

RISK MANAGEMENT IN BANKING SECTOR – AN OVERVIEW

Sridhar Ryakala*

*Assistant Professor of Commerce, Government City College (A), Hyderabad, Telangana State. The author can be reached at janusri0011@gmail.com

Abstract:

Risk management in banks has changed substantially over the last decade. The regulations that emerged from the global financial crisis and the fines that were levied in its wake paved a wave of change in risk functions. These included more detailed and demanding capital, leverage, liquidity, and funding requirements, as well as higher standards for risk reporting. The management of non-financial risks has become more important as the standards for compliance and conduct are tightened. The stress testing emerged as a major supervisory tool, in parallel with the rise of expectations for bank risk-appetite statements. Banks also started investing in strengthening their risk cultures and involved their boards more closely in key risk decisions. Banks also sought to further define and delineate their lines of defense. In order to monitor and control the risks, the banks are compelled to establish and operate an adequate and effective internal audit, internal control and risk management system that is compatible with their activities and structure in accordance with changing conditions, covering all branches and departments, and reporting to the board of directors within the framework of the principles set for them.

Introduction

In the process of financial intermediation banks are confronted with various kinds of financial and non-financial risks viz., credit, interest rate, foreign exchange rate, liquidity, equity price, commodity price, legal, regulatory, reputational, operational, etc. and these risks are highly interdependent and events that affect one area of risk can have consequences for a range of other risk categories. Hence, top management of banks should attach considerable importance to improve the ability to identify, measure, monitor and control the overall level of risks undertaken.

The broad parameters of risk management function should encompass:

- Organisational structure
- Comprehensive risk measurement approach
- Risk management policies approved by the Board which should be consistent with the broader business strategies, capital strength, management expertise and overall willingness to assume risk
- Guidelines and other parameters used to govern risk taking including detailed structure of prudential limits

- Strong MIS for reporting, monitoring and controlling risks
- Well laid out procedures, effective control and comprehensive risk reporting framework
- Separate risk management framework independent of operational departments and with clear delineation of levels of responsibility for management of risk
- Periodical review and evaluation.

Risk Management Structure:

A major issue in establishing an appropriate risk management organisation structure is choosing between a centralised and decentralised structure. The global trend is towards centralising the risk management with an integrated treasury management function to benefit from information on aggregate exposure, natural netting of exposures, economies of scale and easier reporting to top management. The primary responsibility vested with the Board of Directors is to understand the risks run by the bank and ensuring that the risks are appropriately managed. The Board should set risk limits by assessing the bank's risk and risk bearing capacity.

A prerequisite for establishment of an effective risk management system is the existence of a robust MIS with consistency in quality. The existing MIS, however, requires substantial up gradation and strengthening of the data collection machinery to ensure the integrity and reliability of data. As the risk management is a complex function, it requires specialised skills and expertise. Hence, banks have been moving towards the use of sophisticated models for measuring and managing risks. Large banks and those operating in international markets should develop internal risk management models so as to compete effectively with their competitors. As the domestic market integrates with the international markets, the banks should be equipped with necessary expertise and skill in managing various types of risks in a scientific manner. At a more sophisticated level, the core staff should be trained in risk modeling and analytical tools at the head office. It should, therefore, be the endeavor of all banks to upgrade the skills of staff.

Credit Risk:

Credit risk or default risk involves inability or unwillingness of a customer or counterparty to meet commitments in relation to lending, trading, hedging, settlement and other financial transactions. The Credit Risk is generally made up of transaction risk or default risk and portfolio risk. The portfolio risk in turn comprises intrinsic and concentration risk. The credit risk of a bank's portfolio depends on both internal and external factors. The internal factors are:

- Deficiencies in loan policies or administration,
- Absence of prudential credit concentration limits,
- Inadequately defined lending limits for Loan Officers/Credit Committees,
- Deficiencies in appraisal of borrowers' financial position,
- Excessive dependence on collaterals and inadequate risk pricing,

- Absence of loan review mechanism and post sanction surveillance, etc

The external factors include:

- The state of the economy,
- Wide swings in commodity/equity prices,
- Foreign exchange rates and interest rates,
- Trade restrictions,
- Economic sanctions,
- Government policies, etc.

The Management of Credit Risk:

The management of credit risk should receive the top management's attention and the process should encompass:

- a) Measurement of risk through credit rating/scoring;
- b) Quantifying the risk through estimating expected loan losses i.e. the amount of loan losses that bank would experience over a chosen time horizon (through tracking portfolio behavior over 5 or more years) and unexpected loan losses i.e. the amount by which actual losses exceed the expected loss (through standard deviation of losses or the difference between expected loan losses and some selected target credit loss quantile);
- c) Risk pricing on a scientific basis; and
- d) Controlling the risk through effective Loan Review Mechanism and portfolio management.

Credit Risk and Investment Banking:

Significant magnitude of credit risk, in addition to market risk is inherent in investment banking. The proposals for investments should also be subject to the same degree of credit risk analysis, as any loan proposals. The proposals should be subjected to detail appraisal and rating framework that factors in financial and non-financial parameters of issuers, sensitivity to external developments, etc. The maximum exposure to a customer should be bank-wide and should include all exposures assumed by the Credit and Treasury Departments. The coupon on nonsovereign papers should be commensurate with their risk profile. The banks should exercise due caution, particularly in investment proposals which are not rated and should ensure comprehensive risk evaluation. There should be greater interaction between Credit and Treasury Departments and the portfolio analysis should cover the total exposures, including investments. The rating migration of the issuers and the consequent diminution in the portfolio quality should also be tracked at periodic intervals.

As a matter of prudence, the banks should also stipulate entry level minimum ratings/quality standards, industry, maturity, duration, issuer-wise, etc. limits in investment proposals as well to mitigate the adverse impacts of concentration and the risk of illiquidity.

Credit Risk in Off-balance Sheet Exposure:

Banks should also evolve adequate framework for managing their exposure in off-balance sheet products like forex forward contracts, swaps, options, etc. as a part of overall credit to individual customer relationship and subject to the same credit appraisal, limits and monitoring procedures. Banks should classify their off-balance sheet exposures into three broad categories –

- Full risk (credit substitutes) - standby letters of credit, money guarantees, etc,
- Medium risk (not direct credit substitutes, which do not support existing financial obligations) - bid bonds, letters of credit, indemnities and warranties and
- Low risk - reverse repos, currency swaps, options, futures, etc.

Inter-bank Exposure and Country Risk:

A suitable framework should be evolved to provide a centralised overview on the aggregate exposure on other banks. Bank-wise exposure limits should be set on the basis of assessment of financial performance, operating efficiency, management quality, past experience, etc. Banks should also be rated like corporate clients and placed in range of 1-5, 1-8, as the case may be on the basis of their credit quality. The limits so arrived at need to be allocated to various operating centres and followed up and half-yearly/annual reviews should be undertaken at a single point.

Regarding exposure on overseas banks, banks can use the country ratings of international rating agencies and classify the countries into low risk, moderate risk and high risk. Banks should endeavor for developing an internal matrix that reckons the counterparty and country risks. The maximum exposure should be subjected to adherence of country and bank exposure limits already in place. While the exposure should at least be monitored on a weekly basis till the banks are equipped to monitor exposures on a real time basis, all exposures to problem countries should be evaluated on a real time basis.

Market Risk:

Traditionally, credit risk management was the primary challenge for banks, but with progressive deregulation, market risk arising from adverse changes in market variables, such as interest rate, foreign exchange rate, equity price and commodity price has become relatively more important. Even a small change in market variables causes substantial changes in income and economic value of banks. Market risk takes the form of:

- Liquidity Risk
- Interest Rate Risk
- Foreign Exchange Rate (Forex) Risk
- Commodity Price Risk and
- Equity Price Risk

Management of market risk should be the major concern of the top management of banks. The Boards should clearly articulate market risk management policies, procedures, prudential risk limits, review

mechanisms and reporting and auditing systems. The policies should address the bank's exposure on a consolidated basis and clearly articulate the risk measurement systems that capture all material sources of market risk and assess the effects on the bank. The operating prudential limits and the accountability of the line management should also be clearly defined. The Asset-Liability Management Committee (ALCO) should function as the top operational unit for managing the balance sheet within the performance/risk parameters laid down by the Board. The banks should also set up an independent Middle Office to track the magnitude of market risk on a real time basis. The Middle Office should comprise of experts in market risk management, economists, statisticians and general bankers and may be functionally placed directly under the ALCO. The Middle Office should also be separated from Treasury Department and should not be involved in the day to day management of Treasury. The Middle Office should apprise the top management / ALCO / Treasury about adherence to prudential / risk parameters and also aggregate the total market risk exposures assumed by the bank at any point of time.

Operational Risk:

Managing operational risk is becoming a significant feature of sound risk management practices in modern financial markets in the wake of phenomenal increase in the volume of transactions, high degree of structural changes and complex support systems. The most important type of operational risk involves breakdowns in internal controls and corporate governance. Such breakdowns can lead to financial loss through error, fraud, or failure to perform in a timely manner or cause the interest of the bank to be compromised. Operational risk has some form of link between credit and market risks. An operational problem with a business transaction could trigger a credit or market risk.

Risk Aggregation and Capital Allocation:

Most of internally active banks have developed internal processes and techniques to assess and evaluate their own capital needs in the light of their risk profiles and business plans. Such banks take into consideration both qualitative and quantitative factors to assess economic capital. The Basle Committee now recognises that capital adequacy in relation to economic risk is a necessary condition for the long-term soundness of banks. Thus, in addition to complying with the established minimum regulatory capital requirements, banks need to critically assess their internal capital adequacy and future capital needs on the basis of risks assumed by individual lines of business, product, etc. As a part of the process for evaluating internal capital adequacy, banks should be able to identify and evaluate their risks across all its activities to determine whether its capital levels are appropriate.

Conclusion:

The function and process of risk management in banks is complex and the banks are trying to use the simplest and sophisticated models for analyzing and evaluation the risks. In a scientific manner the banks should have expertise and skills to deal with the risks which are involved in the process of integration. In order to compete effectively large banking institutions should develop internal risk management models. At

a more desired level the core staff of head office should be trained in risk modeling and analytic tools to conduct risk management in banks.

References:

1. Basel Committee on Banking Supervision, BIS (2017), Finalising Basel III in brief, https://www.bis.org/bcbs/publ/d424_inbrief.pdf
2. Chen D. X., Damar H. E., Soubra H. and Terajima Y. (2012), An Analysis of Indicators of Balance-Sheet Risks at Canadian Financial Institutions, Bank of Canada Review, <https://www.bankofcanada.ca/wp-content/uploads/2012/08/review-summer12-chen.pdf>
3. Chornous G. & Ursulenko G., (2013), Risk Management in Banks: New Approaches to Risk Assessment and Information Support, ISSN 1392-1258. Ekonomika Vol. 92(1), <https://pdfs.semanticscholar.org/9c43/12f792b9ccf5da86e49f7b4bf2ee846a0c39.pdf>
4. <https://www.bis.org/press/p200327.htm>
5. <https://www.bseducation.net/bs-courses/>
6. <https://www.tbb.org.tr/en/banks-and-banking-sector-information/statistical-reports/20>
7. Gunduz V., Gonenc H. (2019), Credit Portfolio Diversification and Bank Performances During the Recent Crisis Period, 4th International Conference on Banking and Finance Perspectives
8. Gündüz V. (2018) Due Diligence for Bank M&A's: Case from Turkey, Emerging Trends in Banking and Finance, Springer
9. Kanchu T., Kumar M.M., Risk Management In Banking Sector -An Empirical Study (2013) International Journal of Marketing, Financial Services & Management Research ISSN 2277- 3622 Vol.2, No. 2
- 10.Orduna D. C., Schwaab B. (2019), Unconventional monetary policy operations: The upside for central bank balance sheet risks, <https://voxeu.org/article/upside-unconventional-monetary-policy-central-bank-balance-sheet-risks>
- 11.Price water house coopers, (2009) Balance sheet management benchmark survey, <https://www.pwc.com/gx/en/banking-capital-markets/assets/balance-sheet-management-benchmark-survey.pdf>
- 12.Yaylalı P., Şafaklı O. V. (2015) Risk Management in the Banking Sector: Case of TRNC, International Journal of Academic Research in Economics and Management Sciences, Vol. 4, No. 2, ISSN: 2226-3624
- 13.Zupanovic I. (2014) Sustainable Risk Management in the Banking Sector, Journal of Central Banking Theory and Practice, Vol.3 No.1, pp. 81-100