Report of the Committee to Assess the Feasibility of Introducing More Long-Term Fixed Interest Rate Loan Products by Banks

RESERVE BANK OF INDIA
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Executive Summary

Banks have the freedom to offer loans on a fixed or floating interest rate basis, subject to conformity with their asset liability management (ALM) framework. Till few years back, majority of loans offered by the banks and financial institutions in India used to be in the nature of fixed rate loan products. However, in recent times, retail loan portfolio of banks has become skewed in favour of floating rate loan products. It is observed that in a number of banks, there has been significant growth (in absolute terms) in the floating rate loans vis-à-vis that of the fixed rate loans in the last three years. At times, the customers are not able to understand the intricacies of economic cycles, changes in policy rates, transmission of the same and the consequential sudden increase in EMIs thereby exposing themselves to interest rate risk. On the other hand, banks and Financial Institutions offering such loans have got the expertise to manage the inherent interest rate risk and take a view on future rate movements.

Cross Country Experience

A study of the fixed rate products globally reveals that there is predominant prevalence of Fixed Rate Mortgage (FRM) contracts in USA & France. On the other hand, there has been preference for Floating Rate Mortgages or Adjustable Rate Mortgage (ARM) in Ireland, Spain, Korea, UK & Australia. Hybrid products are generally more popular in other parts of Europe and rest of the world like Canada, Denmark, Germany, Netherlands & Switzerland. Australia, Ireland, Korea, Spain and the UK predominantly offer variable-rate mortgages, often with a initial short term fixed rate. FRMs are very popular in the western market due to a host of factors like less volatile/low interest rate scenario, vibrant securitization market, presence of Govt. Sponsored Entities (GSEs) to buy out FRMs and existence of LT liquid Interest Rate Swap (IRS) market.

Over 90% of HLs in Asia (excluding Japan) are floating rate loans. This is mainly due to the prevalence of an underdeveloped primary and secondary market for securitized products, the absence of a liquid medium/Long Term IRS market in most of the countries and non-existence of GSEs to buy out the fixed rate loan products. Lending to the housing sector tends to be dominated by banks in most Asian countries.

Domestic Experience

During the period 1977-2000, fixed rate loan products were popular. However, post 2000, these products gave place to floating rate loans mainly due to falling interest rates in the early 2000s and significantly higher interest rate on fixed rate loan products in many cases.

Considering that most bank liabilities (mainly deposits) are short to medium term in nature, the sanction of long term fixed rate loan products tends to create an asset liability mismatch on the balance sheets of banks. The options to manage this mismatch could be through raising of long term (LT) resources via bonds, securitization of assets, etc.

NHB has been making efforts to give a fillip to LT fixed rate Housing Loans (HLs). It has recently launched a scheme for refinancing banks which offer LT fixed rate HLs to low income households (income up to ₹15,000 per month) up to a period of 15 years.

Recommendations

Banks may explore the option of raising resources through LT bonds to enable them to extend LT fixed rate loan products. As per extant guidelines, banks are permitted to raise LT bonds with a minimum maturity of 5 years to the extent of their exposure, of residual maturity of more than 5 years, to the infrastructure sector. The banks who have not issued LT bonds to the extent of their said exposure to the infrastructure sector could utilize the room available to issue more of LT bonds which would help release resources for extending LT fixed rate loan products. The Committee also recommends offering of fixed rate LT loan products with periodic interest reset provision (say every 7-10 years). Other recommendations of the Committee include popularising fixed deposit schemes with tenor of 5 years and above as the same are eligible for tax exemption, allowing banks to issue LT bonds for their exposure to HLs qualifying for priority sector, take-out financing in case of HLs and encouraging large institutional investors like Pension Funds, Provident Funds, Insurance Companies, etc. to invest in bonds floated by banks. The Committee strongly feels that the aspect of transparency in retail loan products should be appropriately addressed and the customers be educated by the lending institutions on the possible impact of rate changes on their Equated Monthly Instalment (EMI) to enable borrowers to have better planning with regard to their repayments. Indian Banks' Association (IBA) should play a prominent supporting role in this regard. A summary of various recommendations made by the Committee is given in Chapter IV.

Chapter I

Introduction

Banks today have the freedom to offer loans on a fixed or floating interest rate basis, subject to conformity with their ALM framework. They also have the freedom to offer floating interest rate on domestic term deposits clearly linked to a market determined external anchor rate, in addition to fixed rate deposits. Till few years back, majority of loans offered by the banks and financial institutions in India used to be in the nature of fixed rate loan products. However, banks are now offering more loan products with varying interest rate (floating rate products), particularly in the retail segment, instead of fixed interest rate loan products. Information obtained from a representative sample of banks shows that while interest rates on deposits are predominantly fixed, most of the retail loan products, especially HLs have been sanctioned on a floating interest rate basis. Floating rate loan products are loans whose interest rate, and therefore the EMI, fluctuates according to the rise or fall in the benchmark rate to which such products are linked. At times, the customers are not able to understand the intricacies of economic cycles, changes in policy rates, transmission of the same and the consequential sudden increase in their EMIs thereby exposing themselves to interest rate risk. On the other hand, banks and Financial Institutions offering such loans have got the expertise to manage the inherent interest rate risk and take a view on future rate movements.

1.1 In view of the above, the Reserve Bank of India (RBI) had announced on April 17, 2012, in its Monetary Policy Statement 2012-13, "*to set up a Working Group* [1] *to assess the feasibility of introducing more long-term fixed interest rate loan products by banks*" (Para 104). Accordingly, a Committee comprising market experts, officials of the RBI and other stakeholders was constituted with the following terms of reference:

a) To assess the present system of long-term fixed rate loan products by banks;
b) To study cross-country experience in this regard; and
c) To examine the feasibility of introducing more long-term fixed interest rate loan products by banks.

1.2 The Committee had the following members:

i. Sh. K.K. Vohra, CGM, IDMD – Chairman
ii. Sh. Sangeet Shukla, Senior Adviser, IBA – Member
iii. Sh. Vivek Mhatre, GM, Intl Banking & Treasury, Union Bank of India – Member
iv. Dr. M.S. Sastry, CGM, Kerala Circle, Thiruvananthpuram, SBI – Member
v. Sh. V.H. Thatte, GM, International Operations, Bank of Baroda – Member

[1] Hereafter Working Group may be called as Committee.

vi. Sh. Prashant Ranjit, Regional Head, Standard Chartered Bank – Member
vii. Sh. Vasudeva Konda, Joint GM, Asset Liability, ICICI Bank – Member
viii. Smt. Theresa Karunakaran, GM, DBS, CO – Member
ix. Sh. Vivek Deep, GM, DBOD -- Member
x. Sh. D.G. Kale, GM, CSD – Member
xi. Sh. Rakesh Tripathy, DGM, FMD – Member
xii. Sh. Vivek Aggarwal, GM, IDMD – Member Secretary

1.3 **Methodology**: The methodology followed by the Committee in preparing the report and finalizing the recommendations covered elaborate discussions during the meetings of the Committee which met on four occasions and interaction with market bodies like FIMMDA. The deliberations of the Committee were enriched by the views/suggestions of Special Invitees such as Chairman, NHB and ED, HDFC. Feedback was also obtained from select banks (other than those represented by the members of the Committee e.g. Bank of India, Axis Bank, HSBC Bank, Citi Bank, ING Vysya Bank and Allahabad Bank, etc.) through a structured questionnaire on the subject matter of the Committee (**Annex I**). Two Sub-Committees to study domestic experience and cross-country experience were formed within the Committee. These Sub-Committees met periodically and gave valuable suggestions to the Committee.

Chapter II

Cross Country Experience

A comparison of mortgage product offerings which constitute major portion of the retail loan portfolio of lenders in different countries reveals significant differences. Countries differ in terms of the market share of floating versus fixed rate mortgages, the use of pre-payment penalties, maximum tenor of loan, features such as interest-only payments and roll-overs, etc. A study of the fixed rate products in the advanced countries reveals that there is predominant prevalence of FRM contracts in USA & France. On the other hand, floating rate mortgages or ARM are preferred in Ireland, Spain, Korea, UK & Australia (**Table 1**). Hybrid products are generally more popular in other parts of Europe and rest of the world like Canada, Denmark, Germany, Netherlands & Switzerland. Australia, Ireland, Korea, Spain and UK predominantly offer variable-rate mortgages often with a short term initial fixed rate. Designs vary, for example, in Australia, Ireland and UK, the standard variable-rate mortgage has a rate set by the lender at its discretion (a reviewable-rate loan). Rates on these loans are changed for all borrowers at the same time. Canada, Spain, Korea and USA have indexed ARMs with rate changes determined by changes in the underlying index[2].

2. **Types of Mortgages in Different Countries**

a. **Fixed Rate Mortgage**: A mortgage in which the interest rate remains the same throughout the life of the loan (USA, UK).

b. **One Year Adjustable Rate Mortgages (ARM):** The interest rate changes on a specific schedule after one year (Ireland, Spain).

c. **Hybrids (2-Step Mortgages):** An ARM that has one rate for part of the mortgage and a different rate for the remaining part of the mortgage. The interest rate changes in accordance with the market rates. The borrower, on the other hand, may have the option of making a choice between a variable rate or a fixed rate on the adjustment date (USA).

d. **Balloon Mortgages:** Balloon mortgages last for much shorter term and work mostly like a fixed-rate mortgage. The initial monthly payments are lower (as only interest is paid) with large balloon payment at the end of the repayment period (USA).

e. **Interest only Mortgages:** The borrower only pays the interest on the mortgage through monthly payments for a term that is fixed, and the principal remains unchanged. The term is usually between 5 and 7 years. After the term is over, borrowers make a lump sum payment by paying off the principal of the loan (Denmark, Netherlands).

[2] Article of Dr. Michael Lea, International Comparison of Mortgage Product offerings, 2010 - website - www.housingamerica.org.

Table 1: Fixed vs. Variable Mortgage Products – Cross Country Experience

	Variable rate	Short term (2-5 yrs) fixed	Medium term (6-10 yrs) fixed	Long term (beyond 10 yrs) fixed
Australia	92%	8%	-	-
Canada	35%	-	55%	10%
Denmark	-	17%	40%	43%
France	33%	-	-	67%
Germany	16%	17%	38%	29%
Ireland	91%	-	9%	-
Japan	38%	20%	20%	22%
Korea	92%	-	6%	2%
Netherlands	-	15%	66%	19%
Spain	91%	8%	-	1%
Switzerland	2%	-	98%	-
UK	47%	53%	-	-
US	5%	-	-	95%

Source: Article of Dr. Michael Lea, International Comparison of Mortgage Product offerings, 2010 appearing in website - www.housingamerica.org.

2.1 **FRMs in Select Jurisdictions**

2.1.1 The USA has high proportion of LT FRMs as well as use of securitization in HL financing (more than $ 14 tn. assets securitized i.e. approx. 30 per cent). The dominance of FRMs and securitization is driven in part by the presence of government-backed secondary mortgage market institutions that lower the relative price of this type of mortgage. The most common mortgages range from 15 to 30 year. FRMs are usually more expensive than ARMs due to the inherent interest rate risk borne by the lending institution. The ARMs share in the US grew during the boom period (2004-06) accounting for 30-35 per cent of loans but the market reverted to FRMs during the financial crisis (2007-08). The ARMs in USA were hybrid ARMs with fixed rates in the initial few years followed by variable rates thereafter. These loans were designed to improve affordability compared to the FRMs. The shift back to FRMs was mainly due to the historically low rates prevailing in USA (brought about in part by Federal Reserve purchases of MBS), the poor experience of subprime ARMs and fears of future rate increases. The simple mechanism of FRMs vis-a-vis ARMs has also contributed to their popularity.

2.1.2 The only other country that utilizes the FRMs extensively is Denmark. In 2005, 50 per cent of Danish mortgages were FRMs and another 20 per cent were medium term fixed rate loans. The market shifted towards short-term fixed-rate loans as interest rates declined, with 80 per cent of Danish borrowers taking such loans in 2009. The Danish system offers a unique alternative in the form of *"Balance Principle*" that equates individual mortgages and bonds. (**Box I**)

2.1.3 Other than Denmark, Japan and the United States, fixed-rate mortgages are typically subject to a pre-payment penalty. In Australia, Canada, Denmark, Germany, the Netherlands and Switzerland the penalties are designed to compensate the lender for lost interest over

the remaining term of the fixed rate (yield maintenance). In certain countries the prepayment penalty is imposed on a graded basis (in Germany, the prepayment penalty is imposed only if the borrower prepays the loan within 10 years of the loan period).

Box I : Danish 'Balance Principle'

The Danish mortgage bond market is one of the largest in the world, both in absolute terms and relative to the size of the economy. The market value of all Danish outstanding mortgage bonds (traditional mortgage bonds, covered bonds and covered mortgage bonds) exceeds DKK 2,300 bn (app. €310bn). The Danish mortgage bond market is actually more than four times larger than the Danish government bond market. The market value also exceeds total Danish GDP. An important factor for investor security in Danish mortgage bonds is the 'Balance Principle'. The principle safeguards a very close connection between the payments from the borrowers to the mortgage banks and the mortgage banks' payments to the bond owners. The balance principle means that there is a close match between the bonds and the mortgage loans issued. For example, a mortgage bank issues and sells 30-year bonds with a fixed interest of 5 per cent at a value of Danish Krone (DKK) 1mn in order to issue and pay out a 30-year mortgage credit loan with a fixed interest of 5 per cent to the amount of DKK 1mn. This is called match-funding. This means that there, at all time, is complete transparency in the Danish mortgage system. The mortgage banks have used an effective balance principle in combination with close coupling between listed mortgage bonds and the loans granted. With the balance principle and the practice that the mortgage banks follow, there is a complete match between the loans and the bonds issues, hence also between payments on the borrower side and the bond side. When re-financing takes place of e.g. one-year ARM loans, the new interest – irrespective of whether it is higher or lower than the previous interest – is transferred fully to the borrower. This way both liquidity and refinance risk is being avoided in Danish mortgage credit system.

Source: Realkreditraadet, the Association of Danish Mortgage Banks; Website - www.realkreditraadet.dk.

2.2 Reasons for popularity of Fixed rate loan products/FRMs in advanced countries

- Less volatile/ low interest rate scenario;
- Existence of a vibrant securitization market (Global Securitization Issuance[3]–$ 2,448 bn–2011);
- Deep and efficient market for MBS (mostly in US and Europe);

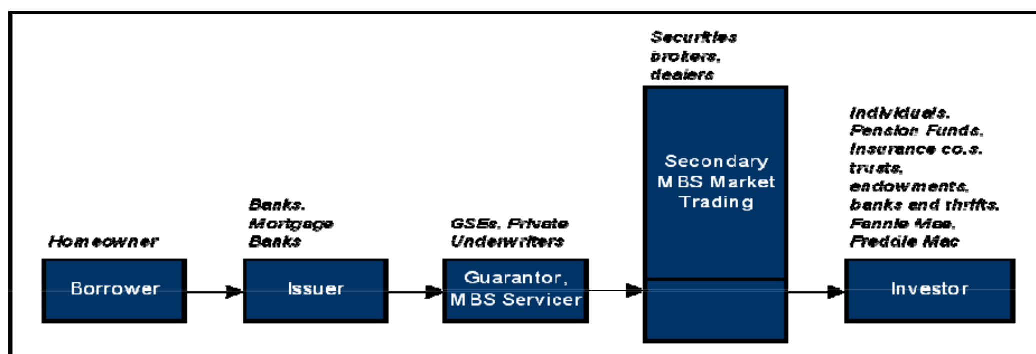
[3] Markets in Motion, Website – www.ftkmc.com.

- Presence of Govt. Sponsored Entities to buy out the FRMs, e.g. **Fannie Mae** and **Freddie Mac** in USA**;** and
- In countries where there is preponderance of FRMs, the risk on account of FRMs is being hedged using a liquid IRS market, e.g. USA.

2.3 Role of Government Sponsored Enterprises (GSEs) in FRMs

There are significant differences among countries in the presence of government-owned or sponsored mortgage institutions. The USA uses government-supported mortgage institutions or guarantee programs: mortgage insurance, mortgage guarantees and GSEs. Mortgage insurance is an insurance policy which compensates lenders or investors for losses due to the default of a mortgage loan whereas mortgage guarantee is a guarantee given by guarantors guaranteeing the payment of mortgage loan by borrowers. Canada and Japan have government guarantee programmes while Canada and the Netherlands have government backed mortgage insurance programmes. Korea has a GSE modeled on the lines of that in USA. The market share of government backed institutions in Canada, Japan and Korea is significantly less than that of USA. In USA, where significant portion of the mortgages are fixed rate, the secondary market for MBS is deep, liquid and efficient permitting banks to securitize these long term loans and move them from their books. This is largely due to the presence of GSEs such as Fannie Mae and Freddie Mac, which purchase the mortgages from the loan originators (banks and housing finance corporations) subject to the mortgages meeting specific criteria, securitize them and also guarantee the principal payment to the investors in MBS. By packaging mortgages into MBS and guaranteeing the timely payment of principal and interest on the underlying mortgages, Fannie Mae and Freddie Mac attract customers to the secondary mortgage market who might not otherwise invest in mortgages, thereby expanding the pool of funds available for housing. That makes the secondary mortgage market more liquid and helps lower the interest rates paid by homeowners and other mortgage borrowers (Chart 4). A cross country experience regarding the development of the mortgage market is given in **Annex II**. In Europe there is facility of covered bonds, which are bonds backed by security of underlying mortgage. Most European countries have strong markets in covered bonds.

Chart 1 : GSE: Role in US Mortgage Secondary Market

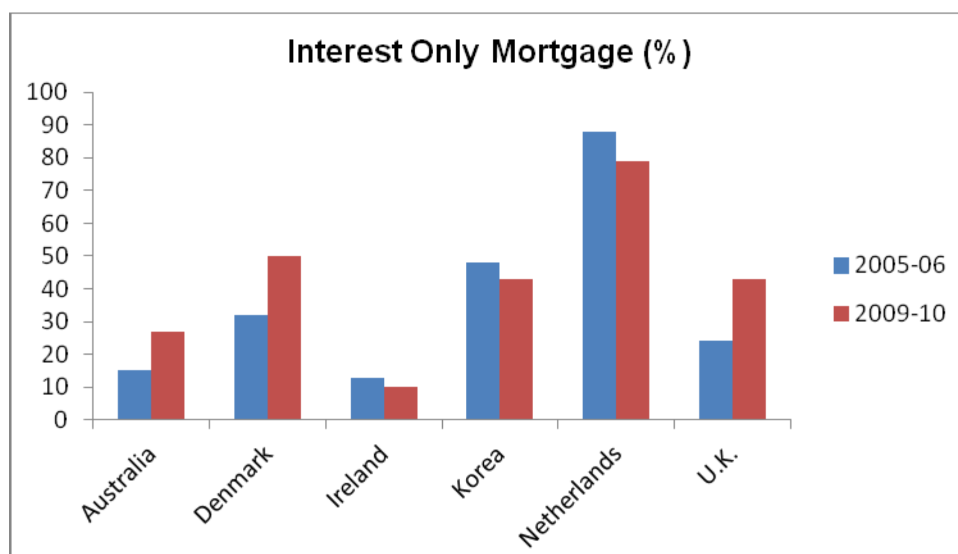


Source: Securities Industry and Financial Markets Association (Sifma), Website – www.Sifma.org

2.4 Interest Only Mortgage (IOM)

In USA, apart from the fixed rate products offered for a fixed tenure, a 5 or 10 year Interest-only Mortgage (IOM) is typical. This is a product in which interest accrued on the loan is paid in the initial few years and the principal is amortized for the remaining term. For example, if a borrower had a 30 year mortgage loan and the first 10 year were interest only, at the end of the first 10 years, the principal balance would be amortized for the remaining period of 20 years. This results in initial payments (in the interest-only period) being substantially lower than the later payments leading to lesser burden on the customers in the initial years. Denmark, Netherlands and UK also offer IOMs. However, there has been no clear preference for IOMs as a proportion to the overall mortgage portfolio and the trends in various countries over the years have so far been mixed. The feasibility of replicating the IOM product in India was discussed in detail by the Committee. The members were of the view that this product can work fine in a benign interest rate scenario with less volatility. However, in a high interest rate country like India, the product may not satisfy the requirement of less interest outgo in the initial periods as is the case in advanced countries. Moreover, this could be seen as another variant of teaser rate loans with all its pitfalls. There was a suggestion to introduce the Principal Only Mortgage (POM) product in India, wherein only the principal would be recovered in the initial years followed by interest recovery. However, this product also could not find favour with the members as they thought that high repayment obligation in the initial years in the form of principal repayment and non-availability of benefit of accrued interest for income tax purposes (unless separate ledger is maintained for the accrued interest) could act as a dampener for such products.

Chart 2: Share of IOMs in some countries



Source: Article of Dr. Michael Lea, International Comparison of Mortgage Product offerings, 2010 appearing in website - www.housingamerica.org.

2.5 Asian Experience

Over 90 per cent of HLs in Asia (excluding Japan) are floating rate loans mainly due to underdeveloped securitization market, absence of liquid IRS market in most of the countries and non-existence of GSEs to buy out the fixed rate loans. China's loan market is the largest in Asian region, followed by Japan. The maximum loan tenors range from 20 years in India, Indonesia and South Korea to over 30 years in China, Japan, Malaysia and Vietnam. In Singapore, it extends to 32 years[4]. Post 1997 Asian financial crisis, Asian governments stepped up their efforts to improve the structure of the real estate finance system. The share of private housing has increased substantially in the last decade and commercial banks and other private financial institutions have gained importance in mortgage loan origination. While in the primary market more diversified mortgage products have been made available, mechanisms for mortgaged backed securitization have been established in several Asian economies. However, both the primary and the secondary market are not fully developed and need to be stimulated further. In China, banks extend HLs and mortgage loans (ML) for periods ranging from 25-40 years on a floating rate basis. In most Asian countries, HLs are referenced to internal benchmark of banks; exceptions are Singapore [linked to Singapore Inter-bank Offered Rate (SIBOR)], Korea [linked to Korea Inter-Bank Offered Rate (KORIBOR) or Cost of Funds Index (COFIX)], and Taiwan (CP reference rate). In Hong Kong, clients can choose for linkage to Hong Kong Inter-Bank Offered Rate (HIBOR) and in Korea new floating rate home loans are linked to COFIX. In Japan about one half of the loans are convertible (after the end of the fixed rate term, the borrower can select another

[4] Mortgage markets in Asia by Seow Eng Ong , Professor in National University of Singapore- www.rics.org.

fixed rate period or switch to a variable rate). HLs lending tends to be dominated by banks and highly concentrated, in most countries.

2.6 Recommendation

The Committee deliberated as to whether banks can extend loans for very long periods say up to 20 years or so. Most of the members felt that in such cases, the spread between fixed and floating rate would be very high and the cost would be exorbitant for the borrowers. Hence, the Committee is of the opinion that banks could introduce and popularize a fixed rate LT loan product (in addition to plain vanilla fixed rate product for long tenor) with interest reset provision after a pre-decided period. Majority of the Committee members opined that the interest reset clause should be operative between 7-10 years. Under this suggestion, the product will be a fixed rate loan with reset of interest rate once in 7-10 years till the maturity of the loan. The Committee is also of the view that at the time of reset, there could be an option for the lender to fix a reasonable cap and floor (say, 200 or 300 bps) in relation to the interest rate originally charged to the borrower at the time of reset. This would help protect the customers from higher interest cost at the time of interest reset if interest rate are going up as also protect the interest of the bank in the event of lower interest reset following downward movement of interest rates.

Chapter III

Domestic Experience

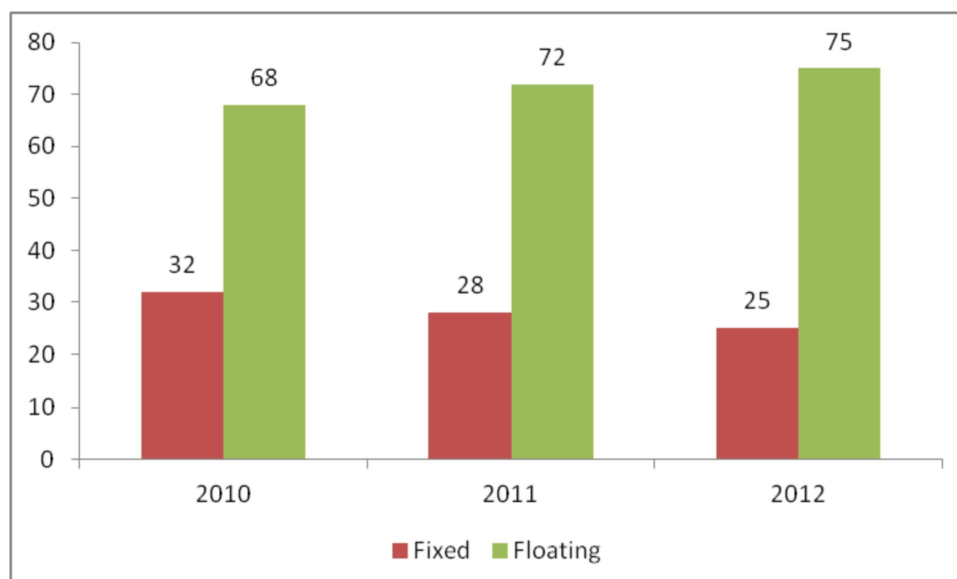
The Benchmark Prime Lending Rate (BPLR) system introduced in 2003 fell short of its original objective of bringing transparency to lending rates. Competition faced by the banks forced them to price a significant proportion of loans far out of alignment with their BPLRs. There was also widespread public perception that the BPLR system had led to cross-subsidization in terms of underpricing of credit for large corporates and overpricing of loans to small and medium borrowers. Accordingly, based on the recommendations of a Working Group[5] (WG) on BPLR, banks were advised to switch over to the system of Base Rate with effect from July 1, 2010. The Base Rate system was aimed at enhancing transparency in lending rates of banks and enabling better assessment of transmission of monetary policy. It was advised by the WG on BPLR that the methodology of computing the floating rates should be objective, transparent and mutually acceptable to the counterparties. The Base Rate itself could serve as the benchmark rate for floating rate loan products, apart from external market benchmark rates. It was, however, required that the floating interest rate based on external benchmarks should be equal to or above the Base Rate at the time of sanction/renewal of loan. The banks were also allowed to offer fixed interest rate loan products provided the interest rates on these loan products were not less than the Base Rate.

3.1 Fixed vs. Floating Rate Loan

3.1.1 The status of fixed vs. floating retail loan portfolio of a representative sample of 21 banks for the last three years is given in **Chart 3**, which shows that the portfolio of banks has been highly skewed towards floating rate loan products. Further, the percentage of the floating rate loans in the portfolio of banks (aggregate) has shown a steady increase whereas the percentage of fixed rate loans has declined in these three years. Retail loans of banks comprise HLs, auto loans, personal loans (against deposits, insurance policies, government securities & gold ornaments), etc. HLs, however, constitute a major portion of the retail loan portfolio of banks and most of these loans are at floating rate of interest.

[5] Report of the WG on BPLR dated October 20, 2009 - Chairman Shri Deepak Mohanty, Executive Director, RBI.

Chart 3: Fixed Vs Floating retail loan portfolio of banks (%)



Note: Based on data collected from a sample of 21 banks

3.1.2 Currently, the fixed rate HL offerings in the market are few and can broadly be classified into one of the following categories :

- **Hybrid Structure**: Loans carrying a fixed rate of interest for a short predetermined tenor (say for the first 2-3 years) and a floating rate structure thereafter. There is another variant of hybrid structure wherein the loan product has both fixed and floating rate loans in specific proportions, say, 50 per cent each. The Committee was informed that this type of loan product which was in vogue in one of the banks in India has since been discontinued.
- **Fixed Rate Structure**: Loans having a fixed rate of interest throughout the loan period.

The pricing mechanism of fixed and floating rate loans, broadly prevalent across the banking system in India is briefly explained in **Box II**.

Box II – Pricing of Fixed & Floating Rate loans

Prior to introduction of base rate regime, in respect of Fixed Rate Term Loans, a spread was loaded on the G-Sec benchmark yield of similar tenor or on the cost of funds for the bank. For example, the rate of interest on a 10 year term loan was 10 year G-Sec yield plus a spread. The spread in this case comprised credit risk premium and transaction cost. In case of loans linked to the cost of funds, the spread included a tenor premium in addition to the credit risk premium and transaction costs. The credit risk premium was linked to the credit ratings, whereas the tenor premium was typically based on G-Sec yield differential across tenors. Post introduction of base rate* regime, the interest rate in case of Floating Rate Loans is being computed as the lending bank's base rate plus a spread consisting of credit Premium. In case of Fixed Rate Loans, bank's base rate is loaded with the credit premium and the tenor premium. The tenor premium is added on account of the inherent interest rate and prepayment risk. In case of HLs fully secured by mortgages, the credit risk premium is determined taking into account the historical behaviour of the HL portfolio and not the individual borrower's credit rating. It is pertinent to note that the pricing of retail loans is to a great extent driven by the pressures of competition and the outlook of the bank on the portfolio and may not exactly conform to the pricing mechanism discussed here.

*Base Rate = a + b + c +d
a – Cost of deposits/funds ; b – Negative carry on CRR/SLR; c – Unallocatable Overhead Cost; d – Average return on Net worth

3.2. Reasons for waning popularity of fixed rate loan products

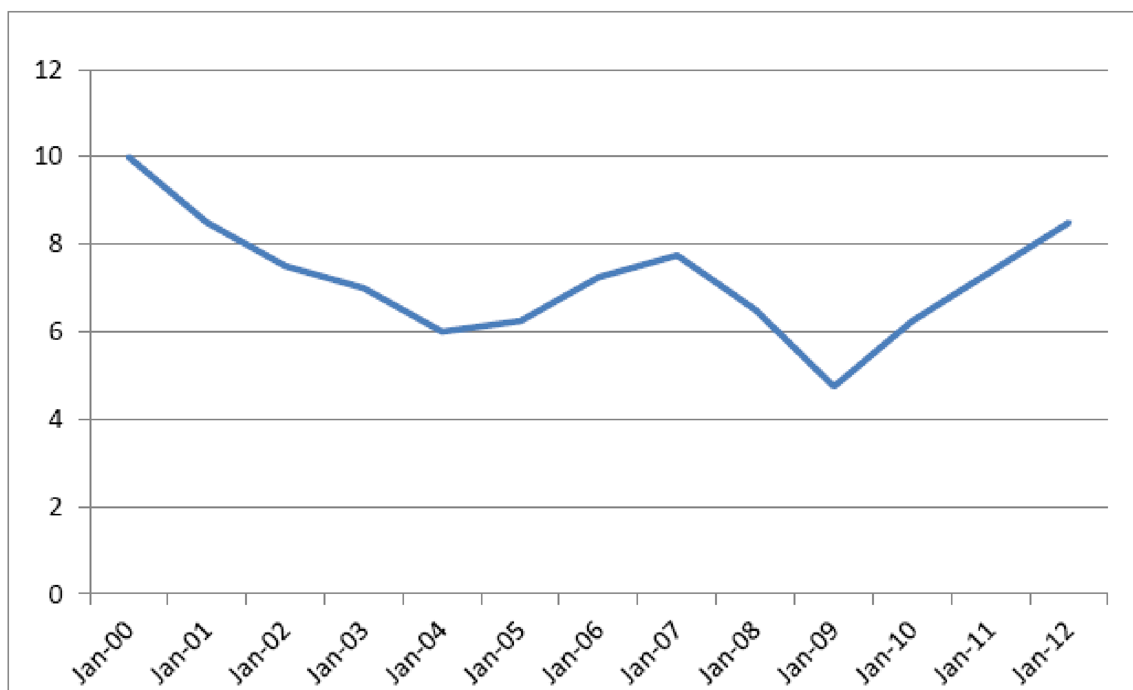
During the period 1977-2000 fixed rate loan products were popular. However, post 2000, these products gave place to floating rate loans due to a variety of reasons:

3.2.1 In a falling interest rate scenario, the customers found it attractive to opt for floating rate loans, as their cost of borrowing declined at every interest reset date. The borrowers however did not have the expertise or knowledge to look at a long term horizon, i.e. periods when the interest rate cycle reverses.

3.2.2 In the absence of well-developed market for securitized products and secondary market for mortgages, the tool available to banks to hedge against downside risks arising out of reversal of interest rate cycles in case of fixed interest rate loan products is predominantly the interest spread. The higher spread maintained on fixed rate products for covering downside risks reduced their attractiveness vis-à-vis floating rate loan products in the market. In some cases, interest rates on fixed rate products were significantly higher than floating rate products, at the time of initial offer of these products, which dissuaded the retail customers to lock in their liability in fixed rate products.

3.2.3 With falling interest rates during the early part of 2000s (**Chart 4**), borrowers started prepaying the high cost fixed rate loans. For this, many banks charged prepayment penalty of 2 to 3 per cent on the outstanding amount. Some of the banks charged prepayment penalty on the originally sanctioned amount. This was resented by the borrowers. Although the interest rates increased from 2004 onwards, the same witnessed rise and fall in different phases. However, the banks adopted a cautious approach in going back to fixed rate regime learning from their previous experience.

Chart 4: Movement of Repo rate (%) Jan 2000-Jan 2012



Source: Bloomberg

3.2.4 During the Annual Conference of Banking Ombudsmen held on September 5, 2011, it was resolved that Banks must not recover pre-payment charges on floating rate loans. Banks may also offer long-term fixed rate HLs to their customers and address their ALM issues by recourse to the IRS market. Subsequently the pre-payment penalty/foreclosure charges on floating rate loan products were prohibited by RBI[6].The removal of prepayment charges on the floating rate loans has made such loans more attractive to the customers. But pre-payment penalty on LT fixed rate loan products continues since an interest rate downturn would adversely affect the profitability and ALM structure of the banks with LT fixed rate loan products in their portfolio. In such a scenario, borrowers would like to pre-pay their loans while depositors would like to continue with their term deposits with the banks.

[6] RBI circular: DBOD. No. Dir. BC. 107 / 13.03.00/ 2011-12, Dated June 5, 2012

3.2.5 There is no differential tax regime for fixed rate or floating rate loans. The Committee deliberated on this issue and some members were of the view that differential tax incentives could be considered for fixed and floating rate loan products. But no consensus could be arrived at among the members in this regard.

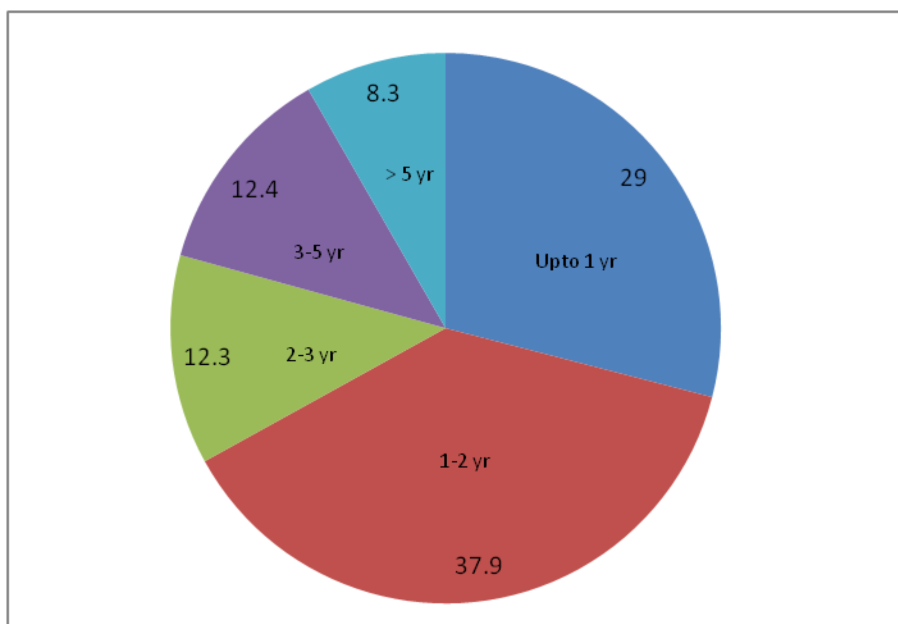
3.3. Constraints in providing fixed rate loan products

A substantial part of the resource mobilization of the banking system is in the form of term deposits, which are predominantly short to mid-term (upto 5 years) (Chart 3 below). Majority of the Committee members informed that a predominant part of the term deposits was upto 2 years' tenor. While a significant part of term deposits are rolled over on maturity and hence may be considered core/long-term in nature, from a liquidity perspective, these are short/medium term in nature from interest rate perspective as they get re-priced on maturity. In addition to term deposits, the core part of Current Account & Savings Account (CASA) deposits also provide stable and medium/long term funds depending upon the behavioural pattern specific to each bank. However, CASA deposits are primarily demand deposits and creation of very long term assets out of these deposits exposes the banks to interest rate as well as liquidity risks. Banks are permitted to mobilize funds through preference shares, innovative perpetual debt instruments, hybrid debt capital instruments and subordinated bonds, which are of medium to long term tenor (up to 15 years) and are used primarily to meet capital requirements[7]. However, bonds constitute a small part of overall resources of banks in India. Given this funding profile, it has been observed that presently, banks manage their loan portfolio as under:

- Auto loans of 3-5 year tenor are at fixed rate for the entire tenor of the loan.
- HLs are generally of 15-25 year maturity with most HLs at floating rate.
- Loans for infrastructure projects are of long duration and as such, banks generally find it difficult to fund these at fixed interest rate.

[7] RBI circular DBOD.No.BP.BC.16/21.06.001/2012-13, Dated July 2, 2012

Chart 5: Deposit Composition (in percentages) of Scheduled Commercial Banks as on Mar 31, 2010



Source: Statistical Tables relating to banks of India, 2010-11, RBI

3.4 Feasibility of Long-Term Fixed Interest Rate Loan Products

Interest rate fluctuations adversely affect the affordability of HLs and enhance the risk of default by the borrowers. Thus, the floating interest rate over the long period of the loan carries risk for the borrowers (EMIs may increase in between) as well as for the lenders (credit risk). However, considering that most bank liabilities (deposits) are short to medium term in nature, the sanction of long term fixed rate loan products tends to create an asset liability mismatch on the balance sheet of banks. Deposits being predominantly of shorter maturity are repriced faster than long term loans and may lead to higher interest costs in a rising interest rate scenario for banks. While lending long, the banks face ALM risk and interest rate risk which get factored in their pricing. Asset liability mismatch affects net interest margin or the spread that banks earn. The options to address this asset liability mismatch were deliberated by the Committee in detail.

3.4.1 One way to mitigate the mismatch is to raise long term fixed rate funds from the bond market.

3.4.2 Securitization activity in India continues to remain subdued with activity remaining confined to a few banks and NBFCs. Despite the growth in HLs and NHB's efforts to revive the securitization market in India, the issuance of mortgaged backed securities (MBS) has continued to remain very low with poor secondary market liquidity of the securitized paper.

The number of Residential MBS (RMBS) issuances in India increased to 22 in FY2012 along with an increase of 53% in value terms. However, the issuance volume in RMBS market continues to be low at less than ₹8,000 crore. Further, the average deal size marginally reduced to ₹349 crore in FY2012 from ₹359 crore in FY2011. RMBS segment continued to be highly concentrated with two housing finance companies, which together contributed to about 85% of all issuances[8]. Further, some of the active banks in retail loans are reaching their exposure limits in respect of retail loans and infrastructure loans either directly or indirectly (through exposure to related NBFCs) thereby resulting in lower advances to these segments. Securitization could help these banks in freeing their exposure limits.

3.4.3 Within the framework of interest rate risk management, specific to each bank, banks maintain certain amount of long term fixed rate SLR securities as per regulatory prescription. Currently a predominant part of Government Securities (G-Secs) issuance is fixed rate. If the incremental issuance by GOI were to include higher amount of shorter dated and floating rate securities, banks will have the flexibility of shifting certain amount of interest rate risk assumed in their balance sheet from SLR securities to long term fixed rate loans. Most of the members of the Committee informed that banks generally do not stipulate a target duration for the combined portfolio of investment and loans. In view of this, there was no unanimity on the proposition of issuance of more short-term dated and floating rate securities by GOI.

3.4.4 The IRS market in India is active mainly up to 5 years segment, although there is no restriction on undertaking longer term IRS trades. Overnight Indexed Swap (OIS) is the most prevalent form of IRS in the domestic money market. Some of the Committee members felt that banks could examine using the IRS market actively to undertake the ALM activity and transform their fixed rate liability to floating rate liability, and vice-versa using this tool. It was, however, observed that the participation in OIS market currently is mainly limited to foreign banks and a few private sector banks. Moreover, OIS is being predominantly used for trading purpose on the interest rate outlook and a very small portion goes to hedge exposures that are influenced by interest rates. Some members were of the view that improvement in infrastructure in terms of provision of IRS trading platform as well as ensuring guaranteed settlement through Central Counterparty Mechanism at an appropriate time could go a long way in imparting liquidity to the IRS market and help develop IRS products for tenors beyond 5 years in course of time when participation in the market becomes more broad based. However, the main issue is that the benchmark used for the OIS is the daily overnight NSE MIBOR and therefore hedging of fixed rate loan products (based on base rate plus spread) using OIS market may lead to basis risk. Most importantly,

[8] ICRA Rating Feature – May 2012

there are no liquid term money benchmarks available in the derivative market to hedge this risk.

3.5 Recent Initiatives for Introduction of Fixed Rate Loan Products

3.5.1 The average tenor of HLs in India is observed to be 7-8 years which is partly because of the pattern of demand by the borrowers who prefer to retire their HLs and release the mortgage of the property as soon as possible.

3.5.2 NHB has undertaken several initiatives to popularize LT fixed rate HL products by banks. Recently they launched a scheme for refinancing banks which offer LT fixed rate HLs to low income households (income up to ₹15,000 per month) for a period extending to 15 years.

3.5.3. Hon'ble Finance Minister of India in his Budget speech for the FY 2012-13 had announced to set up a Credit Guarantee Trust Fund to ensure better flow of institutional credit for HLs. The objective of this proposal was (a) to provide default guarantee as risk mitigant; (b) to enable availability of bank credit without collateral/third party guarantee; and (c) to strengthen credit delivery system and facilitate flow of credit to low income housing. Accordingly, the Mortgage Credit Guarantee Trust Fund (MCGTF) has been set up under the aegis of Ministry of Housing and Urban Poverty Alleviation within the NHB, which will guarantee the default on loans up to ₹0.05 crore. The refinance provided by NHB and the guarantee extended through the MCGTF will result in reduced EMI as well as provide hedge against interest rate volatility. Thus, the NHB has recognised the need to create a long term fixed interest rate market for housing, particularly for the low and moderate income households, who may not be able to absorb the volatilities in the interest rate under the floating rate regime.

3.5.4 NHB has been playing a lead role in starting up Mortgage Backed Securitisation and development of a secondary mortgage market in the country. It launched the pilot issue of MBS in August 2000, followed by other MBS issues. NHB is also examining the possibility of creating a fund for hedging in respect of floating to fixed interest rate, with a view to developing a long term debt and loan market for funding long term mortgages in the country.

3.5.5 HDFC has introduced 'Trufixed Interest Rate Home Loans' scheme, where interest rate is fixed for 10 years. In this scheme, interest rates are 125 basis points lower than HDFC's current fixed rate loans. HLs up to ₹0.10 crore are offered by HDFC at a fixed interest rate of 10.75 per cent and loans above ₹0.10 crore and up to ₹0.75 crore are available at 11 per cent. Under the scheme, borrowers are allowed to choose a fixed tenor varying from three to ten years. For loans beyond 10 years, floating interest rate is charged after the tenth year. In

this scheme, borrowers are permitted to make part-repayments out of their own funds without paying any penalty.

3.6 Recommendations

3.6.1 The Committee was of the view that banks may explore the option of raising resources through LT bonds to enable them to extend LT fixed rate loan products. As per extant guidelines[9], banks are permitted to raise LT bonds with a minimum maturity of 5 years to the extent of their exposure of residual maturity of more than 5 years to the infrastructure sector. The distinction between these LT bonds and Tier II bonds is furnished in **Annex III**. It is understood that most of the banks have not taken recourse to the issue of LT bonds to the extent of their eligible exposure to the infrastructure sector. It is suggested that the room so available could be utilized to raise resources through issue of more LT bonds. This would release resources of the banks locked up in infrastructure loans which can be deployed for extending LT fixed rate loan products. This will also facilitate banks to extend fixed rate loan products ranging from 15 to 20 years. Some members of the Committee informed that there could be some banks without infrastructure exposure and therefore it is suggested that the segment qualifying for raising of resources through LT bonds could be enlarged to include exposure to HLs qualifying for priority sector (currently HLs upto ₹ 25 lakh) in addition to infrastructure sector.

3.6.2 As the Indian financial system has G-Secs upto 30 years, banks could be in a position to raise a 30 year bond also and price the same based on the yield of 30 year G-Sec. This should enable the banks to elongate the tenor of the fixed rate loan, say upto 30 years (without reset clause) which would help reduce the EMIs of the borrowers.

3.6.3 In order to encourage demand side interest in case banks issue LT bonds, it was felt that large institutional investors like Pension Funds, Provident Funds, Insurance Companies, etc. should be encouraged to invest in bonds issued by banks, if necessary by suitably amending the relevant investment guidelines. These institutional investors are ideal match for developing long term retail mortgage market in India.

3.6.4 With a view to mobilizing long term deposits, the Committee feels that banks should popularize the Fixed Deposits (FDs) Scheme with tenors of above 5 years as they are eligible for tax exemption. This would, to some extent, meet the LT funding requirement of banks who would then be in a better position to extend LT fixed rate loans.

3.6.5 NHB may examine the feasibility of extending its refinancing scheme to banks offering LT fixed HL products to their customers other than low income households. Further, NHB

[9] RBI circular DBOD No. BP. BC. 90 /21.01.002/ 2003-04, dated June 11, 2004

may explore issuing long term housing bonds for channelizing the long term resources into the housing sector. In its apex capacity, NHB is well positioned to oversee and catalyse the development of long term debt market.

3.6.6 The Committee discussed the issue of take-out financing. Under this, the institution/bank financing infrastructure projects has an arrangement with any financial institution for transferring to the latter the outstandings in respect of such financing in its books on a pre-determined basis. This helps the banks in their ALM exercise since the financing of infrastructure is LT in nature against their predominantly short-term resources. In India, take-out financing as a product which is currently available for infrastructure sector has not taken off in a significant way due to various factors viz. conditions imposed by the institution committing the take-out e.g. minimum stipulation regarding Debt Service Coverage Ratio[10], reluctance on the part of banks to sell out the good assets from their portfolio, high stamp duties, etc. However, the Committee recommended that the option of take-out financing could be explored in case of LT fixed rate HLs also under which the original lending institution could be allowed to transfer its outstandings relating to such loans to a specialized institution, say, NHB after a minimum lock-in period of 5 years. Such take-out financing should mostly be with minimum conditionalities. The Committee also noted that lack of liquidity in the Indian securitization market is one of the major factors responsible for lack of popularity for fixed rate loan products and therefore recommended that banks should make efforts to promote the securitization market in India.

3.6.7 The Committee discussed the loan product which was in vogue in one bank wherein a part of the loan was having fixed rate and floating rate loan and suggested that banks could consider re-launching of similar products with major proportion of the product as fixed (e.g. 2/3rd – fixed & 1/3rd – floating) in addition to the fixed rate loan products without having the reset clause.

3.6.8 Presently, the interest differential between the rate charged on fixed rate and floating rate HLs extends up to as high as 5.5 percentage points in certain cases. The Committee feels that the current premium charged for LT fixed rate loans over the floating rate loans needs to be reviewed by banks periodically for new loans. Banks should not charge off market rates on these loans.

3.6.9 The Committee deliberated on the removal of pre-payment penalty for floating rate loans which has further skewed the customer preference in favour of floating rate loans vis-à-vis the fixed rate loans. However, it was felt that the pre-payment penalty may continue to

[10] **Debt Service Coverage Ratio**: It is the ratio of cash available for debt servicing to interest, principal and lease payments

remain on fixed rate loan products since an interest rate downturn would adversely affect the profitability and ALM structure of the banks with LT fixed rate loan products in their portfolio. In this scenario, borrowers would like to pre-pay their loans while depositors would like to continue with their term deposits with the banks. The Committee recommends that the pre-payment penalty should be levied only on the outstanding amount, on the date of pre-payment and not on the loan amount initially sanctioned. Further, the pre-payment penalty should be reasonable so that it does not act as a disincentive for the fixed rate loan borrowers. Moreover, the pre-payment penalty could be graded based on the period after which the loan is repaid, i.e. after 5 years, 10 years or so.

3.6.10 It may be impracticable to shift a major part of the floating rate loans to fixed rate loans in a short span of time due to various factors affecting demand and supply of such loans. One of the major sources of discomfort to the borrower is lack of detailed knowledge of the frequent changes in the EMIs under the floating rate system. Substantial increase in EMIs over a period of time has an adverse impact on the repayment capacity of the borrowers which also results in loan delinquencies. In view of this, the aspect of transparency in retail loan products needs significant improvement and the present system of educating customers about loan products should be given paramount importance. Thus, the Committee recommends that banks should educate their customers on the possible impact of rate changes on their EMIs. A scenario analysis could be presented to the borrowers. In this respect, the Committee suggests that IBA should play a prominent role. It should promote awareness regarding the EMI calculator put on RBI website among its members and may provide a link to this calculator through its website.

Chapter IV - Summary of Recommendations

4.1 Banks may introduce and popularize a fixed rate LT loan product with interest re-set provision, say, between 7-10 years till the maturity of the loan in addition to the plain vanilla fixed rate loan product for long tenor. At the time of reset, there could be an option for the lender to fix a reasonable cap and floor (say 200 or 300 bps) in relation to the interest rate originally charged to the borrower at the time of reset to protect the customers from very high interest cost. (**Para 2.6**)

4.2 Banks may explore the option of raising resources through LT bonds to enable them to extend LT fixed rate loan products. As per extant guidelines, banks are permitted to raise LT bonds with a minimum maturity of 5 years to the extent of their exposure, of residual maturity of more than 5 years, to the infrastructure sector. The banks who have not issued LT bonds to the extent of their said exposure to the infrastructure sector could utilize the room available to issue more of LT bonds which would help release resources for extending LT fixed rate loan products. The segment qualifying for raising of resources through LT bonds could also be enlarged to include exposure to HLs qualifying for priority sector. This will facilitate banks to extend fixed rate loan products ranging from 15 to 20 years. (**Para 3.6.1**)

4.3 As the Indian financial system has G-Secs upto 30 years, banks could be in a position to raise a 30 year bond and price the same based on the yield of 30 year G-Sec also. Banks could therefore make efforts to elongate the tenor of the fixed rate loan, say upto 30 years (without reset clause) which would help reduce the EMIs of the borrowers. (**Para 3.6.2**)

4.4 In order to encourage demand side interest in case banks issue LT bonds, large institutional investors like Pension Funds, Provident Funds, Insurance Companies, etc. should be encouraged to invest in bonds issued by banks, if necessary, by suitably amending the relevant investment guidelines. (**Para 3.6.3**)

4.5 Banks should popularize the FDs Schemes with tenors of above 5 years as the same are eligible for tax exemption. This would to some extent meet the LT funding requirement of banks who would then be in a better position to extend LT fixed rate loans. **(Para 3.6.4)**

4.6 NHB may examine the feasibility of extending its refinancing scheme to banks offering LT fixed HL products to their customers other than low income households. Further, NHB may explore issuing long term housing bonds for channelizing the long term resources into the housing sector. **(Para 3.6.5)**

4.7 Banks may explore the option of take-out financing. A minimum lock in period of 5 years can be thought of after which the outstandings can be transferred to a specialized institution like NHB. Such take-out financing should mostly be with minimum conditionalities. Banks should make efforts to promote the securitization market in India. (**Para 3.6.6**)

4.8 Banks may introduce, in addition to the plain vanilla fixed rate loan product for long tenor, a hybrid loan product having both fixed and floating interest rate loans with a higher proportion of fixed rate loan (e.g. 2/3rd –fixed & 1/3rd- floating).

(**Para 3.6.7**)

4.9 Banks may periodically review the premium charged for new LT fixed rate loans and should not charge off-market rates on these loans. (**Para 3.6.8**)

4.10 Banks should charge pre-payment penalty on fixed rate loan products, on the outstanding amount only and not on the initial loan amount sanctioned as some banks are doing. Further, it should be reasonable so that it does not act as a disincentive for the fixed rate loan borrowers**.** Moreover, the pre-payment penalty could be graded based on the period after which the loan is repaid, i.e. 5 years, 10 years or so. (**Para 3.6.9**)

4.11 Banks should improve the transparency in retail loan products. They should educate their customers on the possible impact of rate changes on their EMI and IBA should play a prominent role in this regard. (**Para 3.6.10**)

Annex – I

Questionnaire

Part – A

1) What is the composition of different kinds of fixed and floating rate loan products being offered by your bank?
2) What are the reasons for preference of floating rate loan products vis-à-vis fixed rate loans by banks?
3) What kinds of tools are being used by banks to hedge against downside risk arising out of reversal of interest rate cycle in case of fixed interest rate and floating interest rate loan products? How can this be augmented further?
4) What are the different maturity buckets within long-term fixed and floating rate loan products? Which tenors have more concentration and what are the challenges to offer fixed rate loan products in these buckets?
5) What will be the impact of recent RBI circular on fixed rate loan products which mandates that banks will not be permitted to charge foreclosure charges/ impose pre-payment penalties on home loans given on floating interest basis?

Part – B

a) Do banks feel that there is need for introduction of more fixed rate loan products?
b) What are the constraints (e.g. balance sheet constraints) due to which fixed rate loan products have been losing out to floating rate loan products?
c) What are the incentives for banks to offer more floating rate loan products? How will today's RBI circular advising the banks to stop charging foreclosure charges going to impact bank's behavior towards fixed rate loan products?
d) What are the different fixed rate loan products offered internationally? Is it feasible to introduce these products in India? What changes in the product design/market instruments should be carried out to suit socio-economic conditions? What care has to be taken before these products are introduced in India?
e) What are the learning points vis-à-vis cross country experiences in this regard?
f) What are the regulatory changes envisaged which will act as catalyst for introduction of fixed rate loan products of longer-tenor?

Annex-II

Countries	Predominant kind of mortgage	Residential Mortgage market size in 2009 (USD bn)	Mortgage/ GDP ratio in 2009 (%)	Max. Tenor of Mortgage loan (yrs)	Typical fixed tenor of mortgage loans (yrs)	Deep Mortgage bond market	Tenor of mortgage bonds (yrs)	Developed MBS market	Interest Rate Derivatives
USA	Fixed	10,175	73	30	30	No	N.A.	Yes	Yes
Denmark	Fixed	324	104	25-30	20-25	Yes	20-25	No	Yes
Germany	Fixed	1,587	48	30	7-10	Yes	10-12	No	Yes
Belgium	Fixed	209	44	25-30	7-10	Yes	10-12	No	Yes
France	Fixed	1,053	40	25-30	10-12	Yes	10-12	No	Yes
UK	Floating	1,897	87	20-30	1-2	No	N.A.	No	Yes
Hong Kong	Floating	83	37	40	1	No	N.A.	No	Yes
Singapore	Floating	72	37	35	1-2	No	N.A.	No	Yes

Cross-Country Experience of Mortgage Market

Indonesia	Floating	22	4	25	1-3	No	N.A	No	Yes

Annex III

Tier II bonds Vs Long-Term bonds

Particulars	Tier II bonds	Long-Term bonds
Purpose	- Tier II capital has two components - Upper Tier II and Lower Tier II. - These instruments are issued for the purpose of raising capital only.	- Long term bonds are issued for funding their long-term commitments and to assist banks in reducing ALM mismatches in the longer term maturities.
Pre-requisite / requirement	The banks are allowed to raise this capital subject to a ceiling of 100% of Tier I capital. Hence they can be only 50% of total capital of the bank.	The banks should have first provided assistance to such infrastructure projects before raising resources through bonds. Hence, if the bank has not lent to infrastructure projects (for residual maturity of more than five years), then they are not allowed to issue these bonds.
Maturity	- Upper Tier II instrument original maturity to be at least 15 years. - Lower Tier II instrument original maturity to be at least 5 years.	These bonds are issued with a minimum maturity of five years (to the extent of their exposure of residual maturity of more than five years to the infrastructure sector).
Currency	Upper Tier II instrument can be issued in foreign currency upto 25% of unimpaired Tier I capital. Lower Tier II instrument can be	In INR only.

	issued by banks in foreign currency after taking approval of RBI on a case-by-case basis.	
Optionality	In tier II instrument call option is allowed, subject to certain conditions.	No call/put option allowed.
Subordination	These are subordinated bonds.	These are not subordinated bonds but would be ranked *pari passu* along with other uninsured, unsecured creditors. Hence they would be less expensive as compared to Tier II capital.

Annex IV

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ARM	Adjustable Rate Mortgage
BPLR	Benchmark Prime Lending Rate
CASA	Current Account and Savings
COFIX	Cost of Funds Index
CSD	Customer Service Department
DBS	Department of Banking Supervision
EMI	Equated Monthly Installments
FDs	Fixed Deposits
FRM	Fixed Rate Mortgage
GSE	Govt. Sponsored Entity
GOI	Government of India
HDFC	Housing Development Finance Corporation

Annex V

Acronyms

HIBOR	Hong Kong Inter-bank Offered
HLs	Housing Loans
IDMD	Internal Debt Management
IOM	Interest Only Mortgage
IBA	Indian Banks' Association
IRS	Interest Rate Swap
KORIBOR	Korea Inter-bank Offered Rate
LT	Long-Term
ML	Mortgage Loan
MBS	Mortgage Backed Securities
NHB	National Housing Bank
PDs	Primary Dealers
PTC	Pass through Certificate
RMBS	Residential Mortgage backed Securities

SIBOR	Singapore Inter-bank Offered Rate