Credit Risk Mitigation Techniques of Banks

(1) Abdalslam Shndula, (2) Dr .Shabana Mazhar
(1) PhD Research Scholar, Department of Business Studies, Joseph School of Business Studies & Commerce, Sam Higginbottom University of Agriculture, Technology & Sciences, Prayagraj, India.
(2) Associate Professor, Department of Business studies, Joseph School of Business studies & Commerce, Sam Higginbottom University of Agriculture, Technology & Sciences, Prayagraj, India.

Abstract: Banks must use high mitigation techniques of risk which are suitable with the nature, the complexity and the level of the risks involved in their activities and it must have procedures for establishing and monitoring credit risk mitigation. Banks must establish effective validation procedures, when credit risk assessment involves, risk measurement models and assumption-based estimates. Banks must establish tolerance border for differences among expected and existing outcomes and remedial procedures when credit policy are exceeded. The validation process and results must be documented and be subjected to periodic review by qualified and independent persons.

Key Words: Credit, Risk, Mitigation, Techniques.

1- Introduction.

Credit risk is more simply defined as the possibility of a bank borrower or counterparty to fail to meet its obligations in accordance with the agreed conditions. In other words, credit risk can be defined as the risk that the interest or principal or both will not be paid as promised and is estimated by observing the ratio of assets that are below standard. Credit risk is borne by all lenders and will lead to serious problems. For most banks, loans are the biggest and most plain source of credit risk, and the factors of credit risk are namely:

- Deficiency in credit policy and administration of loan portfolio.
- Deficiency in appraising borrower's financial position prior to lending.
-Excessive dependence on collaterals.
-Bank's failure in debts follow-up.
-Swings in commodity price, foreign exchange rates and interest rates and the state of the economy.

Banks face too many serious problems due to unsuccessful credit risk management but the credit lending remains the chief activity of the banking sector throughout the world. The essence cause behind it is that banks can no longer survive without this activity. This is the cause that credit value is considered as a key mark of financial health and hardness of financial institutions especially the banks. The interests charged by the banks on credit facilities and loans shape a large portion of the bank's assets and delays and defaults of credits and facilities create solemn circumstances for both the lenders and borrowers and even the whole economy. Different studies in the events of banking crises across the world uncover the fact that poor credits (asset quality) are the primary reason for the failure of the banks (Golin J, Delhaise P 2013). (Stuart T,2005) indicates that the ratio of nonperforming loans (bad loans) all around the world was extremely high in the banking sector during the first decade of the millennium . And this was due to a number of causes such as absence or inadequate loan collaterals.

2- Literature Review.

Bagchi (2003) studied the credit risk management in banks in India. He studied risk identification, risk control, and risk check as basic deliberations for credit risk management in banks. The writer concluded that the suitable credit risk structural design, policies proceedings and framework of credit risk management, credit evaluation system, monitoring and control contributes to the success of credit risk management system in the banking industry.

Stulz (2010) studied the impact of credit risk mitigation on bank and mortgage and debated that the fundamental reason of the current financial crisis lies in the lack of expectancy of investors and financial institutions on asset price decrease, as well as the excess leverage of financial institutions.

Choudhary and Navin (2011) planned to develop an internal credit evaluation model for banks which improves their current prognostic power of financial risk factors. He highlights how banks rating the creditworthiness of their borrowers and how can they identify the probable defaulters so as to improve their credit rating. He complimented that the business of lending has given increase to credit risk, which is the risk of default.

Thiagarajan, et al.(2011), empirically studied carried out to expect the determinants of the credit risk in the Indian commercial banks by using an econometric model. They used a panel data model at the bank level for 22 public sector banks and 15 private sector banks, shown some unique determinants of the credit risk in the Indian commercial banking industry.
The model used in the study has a high R square for both public and private sector banks which is a reversal of the suitability of the model and its inevitability. The results explained that the lagged non-performing assets had a strong and statistically significant positive effect on the current non-performing assets. There is a significant opposite relationship between the gross domestic product and the credit risk for both public and private sector banks. The study showed that both macroeconomic and bank-specific factors play a decisive role in determining the credit risk of commercial banks.

Abdelrahim (2013) conducted the research on the efficiency of credit risk management of Saudi bank in light of the global financial crisis with the objective of examining the determinants, experiments and developing means of credit risk management. The methodology was the descriptive and analytical used model for analyzing the performance of credit risk management. The study concluded that liquidity has a significantly positive effect beside bank size, which had a significantly negative effect on the efficiency of credit risk management. While other variables of capital adequacy, asset quality, management reliability and earning had a little effect on the efficiency of credit risk management. The effectiveness credit risk management facing challenge was: weak corporate governance, low quality of assets, little landing diversification; lack of financial analysis; not charging a risk bonus on risky loans, corruption by credit staffs; precedence of profitability at the expense of safety and precedence of loan guarantees at the expense of capacity of payment.
Means of developing the efficiency of credit risk management in serial importance were: training of credit staffs; improving assets quality;

strengthening corporate governance; professional analysis of customer's financial position and having access to Credit Information Centre. The study recommended that an overall strategy for efficacious credit risk management of Saudi Banks based on enhancing capital adequacy, upgrading asset quality, intensifying management soundness, increasing earnings, having adequate liquidity and reducing sensitivity to market risk in addition hedging credit risk; having suitable provisions for downgraded loans; renegotiating loan conditions, transporting credit risk to a third party, extending credit maturity by rearrangement and lowering interest rate on insolvent loan.

Wood & Kellman (2013) examined risk techniques practices of Barbadian Banks with the primary objective to rating the many kinds of risk faced by banks operating in Barbados. Information was obtained by an interview survey of Senior Bank staffs in 2011. The survey covered key sides of risk management, including the importance of risk techniques practices, risk identification, risk control and nature of risk management practices. The main results of the study are: risk managers perceive risk management as crucial factors to banks, the kinds of risks causing the extreme exposures are credit risk, operational risk, country or sovereign risk, interest rate risk and market risk; there was a high level of success with current risk management practices and these practices have evolved over time in line with the changing economic environment and regulatory updates.

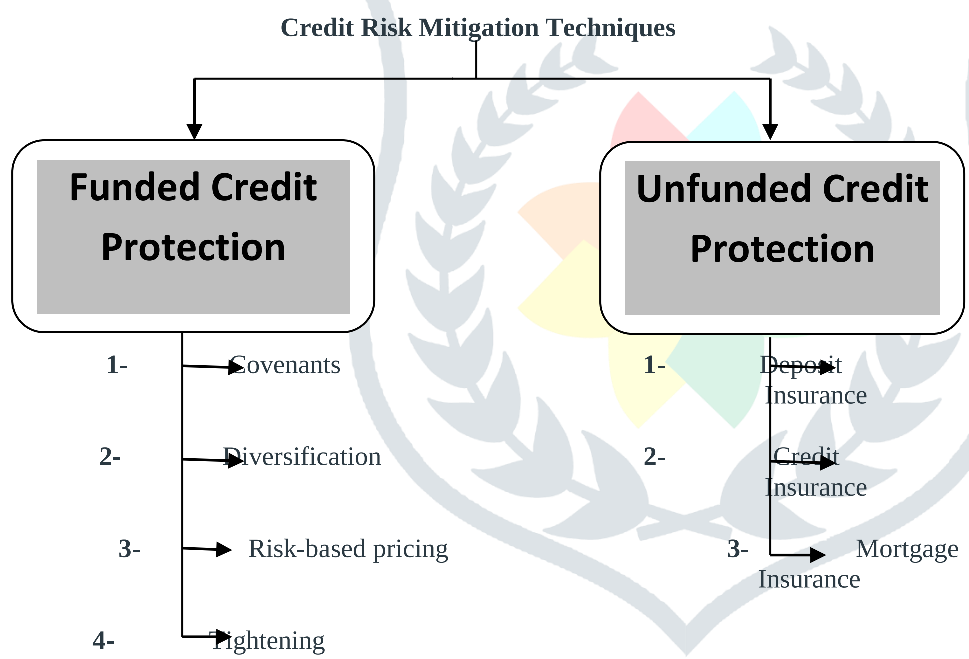
Overall, the results refer strongly that in light of the wretched economic environment, banks operating in Barbados were certainly risk-focused for mitigation purpose.

3- Credit Risk Mitigation Techniques.

Banks have used some methods to credit risk mitigation, "Credit risk mitigation techniques refer to institutions' collateral agreements that are used to reduce risk arising from credit positions"(Allen, Saunders,2004). Credit Risk Mitigation is "a technique used by a credit institution to reduce the credit risk connected with exposure or exposures which the credit institution lasts to hold"(Altman, Sabato,2005).

"Credit Risk Mitigation is a transaction where the credit exposure or possible credit exposure of the credit institution to a counterparty is dodged in whole or in part by surety dispatched by the counterparty or by a third party on behalf of the counterparty. Collateralized credit exposures must have a risk-weighted exposure amount lower than the same credit exposure without credit protection"(Bindseil & Papadia,2006).

It interests the banks to know the impact of such techniques on profitability productivity of banks since some types of credit- risk mitigation techniques are more sensitive than the others. Therefore, it is necessary to differentiate between the two types of credit risk mitigation techniques (Frenkel et al, 2004).The next diagram showing credit risk mitigation techniques.



The figure Shows the types of credit risk mitigation techniques

- Funded credit protection: Such as a mortgage and financial instruments is to be understood as a credit risk mitigation technique where the mitigation of the credit risk exposure of a credit institution de-rives from the right of the credit institution in case of default, and credit risk mitigation by funded credit protection are namely;

-*Covenants*. Lenders may write conditions on the borrower, called pledges, into loan agreements(e.g. borrowing, repurchasing shares and paying dividends).

- *Diversification* . Lenders to a small number of borrowers or a specific type of borrowers face a high degree of unsystematic credit risk, called concentration risk, this risk could be reduced by diversifying the borrowers.

-*Risk-based pricing*. Lenders may charge a higher interest rate to borrowers who are more probable to default, a practice called risk-based pricing. Lenders consider factors relating to the loan such as loan purpose, credit rating, and loan-to-value ratio and assessment the impact on yield.

- *Tightening* .Lenders can mitigate credit risk by mitigation the amount of credit extended, either in total or to certain borrowers. For example, reducing payment terms.

- Unfunded credit protection: Such as insurance is a credit risk mitigation technique where the decrease of the credit risk exposure of a credit institution derives from the undertaking of a third party to pay an amount in the happening of a nonpayment of the borrower, and credit risk mitigation by unfunded credit protection are namely;

-*Deposit insurance*. Governments may create deposit insurance to guarantee bank deposits in the event of bankruptcy and to hearten consumers to hold their savings in the banking system instead of in money.

- *Credit insurance*. Lenders and bondholders may border their credit risk by buying credit insurance or credit derivatives. These agreements transfer the risk from the lender to the Borrower in exchange for payment.

- *Mortgage insurance*. Banks use of mortgage insurance-type guarantees fundamentally involves loan-by loan cover provided under master policies by special mortgage insurers.

There are a number of properties that assets should have to be suitable as bank collateral namely(Buiter, Sibert,2005):

-*Legal collateral*. There should be legal collateral about the transfer of the assets to the bank and the bank's ability to liquidate the assets in case of a counterparty default. Any legal doubts should be removed before an asset is accepted as eligible.

- *Credit quality*. To reduce potential losses, the probability of joint retardation of the counterparty and the collateral issuer should be extremely limited. For this, both a very small prospect of default of the collateral issuer and a limited correlation of default between the collateral issuer and the counterparty is important.

- *Easy liquidity*. The assets should be easy to liquidate so that, in case of counterparty default, it can be easily transported to liquidity. - Handling costs. Handling costs should be limited: while some collateral, such as standard bonds, can be easily transported through an efficient securities settlement system, while, other kinds of collateral may require manual handling.

-*Available amounts and prospective users*. The amounts available of an asset type and the asset's actual use as collateral is important to determine whether it is worth investing the resources required for its inclusion in the list of collateral.

4-Conclusion.

The credit decision must primarily be based on the creditworthiness and repayment capability of the borrower, but collateral and guarantees offered as credit risk mitigation may also be of significance. However, that collateral cannot be a replacement for an overall assessment of the borrower or counterparty, and it cannot compensate for not having enough information.

Banks must recognise that credit risk can remove the profit margin as well as that the value of the collateral may well be impaired by the same factors that have led to the decrease recoverability of the cred.

Therefore, banks must have policies and procedures for collaterals namely:

(i)- Accepting different kinds of collateral.

(ii)- Classifying collateral.

(iii)- Regularly monitoring and assessing collateral values of collateral.

(iv)- Ensuring that collateral is legally enforceable, adequate and realizable.

(v)- Identifying and managing any alterations arising from collateral.

References.

(1)- Abdelrahim, K. E. (2013). Effectiveness of Credit Risk Management of Saudi Banks in the Light of Global Financial Crisis:A Qualitative Study. Asian Transactions on Basic and Applied Sciences , 3(2), p 73-90.

(2)-Allen, L., Saunders, A. (2004) Special Issue on 'the Path to Basel II Adoption'. Journal of Financial Ser-vices Research, No. 26 (October), 101-191.

(3)-Altman, E.I., Sabato, G. (2005) Effects of the New Basel Capital Accord on Bank Capital Requirements for SMEs. Journal of Financial Services Research, No. 28 (October), 15-42.

(4)-Bagchi, S. K. (2003). Credit Risk Management – A Panacea or Conundrum? SBI Monthly Review , 42 (10), p. 497-504.

(5)- Bindseil, U. and Papadia, F. (2006) `Credit Risk Mitigation in Central Bank operations and its effects on financial markets: The case of the Eurosystem´ Paper Series, 49, August, European Central Bank.

(6)-Buiter, H. and A. Sibert (2005), "How the ECB's open market operations weaken fiscal discipline in the eurozone (and what to do about it)", CEPR Discussion Paper No 5387, December.

(7)- Frenkel, Karmann and Scholtens (2004). Sovereign Risk and Financial Crises. Springer. ISBN 978-3-540-22248-4.

(8)- Golin J, Delhaise P (2013) The Bank Credit Analysis Handbook: A Guide for Analysts, Bankers and Investors. (2ndedn), John Wiley & Sons, p: 1056.

(9)-Joseph, C. (2006), "Credit Risk Analysis, Portfolio Credit Mitigation" 1st Ed., Mcgraw-Hill, New Delhi.

(10)- Nandi, J. K., & Choudhary, N. K. (2011). Credit Risk Management of Loan Portfolios by Indian Banks: Some Empirical Evidence. IUP Journal of Bank Management ,10(2), 32.

(11)- Stuart T (2005) New Players, New landscape: The Banker, special supplement. Financial Times**.**

(12)-Stulz. Credit Default Swaps and the Credit Crisis [J]. Journal of Economic Perspectives , 2010(1): 73-92.

(13)-Thiagarajan, S., Ayyappan, S., & Ramachandran, A. (2011). Credit Risk Determinants of Public and Private Sector Banks in India. European Journal of Economics, Finance and Administrative Sciences (34), p 147-154.

(14)- Wood, A., & Kellman, A. (2013). Risk Management Practices by Barbadian Banks. International Journal of Business and Social Research , 3 (5), p. 22-29.