd.	121.73	85.21	75.42

[a]As of 31 March 1997
[b]"n.a." stands for "not available"
[c]Approximate figures
Source: NHB Report

HOUSING DEVELOPMENT FINANCE CORPORATION (HDFC)

An important chapter in the history of housing finance in India was written with the establishment of HDFC in 1977. Up to that time, there was no formal source of housing finance available. HDFC had the backing of ICICI, a leading DFI, plus an initial equity investment from the International Finance Corporation (IFC) and his Highness The Aga Khan. HDFC's initial paid-up capital of Rs 100 million was provided by a little over 10,000 shareholders. Today, after 20 years of operations, HDFC has Rs 1.19 billion in equity capital and about 128,000 shareholders. As of September 1998, HDFC had approved Rs 167 billion in housing loans and disbursed

Rs 137 billion. These loans were for a little over 1.3 million dwelling units in 2,400 towns and cities across the country. HDFC has a network of 45 offices in India and undertakes outreach programs in another 80 locations. Table 8 summarizes HDFC's operational highlights for the last five years.

Table 8 *Operating Highlights of HDFC, 1992–1998 (Rs million)*

	1992–93	1993–94	1994–95	1995–96	1996–97	1997–98
Loan approvals	8,591.4	10,247.7	14,945.5	20,714.6	25,217.0	32,512.7
Cumulative					115,866.1	148,377.8
Loan disbursements	7,198.9	8,890.7	12,116.6	16,835.5	21,007.8	27,536.1
Cumulative					94,793.8	122,329.9
Gross income	4,735.0	6,081.5	7,803.3	9,821.8	12,653.3	14,446.8
Profit after tax	555.5	1,053.6	1,461.5	1,956.9	2,478.9	2,933.6
Shareholders' funds	3,255.8	5,002.8	8,748.5	15,018.2	16,627.5	17,772.4
Share capital						
Equity	686.2	922.4	1,012.4	1,191.1	1,191.1	119.1
Preference shares	—	—	—	500.0	500.0	—
Reserves and surplus	2,569.6	4,080.4	7,736.1	13,327.1	14,936.4	16,581.3
Borrowings						
Deposits	10,293.2	14,581.8	18,532.4	25,126.9	35,021.8	44,237.9
International	7,419.9	8,197.2	8,009.8	7,702.0	7,522.2	8,188.2
Long-term domestic	12,667.6	12,818.4	17,821.4	17,821.4	22,832.6	29,058.4
Housing loans outstanding	25,617.1	30,711.9	37,475.5	47,406.8	57,093.2	69,440.7
Total assets	33,636.6	40,600.2	53,111.9	65,668.5	82,004.1	99,256.9

Source: HDFC balance sheet

NATIONAL HOUSING BANK (NHB)

The NHB, a wholly owned subsidiary of the RBI, was established in 1988 under the National Housing Bank Act of 1987 as an apex bank for housing finance. To promote HFIs at the regional and local levels and to provide financial and other support to such institutions, the NHB:

- issues directions and provides guidelines to HFIs for their sound promotion, management, and growth;
- makes loans and advances and renders other forms of financial assistance to scheduled banks[27] and HFIs;

[27]Scheduled banks are those included in the Second Schedule of the Reserve Bank of India Act and are broadly comparable to member banks in the US. A bank must comply with certain conditions to qualify as a scheduled bank, and receives certain benefits upon being classified as such.

- devises schemes to mobilize resources and extend credit for housing;
- devises schemes for the socially disadvantaged, with subsidy support from the central or state governments or others; and
- subscribes to stocks, shares, bonds, and securities of every other description.

NHB is launching a pilot debt securitization program through which it expects to raise about Rs 1 billion.[28]

SOURCES OF FUNDS FOR HOUSING FINANCE COMPANIES

In the post-1990 liberalization era, three distinct groups of HFIs have emerged: specialized HFIs set up by industrial groups or individual promoters; HFIs set up as subsidiaries of commercial banks; and HFIs set up by insurance companies. The first group of HFIs, besides tapping the market for public deposits, raise their resources mainly through NHB refinancing. The parent banks provide much of the resources of the second group of HFIs, and the insurance companies have traditionally provided funds to their own subsidiaries. For a number of reasons discussed later in this study, securitization of housing loans has not yet taken off in India.

The resource pattern of the various HFIs in India is summarized in Table 9.

Funding Through Public Deposits

Public deposits are an important source of funding for the corporate sector in India. Banks and finance companies, as well as most corporate bodies, accept term deposits from the public, but only banks accept savings deposits as well. The Reserve Bank of India regulates the acceptance of public deposits and imposes conditions relating to the amount of deposits that can be accepted, the minimum and maximum term of the deposits, and the maximum rate of interest. HFI deposits, on the other hand, are regulated by the NHB.

The broad terms and conditions for the acceptance of deposits by HFIs are as follows:

- A deposit can be accepted for a minimum of 12 months and a maximum of 84 months.

[28] See page 157 for details of the program.

Table 9 *Resource Pattern of Housing Finance Institutions (percentage of total funds)*

	Age	Year	Insurance	NHB	UTI	Banks	LOC
HDFC	20	1997	9.40	0.40	0.00	8.40	0.0
		1996	7.50	0.00	0.00	10.70	0.0
Home Trust	2	1996	0.00	0.00	0.00	7.64	65.1
PNB	7	1995	0.00	30.50	0.00	0.41	0.0
DHFL	12	1996	0.00	55.10	0.00	4.86	0.0
		1995	0.00	55.20	0.00	6.00	0.0
HUDCO	26	1996	12.40	7.03	5.00	7.12	0.0
		1995	10.60	8.21	7.30	4.58	0.0
Centbank	5	1996	0.00	16.40	0.00	0.00	0.0
		1995	0.00	14.40	0.00	0.00	0.0
Gruh	10	1996	0.00	29.50	5.50	27.87	0.0
		1995	0.00	31.70	7.60	21.73	0.0
Vijaya	6	1996	0.00	8.59	0.00	18.88	0.0
		1995	0.00	15.50	0.00	26.96	0.0
SBI	8	1996	0.00	6.27	0.00	26.32	0.0
		1995	0.00	8.38	0.00	24.98	0.0
GIC	6	1996	84.11	0.00	0.00	15.89	0.0
		1995	100.00	0.00	0.00	0.00	0.0
LIC	7	1996	92.76	7.17	0.00	0.00	0.0
		1995	90.19	9.74	0.00	0.00	0.0
Canfin	9	1996	0.00	25.90	2.35	14.88	0.0
		1995	0.00	24.90	3.72	13.92	0.0

Sources: Annual reports

- The maximum amount of deposits that can be raised by HFIs is linked to the net owned funds of the HFI as follows:

Net Owned Funds of HFI (Rs million)	Deposits as a Multiple of Net Owned Funds
Up to 100	10 times
Over 100 and up to 200	12.5 times
Over 200	15 times

- HFIs pay a maximum of 15 percent interest yearly on deposits. Interest is computed monthly, quarterly, or semiannually. More frequent compounding of interest would effectively increase the cost of the deposit to the HFI. Some NBFCs used to offer interest on deposits at the peak coupon rate of 15 percent with daily compounding of interest. The actual rate of interest offered by an HFI varies from 11.5 percent (for deposits of at least three years) in the case of HDFC, to 15 percent in some other cases.

Term Loans	Debentures	Bonds	Government	Foreign	Public Deposits	Other Deposits
0.0 0.0	0.00 0.00	4.4 4.0	0.00 0.00	10.00 14.30	53.06 50.00	12.60 13.20
9.2	0.00	0.0	0.00	0.00	8.13	9.96
0.2	0.00	0.0	0.00	0.00	68.90	0.00
0.0 0.0	0.00 0.00	0.0 0.0	0.00 0.00	0.00 0.00	40.00 38.80	0.00 0.00
0.0 0.0	16.90 17.80	46.1 43.5	0.19 1.23	2.28 2.09	2.98 5.73	0.00 0.00
0.0 0.0	0.00 0.00	0.0 0.0	0.00 0.00	0.00 0.00	83.65 85.59	0.00 0.00
0.0 0.0	0.00 7.96	0.0 0.0	1.05 1.18	0.00 0.00	36.13 29.77	0.00 0.00
0.0 0.0	0.00 0.00	0.0 0.0	0.00 0.00	0.00 0.00	72.53 57.49	0.00 0.00
0.0 0.0	0.00 0.00	0.0 0.0	0.00 0.00	0.00 0.00	58.40 52.01	9.01 14.60
0.0 0.0	0.00 0.00	0.0 0.0	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
0.0 0.0	0.00 0.00	0.0 0.0	0.00 0.00	0.00 0.00	0.70 0.70	0.00 0.00
0.0 0.0	2.19 2.48	0.0 0.0	0.00 0.00	0.00 0.00	54.70 54.97	0.00 0.00

- The brokerage fee that can be paid by an HFI to agents (who mobilize deposits) is capped at 2 percent.
- The following rules apply to prepayment of deposits:

Period	Interest Rate
1 month to less than 3 months	No prepayment allowed
3 months to less than 6 months	No interest
6 months to less than 12 months	Maximum of 10% yearly
12 months and over	1% less than applicable rate for period of deposit

- The depositor may borrow from the HFI three months after the date of deposit. The maximum loanable amount is 75 percent of total deposits. HFIs must charge interest on loans at a rate that is 2 percent higher than the interest rate on deposits.
- HFIs must maintain at least 10 percent of their outstanding deposits in liquid assets. This is expected to be increased to 12.5 percent.

LENDING RATES

Until 1994, the NHB regulated the pricing of housing loans, applying a differential interest-rate policy based on the size of the loan. HFIs are now free to charge market interest rates on all loans.

Interest rates in India have not yet found their market equilibrium. Variable rates of interest on housing loans are only just starting to be applied selectively. A suitable reference rate has yet to emerge. The only real choice available to mortgage borrowers today, therefore, is to borrow on a fixed-rate basis. There are tiers of interest rates based on the amount borrowed. The maximum loan tenure is usually 15 years, although a few HFIs have started offering loans of longer tenure at slightly higher rates. GICHF charges an additional 0.5 percent yearly for such loans. However, given the debt aversion of Indian borrowers, there is not enough demand for loans beyond 15 years. Table 10 summarizes the interest rates on housing loans charged by various HFIs.

Until 1989, HFI lending rates hardly changed. In fact, HDFC which was the only source of housing loans to individuals for a major part of the decade, charged the same interest rates on its loans from 1981 to 1989. Since 1990, however, interest rates have been very volatile and have shown a tendency to rise very rapidly and steeply.

Table 10 *Housing Loan Interest Rates Charged by HFIs (percentage per year)*

Loan Amount	HDFC	LICHF[a]	GICHF[b]	Dewan	SBI Home
Up to 10,000	12.5	12.0	12.0	12.0	14.0
10,001–25,000	14.0	12.0	12.0	12.0	14.0
25,001–50,000	14.0	14.0	15.0	14.5	14.0
50,001–100,000	14.0	14.0	15.0	14.5	14.0
100,001–200,000	14.0	14.0	15.0	14.5	14.0
200,001–300,000	14.5	14.5	15.0	15.0	14.5
300,001–500,000	14.5	14.5	15.0	15.0	14.5
500,001–1,000,000	15.5	15.5	16.0	16.0	15.0
1,000,001–1,500,000	15.5	15.5	16.5		15.5
1,500,001–2,000,000	15.5	15.5	16.5		15.5
2,000,001–2,500,000	15.5	15.5	16.5		15.5
2,500,001–5,000,000	15.5	15.5	16.5		
Frequency (A=Annual; M=Monthly)	A	A	M	A	A

[a]These rates are applicable with collateral security of a life insurance policy. The Griha Lakshmi scheme does not require an insurance policy, but the rates charged are 1 percent higher. Loans are only between Rs 100,000 and Rs 500,000.
[b]For loans of over 15 years, an additional 0.5 percent is added to the rate of interest charged yearly.

FUNDING COSTS

A major crisis in the Indian economy triggered the reform process in 1991. During the next few years, it became extremely difficult to raise resources at competitive rates. HFIs, together with the traditional development institutions, began raising their own funds in the market through public deposits, bonds, and debentures. In mid-1991, HDFC launched its highly successful program to increase its retail deposits. Its deposit levels rose from Rs 6.03 billion in March 1991 to over Rs 50 billion in September 1998. From a depositor base of barely 10,000 during this period, it now has over one million depositors.

HFIs, depending on their financial standing, pay 12.5–15 percent interest yearly on deposits of at least three years.

MANAGEMENT OF INTEREST-RATE RISK AND MATURITY MISMATCHES

The deregulation of interest rates has made it imperative for HFIs to manage interest-rate risk. This risk arises out of the possibility that interest rates by a later date will be different from those at which loan transactions were contracted. Since HFIs generally lend at fixed rates of interest, future changes in interest rates will affect their performance unless their assets

GRUH	Home Trust	Canfin Home	PNB HF	BOB HF	Ind Bank HF	AB Homes
14.0		14.0	14.50	12.25	15.0	14.0
14.0	13.0	14.0	14.50	12.25	15.0	14.0
14.0	13.0	14.0	14.50	12.25	15.0	14.0
14.0	14.5	14.0	14.50	14.25	15.0	14.0
14.0	14.5	14.0	14.50	14.25	15.0	14.0
15.0	14.5	15.0	14.50	14.25	15.0	14.5
15.0	14.5	15.0	14.50	14.25	15.0	14.5
16.0	15.0	15.5	15.25	15.50	15.5	15.5
16.0	17.5	15.5		15.50	16.0	16.0
16.0	17.5	15.5		16.00	16.0	16.0
16.0	17.5	15.5		16.00	16.0	16.0
A	A	A		A		

and liabilities are evenly matched in tenure. HFIs generally try to offset this risk by including a clause in their loan agreements that entitles them to vary their interest rates as market conditions change. But no HFI has taken advantage of this provision for existing loans. Changes in interest rates have always been made prospectively for new loans. In a regime of falling interest rates, a prepayment charge is usually collected to discourage prepayment by borrowers.

A major problem associated with fixed-rate lending is asset-liability mismatch. While HFIs provide long-term loans of up to 15 years to their customers, they are often forced to source their funds for much shorter periods, creating a maturity mismatch. Except for HDFC, which has raised a substantial amount of long-term funding both domestically as well as from international sources, HFIs generally fund their lending programs with deposits that average three to four years in maturity. To lessen the maturity mismatch, HFIs make short-term loans to developers and the corporate sector.

LOW DEPENDENCE ON HOUSING LOANS

India's housing finance industry has grown by an average of 25 percent per year over the last five years and is expected to experience more or less similar growth over the next few years. But the industry is still in relative infancy. Among home-buyers, who have historically had a low level of dependence on the formal sector, only about 25–30 percent fund their house purchases through mortgages, which cover only about 40–50 percent of the purchase price. The balance comes from informal sources such as household savings, "friendly loans," sale of property, land, ornaments, or other assets, as well as from housing loans extended by some private- and public-sector employers, often at concessional rates of interest. Mortgages are typically availed of only after all other financing options have been exhausted.

Although this practice has changed somewhat in recent times, the average Indian continues to be debt averse and has been discouraged from borrowing by the high monthly repayment outflow relative to income. The typical average loan size is currently about Rs 250,000 constituting between 40 percent and 50 percent of the cost of the property. Some HFIs have begun to provide loans of up to Rs 5 million, but loans of over Rs 1 million are very rare.

There is much greater awareness of financing options now compared with a few years ago. The aversion to borrowing is also gradually dimin-

ishing. An increasing number have started to purchase automobiles and white goods with loans.

FISCAL INCENTIVES FOR HOUSING

The government, over the years, has granted a number of fiscal concessions for housing with the objective of strengthening the resource base of HFIs and encouraging home ownership in India. Any loan securitization proposal must be based on an understanding of these fiscal incentives.

Fiscal Concessions to Encourage Home Ownership

Three incentives have been provided under the Income Tax Act (IT Act) to encourage home ownership. These are:

- Deductibility of interest on housing loans;
- Tax rebate on repayment of housing loans from approved institutions; and
- Exemption from capital gains tax for housing investments.

Deductibility of interest on housing loans

Section 24(1)(vi) of the IT Act allows individuals to deduct from taxable income the interest payable on a loan for an owner-occupied house up to a maximum of Rs 30,000 per year. The interest can be offset against other income, in lieu of rental income. For property that is rented out, the entire interest payable on the loan (with no monetary limit) can be deducted from rental income. If the interest payable on the loan exceeds the rental income, the excess can be offset against other income.

Starting financial year 1998–1999, the interest payable on housing loans can also be offset against employees' salaries when computing the amount of tax to be deducted at source.

The tax saving for owner-occupied property, at the maximum marginal tax rate of 30 percent, would therefore be Rs 9,000 yearly. Salaried employees would thus have Rs 750 more in their net take-home pay each month.

Tax rebate on repayment of housing loans from approved institutions

Section 88 of the IT Act authorizes individuals to claim a rebate of 20 percent of the portion of their housing loans that they repay in a year, up to a maximum repayment of Rs 10,000 in a financial year. The rebate can

be applied to the income tax payable by the individual. But the benefit is limited to housing loans from approved sources: HFIs, banks, LIC, NHB, and the borrowers' employers.

This provision has an important bearing on securitization, where the ultimate investor in the mortgage-backed security may be deemed under the IT Act to be the lender, although the loan was originated by an HFI. Therefore, unless a clarification is issued, borrowers who have taken out housing loans may not be able to take advantage of the tax concession.

Exemption from capital gains tax for housing investments

Section 54 of the IT Act exempts from capital gains tax those individuals who use the net proceeds from the sale of a capital asset other than a house to buy or build a house. To be eligible for the benefit, the individual must not own a house at the time he sells the capital asset. Under Section 54(1), capital gains from the sale of a house, if used to buy another house, is exempt from tax.

Fiscal Concessions Provided to HFIs

Deductibility of profits transferred to special reserves

Section 36(1)(viii) of the IT Act allows CBDT-approved HFIs to transfer to a special reserve 40 percent of their profits from the business of providing long-term housing finance and to claim this amount as a deduction from taxable income.[29] The amount transferred should not be more than twice the paid-up capital and the balance in general reserves of the HFI. This benefit substantially reduces HFIs' tax liability for their housing finance business, to an effective marginal tax rate of 21 percent as against the corporate tax rate of 35 percent (for financial year 1997–1998).

Fiscal Concessions to Facilitate HFI Resource Mobilization

Deposits from charitable trusts

Section 11(5) of the IT Act allows charitable trusts to invest in government savings certificates, bank deposits, UTI units, central and state government securities, deposits placed with public-sector companies, depos-

[29]Long-term finance for this purpose refers to loans and advances to be repaid over a period of at least five years.

its and bonds of financial corporations providing long-term finance for industrial development, and deposits and bonds of approved HFIs under Section 36(1)(viii) of the act, among other investments.

Tax-exempt interest on deposits with HFIs

Section 80L of the IT Act provides for an overall deduction of up to Rs 12,000 per year for dividends or interest received by individuals on their investments in financial instruments. Included here are interest on bank deposits, interest on government securities, dividends paid by mutual funds, and interest on deposits with approved HFIs.

Higher limit for nondeduction of tax at source

Corporations find it difficult to generate more deposits because of the requirement, under Section 194A of the IT Act, to deduct tax at source when paying interest on deposits placed with them. For deposits placed by individuals, tax must be deducted at source if the amount of interest exceeds Rs 2,500 in a financial year. Approved HFIs, on the other hand, do not have to deduct tax at source on interest payment of up to Rs 10,000 per branch in a financial year.

FLOW OF FUNDS TO THE HOUSING SECTOR

Funding for the housing sector used to come directly from government sources—budget allocation, financing from government agencies, and direct credit from banks and financial institutions. In the last ten years or so, however, many HFIs have started raising a part of their funding requirements through retail deposits along the lines of building societies in the UK.

The contribution of the government to housing finance has shrunk from 23 percent to 9 percent in the last four decades. The flow of funds to the housing sector during the eighth five-year plan is given in Table 11.

Table 12 shows the projected flow of funds from the formal sector during the period 1997–2002, as estimated by the Working Group on Housing for the Ninth Plan. According to the table, HFIs are expected to mobilize Rs 95 billion during this five-year period.

LOAN REFINANCING BY NHB

Refinancing of housing loans is at a nascent stage in India. NHB, which also regulates refinancing, refinances loans of up to Rs 1 million that are

Table 11 *Estimated Flow of Funds to the Housing Sector, 1992–1997 (Rs million)*

	Estimated Amount	Percentage Share
Central and state governments	50,000[a]	22.15
Life Insurance Corporation (LIC)	45,000	19.94
National Housing Bank	18,000	7.98
General Insurance Corporation (GIC)	7,000	3.10
Scheduled commercial banks	27,700	12.30
Provident/Pension funds	9,000	3.99
Housing finance institutions	45,000	19.94
Mortgage securitization	0	0.00
Others	12,000	5.32
UTI	10,500	4.65
Home loan accounts	1,500	0.70
Total	225,700	

[a]Excluding expenditures outside the plan
Source: Working Group on Housing for the Eighth Plan

Table 12 *Projected Flow of Funds for Housing from the Formal Sector, 1997–2002 (Rs million)*

Institution	Flow of Funds	% Share
Plan and nonplan outlay of the central government	60,000	11.54
Plan and nonplan outlay of state governments	60,000	11.54
Employers' house construction plans	20,000	3.85
Life Insurance Corporation (LIC)	45,000	8.65
General Insurance Corporation (GIC)	10,000	1.92
Scheduled commercial banks	55,000	10.58
Provident funds	50,000	9.62
Housing finance institutions	95,000	18.27
HUDCO	25,000	4.81
National Housing Bank	30,000	5.77
Securitization	25,000	4.81
Cooperatives	30,000	5.77
Others	15,000	10.70
Total	520,000	

Source: Working Group on Housing for the Ninth Plan

granted by commercial banks and HFIs to individual borrowers. It charges 11 percent interest for loans of up to Rs 50,000 and 15 percent for loans beyond that amount. However, the total amount of refinancing provided

to an HFI cannot exceed 25 percent of NHB's net owned funds. As of June 1997, NHB had refinanced Rs 31.03 billion worth of loans. Table 13 gives a breakdown of the refinancing granted by NHB to various agencies in 1994–1997.

Table 13 *Agency Refinancing Disbursed by NHB, 1994–1997 (Rs million)*

Agency	1994–1995	1995–1996	1996–1997	Cumulative, as of 30/6/97
Scheduled banks	3.72	21.10	5.76	190.37
Cooperative sector institutions	38.56	63.57	111.90	437.19
Housing finance institutions	275.55	248.38	327.69	2,475.29
Total	317.83	333.05	445.35	3,102.85

Source: NHB

Securitization is the most talked-about alternative to refinancing housing loans. A pilot securitization program planned for the first half of 1999 is discussed in the next section.

NEED FOR A DYNAMIC HOUSING FINANCE SYSTEM

Increasing attention has focused in the last few years on developing a dynamic housing finance system in the country. It is believed that such a system must be present to increase the level of household savings. HFIs now serve only a limited number of households at a high cost, and the fragmented housing finance services within the informal sector are unable to mobilize domestic savings. Also, housing investment has strong macroeconomic linkages and is directly tied to the internal efficiency and productivity of cities.

A host of suggestions have been made to impart dynamism to the housing finance sector. These include tapping the capital market by securitizing housing loans, strengthening and promoting contractual saving schemes, expanding the fiscal incentive base, and leveling the playing field between HFIs and other financing institutions. Through these initiatives, the HFIs could take advantage of the vibrant Indian capital market and create conditions conducive to the development of the secondary mortgage market. HFIs then need not depend on budgetary allocations and the allocated credit system.

Several factors have, however, stalled the development of a dynamic housing finance system in the country. These include the following, among others:

- HFIs form the core of the housing finance system in the country. Except for HDFC, HFIs have by and large depended for their resources on the banking system, the insurance companies, and NHB refinancing. They have not tapped either the retail market (domestic savings) or the capital market in a big way to augment and strengthen their resource base. Formal financial intermediaries thus continue to finance a very small share of housing investments.
- HFIs have so far been poorly motivated to seek capital market resources, given the historically high levels of allocated credit.
- There are no innovative financing mechanisms to link formal and informal sources of financing, particularly for poor households. On the grounds of low repayment capacity, increased frequency of late payments and defaults, difficulty in establishing clear title, lack of a credit bureau, and inadequate foreclosure laws, very little attempt has been made to improve access to housing finance for low-income households. Subsidized credit is still viewed as the principal instrument for reaching out to poorer households.
- Housing supply is heavily distorted by onerous legislation and time-consuming procedures. Local authorities impose their own municipal and development rules. Urban land policies restrict the supply of available land for housing, and rent control legislation protects existing tenants at the expense of future potential tenants, effectively crippling the rental market. New housing cannot develop while at the same time the housing stock remains unutilized for fear of being dispossessed, worsening the inelasticity of supply.

In this context, the need to develop a dynamic housing finance system must be considered once again. As pointed out earlier, India's housing finance requirement is very large. Providing finance on this scale—an estimated US$8–10 billion is needed annually to eliminate the housing deficit and meet the incremental demand—will mean using 10–12 percent of annual domestic savings for several years. If other related investments such as land development and essential offsite infrastructure were taken into account, the financial requirements would be even larger overall.

Meeting financial needs of such a scale will be a stupendous task, particularly because, as the process of reform progresses, the financial system will increasingly operate without any form of preferential or

dedicated credit and without any interference with the interest-rate structure. HFIs must then compete for resources with other equally demanding sectors. To be viable in this environment, HFIs will need strong marketing and other devices to tap domestic savings and the vibrant capital market.

FUTURE STRATEGY

The future strategy for housing finance must be based on two assumptions:

- HFIs will continue to be the principal providers of housing finance. Mortgages must, however, be made "salable" through a series of complementary actions, such as standardizing and tightening up foreclosure laws.
- Housing will be affordable. Affordability would mean not only a reasonable cost of finance but a complete overhaul of land and rental regulations and the stamp duty on property transfers.

In all likelihood, housing finance in India would undergo a second revolution if commercial banks were to gradually emerge as major mortgage lenders. (This has begun to happen very recently.) But HFIs will continue to play an important role for a number of years.

Housing finance in India is the domain of specialized lenders. Except for HDFC, most of the large HFIs are backed either by an insurance company or by a commercial bank, and have historically depended, in varying degrees, on their parent companies for concessional funding. Increasing competition from domestic as well as foreign players may, however, preclude concessional funding by the parent companies to their subsidiaries before very long.

The deregulation and liberalization of the financial markets have required the housing finance system to evolve and adjust. Its flexibility and responsiveness will determine how quickly it is able to adjust.

Asset Securitization

NEED FOR SECURITIZATION IN INDIA

Housing finance is extremely important even in the West; in India it is indispensable. Because the housing shortage is so massive and individuals cannot afford to buy a house merely with their savings, funds for housing finance must be continuously available. Institutions that speed up building

activity by providing funds for the purchase of houses must therefore be created and strengthened. The loans should also be made affordable.

The housing finance system must ultimately be self-supporting. To this end, there should be a secondary market where individuals with surplus investible funds can buy the mortgages of HFIs. Banks, the Unit Trust of India, mutual funds, and the corporate sector could be the initial targets for the MBSs thus created. With some changes in the pattern of prescribed investments, insurance companies and provident funds could also be included. In the long run, however, MBSs must be targeted at retail investors.

HFIs can convert their primary assets, mortgages, into liquid assets to raise funds that they can invest in new mortgage assets. Their ability to convert the assets into liquid funds will depend on the appetite for fixed-income securities in the market. A strategy for developing and systematically promoting such a market along US lines is therefore critical. In recent times, the development of a secondary mortgage market has begun to receive increasing attention in India.

The US originated the use of securitization as a financing technique about 25 years ago. Since then, the US markets have grown rapidly and have reached a high degree of sophistication. US investors can now choose from a wide array of securitized debt instruments to suit their specific risk and maturity preferences. As of September 1991, more than 40 percent (US$1.2 trillion) of all US mortgages had been securitized. At the end of 1996, 81.7 percent of all US mortgages (US$4.2 trillion) had been securitized. In many other countries, securitization is in various stages of development.

SECURITIZATION ATTEMPTS

Securitization is a recent innovation in India. Mortgage securitization, however, has not yet been attempted in the country. A memorandum of understanding signed in 1992 by HDFC and Infrastructure Leasing and Financial Services (IL&FS) called for IL&FS to sell some of the loans extended by HDFC to institutional investors. HDFC was to retain its agency role in the administration of the loans. But this deal fell through because of certain legal complexities.

In the last three years, Citibank has structured various nonmortgage securitization transactions involving its auto loan portfolio, the bills portfolio of ICICI, hire-purchase receivables of Tata Engineering and Locomo-

tive Company (TELCO), and receivables of DLF Universal Ltd. from the sale of residential properties on deferred payment. Vishwa Priya Financial Services and Securities Ltd. introduced retail asset securitization, where a large corpus of assets such as bills of exchange was broken into many small units to be subscribed by investors.

Past attempts at securitization have not been very successful. For one, very few securitization transactions have taken place. Also, only one or two institutional investors have subscribed to the instruments created through securitization. There is thus no secondary market in the instruments.

NHB'S PROPOSED PILOT SECURITIZATION PROGRAM

To promote securitization of housing loans, NHB will be launching a pilot debt securitization program in the first half of 1999 from which it expects to raise about Rs 1 billion. NHB proposes to play the role of a special-purpose vehicle (SPV) for the issue. Securitization will take place through pass-through certificates.

NHB will purchase the loans of four HFIs: about Rs 400–500 million worth from HDFC, Rs 200–250 million each from Canfin Homes and LICHF, and Rs 100 million from Dewan Housing. It will offer the pass-through certificates to all types of investors, but particularly to banks, financial institutions, and mutual funds. Since HFIs are perceived to vary in loan portfolio quality, NHB proposes to market the HFI portfolios individually.

CASE FOR DEVELOPING A SECONDARY MORTGAGE MARKET IN INDIA

Besides broadening the resource base of HFIs, there are several other benefits to be gained from securitizing housing loans and developing a secondary market. Securitization will release reserves to enable the HFIs selling loans to meet their capital adequacy requirements. It will reduce the liquidity risks of issuers arising out of a maturity or duration mismatch between their shorter-term liabilities and longer-term loan assets (housing loans by their very nature are long term)—an area of concern for HFIs in India. Securitization will also open up the mortgage market to lenders with relatively little capital. In this way it will increase the amount of funds available for housing loans, allow risk exposure to be shared by a much broader range of capital market participants instead of

being concentrated in the housing finance system, and thus reduce the cost of funding to HFIs. In the long run, securitization will help standardize loan documents as well as the credit and legal appraisal procedures of HFIs, and facilitate the integration of housing finance with the overall capital markets.

Broadening the HFI Resource Base

The housing sector in India is vastly undercapitalized. The formal sector accounts for only about 25 percent of the total investment in the sector. The availability of funds for housing is far outstripped by the demand for housing; the housing shortage has grown at an alarming rate as a result.

The working group on housing finance for the ninth five-year plan (1997–2002) has recommended an outlay of Rs 520 billion, compared with Rs 226 billion for the eighth five-year plan (1992–1997). This is a huge outlay by any standard and represents an increase of more than 100 percent in the financing provided by the formal sector.

Both commercial banks and HFIs provide loans for housing. For commercial banks this is only one of their many activities and traditionally has not been a preferred activity. Formal housing finance is therefore largely dependent on HFIs. Over the past few years there has been a notable increase in the number of HFIs in the private as well as the public sector. These HFIs compete with each other, with the NBFCs, and with the banks for the limited resources in the system. Resource mobilization has consequently become a key issue for market-oriented HFIs.

The resource base of HFIs must be substantially enhanced. They must be able to tap the capital market to expand their mortgage operations, but their ability to do so will depend on several factors including the extent to which the housing finance system is integrated into the broader financial system. The same economic conditions that influence capital market developments also determine the developments in the financial system of which housing finance is a part.

Complying with Capital Adequacy Requirements

Except for HDFC, LICHF, and GICHF, most of the 26 HFIs that have been approved by NHB are finding it difficult to meet the capital adequacy norms set by the NHB. These norms require HFIs to maintain a capital adequacy ratio of 8 percent, at least half of which should be tier-1

capital.[30] Interestingly, contrary to the BIS norms, housing loans in India are accorded a risk weight factor of 100 percent.

Given the capital adequacy restrictions, the growth of HFIs has often been curtailed by their inability to increase their capital to support a higher asset level. The current state of capital markets in India does not make it commercially viable for companies to increase their equity capital by issuing new shares.

The market price, earnings per share, and price-earnings ratio of the four HFIs listed on the Bombay Stock Exchange as of 27 February 1998 are given in Table 14.

Table 14 *Market Price, Earnings per Share, and P/E Ratio of HFIs, as of 27 February 1998*

Company	Market Price[a]	Earnings Per Share[b]	P/E Ratio[a]
HDFC Ltd.	Rs 2,236.75	Rs 243.00	9.2
LIC Housing Finance Ltd.	32.55	11.69	2.8
Gruh Finance Ltd.	7.25[c]	0.77	9.4
Canfin Homes Ltd.	14.50	5.40	2.7

[a]As of 30 October 1998
[b]As of 31 March 1998
[c]Closing price as of 29 October 1998
Source: *Economic Times*

Equity issues are undesirable at the above P/E multiples. Except in the case of HDFC, HFI equity issues at this stage would have to be made at a very low P/E multiple, possibly at par value, resulting in substantial dilution of earnings per share.

The capital adequacy ratios of some of the larger HFIs as of 31 March 1997 are given in Table 15. Significantly lower capital adequacy ratios were expected for March 1998 because market conditions prevented HFIs from making capital issues in 1997–1998.

Companies can raise tier-2 capital by issuing preference shares. However, this is very costly to the issuing company since the dividend paid on the shares is not tax deductible. Besides, Indian tax laws require companies to pay a 10 percent tax on the dividends they pay, whether on preference or on equity shares. Dividend income is thereafter tax-free to recipients. A generally acceptable coupon rate on preference shares is 11–12 percent per year. Taking into account the corporate tax rate of 35 percent

[30]In March 1998, the RBI set a 10 percent capital adequacy ratio for NBFCs. The ratio will be increased to 12 percent by March 1999.

Table 15 *Capital Adequacy Ratio of HFIs, as of 31 March 1997*

Company	Capital Adequacy Ratio (%)
GIC Housing Finance Ltd.	32.45
HDFC Ltd.	20.40
AB Homes Finance Ltd.	14.85
Vysya Bank	14.04
Dewan Housing Finance Ltd.	12.00
Canfin Homes Ltd.	11.96
LIC Housing Finance Ltd.	11.19
Gruh Finance Ltd.	10.78
SBI Home Finance Ltd.	8.02
Ind Bank Housing Ltd.	7.29

Source: NHB Report

and the dividend tax of 10 per cent, the effective cost to the issuing company would be 18.6–20.3 percent per year. The maximum interest rate on deposits, on the other hand, is 11.5 percent for HDFC and up to 15 percent for other HFIs. Even taking into account the commission of 50 bps paid to agents, and servicing costs of, say, 100 bps, the effective maximum cost of deposits to HFIs comes to only 16.5 percent—much lower than the cost of issuing preference shares.

Since issuing equity or preference shares is not viable, the best way to increase the capital adequacy ratio is to securitize a part of the loan portfolio of HFIs. They can thus transfer their 100 percent risk-weighted assets to a third party, and improve their ability to add to their asset base.

Improving the Maturity Profile of Assets

Except for HDFC and LICHF, which have a well-balanced asset-liability profile, most HFIs in India are believed to suffer from a major maturity mismatch. The mismatch is due to the long duration of housing loans on the asset side, the large share of loans in total assets (see Table 16), and the shortage of long-term funding at viable interest rates in the domestic markets.

Increasing deregulation in India during the last five years has made interest rates extremely volatile. Housing loans from HFIs (at least those granted to individual borrowers) are by and large fixed-rate loans. Most loan agreements between HFIs and individual borrowers reserve to HFIs

Table 16 *Ratio of Housing Loans to Total Assets, as of 31 March 1997 (Rs million)*

Company	Outstanding Loans	Total Assets	Ratio of Outstanding Loans to Total Assets (%)
BOB Housing Finance Ltd.	751.16	824.53	91
LIC Housing Finance Ltd.	26,047.59	29,624.30	88
Dewan Housing Finance Ltd.	4,222.03	4,910.70	86
Vysya Bank	792.23	924.85	86
Hometrust Housing Finance Ltd.	360.49	416.77	86
Cent Bank Housing Finance Ltd.	678.00	841.51	81
VI Bank	80.01	98.63	81
Canfin Homes Ltd.	4,837.03	6,060.65	80
AB Home Finance Ltd.	817.63	1,025.60	80
GIC Housing Finance Ltd.	3,257.86	4,244.07	77
Livewell Housing Finance Ltd.	123.13	160.83	77
GLFL Housing Finance Ltd.	598.57	849.07	70
Weizmann Homes	150.97	215.89	70
Saya Housing Finance Ltd.	29.53	41.90	70
Vijaya Home Loans	207.71	302.23	69
HDFC Ltd.	57,093.25	87,081.33	67
Gruh Finance Ltd.	2,189.16	3,349.31	65
Ind Bank Housing Ltd.	1,473.39	2,384.41	62
SBI Home Finance Ltd.	3,210.61	5,415.33	59
PNB Housing Finance Ltd.	837.61	1,921.77	43
Mercantile Housing Finance Ltd.	18.37	50.94	36

Source: NHB Report

the right to vary the interest rate depending on market conditions, but no HFI has exercised this right because of the administrative difficulties involved and the fear of adverse publicity. Since interest rates are relatively inelastic on the asset side, the tenure of liabilities should match the tenure of the assets. A sharp upward turn in interest rates would adversely affect HFIs, which would have to enter into higher-cost borrowing to replace liabilities that mature earlier than the assets. Depending on how high interest rates go, the consequences could be disastrous for HFIs.

Securitization will enable the HFI to offload some of its loans from its balance sheet. This will shorten the life of the assets and improve the maturity profile.

Reducing the Cost of Funding

Through securitization, the loan originator should be able to mobilize funds at a low cost, and thus reduce its lending rates and make housing loans more affordable to home-buyers. This is achieved through specialization in a particular securitization activity and diversification of risk.

Specialization promotes efficiency and reduces the transaction cost. Securitization involves various specialists such as administrators, credit enhancers, issuers, and pool insurers. As funds for housing finance come from a broader range of lenders, interest rates on mortgage loans will tend to decline, making the loans cheaper in the long run. The large investor base will give rise to special mortgage products for lower- and middle-income investor groups. Securitization will help the HFIs to grant mortgages of longer maturity and to introduce alternative mortgage instruments based on a higher loan-to-value ratio than at present.

Specialization, in turn, will make it possible to transfer risks between sectors and to minimize the cost of such risks. The risks associated with housing finance, now limited to the housing sector, will be distributed among a greater number of players as securitization and a secondary market develop.

Integrating Housing Finance with the Overall Capital Markets

With securitization, capital from the broader financial system will flow more easily into the housing sector. The flow will depend on the volume of primary mortgage operations, the competitiveness of the investment instruments, and the overall return on capital that is available in the mortgage business, among other factors. The interest differential between the mortgage market and the capital market will affect the design of mortgage instruments as well as secondary market instruments.

Securitization will promote growth through wholesale markets, which will allow economies of scale to operate. As the secondary market grows, mortgage lenders will no longer need to bring together a large number of small depositors, but may instead raise large tranches of funds in the capital market by selling the pool of loans in their portfolio. This will link the housing finance system more closely with the overall economic environment and the macro financial system. Also, the funds raised can vary significantly in quantity without any change in the interest rate (in the retail markets, in contrast, rates must go up to bring in more funds). Securitization will thus significantly reduce the cost of funds of the HFIs, and, as has occurred in other countries, lead to the rapid conversion of a largely independent, al-

most self-funding housing finance system into one that increasingly sources its funds in the domestic, and eventually the global, capital markets.

Securitization will be an efficient way of channeling surplus savings to capital-deficient areas of the country to finance new mortgage loans, thus preventing imbalances of mortgage credit between regions.

SECURITIZATION ISSUES

As indicated earlier, securitization has not yet taken off in India for several reasons. Certain issues need to be identified and resolved before the securitization tool can be successfully used to provide continuous funding to loan originators. The main legal issues relate to the high stamp duty rates in most states and the lack of speedy foreclosure laws. Some tax-related issues also need to be clarified.[31]

In addition, other operational and commercial matters need to be addressed, in order to create an institutional framework for securitization. Successful securitization requires uniform loan documentation, underwriting standards, and accounting practices. Likewise, the pricing of mortgages is a key factor in developing the secondary mortgage market. While the yield to the investor must be competitive, mortgage-backed securitization should not push up the interest rate on housing loans. The objective of securitization must be to increase the return to the investors by reducing the cost of intermediation. To this end, the administrative and operational costs of the originator, the credit enhancement agency, the service agents, and the SPV must be minimized.

An attempt is made below to understand some of the securitization issues and suggest possible solutions.

Potential Investors

A very important issue connected with securitization is the identification of potential investors in MBSs. The paper will initially be marketed exclusively to institutional investors—banks, mutual funds, DFIs, NBFCs, and HFIs which would be able to invest in MBSs without any regulatory restriction.

Insurance companies and provident funds would be the target of marketing efforts in the second phase, but only after regulatory changes allowing these institutions to invest in MBSs have been made.

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[31]The legal and tax issues were discussed on pages 127–133.

Individuals and other retail investors would enter the MBSs market only after the instrument is well established and understood. The granting of fiscal concessions to MBSs investors would significantly help in generating demand for the paper especially at the retail level.[32]

Investment by provident funds

Provident funds in India have huge amounts of investible surpluses. There are three types of provident funds.

The Public Provident Fund (PPF) is a voluntary savings account with tax incentives that is offered by some commercial banks acting on behalf of the central government. An individual may invest in a PPF account for a minimum period of 15 years and thus qualify for tax benefits under Section 88 of the IT Act. Twenty percent of the investment, subject to a certain overall limit, can be offset against the tax payable by the individual. Also, the investment earns tax-free interest.

The other two types of provident funds entail compulsory savings out of salaries. The Provident Fund Act requires each employee to save 10–12 percent of his salary in a provident fund account and his employer to make a similar contribution to the employee's account. The compulsory savings are therefore equivalent to at least 20 percent of the employee's salary. The Central Provident Fund Commissioner operates a provident fund, and most large corporations are also authorized to operate their own provident funds for their employees. Contributions under the Provident Fund Act are also covered by tax benefits similar to those for PPF contributions.

The provident funds are normally constituted as trusts and are governed by the provisions of the relevant statutes. Provident funds that are covered by the Provident Fund Act of 1925[33] have no investment restrictions other than those contained in their respective governing rules, and may therefore invest in MBSs if their governing rules allow them to do so.

For provident funds covered by the Employees Provident Funds and Miscellaneous Provisions Act of 1952, which covers most provident funds in India, the pattern of investment is as prescribed in the Employees Provident Fund Scheme of 1952, but may be amended by the central government. The prescribed pattern of investments is currently as

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[32]See pages 166–169 for details of the fiscal concessions sought.

[33]Employees may be covered either by the Provident Fund Act of 1925 (which applies only to some old provident funds) or by the Provident Fund Act of 1952.

follows: 25 percent of the funds must be invested in securities issued by the central government, 15 percent in securities issued by state governments, 40 percent in PSU bonds (intended for this purpose) and CDs of banks, and the remaining 20 percent in any of the foregoing avenues.

Securities issued by non-public-sector bodies (including all HFIs) are evidently not included among the permissible investments for provident funds. But since provident funds are long-term investors, it would be appropriate for them to invest in MBSs. The investment pattern prescribed for provident funds should therefore be amended.

Investment by insurance companies

Insurance companies invest their controlled funds in accordance with the provisions of the Insurance Act of 1938, which limits their investments to those specified in the act. MBSs are not among the approved investments for insurance companies, although the central government, through a published notice in the Official Gazette, could classify MBSs or other excluded investments as approved investments. If the government were to declare investments in MBSs to be approved investments, GIC and its subsidiaries (National Insurance Company, New India Assurance Company, Oriental Insurance Company, and United Insurance Company) could invest in MBSs.

LIC was set up under a separate act of Parliament (the LIC Act) and, strictly speaking, is not covered by the Insurance Act. But Section 43 of the LIC Act makes the provisions of Section 27A of the Insurance Act applicable to LIC. It could therefore invest in MBSs only if the central government were to classify these instruments as approved investments.

Other potential investors

Mutual funds, under the investment guidelines issued by SEBI in February 1992, can invest only in transferable securities, including privately placed debentures or securitized debt, either in the money market or in the capital market. Thus, mutual funds can invest their funds in MBSs, subject to the limits specified in the guidelines. The Unit Trust of India, the first and by far the largest mutual fund in the country, can invest in MBSs under Section 19 of the UTI Act of 1963.

In the long run, the successful development of the secondary market requires a broader investor base. While the first tranche of securitized loans may be offered to banks, mutual funds, and other institutional

investors, the instrument must ultimately be targeted at individual investors. For this purpose, certain fiscal concessions may have to be provided at the start.

Recommended Fiscal incentives for MBSs

Since MBSs are currently unknown and untested in the Indian financial markets, it may take some time before investors become sufficiently interested. During this infancy period, investors in MBSs must be provided with fiscal concessions in the form of tax benefits, to create a level playing field for MBSs relative to alternative investments.

Tax benefit for investors

The yield on the MBSs would initially be determined by the prevailing interest rate on the underlying housing loans. Eventually, the yield would have to be comparable to that of alternative instruments in the market. Greater integration between the housing finance sector and the rest of the financial system is required for this, and housing loan rates would have to follow commercial lending rates. Until then, fiscal concessions must be provided to attract investments in MBSs. Investors will be exposed to some risk of nonrecovery because the credit enhancement will not cover the entire loan amount. Also, since MBSs are new in India, investors will, at least at the start, expect a slightly higher yield than from other types of financial instruments.

It is therefore recommended that MBSs income distributions be treated in the same way as dividend income. Under Indian tax laws, dividends are tax-free to recipients but the paying company is charged a 10 percent tax on the total dividend paid. MBSs income distributions could similarly be tax-free to investors while the SPV deducts a tax of, say, 10 percent at source at the time of income distribution and distributes the balance of 90 percent to the investors. MBSs would thus be on a par with shares, at least in tax treatment, and banks, other institutional investors, and even individuals would be encouraged to invest in MBSs.

Parity with mutual funds

The SPV and MBSs investors should have the same fiscal benefits that are now available to mutual funds recognized under Section 10(23D) of the IT Act and to their investors. Currently, these mutual funds enjoy

tax-free status and other fiscal concessions. These concessions were provided to encourage the growth of mutual funds.

The MBSs to be issued by the SPV would be similar to units issued by mutual funds. Ideally the SPV would be a mutual fund; if this is not possible, it could be any other type of entity, such as a corporation or a trust. At any rate, it should have the same fiscal benefits as the approved mutual funds. The SPV should be approved by SEBI and should be subject to its regulatory control and supervision.

The tax concessions that should be granted to the SPV and to MBSs investors to bring about parity with mutual funds are as follows.

Exemption of SPV income. The income of the SPV should not be taxed as long as the SPV is approved by SEBI. Mutual funds approved under Section 10(23D) of the IT Act do not pay tax.

Tax incentives for foreign companies. Section 115A of the IT Act applies a concessional tax rate to income earned by foreign companies from units of mutual funds approved under Section 10(23D), provided that the original investment was made in a foreign currency. Income earned from MBSs should be allowed a similar benefit.

Tax incentives for offshore funds. Section 115AB of the IT Act applies a concessional rate of tax to income earned by an offshore fund from units of mutual funds approved under Section 10(23D), provided that the original investment was made in a foreign currency. Income earned from MBSs should have a similar benefit.

Investment by charitable trusts. Charitable trusts in India are allowed to invest only in certain approved instruments covered by Section 11(5) of the IT Act. Units and securities floated by mutual funds approved under Section 10(23D) of the act are treated as eligible instruments for this purpose. MBSs should also be treated as eligible investments for charitable trusts. This is a very important benefit since charitable trusts in India have fairly large investable funds.

Exemption from wealth tax. An investment under any scheme of a mutual fund approved under Section 10(23D) is exempt from wealth tax. A similar benefit should be granted for investments in MBSs.

Credit enhancement

The MBSs would be issued to investors without recourse to the originator or the issuer. This means that the originator or issuer neither guarantees the timeliness of payments on the underlying mortgage nor

indemnifies the holders of MBSs for delays in payment. The issuer is only obliged to pass on to the MBSs holders the payments on the underlying assets it receives from the borrowers. Any shortfall would have to be borne by the MBSs holders on a pro rata basis. Some form of credit enhancement must therefore be provided to make the MBSs more secure and attractive.

As indicated in an earlier section, mortgages in India take a considerable amount of time to enforce. Thus, despite the debt aversion of Indian borrowers, and the low level of defaults among HFIs, housing loans are risky. In view of the fact that MBSs are new in the Indian capital market, it is necessary to provide them with some form of credit enhancement. The rating agencies will have to determine the extent of credit enhancement that must be provided to enable MBSs to attain an AAA rating.

Overcollateralization or standby arrangements can be used for credit enhancement. The extent of collateral security would depend on the recovery record of the HFI that originated the loan as well as the portfolio of loans being securitized.

Credit enhancement can also take the form of mortgage insurance. Mortgage insurance does not exist in India, as GIC quotes premiums that are excessive in relation to the level of defaults. However, the possible opening up of the insurance sector would attract more players to the insurance business and make premium levels more competitive.

A financial guarantee could be another credit enhancement alternative. Individually or in partnership, major institutions such as NHB and HDFC can set up a financial guarantee company. The Infrastructure Development Finance Company (IDFC) proposes to set up an AAA-rated financial guarantee company. ICICI and CapMac of the US have collaborated to set up a financial guarantee company, which could take up mortgage insurance.

Credit rating of MBSs

MBSs have never before been rated in India. Their rating will be based on the strength of the cash flows and the mechanism for ensuring full and timely payments. The rating will be tailored to the instrument. The extent of overcollateralization will also affect the rating of the mortgage pool to a large extent.

The rating agencies would likewise take into account such factors as the delinquency rate of the HFI that originated the loan, the loan-to-

value ratio, the size of the loans and their geographical concentration, the installment income ratio in respect of the loans in the pool, and the record of the pool administrators.[34]

Standardization

Investors will buy the MBSs if they have confidence in the quality of the underlying security. The quality of the underlying loans will depend largely on the credit-appraisal techniques of the HFI originating the loan, as reflected in its record of nonperforming loans.

The housing finance market in India today operates on lending techniques and guidelines that are specific to each HFI and have evolved haphazardly. Consequently, there is little consistency in HFI appraisal techniques, signifying a variance in the quality of the loan portfolio of each institution. This factor will become significant as the pace of securitization picks up and more institutions enter the market to securitize their portfolio.

In an emerging market, it is critical that the secondary market instruments be standardized in terms of quality and specifications, irrespective of the HFI that originated the loan. To achieve this standardization, the credit enhancement process would have to provide for varying levels of first-loss cover depending on the HFI that originated the loan in the first instance.

Standardization of lending norms as well as borrower documentation is important in securitization. Standardization will also facilitate rating. In this context, NHB must set certain standard norms for securitizing loans. These standards could pertain to the evaluation of the creditworthiness of borrowers as measured by the loan-to-value ratio, the installment income ratio, and the fixed-obligation income ratio. Documents for the loans to be securitized should also be standardized.

Borrower's Consent for Securitization

Mortgage securitization is based on the principle that a mortgage is a right of property and can be sold with or without the consent or knowledge of the mortgagor. Further, according to the general principles of law, a right arising from agreement can be freely assigned by the beneficiary unless that agreement specifically states otherwise or unless the beneficiary is prevented by law from assigning the right because it is personal to the contracting parties (such as rights arising under a contract of employment).

[34]For details of the rating agencies, see page 111.

In principle, therefore, the law will allow a lender to assign the right to receive repayment of its loan to a third party without the borrower's consent. However, obligations under an agreement cannot be transferred by the party on whom they have been imposed without the consent of the party to whom they are owed.

Although strictly speaking there is no need to obtain the borrower's consent in a mortgage securitization, it is desirable to secure his general consent at the time the loan documents are executed, by including a suitable provision in the loan agreement. This, if done, would take care of the securitization of housing loans made in the future. Some HFIs have, for years now, used loan agreements with their borrowers in which the HFIs reserve the right to sell the loans. Most of the earlier loans were, however, based on no such specific or general consent of the borrowers. In these cases, the question arises whether the borrower should at least be given notice of the transfer of mortgage.

In the UK where there is legal assignment of mortgage, written notice of the transfer must be given to the borrower in accordance with Section 136 of the Law of Property Act of 1925. In the case of assignment of mortgage in equity, however, the borrower does not need to be notified. France, Belgium, and Italy require notification of the borrower through a court bailiff or a document executed before a notary; Spain and Germany require no such notice.

In India, the law does not require the borrower to be notified of the transfer of mortgage. But the consequence of not obtaining the mortgagor's consent for such transfer or notifying him of such transfer is that the mortgagor can continue to pay his original lender (the loan originator), who need not be the servicing agent, and by such payment he would get good discharge of the debt. It is therefore advisable for the HFI to notify the borrower regarding the securitization of his loan even if the loan agreement empowers the HFI to sell the loan.

Feasibility of Launching a Special-Purpose Vehicle and MBSs

STRUCTURING THE INSTRUMENT

The MBS most appropriate in the Indian context is the pass-through certificate (PTC). In the PTC structure the instrument issued to investors

represents undivided interest in the pool of mortgages. Securitization will involve the sale of loans by the HFI to an SPV. These loans, to the extent possible, will have a common maturity, say, a remaining term-to-maturity of seven years. The loans purchased by the SPV would be packaged together and PTCs would be issued by the SPV. These PTCs would be of smaller denominations and would be offered to investors for subscription. The tenure of these PTCs would be coterminous with the maturity of the underlying housing loans. The PTC would be secured on a back-to-back basis against the housing loans purchased by the SPV.

HFIs provide housing loans that are repaid in equal monthly installments (EMIs) with a principal and interest component. Except for GICHF, all the HFIs compute EMIs on an annual balance basis. Therefore, although the borrower pays principal and interest to the HFI monthly, his payments of principal are credited to his loan account only at the end of the financial year. In other words, the borrower continues to pay interest throughout the financial year on the portion of the principal that he has repaid through EMIs.

After the loan is sold, the borrower (unless told otherwise), continues paying EMIs to the HFI from which the loan has been obtained. To simplify matters, therefore, the HFI that originated the loan should continue to be the servicing agent.[35]

The EMIs received from different borrowers by the HFI would have to be segregated into payments relating to loans that have been sold and other loans. This itself is not going to be very easy since the loans would be spread across several branches of the HFI. Sophisticated software (compatible with the accounting system adopted by the HFI), would have to be used for this purpose. Fortunately, all the HFIs have computerized accounting records which will make the process of identification easier.

The EMIs received from borrowers whose loans have been sold would have to be retained by the HFI in an escrow account and paid to the SPV on predetermined dates (possibly after a 30-day grace period). The 30-day grace period is suggested to facilitate administration, since the collections are spread across different branches of the HFI, and to allow for the possibility of delayed payments by borrowers.

The SPV, in turn, would distribute the money received from the HFI to investors. Or it could pay interest to the investors and use the principal to purchase fresh loans from the HFI.

[35]The role of the servicing agent is discussed below.

SERVICING AGENTS

As stated earlier, until specialized servicing agents are established, the HFI that originated the housing loan should continue to act as the servicing agent even after the loan is sold. The HFI would be paid a fee for this purpose. The servicing fee to be paid to the HFI could be in the range of 100 bps per year of the loans outstanding. The HFI would be required to continue performing the following activities in respect of the loans that have been sold:

- Collecting the installments on behalf of the SPV;
- Contacting defaulting borrowers in an attempt to recover overdue installments;
- Issuing income tax certificates annually to borrowers to enable them to avail of the deductions under Section 24(1)(vi) and Section 88 of the IT Act;
- Maintaining the loan accounts of individual borrowers whose loans have been sold and sending them statements of account; and
- Submitting periodically to the SPV detailed accounts of the borrowers whose loans have been sold.

YIELD AND PRICING

The yield on the MBSs should be comparable to that on alternative instruments in the market. The difference between the rate of interest on the MBSs and the rate of interest on the underlying loan should cover the cost of intermediation, which could be in the range of 2–2.50 percent. This would take care of the servicing cost payable to the HFI, the cost of credit enhancement, operating and other expenses of the SPV, stamp duty, and underwriting commission.

Current mortgage rates range from 14 percent to 15.5 percent. After deducting the cost of intermediation, the MBSs would therefore provide a yield to investors of between 11.5 percent and 13.5 percent per year. Given current market conditions, a yield of less than 13 percent would not be acceptable to investors unless tax benefits are also provided. This is especially so since MBSs are new in the Indian capital market and investors are not familiar with them. The success of the MBSs market would depend on the ability to reduce the cost of intermediation to about 1.5 percent, but this may be difficult since the servicing cost itself is likely to be about 100 bps and the cost of credit enhancement another 40–50 bps. The overhead and the profit margin of the SPV, stamp duty, other legal expenses as well

as the cost of credit rating are additional costs to be absorbed. Considering the above, the total cost of intermediation is likely to be about 200–250 bps. Given current lending rates, therefore, it would be possible to securitize only the high-yielding loans which are priced at 15.5 percent. This would leave the lower-yielding loans in the HFI portfolio.

SPECIAL-PURPOSE VEHICLE (SPV)

A key question in securitization is the identity of the SPV. It will purchase the loans originated by the HFIs and then issue MBSs backed by these loans. Since housing loans carry an element of risk, especially in the context of Indian foreclosure laws, the SPV must minimize the risks before issuing the MBSs. This, as indicated earlier, would have to be done through credit enhancement. The rating agencies must determine the level of credit enhancement required to give an AAA rating to the instrument.

The SPV will have to work closely with the HFIs that originated the loan and with the ultimate investors in MBSs. In the short term, the SPV may also have to play the role of market-maker.[36] An important function of the SPV would be to determine the MBSs structure and interest rate. The price at which the SPV issues MBSs should be competitive with regard to the rate of interest on the underlying loans that have been securitized.

The SPV's assets will have to match its liabilities, especially if it must also be a market-maker. Since housing loans are long term, the SPV will have to sell the MBSs to long-term investors. The SPV should have a strong financial base. To protect investors, the functioning of the SPV should be closely monitored and regulated. Prudential norms would have to be laid down for the SPV. The prudential norms should relate to a minimum capital requirement, appropriate debt-equity norms, and a minimum capital adequacy ratio.

Eventually, a new specialized institution should be set up to act as the SPV. This institution could be backed by some of the larger players in the housing and financial sectors such as NHB, HDFC, HUDCO, and UTI (an active player in the secondary market). In the meantime, the NHB should play the role of an SPV as proposed in the pilot securitization program.[37]

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[36]Alternatively, as discussed below, another institution could perform this role.
[37]See page 157.

MBSs MARKET REGULATOR

SEBI could play the role of MBS market regulator. NHB, which already regulates HFIs and is actively involved in the housing finance market, could also be the regulator in the future when a specialized entity has been set up to play the role of the SPV. However, it may be more appropriate to have a secondary market regulator for the MBSs activity rather than a regulator of the housing finance market.

LIQUIDITY

In the long term, liquidity has to be provided to the MBSs through listing on the stock exchange. NSE seems well positioned for such a listing. However in the initial stages, since MBSs are unknown in the market, and also since the debt market is illiquid, a mere listing may not satisfy some investors who would prefer to be able to divest their holdings at short notice. To satisfy such investors, a market-maker should be appointed to provide two-way bid and offer quotes for MBSs and ensure the maintenance of a stable market. The market-maker should therefore have a sound financial footing and a strong balance sheet.

The SPV that issues the MBSs could itself play the role of market-maker for this purpose. As discussed earlier, a specialized institution should eventually be set up to act as an SPV. The SPV could then act as market-maker. Until then, the NHB could play the role of market-maker. NHB, in its capacity as a wholly owned subsidiary of RBI, is ideally positioned to play this role. The implicit support of RBI will not only make the instrument more marketable but will also boost the rating of the paper.

Given the developments in the financial and capital markets, the secondary market for debt instruments should eventually become much more liquid, and this should benefit the MBSs market.

MORTGAGE TRUSTEE

The mortgage trustee holds the loan agreement and the other documents connected with the grant of the loan on behalf of the investors in MBSs. Initially the HFIs that originated the loans could continue to act as trustees even after the loans are sold and could thus continue to hold the loan agreements and other mortgage documents on behalf of the investors. In the long run, however, there must be a specialized trustee company to

hold the documents and mortgages on behalf of the ultimate investors in the MBSs.

The Stock Holding Corporation of India Ltd. (SHCIL), backed by seven all-India financial institutions (IDBI, ICICI, IFCI, IRBI, UTI, LIC, and GIC and its subsidiaries), was incorporated in 1986 to provide services including market operations, corporate actions, safekeeping, custody management, registration, transfer, and reporting. The SHCIL would be ideally suited to act as a trustee company for MBSs.

SECURITIZATION METHODS

Considering the legal framework in India, loans may be securitized through either of these two methods:

- Sale of the loan portfolio to an SPV which would then issue MBSs; or
- Transfer of beneficial interest in the loans.

Securitization Through Sale of Loan Portfolio

Under this method, the portfolio of loans that have been identified for sale together with the underlying securities would have to be sold or transferred by the lending institution (the HFI) to the SPV at the agreed price. To carry out the transaction, a transfer deed would have to be executed between the HFI and the SPV transferring the loans that are being securitized. Such a transfer deed would have to be stamped on an ad valorem basis under the stamp law of the concerned state. After the transfer, the SPV can issue MBSs to the investors.

Since mortgage debt is regarded as property, it can be transferred only by means of an instrument in writing.[38] In the states of Maharashtra, Karnataka, and Tamil Nadu, such an instrument of transfer draws stamp duty at the rate of 0.1 percent on an ad valorem basis. Under the corresponding provisions of the stamp laws of other states, the rates of stamp duty on such transfer deeds can range up to 15 percent of the consideration for the transfer. Thus, the execution of the transfer deed will involve the payment of a heavy stamp duty in some states.

[38] See Mulla's Transfer of Property Act, 7th ed., page 16.

Securitization Through Transfer of Beneficial Interest in the Loan Portfolio

This can be done in either one of these two ways:

- Through a trust created by the HFI under which it constitutes itself as the trustee for the investors, or
- Through an agreement executed between the HFI and the SPV transferring the portfolio of loans with a power of attorney in favor of the SPV to enable it to carry out a legal transfer.

Creation of a trust

Under this method, the HFI, through a declaration of trust, would be required to create an express trust in favor of the investors by declaring that it would hold beneficial or economic interest in the loan portfolio on behalf of the investors. The HFI would then constitute itself as the trustee for this purpose and would issue MBSs to the investors.

Under this method, the interest of the HFI or settlor of the trust in the securitized assets is classified into legal interest and beneficial interest. While legal interest is retained by the settlor, beneficial interest is transferred to the investors. Indian law does not recognize equitable ownership in the sense known in English law (because India, unlike England, does not have two kinds of law of jurisdiction, that is, common law and equity), but this concept has been recognized in certain decided legal cases.[39] On this basis, separation of legal interest and beneficial interest in the securitized assets is legally permissible.

Moreover, under Sections 5 and 6 of the Indian Trust Act of 1882, if the declarer of the trust is also the trustee, he does not need to transfer the property to himself as the trustee. Such a transfer is implied under law and no overt act other than a declaration of trust is necessary (Tulsidas Kilachand vs Commissioner of Income Tax, Bombay City: AIR 1961 S.C. 1023 at 1026).

Execution of an agreement

Under this method, the SPV would be constituted as a separate entity and the HFI would be required to execute in favor of the SPV:

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[39] Refer to the decision of the Gujarat High Court in Suleman Isubji Dadabhai vs Naranbhai Dayabhai Patel (1980) 21 GUJ L.R. 2321 and the decision of the Punjab High Court in Punjab Province vs Daulat Singh (1942 FCR 67, p.80).

- an agreement by which the HFI agrees to assign or transfer the loans to the SPV, at a price agreed to between them;
- a declaration of trust constituting the SPV as trustee of the investors; and
- irrevocable power of attorney to enable the SPV to effect legal transfer under certain circumstances.

The SPV will then raise funds from the market by issuing MBS instruments.

English law distinguishes between law and equity, and recognizes both legal and equitable estates. Therefore, in England, a contract for the sale of mortgage makes the purchaser the equity owner of the property. The seller becomes a trustee for the purchaser in respect of the property agreed to be sold or transferred, from the date of the contract for sale.

In India, the doctrine of equitable estate does not apply. The law of mortgages is statutory and is embodied in the Transfer of Property Act of 1882 (TP Act) read with the relevant provisions of the Code of Civil Procedure of 1908. Under Section 154 of the TP Act, a contract for sale of property does not by itself create any interest in or charge on the property to be sold. Although the sale contract does not by itself transfer or assign the mortgage loans to the SPV, it embodies an agreement to transfer or assign the loans to the SPV in the future. The contract also anticipates the execution of a regular deed of transfer to carry out the necessary transfer or assignment.

The contracting parties clearly understand that the HFI will hand over to the SPV all payments on the underlying mortgages as soon as these are made. Therefore, after the SPV pays the full purchase price to the HFI, the beneficial interest in the loans is vested only in the SPV and not in the HFI. The payments received by the HFI from the borrowers will therefore be held by it for the benefit of the investors. Under both methods of securitization given above, a trust declaration will have to be executed by the HFI creating the trust. Such a declaration is subject to the stamp law of the state in which it is executed. Since a trust declaration is likely to be construed by the stamp authorities as an instrument involving the disposition of property, substantial stamp duty (up to 10 percent) may be payable on the instrument.

ACCOUNTING TREATMENT UNDER BOTH METHODS

The real benefits of securitization would accrue to the HFI only if it could remove the securitized assets from its balance sheet under either of the two foregoing methods.

No statutory provision or guiding principle throws any light on this matter. In England, it is generally accepted that an asset has been sold for accounting purposes when all significant risks and benefits arising out of its ownership have been transferred by the originator to the buyer. Thus, in England, assets whose ownership, with its attendant risks and rewards, has been substantially and materially transferred after securitization should be kept off the balance sheet.

The US Statement of Financial Accounting Standard No.77, pertaining to the removal of assets from the balance sheet, requires the transferor to surrender control of the future economic benefits embodied in the receivables, and inhibits the transferee from requiring the transferor to repurchase the receivables sold. In India, the relevant legislation (the Companies Act of 1956) requires the concerned entity to show all its assets and liabilities on its balance sheet. The act, however, does not define what constitutes an asset or a liability. Similarly, the act requires accounts to give a “true and fair” view, but does not specify what this means or how it should be carried out.

No standards or guidelines in this regard have been laid down by the Institute of Chartered Accountants of India (the professional accounting body in India). The matter is therefore left to the professional judgment of the auditor, who has to justify the necessity of off-balance-sheet treatment for the assets securitized to give a true and fair view in the originator’s accounts.

Under the first method of securitization, since the loan portfolio and the related mortgages are sold or transferred by the HFI to the SPV, the attendant risks and rewards pass to the SPV and, therefore, there is no doubt that the securitized asset can be removed from the balance sheet of the HFI.

Under the second method, the HFI transfers all beneficial or economic interest in the loans to the MBSs holders and merely retains a formal legal interest in them. Further, on securitization, the relative loan assets on the balance sheet of the HFI are replaced by the money received by it, representing the proceeds arising out of the sale of the beneficial interest in the loans. It is also relevant to mention here that since the securities are issued without recourse to the HFI, no fresh liability arises to the HFI on that account. For these reasons, it is felt that even assets securitized

under the second method could be given off-balance-sheet treatment. The transaction could be given appropriate disclosure in a note to the accounts. However, the matter is not entirely beyond question.

CONCLUSION

In view of the foregoing, it is recommended that the first method of loan securitization described above be adopted. The HFI should sell the loans to the SPV, which, in turn, would issue MBSs. The sale should be without recourse to the HFI to enable the HFI to remove the loans from its balance sheet. To minimize the cost of intermediation, state governments should be persuaded to lower the rate of stamp duty. The sale deed for the loans could currently be executed in any city in the state of Maharashtra, Karnataka, or Tamil Nadu where the HFI has an office, to take advantage of the 0.1 percent stamp duty. It is hoped that the other states in India will eventually also reduce the stamp duty.

Until a specialized new entity is established for the purpose, the NHB should be the SPV, buying loans from HFIs and issuing MBSs backed by the loans. Eventually, institutions such as the NHB, HDFC, HUDCO, UTI, and other large players in the housing or the financial sector should get together and establish a separate company to act as specialized SPV.

The MBSs issued initially by NHB and later on by the specialized SPV must be rated. The credit-rating agencies must stipulate the extent of credit enhancement required for a triple-A rating for the instruments. Loans originated by different HFIs may require different levels of credit enhancement. The credit enhancement could be in the form of cash collateral to be provided by the HFI that sold the loans. In the long term, a specialized institution could be set up to provide guarantees for various types of financial instruments such as MBSs.

The HFI that originated the loan should continue playing the role of servicing agent and should be compensated for its services.

The MBSs should first be targeted at large institutional investors such as banks, UTI, and other mutual funds. A request should be made to the government to permit long-term investors such as LIC, GIC, and provident funds to invest in MBSs. In the long term, the MBSs should be targeted at individual investors. For this purpose and to create a level playing field, representation should be made to the government to provide fiscal concessions for investments in MBSs. These concessions should be provided when the instrument is launched and is still relatively unknown to individual investors.