Credit Risk Management for Banking

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1. Introduction

Credit risk or default risk involves inability or willingness of a customer if 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 external and internal factors.

Credit Risk Management has always been on the radar of the top management of any company, but at no other time has its relevance been more felt by financial institutions that in the current business scenario – plagued by increasing competition; and the great nemesis – the subprime lending crisis. In the age of advancing and complex risk transfer mechanisms, it may make sense to step back and take a look into the very basics of Credit Risk Management. By understanding the overall lifecycle of a typical Credit Risk Management process, the management can identify the key priority areas and challenges in the credit risk arena and solution can be designed to tackle.

2. Credit Risk Management Department

The Credit Risk Management process should be articulated in the bank's loan policy, duly approved by the Board. Each bank should constitute a high level credit policy committee, also called Credit Risk Management Committee or Credit Control Committee etc, to deal with issues relating to credit policy and procedures and to analyze, manage and control credit risk on a bank wide basis. The Committee should, formulate clear policies on standards for presentation of credit proposals, financial covenants, rating standards and benchmarks, delegation of credit approving powers, prudential limits on large credit exposures, standards for loan collateral, loan review mechanism, risk concentrations, risk monitoring and evaluation, pricing of loans, provisioning, regulatory or legal compliance, etc.,

3. Overall Life Cycle of Credit Risk Management Process

Credit Risk is the largest and most elementary risk faced by banks. It essentially focuses on determining likelihood of default or credit deterioration and how costly it will turn out to be if it does occur. And this is true for consumer lending or corporate as well as counterparty credit risk in capital markets. Although dependent on organizations requirements and profile, a Credit Risk Management lifecycle typically involves the following process.

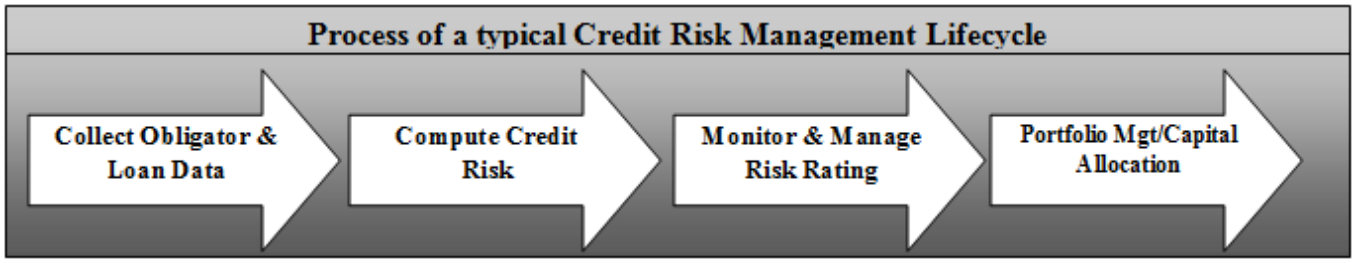


Figure 1: Process of a typical Credit Risk Management Lifecycle

3.1 Collect Obligator and Loan Date

The very foundation of a sound Credit Risk Management system lies in the data that it gets. The inputs needed in this stage are the obligator (Borrower), Loan and external ratings data. This is first critical step in any loan process and all necessary data about the obligator needs to be collected.

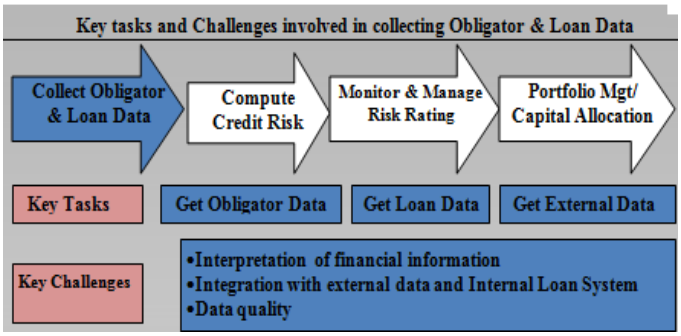


Figure 2: Key tasks and Challenges involved in collecting Obligator & Loan Data

3.2 Compute Credit Risk

The next and one of the most crucial phases is calculating the credit risk in the form of risk ratings to meaningfully differentiate risk among different firms or exposures.

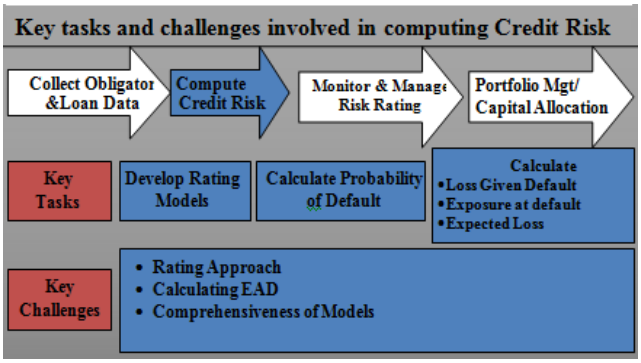


Figure 3: Key tasks and challenges involved in computing Credit Risk

3.3 Monitor and Manage Risk Rating

The Job is not over with the credit rating process. In fact, it is quit essential to monitor and manage the risk ratings as highlighted below.

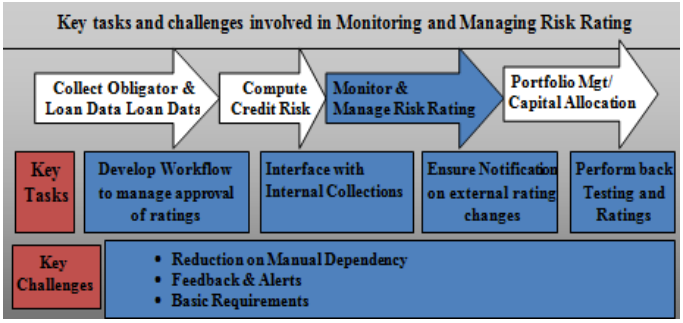


Figure 4: Key tasks and challenges involved in Monitoring and Managing Risk Rating

3.4 Manage Portfolio and Allocate Capital

Portfolio Management has become one of the most difficult challenges in the financial world especially from the point of view of credit risk management. Efficient portfolio management and capital allocation is a process which an organization must put on the top of its agenda.

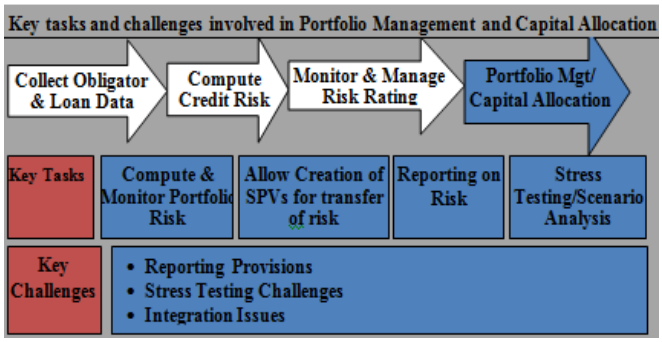


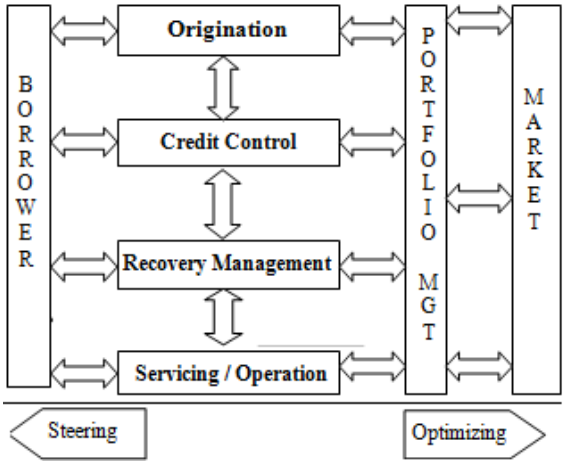
Figure 5: Key tasks and challenges involved in Portfolio Management and Capital Allocation

4. New Business Model for Credit Risk Management

Bank's business model for credit risk management currently undergoes a change of paradigm mainly driven by ICT as it deconstructs the traditional business model. Traditionally, a buy-and-hold business model is applied where banks, originate the loan keeping it on the balance sheet until it either defaults or reaches maturity as expected. Risk management in this integrated business model is performed on a decentralized basis it often even lacks the separation between origination and credit control and only on individual loan level. Loans are highly illiquid and are meant to remain on the bank's balance sheet without being traded or hedged. Lately, this model of passive risk taking was challenged and had to be changed into active risk management because the application of ICT throughout the entire value chain of credit offers the required options. Three different types of future bank strategies with regards to credit risk management are discussed;

- The investment banking paradigm (banks as intermediaries without direct risk taking),
- The reinsurance paradigm (banks as risk takers, buy insurance against large losses) or
- The asset backed finance paradigm (banks as risk managers).

Those paradigms may not be applied in their pure form. However, different risk management approaches for different asset classes (large loans versus SME facilities) seem to be likely and require a changed organization form within the bank.



5. Challenges to Credit Risk Management

Trading credit risk on loan markets is the most efficient way to manage a loan portfolio. However, specifically when talking about commercial bank loan portfolios, efficient credit portfolio management is challenged by various issues. First, the analysis of the fair value of credit risk is an issue. Banks use internal rating models based on quantitative and qualitative parameters to attribute an expected default frequency to a counterparty risk. This internal view needs to be shared with the markets in order to trade this risk. Mainly for SME risks there are no external ratings available and this complicates communication between market participants as they lack a common 'language'. Furthermore, banks use different portfolio models calibrated on internal loss distributions. This leads to different model prices for the loans.

Second, the lack of transparency driven by asymmetric information distribution between different agents and principals is challenging. Due to relationship banking, which is typical for SMEs, banks gather much more information about counterparty than they are able to share with the markets. This complicates the trading of the company's loan. Additionally, as can be seen from credit spread moves on the loan market, insider trading is a problem, as information flows within the bank. Furthermore, moral hazard exists after hedging or selling a loan, as a bank has no more incentives to service the loan as it would do with the credit risk on the balance sheet.

Third, as already mentioned, markets are very young and highly inefficient in terms of information efficiency. Liquidity is limited, there are only a few market participants actively trading in the market, no exchange traded products are available and the market is organized on OTC (over the counter) platforms only. Transaction costs are still very high and there is empirical evidence for the market to pay a premium over a fair value for credit risk (which is again a proof of inefficiency). However, as the market for credit default swaps (CDS) is growing at exponential rates, market inefficiencies are expected to be solved for this segment. For SME loans. Though, hedging on single name basis, namely by CDS, is not an option due to the asymmetric information distribution coming from relationship banking.

6. Conclusion

A large number of factors are involved in management of credit risk. But with increased government and corporate regulations designed to fight money laundering and terrorist funding, a big part of credit risk management knows more about the customers. Specifically, financial institutions and other organizations are required to increase scrutiny of individuals who are more likely to be involved in illegal activity, by virtue of their relationships to foreign official, government or political groups. These politically Exposed Persons, or PEPs, may represent a greater threat to the organization and their activity and dealings must be treated more closely. Failure to catch illegal activity can result in public embarrassment at best, and legal exposure and financial ruin is the worst case scenario. Consequently, findings ways to easily identify PEPs and implement better credit risk management is a matter of concern for institutions everywhere.

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