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**CONTRIBUTIONS TO BOOKS**

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

**JOURNAL AND OTHER ARTICLES**

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

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**RISKS IN HOUSING FINANCE THE COMMERCIAL BANKS EXPOSED TO – AN OVERVIEW**

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**ABSTRACT**

*Housing finance by the commercial banks is exposed to various types of risks. All types of loans\advances in general and housing finance in particular involve a variety of risks. The risks that the commercial banks are exposed to in financing housing is unique, in the sense that the lending spreads over a period of 5 – 25 years which is long period and identifying the risks involved is very difficult. In fact inappropriate advances, pricing and risk management in home loans can create a problem for the broader financial systems. The risk in housing finance triggers systemic risks which lead to major financial crisis globally. In fact the problem in the housing mortgage market has been identified as one of the important causes of the financial crisis of 2008-09. In most of the developed economies, during this period most of the banks and other financial institutions financing housing started facing significant losses on their investment in housing mortgagees and related securities in 2007. These losses triggered full blown financial crisis. The financial turmoil so created has been widely considered the primary cause of the economic recession that began in late 2007. It is therefore the need of the hour, to identify the major risks in general and operational risks in particular in housing finance, and review the management of the risks.*

**KEYWORDS**

Risk, Operational Risk, Mortgage, Management.

**INTRODUCTION**

**R**isk is a component of financial decision. Financial decision is an integral part of the human life. Risk is generally thought to be “the danger of loss”, it is associated with the down side and not the upside of a transaction. In the theory of finance, risk has been defined as “dispersion of unexpected outcome due to movement of financial variables”. The word “Risk” has been derived from the Latin word “Rescum” which means, “Risk at Sea”. Risk is inherent in every walk of life; however, risk in the banking sector has been associated with uncertainty and exposure which is an integral part of the banking business. Due to competition for survival, the banks are compelled to do business and encounter various types of financial and non-financial risks. Risk therefore, is universal, it refers to human behaviour in the decision making process. The measurement of the risk has been viewed in terms of distribution of potential outcomes of asset returns, asset values, losses etc.,. The two necessary parameters to evaluate the risky situation are :potential outcomes and their possibility of occurrence ,whether this evaluation is made consciously or unconsciously. With this backdrop, the present article proposes to study the risks faced by the banks in financing housing.

**STATEMENT OF PROBLEM /NEED FOR THE STUDY**

Housing is one of the basic necessities of mankind. Housing not only promotes the socio-biological interaction, but also house-hold based economic activities as it has both forward and backward linkages, it has been roughly estimated that about 280 industries are linked to housing activities directly or indirectly.

Housing finance of late has been considered as a priority sector and has evinced interest from various sections of the society. The problem of housing is a global one and therefore it has attracted the attention of the academicians, social activists, economists, Banks, politicians and policy makers. Housing finance has of late emerged as one of the important advances of the banks, as it has been considered as a safe and profitable advance for financial institutions in general and banks in particular. Housing finance plays a vital role, especially when there is an industrial sluggishness in the economy, as the surplus liquidity compels the banks in providing more finance to the housing sector. It is estimated that out of the total retail loans, that the banks have advanced, around 30 per cent to 35 per cent have been advanced to the housing sector. Housing financing is a “Mortgage” based advance and hence the banks find it safer when compared to other advances. However, the housing finance is not totally free from risks.

The financial crisis that the United States America faced in the year 2008-09 has to a very large extent originated from lapses or risks in the housing finance market. The Sub-prime crisis of the U.S., which has been considered more severe than the great depression of the 1930's was attributed to the Operational Risk in housing finance. Operational Risk in mortgage industry manifested itself as multiple lapses, though modest in size but pervasive in extent, accumulated to enormous proportions and crushed many mortgage players, crippled many others and triggered further Operational Risk crisis in the adjacent mortgage backed securities market.

Some of the reasons for the Sub-Prime crisis were appraisal frauds, liar loans, intermediation and redistribution towards underwriters, and computer programmers, that encouraged the customers into borrowing more loans and more profitable to the lenders. In addition to this, the real estate boom and the decline in long term interest rates were important contributors to the rise of sub-prime lending. The property prices in the US rose to 86 % between the period 1996 - 2006. Mortgage lending during this time rapidly increased the prices of the house and the Sub-prime was in a boom. Sub-prime lending increased from 9% of total mortgage lending in 2001 to 20% in 2006. During this period the property speculation grew, and as the boom persisted the lenders relied on the rising value of collateral to advance loans than the borrower's ability to repay from his income. The quality of loans deteriorated and in addition to this the underwriting criterias were relaxed as a result only 38% of sub-prime loans had a combined LTVA (Loan to Value Assets) of 100% or more and the remaining were less secured which, in turn triggered the great financial crisis in the U.S..

**RISKS IN HOUSING FINANCE ADVANCED BY THE COMMERCIAL BANKS**

Housing finance by the commercial banks is exposed to various types of risks. All types of lendings in general and housing finance in particular involve a variety of risks. The risks that the commercial banks are exposed to in financing housing is unique, in the sense that the lending spreads over a period of 5 – 25 years which is long period and identifying the risks involved is very difficult. In fact inappropriate lending , pricing and risk management in home loans can create a problem for the broader financial systems. The risk in housing finance triggers systemic risks which lead to major financial crisis globally. In fact the problem in the housing mortgage market has been identified as one of the important causes of the financial crisis of 2008-09. In most of the developed economies, during this period most of the banks and other financial institutions financing housing started facing significant losses on their investment in housing mortgagees and related securities in 2007. These losses triggered full blown financial crisis. The financial turmoil so created has been widely considered the primary cause of the economic recession that began in late 2007. In this backdrop efforts have been made to identify the major risks in general and operational risks in particular housing finance, and review the management of the risks. In this context it is the need of hour to study the risks that the commercial banks are exposed to, in general and housing finance in particular.

## OBJECTIVES OF THE STUDY

- To study the risks that the commercial banks are exposed to.
- To study the different types of risks that the banks are subjected to in financing housing
- To study the management and mitigation of the risks in housing finance.

## DEFINITION OF RISKS

Risk has been defined in Oxford English Dictionary (OED), as "Exposure to the possibility of loss, injury, or other adverse or unwelcome circumstance; a chance or situation involving such a possibility" (Wikipedia). Risk is effect of uncertainty on objectives. Uncertainty includes events (which may happen or may not happen) and uncertainty caused by lack of information or due to ambiguity. However, there is no uniform or unique definition of risk. Different financial institutions have defined risks differently, depending upon their banking structure, operations and investment strategies. Risk has been perceived as the probability and impact of a negative deviation, the probability or potential of sustaining a loss. Risks have been defined by various authors as "A condition in which there is a possibility of an adverse deviation from a desired outcome that is expected or hoped for" (E.J. Vaughan & T. Vaughan, *fundamentals of risks and insurance*, John Wiley & Sons, 9th edition, 2003). "An expression of the danger that the effective future outcome will deviate from the expected or planned outcome in a negative way." (H. Geiger. Die Risikopolitik der Banken, teil 1 and teil 2. *Der Sachweizer, Treuhander*, 73(6:7 and 8). "Risks are future problems that can be avoided or mitigated, rather than current ones that must be immediately addressed. Risk can also be expressed in mathematical terms as

**Risk= (Probability of the accident occurring) X (expected loss in case of accident).**

## REVIEW OF LITERATURE

The available literature has been reviewed under different dimensions like, housing finance, study of risks, management and its mitigation.

Vast literature has been published regarding the housing systems in India, however, there is little work on risk in housing finance. The literature focuses on the vital role of banks in housing finance, especially in recent times. The RBI Annual Report (2002-2003), RBI Report of Currency and Finance, (2002-03) has focused on the role of the commercial banks in financing to housing in India. The catalyst role of banking sector in financing housing has been well addressed by the various publications of the Basic Statistical Reports (BSR) and various issues of IBA Bulletin.

Basel-I and Basel-II Accords have laid down the guidelines for the commercial banks in advancing loans. "Basel Accord-II: Implications for the Indian Banking Systems" Bank Quest (Vol.74, No.3,) discusses the draw-backs of Basel-I on the one hand and on the other, highlights the importance of Basel-II Accord. The article probes into issues such as Minimum Capital Requirement, Supervisory reviews and Market disciplines. "Minimum Capital Requirement- Pillar-I", (Bank Quest) has also discussed the three pillars as the standardized approach for credit risk, the article also focuses on risk weights for Sovereigns, Banks, and the Corporates. CRISIL (2004), Report-2: "A road map for implementing and integrated risk management system by Indian banks by March 2005", IBA Bulletin has discussed the various types of risks that the banks are exposed to, in general and focuses on the risk management techniques to be adopted by the Indian banks. Mohan Amarendra (2001), "Risk, credit risk and market risk-a conceptual – paradigm" (Bank Quest), has discussed the different kinds of risk in financial transactions of the bank.

Rajeev. A.S. (2004), "Operational risk a real nightmare?" (Bank Quest, Vol.75 No. 3.) has discussed about the Operational risk, its measurement and management in general.

The role of housing finance, good housing finance system, Mortgage Finance Market Infrastructure, and the various types of risks in housing finance and its management, mitigation and regulation has been discussed in "Housing Finance in Emerging Markets" by Loic Chiquier and Michael Lea compiled in the World Bank Report (2009).

## TYPES OF HOUSING FINANCE RISKS

The banks and housing finance institutions face risks of different category and magnitude. The risks faced in financing housing can be categorised on different factors such as the nature of loss, by the degree of expectancy, by risk type, event type, business type, or loss type, and by the magnitude of loss and the frequency of loss. Following are the different types of housing risks"

### 1. CREDIT RISK

Credit risk is one of the important risks faced by the banks financing housing. The credit risk has also been referred to as 'Income Risks' or 'Default Risks'. Credit risk has been defined as "The inability or unwillingness of a customer or counter party to meet commitment in relation to lendings." That is to say income risks or credibility risks, in housing finance is associated with risk of loan default, when the borrower lacks the ability provided through income, to pay interest and instalments. The credit risk in housing finance can broadly be classified as:

- a) Probability of default and
- b) Loss given default:

The probability of default refers to the likelihood that the borrower will fail to make payment over the life of the housing loan. However, loss given default refers to the net cost that the banks will suffer in the event of default and foreclosure. The loss given default on the other hand is termed as a loss because the banks usually lose when it has to foreclose and sell a property especially when the price of the house has declined. In addition to this, the loss given default also include the cost of maintaining the house if it remains vacant after foreclosure or from the legal fees and other clause of foreclosure.

One of the significant causes of credit risks faced by the banks in financing housing is the lack of credit information; this is more so a significant barrier in most of the emerging economies, as borrowers often do not have a credit history or ability to prove their income. In addition to this most of the borrowers in these economies are employed in the informal sector and as such their income is more volatile and difficult to substantiate. There are also instances wherein some borrowers who have systematically underreported their income which enforces the banks to bear the loss.

### 2. MARKET RISKS

Market risks refer to the sensitivity of the value of housing property to changes in the value prices. Market risks originate from uncertainty with respect to expected inflation, actual inflation, real inflation rate, exchange rate and lending for a longer term. The macroeconomic and environment and characteristics of the mortgage instruments are principal determinants of cash-flow risks. For example, a low cost repayment may be a desirable feature of the mortgage for the consumer, but it significantly increases the cash-flow risks to the lender.

The different methods of calculating market risks are Traded Market Risks and Non-Traded Market Risks methods. Traded Market Risks are modelled and calculated using Value at Risk (VaR) methodology. VaR facilitates the generation of information like establishment, trading limit and control of trading operations, performance, assets and resource allocation which include hedging decision, in addition to risk overwrite and regulatory reporting.

Under the Basel-II Accord market risk can be measured by using different approaches. The Standardised Approach is a formula based model, while the Internal Model Approach requires extensive data collection systems and quantitative expertise.

### 3. LIQUIDITY RISKS

Liquidity means the ability to effectively accommodate bank deposit as also reduction in liabilities and to fund the loan growth and possible off-balance sheet claims. The concept of liquidity is very important in managing financial risks.

Liquidity Risk considered as part of Market risk has been alternatively defined as "The risk that the institution will not be able to execute or transact at the prevailing market price because there is, temporarily, no appetite for the deal on the "other side" of the market. (M.Crouhy, D. Galai, and R.Mark. *Risk Management*. Mc Graw-Hill, New York, 2001). Liquidity risk is not unique to housing finance but it is rather a broader financial sector stability issue. The housing loans are long term in nature which creates a greater liquidity risk than any other type of lending.



**TYPES OF LIQUIDITY RISKS**

Liquidity risks are based on the cash flows placed in different time baskets namely, the behaviour of assets, liabilities and off-balance sheet items can be classified into three different types:

- (i) **Funding risks:** It is the need to replace net outflows due to unanticipated withdrawal/non-renewal of deposit. This refers to the ability to meet funding obligations by either financing through sale of assets or by borrowing.
- (ii) **Time Risk:** it is the need to compensate for non-receipt of expected inflow of funds that is the performing assets turning into non-performing assets.
- (iii) **Call Risks:** The call risks happen on account of crystallisation of contingent liabilities and inability to undertake profitable business opportunities when desired.

**4. AGENCY RISKS IN HOUSING FINANCE**

Agency risks occur at the primary market level, where lenders may depend upon brokers to market and process loans and appraisers to value the collateral. In secondary markets, investors depend on third party originators and servicers to underwrite, collect, and remit payment. It is also a major concern in Government guarantee programmes as the government is exposed to a moral hazard. The presence of agency risk increases the cost of lending and securitization.

**5. SYSTEMIC CREDIT RISKS IN HOUSING FINANCE**

Systemic credit risk arises when there is a sudden decline in the property values. The decline may be local or national in nature. A market failure may be due to the inability of the lenders to diversify the mortgage risks. Real estate prices have the tendency to move in cycles, sometimes with tremendous volatility, which is risky not only to the lenders, but also for the stability of the financial systems. Volatile real estate prices make it difficult to value the collateral, underlying the mortgage, and to assess the credit risk of the mortgage portfolios. The sub-prime crisis of the U.S. (2007-08) demonstrates how real estate bubbles can be propagated across the global financial system. The real estate bubble in the U.S. due to the loose monetary policy adopted was further intensified by a mortgage bubble led to a mortgage and real estate explosion, affecting all types of lenders in the U.S. and abroad.

**6. POLITICAL RISKS IN HOUSING FINANCE**

The changes in a country's or a region's political system will have adverse impacts on the bank's activities, as it adversely affects the ability of clients to perform their obligations to the banks. The political risk in mortgage lending relates to events that reduce earning from mortgage lending because of political intervention in the selection of borrowers, the rate adjustment process, the mortgage terms and conditions, or the foreclosure and eviction process.

**7. OPERATIONAL RISKS (OR)****DEFINITION OF OPERATIONAL RISK**

Operational Risks have been defined by the Basel Committee –I as, "any risk which is not categorized as market or credit risk or the risk of loss arising from various types of human or technical errors." (BCBS 1988, Banking Committee on Banking Supervision). Further, **Basel Committee –II** defined operational risk as "The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk but excludes strategic and reputational risk." (BCBS 2004 Banking Committee on Banking Supervision).

The important types of operational risk involves breakdown in internal control and corporate governance, these break downs can lead to financial losses through errors, frauds or failure. The Basel committee –I has further opined that, due to the lending officer or staff exceeding their authority or conducting business in an unethical or risky manner the banks may incur loss. In addition to the above, the other major causes of operational risk are failure of information, technology, systems or major events like fire or any other disasters also leads to operational risk.

**OPERATIONAL RISKS IN HOUSING FINANCE**

Among the risks faced by the housing finance institutions, the operational risks are the most important and are a more recent phenomenon. Operational risks in housing finance have been defined by Basel committee in January 2001, as "the risk of direct or indirect loss resulting from inadequate or failed internal process, people or systems or from external events". Operational risk is a relatively new term for some very old problems, which happen on a small scale every day in financial markets and are managed with little or no incidents, which may however, may occasionally explode with dramatic and devastating effect. The transaction intensity of the mortgage business makes mortgage lenders more prone to OR. The long term maturity of the housing loans, the lengthy mortgage lien documents increases the likelihood of many errors. OR can become more important, as the mortgage value chain is "unbundled" through securitization as many participants work in different stages of the process like origination, servicing, securitization, and hence more actors are involved and therefore there are more chances of OR. Unlike market and credit risk OR factor in housing is largely internal to the bank. The OR in mortgage in housing includes risk of loss from incomplete documentation, automated system failures, data entry errors, rogue traders, internal and external frauds and computer security breaches.

**TYPES OF OPERATIONAL RISK IN HOUSING FINANCE**

The OR in housing finance stems from four important factors like people, process, systems, or external factors. The Basel-II Accord has identified seven different types of OR like internal frauds, external frauds, employment practises and work place safety, client's products and business practises, damage to physical assets, business disruptions and system failure and execution, delivery process management. The OR in housing finance can broadly be classified as internal factors and External factors.

**I. INTERNAL FACTORS**

The OR in housing finance which involves certain factors within the banking transaction is referred to as internal factors, responsible for OR in housing finance. The internal factors which lead to internal frauds can be defined as 'Acts intended to defraud misappropriate property or circumvent regulations, the law or bank policy which involves at least one internal party' for instance unauthorised activities, thefts and so on.

**(A) PEOPLE**

People refer to the human resources and employees who are involved in handling the housing finance portfolios in banks. The failure in management of the people is the main cause for the OR in housing finance. The under- trained or untrained overworked employees may subject the bank to the OR. Failing to understand the mandate, lack of confidence in the institution, non-adherence to the bank policies and strategies are some of the causes for the OR in housing finance.

**(B) PROCESS AND SYSTEMS**

The complex or poorly designed systems and procedures are responsible for the wide range of problems faced by the banks. This because most systems and procedures are either unfit for the purpose or they malfunction. In addition, to this the increasing automation of systems and banks reliance on Information Technology (IT) has the potential to transform minor Manual processing errors to major systemic failures. Likewise, there will be losses arising from system failures due to failure in hardware, software, telecommunication, utility outage and others.

**II EXTERNAL FACTORS**

The external factors have a major impact on financing housing. The external factors include both expected and unexpected changes. The major types of external factors are;

**(A) DISRUPTIVE EVENTS**

The losses arising from loss or damage to physical property or assets are referred to as disruptive events. The major factors of the disruptive events are natural calamities or disasters like fire, flood, and earthquakes. Human involvement like terrorist activities, vandalisms, eviction, acquisitions among others are also responsible for the disruptive activities in housing finance, which leads to OR in housing finance.

**(B) CONSULTANT AND OUT-SOURCING**

The reliance on out-sourcing and use of consultants for house building activities has become a serious threat to the banks. Of late excessive use and dependence on the use of Consultant and out-sourcing of services related to financing housing has increased in a big way. The use of Consultants and outsourcing on the one hand enables the banks in processing the housing loan portfolio, but on the other hand the concern is the loss of control over the bank's process. Miscommunication, data entry maintenance or loading errors, missed dead-lines, system misappropriation, accounting errors, entity attribution error, collateral management failure, failure of reference data maintenance among others are some of the factors that contribute to OR in housing finance.

Thus, the housing finance has globally been exposed to risks such as the market housing finance risks, credit risk in housing finance, systemic credit risks, agency risks, political risks and operational risks.

**MITIGATION AND MANAGEMENT OF RISKS IN HOUSING FINANCE**

All lending involves a variety of risks that must be allocated, managed and priced. However, the 10-30 years maturities and the legal aspects of mortgage pose a unique risk in housing finance. The inappropriate lending, pricing, and risk management can create problems for the broader financial system and macro-economy presents special challenges for regulators. Balancing risk and return is not an easy task as risk is subjective and not quantifiable. However, there may not be one-size-fit-all risk management module for all the banks to be made applicable uniformly. It is in this context, that the mitigating of risks in financing housing is posing a great danger and is the need of the hour.

**MANAGEMENT OF CREDIT RISKS**

Managing credit risk is tricky situation, where it is important to distinguish good loan applications from bad loan applications. Good credit risk assessment is based on the knowledge of the borrower. The knowledge of the borrower includes both quantitative and qualitative source of information. The quantitative sources are relatively easier to evaluate than the qualitative sources. As the qualitative sources are more subjective and require different set of skills to assess efficiency. The strategies adopted to reduce the credit risks includes, building of long term relationship between the lender and the borrower. The tools for managing mortgage credit risk can broadly be classified into three categories: Firstly, the front-end risk management, that is, screening by under-writing criteria, Secondly, the back-end risk control, by reserving capital against expected and unexpected credit losses, Finally, the risk sharing with the third parties through mortgage insurance and other credit lending mechanisms. The mortgage/housing credit risk management is based on three pillars.

**PILLAR-1: Risk Based Mortgage under-writing:**

Loan-to-value (LTV) and Debt-to-Income (DTI) are used as important indicators of mortgage default case in most of the countries. In most developed and emerging mortgage markets the LTV is set in two tiers, (i) those with mortgage insurance (MI) and (ii) those without mortgage insurance (MI). Normally the LTV ranges without MI is 60-80% and with MI 100% in most of the developed countries like USA, France, Germany and others. However, in India in the absence of MI the LTV ranges from 50-70%.

The credit risk management further, depends upon the DTI restrictions. DTI or loan to income refers to the borrower's ability to pay back the loan. Although, there is no explicit threshold while determining the DTI like the LTV. The DTI threshold in most of the European countries range between 30-45% and around 50% in most of the Asian countries including India. However, the use of loan to income as a risk indicator has become less prevalent since the introduction of the Automated Under-writing System (AUS) and the mortgage scoring system introduced in the mid-1990s. Currently the maximum DTI is generally at a higher level of 40% globally. The DTI is determined by various factors such as consumption pattern and borrower's wealth or cash reserve. The accurate measurement and the validation of the borrower's income is however, a big challenge in many countries.

**PILLAR-II-RISK-SHARING VIA MORTGAGE**

Mortgage is a type of insurance of external credit enhancement which was first started in 1930's by the Federal Housing Administration (FHA) in the U.S. to provide a government guarantee for long term fixed-rate mortgage loans. The FHA'S successes lead to the development of private mortgage insurance and MI then expanded to other countries during the 1990's and 2000. MI generally categorized into the Public MI and the Private MI and also categorized as Complete and Partial Coverage Programme. MIs can be either be a public or in the private initiative or it can co-exist. In countries like U.K., Italy and Spain the private MI exists. The advantage of public mortgage insurance is that it tends target wealth-constrained households because it usually sets maximum on the loan amount on the property value. Among the Asian countries the Hong Kong Mortgage Corporation established in 1997 as a joint venture private lending institution and this helped raise the LTV on mortgage risk from 70% to 90%.

**PILLAR-III- RISK BASED CAPITAL REQUIREMENTS**

The adoption of Basel-II recommendation in many countries has enhanced measurement of mortgage credit risks. It is now possible for the lending institutions to utilise the Economic Capital (EC) as a tool for internal allocation of capital across different business lines or mortgage products. The EC is a Value-at-Risk (VaR) type sensitivity measure that can be used in estimating unexpected stress, credit losses and others.

Apart from adoption of these three pillars in managing of the mortgage risks effective servicing, active monitoring of repayment performance and corrective actions go a long way in reducing mortgage credit risks.

**MANAGEMENT OF MARKET RISKS IN HOUSING**

Different methods have been adopted to mitigate market risks by both lenders and investors. Fixed Rate Mortgage (FRMs) place market risk in the hands of the lenders, and require matching funding and protection from prepayment risks. Floating rate and inflation indexed loans place at least market risks in the hands of the borrower, and require attention to payment shock and to any mismatch between nature and timing of the indices to which the loans and liabilities that fund them are linked. Economies having less liquidity fixed income markets have difficulty in establishing a reliable index for floating rate markets.

**MANAGEMENT OF LIQUIDITY RISKS**

Measuring and managing of liquidity risks is very important for effective housing finance companies. The Asset Liability Management (ALM) is a part of the over-all risk management in the banks. The ALM examines the assets and liabilities on a continuous basis to ensuring a proper balance between mobilizations of funds and deployment according to maturity profiles, costs, field, and risk exposures. It includes product pricing for deposits as well as advances and the desired maturity profile of asset and liabilities. Management of the liquidity housing finance companies not only examines how liquidity requirements are likely to evolve under different assumptions. Many a times the so called liquid assets like Government securities and other money market instruments could be illiquid when the market and the players are unidirectional. It is therefore necessary that the liquidity has to be tracked through maturity or cash flow mismatches. The tools like the use of maturity ladder and calculation of cumulative surplus or deficit or funds at selected maturity dates is adopted as a standard tool for measuring and managing net funding requirements.

**MANAGEMENT OF THE AGENCY RISK**

The agency risk is managed by the lenders and investors with contract terms, quality controls, and technology. Nevertheless, the agency risk materializes at various levels of the lending chain, from unscrupulous bankers and appraisers to moral hazard in securitized portfolios. A good example for this is the U.S. where the agency risks were one of the important drivers of the sub-prime crisis.

**MANAGEMENT OF SYSTEMIC CREDIT RISKS**

The management of the systemic credit risks depends upon the policies to deflate the price bubbles from time again. The policies in the developed countries which include greater price transparency, efficient markets for urban land, better market infrastructure, efficient lien registry system, lower transaction costs, strong legal framework for ownership and contract enforcement, and sophisticated financial system have been adopted to lessen the effect of the bubble and provide more rapid adjustment to collapse in prices. However, the same is not true in the emerging economies as the information is not only scarcer but the mortgage markets are less efficient.

**OPERATIONAL RISK POLICY /REGULATORY FRAMEWORK**

Housing finance is contributing to economic growth of a country and welfare of an individual. The strong and stable regulations only can foster the resilient lenders and financial markets. The financial market participants are not always willing to hold adequate capital, disclosure of risks they engage in or manage the risks efficiently. The balance between the faster economic growth and lighter regulations results in failures of lenders. The stronger regulations such as financial reporting, disclosures of risks, and appropriate level of risk based capital. Emerging markets financial disclosures rules are often below the international standards for best practise, security trading are infrequent and liquid, the audit rules are often weaker under these circumstances the strong regulations may fail to prove disclosure regimes and by installing greater market discipline.

In India between 1995 and 2011 two distinct prudential regulations for financing housing were identifiable. During the period 1995 to 2001, restrictions comprised numerical restrictions in the form of leverage restrictions, explicit interest rate caps on deposits for both borrowing and lending for housing finance. From 2001 onwards, in addition to these numerical restrictions, the prudential regulations was framed as it was outlined in Basel-II, with risk weights being the primary instrument of regulatory policy. During this period, risk weights specially for housing assets were introduced and frequently modified. In the Indian housing finance context, two regulators operate namely the Reserve Bank of India (RBI) which regulates bank lending to housing and the National Housing Bank for Housing Finance Companies.

In the year 1992 RBI introduced a risk-asset-ratio-system for banks in line with the Basel-I Accord recommendation of 1988 for financing housing. During this period the risk weight for housing finance was 100 per cent, as housing finance was categorized as "other advances" under the heading real estate and other investments in the balance sheets of the banks. In accordance with the Basel-II recommendation the RBI has redefined the risk-weights for housing finance where the residential properties are owned or rented with borrowing up to 30 lakhs is 50 per cent and above 30 lakhs risk weight is 75 per cent provided the LTV should not exceed more than 75 per cent risk weight is 100 per cent and for commercial estate the risk weight is 150 per cent.

The Operational Risks in housing finance lending is normally regulated and supervised by both the Regulatory authorities and Market-participants. The housing finance lenders in general, and the Scheduled Commercial Banks in particular establish risk measures and methods for mitigating risks that include credit, market, liquidity, foreign currencies, operation and political conditions. The following are some of the measures adopted by the housing finance institutions in general and the Scheduled Commercial Banks to mitigate the operational risks financing housing.

**MITIGATION OF HOUSING FINANCE RISKS**

- As the Operational Risks in housing finance is a broad and catch-all topic, involves risks of different types, robust effective controls, automated systems and business processes to manage the credit underwriting process and all of the associated paperwork have been given utmost importance.
- With reference to the housing finance by the SCBs, the RBI has adopted several methods such as the loss incurred due to natural disaster can be mitigated by way of insurance.
- The RBI has directed the SCBs to establish back-up facilities and adoption of business continuity and disaster recovery plan to mitigate the loss due to business disruption as a result of failure in telecommunications or electricity.
- Another method adopted by the SCBs to mitigate the operational risks in financing housing is through strong internal auditing procedures due to internal factors like employee fraud or product flaws and procedural lapses.
- A strong control culture promotes a sound risk management practice that have to be reinforced by both Board of Directors and Senior Management. A system of effective internal control to ensure that the SCBs will comply with laws and regulations as well as policies, plans, internal rules and procedures, and decrease the risk of unexpected losses or damage to the bank's reputation. In addition to this, internal control is process adopted by the Board of Directors, Senior Management and all level personnel.
- The Internal control emphasis on top level reviews, appropriate activity controls for different departments or divisions, physical controls, checking for compliance on exposure limits and follow-up on non-compliance, a system of approvals and authorisations and a system of verifications and reconciliations in financing housing by the SCBs are to be adopted.
- The internal control system also stresses on segregation of duties among the employees of the banks. The areas of conflicting interests among the employees should be identified, minimised, and subject to careful independent monitoring thereby minimising the loss due operational risks.
- The RBI has laid down guidelines that the SCBs should have a strong information system which provides reliable, timely and accessible information in a consistent format, regarding the internal financial operation as well as external market conditions.
- Methods to secure the data in an electronic form, monitored independently and supported by adequate contingency arrangements have been implemented.
- Another important measure adopted to mitigate operational risks by the SCBs in financing housing is by an effective internal audit function that independently evaluates the control systems within the organisation. Internal audit is part of the on-going monitoring of the bank's system of internal controls and of its internal capital assessment procedure. Internal audit provides an independent assessment of the adequacy of, and compliance with, the bank's established policies and procedures.

**CONCLUSION**

To conclude, the financial crisis of 2007 and 2008 exposed serious problems in housing finance by the commercial banks, from sloppiness to outright fraud. As said "what cannot be cured, should be endured" Like-wise, Risks in general and Operational Risks in particular housing finance cannot be completely eradicated, it can only be managed by a sound risk management framework. The framework includes clear strategies adopted by the Board of Directors and oversight exercised by the Senior Management, strong internal operational risk culture and internal control culture emphasizing on dual controls, effective monitoring and internal reporting, contingency and business continuity plans, high standards of ethics and integrity and commitment to effective corporate governance, including, segregation of duties avoidance of conflicts of interest and clear lines of management responsibilities, accountability and reporting, as reflecting in the bank's corporate governance documents. All levels of staff shall understand their responsibilities are the need of the hour to mitigate and manage the operational risks in housing finance.

**REFERENCES**

1. "Basel committee on banking supervision, sound practices for the management and supervision of operational risk,, February 2003"
2. "Basel committee on banking supervision, frame work for internal control systems in banking organizations, September 1998".
3. "Basel committee on banking supervision, International Convergence of Capital Measurement and Capital standards.(July 1988, up dated to april1998.
4. "Basel committee on banking supervision, international Convergence of Capital measurement and Capital standards- A Revised frame works June 2004."
5. CRISIL (2004), Report-2: "A road map for implementing and integrated risk management system by Indian banks by March 2005",
6. E.J. Vaughan & T. Vaughan, fundamentals of risks and insurance, John wiley & Sons, 9th edition ,2003
7. H. Geiger. Die Risikopolitik der Bankken, teil 1 and teil 2 . Der Sachweizer, Treuhander, 73(6:7 and 8).
8. Loic Chiquier and Michael Lea "Housing Finance in Emerging Markets" World Bank Report (2009) .
9. Mohan Amarendra (2001), "Risk, credit risk and market risk-a conceptual – paradigm" (Bank Quest),
10. Rajeev. A.S. (2004), "Operational risk a real Nightmare?" (Bank Quest, Vol.75 No. 3.)
11. RBI "Guidance note on Management of operational risk" October 2005.
12. RBI Annual Report (2002-2003),
13. RBI Basic Statistical Reports (BSR) various issues.
14. RBI Report of Currency and Finance, (2002-03)
15. World bank report October 2010.

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