International Journal of Scientific Research in Engineering and Management (IJSREM)
Volume: 07 Issue: 06 | June - 2023 SJIF Rating: 8.176 ISSN: 2582-3930

RISK MANAGEMENT IN BANKING SECTOR

DR. REEMA SHARMA, DEEPAK, BADAL PAL
MBA 1st YEAR (TIAS)

KEYWORDS: -Risk, Risk Management, banking sector, Credit risk, Market risk, Operating Risk, Gab Analysis, Value at Risk (VatR)

ABSTRACT- The use of proactive strategy to plan, lead, organize, and control the vast range of hazards that are brought into an organization's daily and ongoing operations is known as risk management. long-term performance. Whether we like it or not, risk has an impact on whether we achieve our objectives and the performance of a company as a whole. The goal of the current study is to attempt to categories the risks that the banking sector faces as well as the risk management procedure. This essay also looked at the various risk management strategies used by the banking sector. Data was gathered from secondary sources, such as books, journals, and online publications, to meet the study's objectives. These sources helped to identify the numerous risks that banks faced, build the risk management process, and analyze various risk management strategies. Finally, it may be said that banks should manage risk more effectively, foresee negative changes, and hedge accordingly. This will provide them a competitive advantage and help manage the banking sector effectively.

INTRODUCTION: - Risk is defined as something that may make it more difficult to attain specific goals. Depending on the type of risk present in a particular situation, it may be caused by either internal or external causes. The possibility of exposure might make a problem more urgent. Taking proactive steps to detect any risk that could lead to unfavourable consequences is a better course of action in such a situation. In plain English, it may be noted that addressing a risk before it occurs is much better than waiting for it to happen.

An essential component of the Bank's policy is risk management. Risk is the potential for a reduction in economic benefit in the event of a financial loss, expense, or loss connected to a transaction or activity of a bank.

A strategy for recognising, evaluating, and then dealing with a specific risk is called risk management. It is a continual process that serves as a useful tool in the decision-making process. Risk management, according to the Higher Education Funding Council for England (HEFCE), is used to raise the likelihood of good things happening as well as reduce the likelihood of terrible things happening. According to the "Prospect Theory" paradigm, a person is more likely to accept the risk than to experience a certain loss. A dynamic and complicated industry, banking is continually exposed to a wide range of dangers. These dangers may significantly affect a bank's financial performance and possibly cause it to fail. Banks must have a strong risk management strategy in place to reduce these risks.

PURPOSE OF THE RESEARCH: - During this phase of economic liberalisation, risk analysis and risk management have gained significant relevance in the Indian economy. Understanding and managing risk is the most significant challenge the banking industry is currently facing. The threat of risk is ingrained in the banking industry by its very nature. The primary function of banks is to act as an intermediary between those who have resources and those who need them. Credit risk, market risk, and operational risk must all be combined into one composite measure in order to manage risk at the company level. So that the appropriate composite estimate may be created, operational risk measurement must be done in conjunction with additional measurements of credit and market risk. Thus, research into risk analysis and risk management in the banking sector is crucial in light of international banking regulations (Basel Committee Accords) and RBI guidelines.

OBJECTIVES THE STUDY: -

The following are the objectives of the study.

i. To identify the risks faced by the banking industry.

ii. To identify the risk management system and procedure.

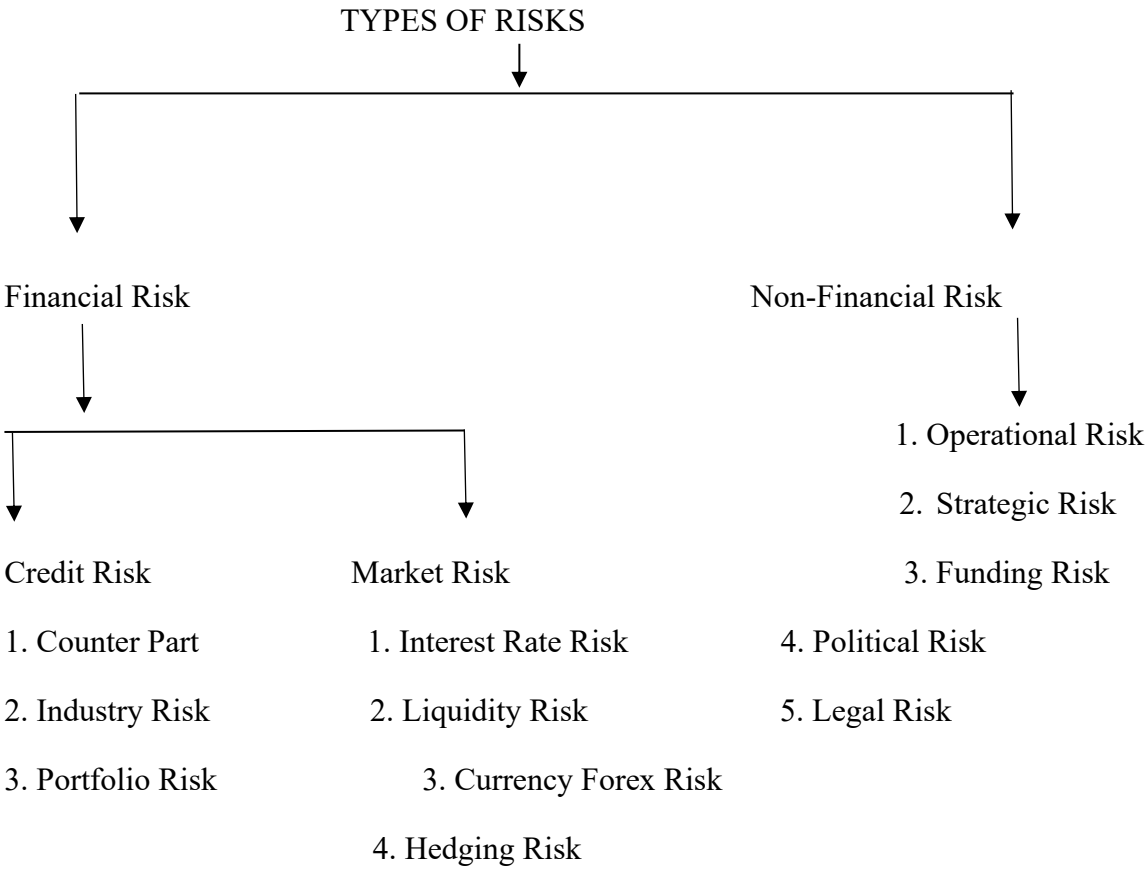
iii. To analyse the risk management strategies used by the banking industry.

RESEARCH METHODOLOG: -

The significant investigation that the secondary source of information used to create this theoretically oriented paper. Online publications, books, and journals are some of the sources.

TYPES OF RISKS IN BANKING SECTOR: -

Risk management has taken on a prominent role, particularly in the financial sector, due to the increased complexity of banks' businesses and their changing operating environment. The possibility of a bank's financial health being harmed by one or more contingent factors might be seen as the pinnacle level of risk. While the metrics used to gauge a bank's health might range from net interest margin to market value of stock, there are also many more variables that can be crucial. For instance, these can include borrowers' default on loan repayments, a decrease in the value of assets, or a disruption of operations owing to a technological breakdown. Despite the fact that the first two criteria might be categorised as credit risk and market risk, banks often classify all other risks—aside from credit risk and market risk—as operational risk.



FINANCIAL RISK: - Any business ventures a bank engages in entails financial risk due to the possibility of loss. Credit risk and market risk are other categories for this risk.

1. **Credit Risk**: - Credit Risk is the possibility that a bank borrower or counter party may not fulfil the obligations according to the terms set forth. There is always a chance that the borrower would break his obligations for one reason or another, which would result in the bank taking on more credit risk. Outright default or losses from changes in portfolio value due to a real or perceived decline in credit quality that is short of default could be the form that these losses take. Credit risk is a component of the lending business and is directly related to market risk factors. By taking on and keeping credit exposure within the allowed ranges, credit risk management aims to reduce risk and increase the bank's risk-adjusted rate of return.
   The management of credit risk includes
   a) Measurement through credit rating/ scoring,
   b) Measurement using an estimate of anticipated loan losses,
   c) Pricing on a scientific basis
   d) Controlling through efficient portfolio management and loan review mechanisms.

TOOLS OF CREDIT RISK MANAGEMENT.

The following is a list of the instruments and tools used in credit risk management:

a) **Exposure Ceilings**: Threshold limits are set at levels below prudent exposure levels; substantial exposure, or the total of exposures above threshold limits, should not exceed 600% to 800% of the bank's capital funds (six to eight times); prudent limits are linked to capital funds, such as 15% for a single borrower entity, 40% for a group, and an additional 10% for infrastructure projects undertaken by the group.

b) **Review/Renewal**: Multi-tiered Credit Approving Authority, Constitutionally-based delegation of powers, Higher delegated powers for consumers with better ratings, Discriminatory review/renewal timetable, On the basis of risk rating, among other factors, hurdle rates, benchmarks, and periodicity for renewal are developed.

c) **Risk Rating Model**: Create a detailed risk rating system with a six-to-nine-point scale. Establish clear rating thresholds and regularly review the ratings, preferably every six months. To calculate the anticipated loss, rating migration must be plotted out.

d) **Risk based scientific pricing**: Connect loan pricing to loss anticipation. Borrowers in the high-risk category should be charged more. Create historical default loss data. Set aside money to cover the unforeseen loss. Take the RAROC approach.

e) Loan Review Mechanism: It should be carried out separately from credit operations. It is also known as a "credit audit," and it has the same goals of enhancing credit quality by reviewing the sanction process, compliance status, risk rating, picking up warning signs, and recommending corrective action. To ensure that all significant credit risks embedded in the balance sheet have been tracked, it should target all loans above a specific cut-off limit and ensure that at least 30% to 40% of the portfolio is subject to LRM each year.

f) **Portfolio Management:** The need for credit portfolio management arises from the requirement to maximise the advantages of diversity and to lessen the potential negative effects of exposure concentration to a specific borrower, sector, or industry. Set quantitative limits on total exposure to certain rating categories, distribute borrowers across different industries, and conduct quick portfolio assessments.

2. **Market Risk:** Market risk is the potential for a bank to suffer losses as a result of changes in market conditions. There is a chance that changes in the equities and interest rate markets, the value of currencies, and the prices of commodities will have a negative impact on the value of holdings that are on or off the balance sheet. Market risk is the danger to a bank's profits and capital posed by

fluctuations in interest rates, stock prices, foreign exchange rates, and other market-related prices, as well as the volatility of those values. The following list of market hazards includes.

a) **Liquidity Risk:** Since bank deposits often have shorter contractual maturities than loans, liquidity management must provide a buffer to offset expected withdrawals from deposits. The capacity to efficiently handle deposits, reduce liabilities, finance loan expansion, and even fund off-balance sheet claims are all examples of liquidity. Depending on how assets, liabilities, and off-balance sheet things will likely behave in the future, the cash flows are divided into distinct time buckets. Funding Risk, Time Risk, and Call Risk are the three types of liquidity risk.

b) **Interest Rate Risk:** Interest Rate Risk refers to the vulnerability of an institution's financial condition to changes in interest rates and has the potential to have a negative influence on Net Interest Income. Earnings, asset value, off-balance sheet items related to liabilities, and cash flow are all impacted by changes in interest rates. Analysing the effects of interest rate fluctuations on accrued or reported earnings in the short term is part of the earnings perspective. This is gauged by changes in Net Interest Income (NII), which is calculated as the difference between total interest income and total interest expense.

c) **Forex Risk:** Forex risk, commonly referred to as foreign exchange risk or currency risk, is a major obstacle that banks that operate in the global banking sector must overcome. It refers to the possible negative effects of exchange rate changes on the liquidity and profitability of a bank. Banks are vulnerable to the inherent volatility of the foreign exchange market since they do international business and retain assets and liabilities denominated in foreign currencies. Forex risk can come from a number of different things, such as international trade, foreign investments, and currency speculation. In order to maintain stability and safeguard themselves against potential losses, banks must effectively manage FX risk.

d) **Country Risk:** This is the risk associated with cross-border transactions, which have increased significantly over the past few years as a result of economic liberalisation and globalisation. There is a chance that a nation won't be able to timely service or repay its debts to international lenders. It consists of three types of risk: transfer risk, sovereign risk, and sovereign guarantee risk. Transfer risk results from the likelihood of losses due to limits on international transfers. Political Risk occurs when a nation's political climate or legislative process results in the government seizing the financial entity's assets (via nationalisation, for example) and blocking the discharge of liabilities in the manner previously agreed to; cross-border risk brought on by the borrower's residence in a different nation than the one in which the cross-border asset is booked; Currency risk, or the potential that exchange rates will vary, can influence the projected principle and return on an investment or loan.

NON - FINANCIAL RISK:

Non-financial risks include those that could have an impact on a bank's ability to expand its clientele, the marketability of its goods and services, the likelihood that its expansion initiatives would fail, etc. These risks may be brought on by poor management, rivalry, a lack of adequate goods or services, outside influences, etc. Operational and strategic risk must be carefully considered in these situations.

OPERATIONAL RISK:

Operational risk refers to the potential for experiencing losses as a result of internal processes, people, and systems that are inadequate or fail, as well as as a result of external events. It includes a wide range of elements, including human mistake, technological setbacks, fraud, and problems with legal and regulatory compliance.

There is also a legal risk. Strategic and reputational risks are not included since they cannot be quantified. Operational risk comprises the possibility of financial loss brought on by fraud, system malfunctions, trading errors, and many other organisational internal hazards in addition to risk brought on by uncontrollable external occurrences like fire, flood, etc. Operation risk can result in both direct and indirect losses. The term "direct loss" refers to monetary losses that are a direct outcome of an incident or event. For instance, "indirect loss" refers to a loss brought on by the effects of an incident, such as fraud or forgery.

Operational risk involves failures in internal controls and corporate governance that result in mistakes, fraud, poor performance, and compromises of the bank's interests, all of which result in monetary loss. By itself, putting in place good corporate governance procedures would be a useful risk management instrument. Operational risk is frequently entangled with market or credit risk and is challenging to isolate; thus, the bank should work to establish a shared awareness of operational risk within the organisation.

PROCESS OF RISK MANAGEMENT: All banking-related hazards must be managed in order to reduce risk and ensure smooth operation of the industry. One of the primary duties of every banking service is risk management. Identification and control of risks, or maintaining them at an acceptable level, constitute risk management. These standards vary from institution to institution and nation to nation. The primary goal of risk management is to provide value to stakeholders by maximising profit and making the best use of capital resources to ensure the long-term solvency of the financial organisation. The following roles compose the risk management process:

Risk Management Process

Risk Origination within the Bank

Credit Risk

Market Risk

Operational Risk

Risk Identification

Identify Risks

Understand and Analyse Risks

Risk Assessment and Measurement

Assess the Risk Impact

Measure the Risk Impact

Risk Control

Recommendations for Risk Control

Risk Mitigation through Control Techniques

Deputation of Competent Officers to Deal with the Risks

Risk Monitoring

Supervise the Risks

Reporting on Progress

Compliance with Regulations Follow-up

Risk-Return Trade-Off

Balancing of Risk against Return

TECHNIQUES OF RISK MANAGEMENT

1. **GAP Analysis**
   It is a balance sheet-based strategy for managing interest rate risk that focuses on the possible volatility of net interest income across given time periods. By using this strategy, interest-sensitive assets, liabilities, and off-balance sheet positions are divided into time bands based on their maturity (if fixed rate) or the amount of time before their next re-pricing (if variable rate), respectively. Then, using these schedules, indices of the sensitivity of profits and economic value to changing interest rates are produced. Assets and liabilities are divided into various time buckets after selecting the time periods, depending on their maturity (for fixed rates) or first likely re-pricing time (for flexible rates). Rate-sensitive assets (RSAs) and rate-sensitive liabilities (RSLs), respectively, refer to the assets and obligations that are re-priceable. The interest sensitivity gap (DGAP), which is calculated by, reflects the variations between the volume of rate-sensitive assets and liabilities.
   GAP = RSAs – RSL
   The management can get a sense of how changes in interest rates may affect net income thanks to the information on GAP. Because the change in interest income is greater than the change in interest expenses and vice versa, positive GAP suggests that an increase in future interest rates would improve the net interest income.

   Duration-GAP Analysis
   It is a different way to assess interest rate risk and manage net interest income that is produced by accounting for all discrete cash inflows and outflows. The average time required to recoup the invested funds is represented by the duration, a value and time weighted measure of maturity for all cash flows. Duration analysis can be thought of as the elasticity of an instrument's market value with respect to interest rates.
2. **Value at Risk (VaR)**
   One of the more recent risk management tools is it. The Value at Risk (VaR) reveals how much a company can earn or lose with a specific probability over a specific period of time. VaR reduces the complex concept of financial risk present in portfolios to a single figure. Although VaR is used to gauge market risk generally, it also takes into account numerous other hazards, including those associated with foreign exchange, commodities, and stocks.2001's Jorion
3. **Risk Adjusted Rate of Return on Capital (RAROC)**
   In addition to providing managers with the skills to make effective decisions regarding the risk/return tradeoff in various assets, it also provides an economic foundation for measuring all relevant risks consistently. Allocating capital for the numerous risks that these institutions confront is crucial because economic capital shields financial institutions from unforeseen losses. The total return on capital for a company is calculated using Risk Adjusted Rate of Return on Capital (RAROC) analysis, which demonstrates how much financial capital is required for various goods and enterprises. Although Risk Adjusted Rate of Return can be utilised as a tool for integrated risk management, it can also be used to assess the capital requirements for market, credit, and operational risks (Crouhy and Robert, 2001).

4. **Securitization**
   It falls within the categories of credit linked notes or structured finance.
   Asset and loan securitization is a method of increasing capital and lowering a bank's risk exposures. A group of income-producing assets, such as mortgages, are gathered by the bank and sold as collateral for securities in the open market, turning otherwise illiquid assets into tradable asset-backed securities. The onus of repayment is shifted from the originator to these pooled assets because the profits from these securities depend on the cash flows of the underlying assets.
5. **Sensitivity Analysis**
   When seeking to ascertain the effect, the real outcome of a specific variable will have if it differs from what was previously anticipated, it is highly helpful. The analyst can ascertain how changes to one or more variables will affect the target variable by developing a specified set of scenarios.

CONCLUSIONS

Risk management emphasises the idea that a company's ability to foresee change and prepare for it, as opposed to simply waiting for it and responding to it, is crucial to its existence. The goal of risk management is to guarantee that risks are voluntarily taken with full awareness, a clear purpose, and understanding so that they can be measured and minimised, rather than to forbid or restrict risk-taking activities. Instead, then forbidding or restricting risk-taking behaviours, risk management seeks to ensure that risks are taken freely, with full awareness, a clear purpose, and understanding so that they may be measured and minimised. These committees cover the risk management aspects, including the Asset Liability Committee, Credit Policy Committee, and Risk Management Committee. It becomes a source of competitive advantage for the banks since they can offer their goods at a lower cost than their rivals because they can take risk more consciously, predict negative changes, and hedge accordingly. It is discovered that internal rating systems and risk-adjusted rate of return on capital are significant when using risk management approaches. The efficiency of the management information system, computerization, and interconnectedness of branch activities all contribute to the effectiveness of risk measurement in banks.

REFERENCES:

1. https://reciprocity.com/blog/compliance-risk-management-for-banks/
2. https://mpra.ub.uni-muenchen.de/86427/1/MPRA_paper_86427.pdf
3. https://www.careerlauncher.com/rbi-grade-b/risk-management/
4. https://testbook.com/banking-awareness/risk-management-in-banking-sector
5. https://www.metricstream.com/risk-management-in-banking.html
6. https://www.libf.ac.uk/news-and-insights/news/detail/2022/09/08/risk-management-in-banking
7. https://www.educba.com/risk-management-in-banks/
8. https://symbiosiscollege.edu.in/assets/pdf/e-learning/tybcom/TYBCom%20Art%202%20-SEM%206%20BANKING%20SPL%20%208%20APRIL%202020.pdf
9. https://www.evalueserve.com/blog/9-types-of-risks-in-banking/