How to Cite:
Reddy, G. D., & Thaiyalnayaki, M. (2022). Risk management in investment banking. *International Journal of Health Sciences*, *6*(S1), 12975–12988. https://doi.org/10.53730/ijhs.v6nS1.8260

Risk management in investment banking

Mr. G. Divakara Reddy
Research scholar, Department of commerce, Vels Institute of Science Technology and Advanced Studies (VISTAS), Pallavaram, Chennai
Corresponding author email: divakararedddy@gmail.com

Dr. M. Thaiyalnayaki
Professor, Department of commerce, Vels Institute of Science Technology and Advanced Studies (VISTAS), Pallavaram, Chennai
Email: tnthaiyal4@gmail.com

***Abstract*---**Finance theory did well to teach to build an outlet for advising firms on how to utilise hedges. Unfortunately, its noteworthy flaw is the inability to properly explain or offer logical solutions to essential concerns before initiating a hedging plan. When it comes to hedging, for example, it doesn't address whether or not a particular strategy should include full hedging or what kinds of instruments should be utilised to implement it. It is the purpose of this research to establish a broad framework for analysing corporate financial risk management utilising multiple tools. It also discusses the arguments for and against financial risk management using a variety of tools. Financial risk management is an essential technique that those in charge of managing public finances should continue to adopt or abandon completely, according to the results of the research.

***Keywords*---**Risk management finance, investment banking risk, risk management, investment banking.

Introduction

It is the job of investment bankers to buy and sell assets such as stocks, bonds, and government securities. It includes trading, which is the act of purchasing and selling stocks, commodities, and derivatives. Derivatives can be traded for profit or hedging purposes. Risk management in investment banking and derivatives trading may be learned from the following content.

Anywhere in the world, buyers and sellers may participate in internet trading. Derivatives and commodities, on the other hand, are newer and less familiar to many investors. In securities trading, one must either pay and take delivery of the scrip or deliver the scrip before receiving payment. In derivative trading, no asset is required, and only a difference between the contracted price and the spot price

(market rate) must be settled. This is the primary difference between securities trading and derivatives trading. Commodity trading follows the same regulations and procedures as stock trading (Zachosova, Herasymenko& Shevchenko, 2018).

In the trading of financial instruments, derivatives such as forward, future, option, and swap are used to control risk. If you want to put it another way, a derivative is an agreement that gets its value from underlying assets such as stock market indices and equities. By far, the most common form of a derivative is a forward contract. Robust banking systems are vital for protracted growth in the economy because banks are the conduit between depositors and entrepreneurs. Banks also play a key role in the day-to-day operations of individuals, large and micro-businesses, giant corporate organizations, and sovereign governments.

Many elements of life are susceptible to risks, but the financial industry bears the brunt of it. Until recently, banks couldn't bear to take bets because of the tight climate. Rivalry from other financial institutions, on the other hand, has resulted in a wide range of monetary and non-monetary dangers for banks. Risk-taking is an element of banking by definition, therefore risks and unpredictability are inevitable. Risk analysis and risk management have grown increasingly significant in the Indian economy throughout the liberalisation phase. In today's banking industry, one of the most serious issues is assessing and managing risk. The inherent essence of the banking industry is permeated with the threat of risk. To put it simply, banks are conduits between those who have money and those who are in need.

Literature Review

Finally, the Reserve Bank of India has released its final recommendations for PSU banks on Credit Risk and Market Risk Management, after receiving feedback from banks on the drafted guidance note. Risk is the possibility that the Bank's capital or income will be adversely affected by both expected and unexpected events. Risk premiums and reserve funds produced out of income are used to ensure that the debtor bears the cost of the expected loss. It's the projected amount of money lost as a result of a change in creditworthiness that causes a bill to go unpaid. The bank's capital must be used to cover the unexpected loss resulting from individual exposures and the total portfolio, reserves or provisions cover the anticipated loss and unanticipated losses require capital allocation. A proper Capital Adequacy Ratio is therefore required. VaR(Value at Risk) is used to determine the estimated and unanticipated losses associated with each type of hazard. (Dalessandro, 2011).

Credit Risk Management

Credit risk refers to the risk that a financial client or counterparties may not meet their obligations in line with the agreement agreed upon. The bank's credit risk increases if the borrower defaults on his commitments in any way. Some of these losses could be attributed to fluctuations in the value of the portfolio due to real or perceived credit quality degradation. There is a lot of risk associated with lending money to businesses that are heavily dependent on market risk.

Downgrade or Migration Risk

Even if a debtor does not default, a drop in their credit quality poses a danger. Since the credit spread is likely to widen, the term "credit spread" refers to this danger. Rankings are often downgraded to reflect this. Generally, it's a little stodgier.

Default Risk

The likelihood that a borrower would unable to full fill a pledged payment in whole or in parts is what causes default risk. It's common for only a portion of the debt to be met in the event of default.

Inherent Uncertainty

Diversification reduces the overall risk of a portfolio. Risk is minimised when a portfolio is evenly diversified geographically, industrially, across borrowers and in the market. This level of risk is deemed essential for any company.

Concentration Risk

Without diversification, the portfolio is exposed to concentration risk, which occurs when there is a greater weight placed on a single borrower, geographic region, industry, etc (Huong, 2020). Risk-adjusted returns should be as high as feasible while keeping the bank's exposure to credit as low as possible, the purpose of credit risk management. It's important to note that credit risk is made up of two main components: Quantity, which is the amount of risk, and quality, which is the severity of loss determined by both probabilities of Default and the recoveries that may be made if a default occurs. In these other terms, credit risk is influenced by defaults and exposure risk. There are two types of risk associated with default and migration/downgrading: transactional risk and intrinsic risk. Transactional risk is one of the subcategories of Portfolio Risk. Credit ratings are a useful tool for assessing credit risk at the transactional level because they are widely used across the entire firm. Portfolio analysis can tell you, among other things, where credit risk is focused, how often clients fail or relocate, as well as how much capital is retrieved. Debtor creditworthiness and assets value typically decline over time, which is also known as "migrating," as a result of a steady decrease in creditworthiness and asset quality. Debt defaults are the most extreme kind of credit migration. Off-balance-sheet exposures such as foreign currency forward contracts, swaps, and options are converted into risk-weighted assets before they are summed. Risk levels range from high to low, depending on the circumstances. There are various steps involved in managing credit risk.

- Estimation of possible loan losses to quantify
- Pricing based on data gleaned from scientific studies and
- Controlling through efficient Loan Review Mechanism and Portfolio Management.

The following is a list of credit risk management's tools and instruments:

Exposure Ceilings: Significant Exposure, which includes all exposures over the threshold limit but below Prudential Exposure, must not surpass 600% to 800% of a bank's Capital Funds. Let’s say Individual borrower entities have a Prudential Limit of 15%, whereas a group of lenders has a Prudential Limit of 40% plus an extra 10% for infrastructure projects done by the collective (i.e. six to eight times) (B, 2016).

Review/Renewal: Multi-tiered credit approval authority, legally mandated assignment of power, higher delegated authority for better-rated clients, as well as discriminatory review/renewal schedules, hurdle rates, and periodicity standards depending on risk rating are all included in the process.

Risk Rating Model: Set up a six-to-nine-point risk assessment system. It is important to clearly define rating criteria and to check the ratings on a regular basis, preferably every six months. It is necessary to develop a rating migration map in order to calculate the expected loss (Lehmann & Tillich, 2016). Risk assessment is used to determine the price of a product: Link the cost of the loan to the amount of money you expect to lose. Borrowers who fall into the high-risk group will be charged a higher interest rate. Assemble a record of default losses over time. Prepare for the unexpected financial loss by allocating funds. Adopt the RAROC approach.

Management of a Portfolio:The need for credit portfolio management stems from the need to maximise the benefits of diversification while minimising the potentially detrimental effects of excessive exposure to a single borrower, industry, or sector. Perform rapid portfolio analyses by establishing a quantitative ceiling on aggregate exposure to particular rating categories and by distributing customers in various industries across different business groups. As a result, the balance sheet date is a sham in the tracking of non-performing loans. An early warning system is essential to preventing problems from becoming more serious. The credit decision-making process should be used to maintain the required level of portfolio quality.

Loan Review Mechanism

In order to avoid confusion, it should be performed on its own. Credit Audits aim to improve credit quality by examining the sanction process, compliance status, risk assessment, identification of warning signals, and corrective action suggestions. To keep track of all of the key credit risks included in the company's balance sheet, it is recommended that 30-40% of the portfolio be exposed to LRM annually. This is done in an effort to raise the quality of credit administration overall. Decide which debts have bad credit. Determine if loan loss provisions are sufficient. Ensure that loan rules and procedures are followed. There needs to be an expansion of the credit audit's reach from individual accounts to the entire portfolio. It is critical that the top levels of management get regular, accurate, and timely reports. In other words, the branch where the advance has been examined and where the principal operational limits are made available conducts the credit

audit on-site. Even so, it is not essential to go to the place of business of the borrower.(Ivanov, 2021).

Model for Evaluating the Degree of Uncertainty

The branch where the advance has been examined and where the principal operational limits are made available conducts the credit audit on-site. However, putting the factory/office premises of debtors at danger is not absolutely necessary. Due to the importance of credit risk in a financial institution, senior executives should spend considerable resources to tackling it. Effective credit risk management requires a detailed knowledge of the significant risks linked to a particular loan proposal. With careful planning, predictable risks may be minimised, but unforeseen hazards must be faced and dealt with. Consequently, each loan decision must always be preceded by a thorough examination of the risks, which serves as the basis for the credit decision. It is safe to believe that any probability estimations obtained from previous experience are reliable because of the close association between credit ratings and default rates. Six asset grades and two non-performing assets can be included in the model. The distribution of asset ratings should be such that no more than 30% of advances are assigned a single grade. The following considerations necessitated the construction of a credit risk-rating model:

Ratings can be utilised as a safety net in the event of an emergency. The credit risk model takes into consideration both historical and future data when determining the value of a loan or fixed-income instrument. As a result, there is a quantitative risk that the projected money flows may not materialise. Aiming to assess and manage credit risk across geographies and product lines is the goal of credit risk models. Credit models are designed to spot potential problems with a portfolio as soon as possible, allowing corrective action to be implemented. A good risk-rating model should take into account a wide range of dangers, such as industry and company risks, financial losses associated with credit risk, and managerial risks. Industry/business risk is comprised of both systematic and unsystematic market hazards. From the general political atmosphere, changes in fiscal plans, budgetary policies of the government, infrastructural improvements, and so forth, the systemic risk is generated. The borrower's specialised company operations, such as technological failures, labour strikes, and new competitors, provide an unsystematic risk.(Boychenko, 2017).

In order to assess a company's financial risks, one must examine the productivity and fiscal metrics of the company, such as its liquidity, profitability, gearing, leverage, coverage, and turnover, among other things. You must keep an eye on these indicators over time and compare them to industry standards when they are possible. Projects fail 45 percent of the time because the people who are supposed to be in charge of them fail miserably in their project management responsibilities. Consider the probability of default when measuring credit risk, which is a major component of credit risk. Probabilities are speculative forecasts of the likelihood of future events. For a forecast to be accurate, we need to know the type and degree of uncertainty surrounding it, as well as how much qualitative details are available to us at any one time. Capital Accord II's new Internal Ratings-Based Approach to Credit Risk Management forces banks to

change their expected loss/unexpected loss methodology. The following is a list of some of the most commonly used risk rating methods:

Altman's Z score Model aims to predict if a company will go bankrupt. The indexes are based on numerous financial ratios that are converted into simple indexes to separate defaulting lenders from non-defaulting lenders.

Credit Metrics assesses the unpredictability of asset prices as a result of changes in the quality of assets. As a result, the model keeps track of a borrower's risk migration or the possibility that their rating may change from one risk rating to another.

In the insurance sector, a statistical method known as Credit Risk + is used to determine the level of credit risk. Actuarial rates and default losses that were not expected form the basis of the model. It is built upon the insurance industry's event risk model.

According to KVM's Expected Default Frequency (EDF) approach, each obligor is estimated to be at risk of default based on characteristics such as capital structure and asset volatility. The market value of a company's stock is used to calculate the asset value of the company, and equity is treated as a call option on the underlying securities. It aims to predict the company's asset value path over a given period of time. It's possible that the predicted asset value will fall below a predetermined default point, which is known as the default risk.

Based on macroeconomic variables like unemployment, GDP growth, FX rates, and so on, McKinsey's credit portfolio viewpoint can be utilized to generate distributions of default likelihood and migration probabilities. These days, the term "default" is used to describe an obligation to make a planned repayment that is not met within 180 days of the due date. Exposure risk is decreased by the sum that can be recouped in the event of a default. The sufferer will bear the brunt of a creditor's failure to make payments.(Leung, Banks &Saary-Littman, 2016).

Loss = D* X * (I-R) (I-R)

Where,

Assumption of no change
X is the Exposure Value
R is the recovery rate.

The POD and Loss Given Default (LGD) are two metrics used to assess credit risk (LGD). The bank should evaluate the chance of default connected with borrowers in each of the rating classes. In the case of a default, how much money does the bank stand to lose? This is called Loss Given Default. The bank's exposure to the borrower at the moment of default, which is referred to as "Exposure at Default," also factors towards this loss (EaD). The predicted Loss Given Default might be used to evaluate the amount of provisioning needed (which is the product of

Probability of Default, Loss Given Default & Exposure & Default). That is ELGD is equal to PODX LGD X EaD.

Portfolio value should be evaluated in terms of credit quality over time, rather than only default risk. This is what the Credit Metrics method promotes. Corporate credit metrics can be developed to be used on a yearly basis, if not more frequently, to assess risk movement and the resulting degradation in the loan portfolios.In an ideal world, a bank's credit portfolio loss risk and the required level of capital would be summarised in a single figure.

Methods of Measuring Credit Risk

- Proficient IRB
- Standardized
- Foundation IRB

Steps:
- Calculate credit risk using preset risk weights derived from third-party credit ratings (ratings)
- Least sophisticated capital calculations; least differential in necessary capital between safer and riskier debts
- Generally higher capital burdens

IRB Approach

For the purposes of establishing capital requirements, banks are allowed to employ their own vulnerability factors under the Basel II criteria. Credit risk capital needs are calculated using the Internal Ratings-Based (IRB) Approach. If a financial institution meets certain minimum qualifications and reporting standards and has been granted permission by its local regulator, they can use this method to measure capital for a range of risks in their portfolio. There are 3 factors for the measuring of a single credit facility

- Probability of default (PD)
- Standard exposure (EAD)
- Default-related loss (LGD)

Probability of default (PD)

It is the chance that the counter-party will be unable to meet its obligations, either during the term of the commitment or over a predetermined period of time after it has been committed.

Standard exposure (EAD)

The amount of the loan commitment estimated by the EAD for loan commitment is the sum of the facilities that are anticipated to be withdrawn in the case of non-payment.

Default-related loss (LGD)

If a default occurs, the LGD shows the amount of the expose which will be lost due.

Banking products and services are priced in such a way that they account for the expected loss. The fluctuation around the mean loss is referred to as unexpected loss, and it should be compensated by adequate capital allocation or provision.

Perceived defeat = Pd multiplied by Ead multiplied by LGD

Foundation IRB

- Use complex formulae to calculate credit risk, including the likelihood of default (PD) and regulatory inputs on loss given default (LGD), exposure at default (EAD), and maturity (Maturity Risk) (M)
- Better ability to distinguish between safe and hazardous investments in terms of capital requirements.

Proficient IRB

- PD, LGD, EAD, and M are utilised as internal inputs to quantify credit risk using advanced algorithms.
- Highest risk-sensitive (but not usually lowest) capital needs; the biggest disparity in capital requirements between safe and risky borrowers. •
- In order to successfully shift to the Advanced IRB level, an organisation must have comprehensive internal risk management processes and data.

Market risk

Market Chance refers to the risk that a bank would lose money owing to market movements. Changes in stock and interest rates, currency exchange rates, and commodity prices can have a detrimental impact on both on- and off-balance-sheet assets. Interest rates, stock price volatility and foreign currency exchange rates can all put a bank at risk of losing money. This is known as market risk. MRM is a crucial part of the bank's business plan when it comes to risk management. Liquidity, interest rate, foreign exchange, and stock risk may all be monitored, measured, and managed using MRM's dynamic framework. Additionally, stress testing and scenario analysis may be utilised to uncover possible difficulties in a portfolio. Prior to undertaking stress testing, a bank's portfolio has to be identified as a target for potential unfavourable changes in economic conditions, such as an economic/industry downturn or a market risk event or liquidity crisis. Testing should be done often since the risk management system should be able to respond dynamically to market happenings.
Market risks include the following:

The price and/or implied volatility of stocks puts investors at risk.

Interest rate risk refers to the likelihood that interest rates and/or the volatility they imply will change. The risk of fluctuating exchange rates or the volatility they

suggest is known as currency risk. There is a risk associated with commodities, namely that their values and/or high volatility will change. There is a chance that an asset's liquidity risk will not be manageable quickly enough to avoid damage (or make the desired gain).

Liquidity Risk

Deposits have lower contractual maturities than mortgages, therefore appropriate liquidity must be maintained to cover the expected withdrawals of deposited funds. It is the ability to accept a deposit and reduce liabilities while still funding loan growth and maybe paying down off-balance-sheet claims that are referred to as "liquidity." For each asset, liability, and entity on the balance sheet, cash flows are allocated to a certain time period. Funding risk, time risk, and call risk all fall under the umbrella of liquidity risk.
Due to unexpected withdrawals or nonrenewal of deposits, there is a need to replenish outflows. This is known as "funding risk."
Due to the danger of not receiving anticipated cash inflows from performance assets, the term "time risk" is often used.
Inability to explore profitable business opportunities due to the accumulation of contingent commitments and inability to call risk is the cause of call risk.
It is part of the overall risk management strategy in banks, Asset Liability Management (ALM). In order to maintain a healthy balance between the mobilization of funds and the deployment of those funds, all of the company's financial positions are assessed at the same time and overtime. Deposit and advance products are priced, as well as the expected maturation structure of assets and liabilities, are included in this section.

Interest Rate Risk

Amount Owed In the relation to financial risk, the potential negative impact on Net Interest Income is defined as the institution's ability to withstand a change in lending rates. Income, asset value, and other off-balance sheet things can all be affected by changes in the interest rate on a company's debt. As a result, the goal of interest rate risk management is to ensure that the risk-return trade-off is maintained and that the reimbursement obtained is sufficient for the risks undertaken.

When it comes to interest rate risk, the goal is to ensure that profits remain constant, strengthen a company's ability to withstand potential losses, and ensure that reimbursement obtained for the risk involved is sufficient. Consider both profitability and economic value when making decisions in order to accommodate for the risks involved with maturity and re-pricing imbalances in interest rate risk management. In the short term, the influence of interest rate fluctuations on accrued or reported earnings is examined from the standpoint of earnings. Net Interest Income (NII) is calculated by comparing the difference in total interest earned and total interest expense.

A bank's credit risk management system is fully functional. Control over a bank's lending risk rests with the board of directors. It's important to evaluate the Bank's

tolerance for risk, which is based on the company's assessment of risk and its desired earnings level for taking on risk. Monitoring the Bank's credit risk management procedures is the role of the top. The bank's goal is to meet its profit projections, satisfy the needs of its clients, and maintain a steady portfolio. With the use of market research, appropriate credit approval processes, and post-disbursement tracking and remedial measures, credit exposures can be managed effectively.' The retail credit model and the wholesale credit model govern the credit process in different ways.

Huge quantity, low transaction value businesses are the primary target of the retail credit model, which uses statistical algorithms to determine the creditworthiness of new connections. A strategy that is better appropriate for smaller transactions with bigger transaction sizes and customized items is the wholesale credit model's judgment-based approach to credit exposure start, approval, and management. Credit models can choose between product programs and credit transactions to manage the credit process.

FOREX risk

It is possible to lose money owing to currency exchange rate swings if a bank maintains an open foreign currency position, whether spot or forward or both. Individual currency positions may nevertheless be imbalanced even if they are evenly split between spot and forward positions. It's possible for one currency to be settled in the one-time zone while the other currency is settled elsewhere. This creates a time lag risk for both currencies. Banks are exposed to interest rate risk due to maturities that are out of sync with their foreign currency holdings.

Currency risk refers to the possibility that fluctuations in the value of a certain currency will alter the expected investment and interest on an investment. In some cases, banks may try to mitigate this issue by shifting the currency volatility risk to the customers. Even so, the danger does not go away; rather, it is changed into a type of credit risk concern. Increased cross-border transactions due to economic liberalism and globalization provide this risk to the national economy overall. If a country cannot service or return its debts to foreign lenders on time, default could occur.

Remittance losses that are a source of Transfer Risk comprise the bulk of the losses. The risk of giving money to a sovereign government or receiving assurances from that federal govt is known as "sovereign risk." such as nationalization etc.) and hindering discharge of responsibilities in a manner that had been agreed to earlier; this is called political risk. Borrowers who live in countries apart from the one where the cross-border collateral is held are exposed to cross-border risk. In the event of a currency fluctuation, the sum of capital and income on the loan or investments could be affected.

Operational Risk

Operational risk refers to the threat of financial damages resulting from the failure of structures, processes, and people, as well as from events that are beyond the control of a company's management. 'Operational risks' refer to risks

that are not related to credit or the stock market that are encountered by certain companies. Operational risk is difficult to define accurately given the fact that every sector has its own individual sense of operational risk that is based on its own unique perception and situation. The following are some real-world examples of operational definitions at work:

In the financial world, financial risk is defined as follows: financial risk which is not induced by market risk or credit risk (for example, increased financing associated costs with a firm's incapability to trade rapidly in order to deal with a foreign currency exposed).
The public is put at risk when systems fail or operate normally (for example, when a system fails or when a processing error occurs) (ex: system failure or processing mistake).

Such a threat that originates within the organization (for example, internal fraud), with the exception of the effects of regulatory action or a catastrophic event, is considered an internal risk.With the exception of business risk, these are losses that are caused or exacerbated by faults in the operation of a system, personnel, or an external incident, and are not covered by insurance (such as a natural catastrophe).

Methods

This research paper was performed using Secondary qualitative method. Qualitative research is described as a market research approach that focuses on acquiring data via open-ended and conversational dialogue. This approach looks at "what" individuals think as well as "why" they believe what they do. For example, suppose a convenience shop wants to enhance its clientele. QSA makes use of qualitative data that has already been acquired, either by another researcher or for the purpose of answering a different research topic. Secondary analysis of qualitative data gives a chance to increase data usefulness, particularly with difficult-to-reach patient populations. In order to fully comprehend, contextualize, and assess study findings, qualitative secondary analysis approaches need thorough thought and precise explanation.

Methodology

Non-numerical data (such as text, video, or audio) is collected and analyzed in qualitative research to better comprehend concepts, views, or experiences. It may be utilized to acquire in-depth insights into a topic or produce fresh ideas for study. Qualitative research is the antithesis of quantitative research, which includes gathering and interpreting numerical data for statistical analysis.
Qualitative research is extensively employed in the humanities and social sciences, in disciplines such as anthropology, sociology, education, health sciences, history, etc.

According to Harb, and Abu-Shanab, (2020), knowledge management development can improve the integration or description of a given topic. It leads to difficulty in learning, research, and other things. Apart from this, descriptive aspects may readily distribute information and produce clear notions based on

the issue. Improvising descriptive sessions necessitates a concentrate on proper information management facts and extra considerations. The descriptive research study gives a higher degree of activities to boost the quality of research and it efficiently maintains disciplinary elements, distinct research categories, such as technical, non-technical, business management, marketing, and many more things. These advantages might be boosted the study session and raise capacity to control each portion of the research.

Descriptive research design is establishing the correct technique to study distinct parts depending on a research subject. In addition, this study design helps readers better grasp systematic techniques by providing a systematic means of describing them. In addition to reducing mistakes, the structure provided by this design also aids in the conduct of research (Sumeet al. 2019). A research approach is assisting in constructing the research session by supplying distinct segments relating to certain specified subjects. Describing the data in a way that makes it easier to understand the effects of social media marketing, consumer behavior, and other topics is an excellent application of descriptive design.

Data Analysis

As a result, according to the findings of the analysis, the Bank allows the highest possible levels of creditworthiness to a group of clients with comparable features, profiles, and/or product demands, all under clearly defined and standardized contract terms, as part of product programs. When credit risks and projected returns are mapped to a template, it is possible to predict portfolio behavior such as yield, delinquency, and write-offs more accurately. Using automated monitoring and tracing strategies is critical in these elevated surroundings in order to identify portfolio behavior trends early on and implement changes in a timely manner. When it comes to credit transactions, the risk procedure is more focused on specific consumers or creditor connections than it is on the overall transaction itself. The credit authorities' distinct opinions and exhaustive examinations serve as the foundation for the clearing procedure in such circumstances, which frequently include intricate items or hazards, a variety of amenities, and a variety of different securities and other assets.

This handbook, along with the Bank's credit rules and processes handbook and credit programs when appropriate, serve as the foundation for risk management across the Bank's various activities and product lines. These documents provide detailed descriptions of the loan origination and approval processes, as well as the bank's credit risk management strategy. These guidelines outline the Bank's overall credit granting criteria, as well as the basic terms and conditions under which credit is granted. They also outline the Bank's credit granting policies and procedures. On a broad level, the policies and programs address topics such as target markets/customer segmentation, qualitative and quantitative assessment parameters, portfolio mix, prudential exposure ceilings, and concentration limits, price and non-price terms, the structure of boundaries, industry certifications, the exception reporting system, prudential financial reporting, and provisioning rules, to name a few examples. The knowledge of these individuals includes prudent and prevalent conventional banking practices, applicable regulatory

requirements, the nature and difficulty of the Bank's activities, industry trends, and other relevant factors, to name a few topics of discussion.

Credit concentration risk arises in large part as a result of the accumulation of exposures in a variety of categories, including sector and goods exposures, geography exposures, underlying collateral type exposures, and individual and collective borrowers risks, among other things.

Results

The financial crisis began with a large increase in the financing conditions in the money market which had a big influence on the commercial banks. The bank saw a large fall in loan volumes, balance sheets, and profitability. The bank's policy had to be changed and a binding zero-lower threshold was set in addition to increased competition for retail deposit accounts. The year is 2007 and the month is August, and this catastrophe begins then. During this period, the commercial banks' behavior was not favorable, because it led many countries to drop in growth and banks too have less profit. In their 2015 book (Ritz & Walther, pp. 386-387), Let's dig deeper into what commercial banks represent, and how interest rate risk might control utilizing a commercial bank. The risk of interest rate and liquidity fluctuations in financial institutions is a result of depositors pulling their money out of the bank in the event of a rise or fall in interest rates, as well as the commercial bank's use of the interest rate pays to recruit and hold deposits. The financial market has traditionally placed a high value on risk management. Each form of risk is being hassled when there is a problem of risk management in banking. The commercial bank, on the other hand, affects the interplay of these risks. As for the global risk management in banking, it symbolizes the bank protection against bad effects happening with the commercial bank that has been registered. It is a good notion for all banks to look further into global risk management because it takes on four crucial measures. Those four processes are the identification and evaluation of risk, risk control, risk reduction, and risk that might be moved.

Discussions

Companies of all kinds—financial and otherwise—use financial risk management as a tool to set parameters for how much risk they are willing to take on. Simply expressed, it involves methods and techniques that firms utilise to maximise the risks that they handle considering their financial interests. Market and credit risks are the most often guarded against by companies. However, there are additional hazards that might befall a company, for instance, foreign exchange, volatility, inflation as well as liquidity concerns.

In the same way that many other risks are identified and measured, the causes of financial risk should be identified and measures designed to deal with them. It is important to note, however, that financial risk management can be either quantitative or qualitative in nature. As a result, a wide range of monetary instruments (hedges) can be used to protect against financial losses, such as insurance, stocks, mutual funds traded on exchange markets, options, and

futures contracts. Additionally, these can assist in gaining the advantage of the current market circumstances.

Conclusion

Finance theory did well to teach to build an outlet for advising firms on how to utilise hedges. Unfortunately, its noteworthy flaw is the inability to properly explain or offer logical solutions to essential concerns before initiating a hedging plan. When it comes to hedging, for example, it doesn't address whether or not a particular strategy should include full hedging or what kinds of instruments should be utilised to implement it. It is the purpose of this research to establish a broad framework for analysing corporate financial risk management utilising multiple tools. It also discusses the arguments for and against financial risk management using a variety of tools. Financial risk management is an essential technique that those in charge of managing public finances should continue to adopt or abandon completely, according to the results of the research.

Limitations and Future Studies

Also, it is not specific to any country, so this limits the scope. Further studies can be done by expanding more towards operational risk, and risks on other sectors of banking.

References

B, K. (2016). Exposure, Exposure, Exposure. *Journal Of Surgery: Open Access*, *2*(3). doi: 10.16966/2470-0991.127

Boychenko, K. (2017). Changeability and uncertainity of interactive architecture. *EUROPEAN RESEARCH*, *26*. doi: 10.20861/2410-2873-2017-26-004

Dalessandro, A. (2011). Credit Migration Risk and Point in Time Credit Dynamics: A New Perspective for Credit Risk Management. *SSRN Electronic Journal*. doi: 10.2139/ssrn.1969796

Huong, D. (2020). Entrepreneurship: Risk Mitigation Strategy. *Journal Of Advanced Research In Dynamical And Control Systems*, *12*(SP3), 991-998. doi: 10.5373/jardcs/v12sp3/20201343

Ivanov, K. (2021). Credit enhancement mechanism in loan securitization and its implication to systemic risk. *Review Of Financial Economics*. doi: 10.1002/rfe.1155

Lehmann, C., & Tillich, D. (2016). Consensus information and consensus rating: a simulation study on rating aggregation. *The Journal Of Risk Model Validation*. doi: 10.21314/jrmv.2016.159

Leung, S., Banks, M., &Saary-Littman, J. (2016). International Association of Credit Portfolio Managers Principles and Practices: 2015. *Global Credit Review*, *06*, 11-20. doi: 10.1142/s2010493616500021

Zachosova, N., Herasymenko, O., & Shevchenko, A. (2018). Risks and possibilities of the effect of financial inclusion on managing the financial security at the macro level. *Investment Management And Financial Innovations*, *15*(4), 304-319. doi: 10.21511/imfi.15(4).2018.25