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CREDIT RATING TECHNIQUES ON REDUCING THE DEFAULT RISK IN COMMERCIAL BANKS

By

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CERTIFICATION

I hereby recommend that the dissertation was prepared under my supervision by C.Amarasinghe (GS/MC/1862/2001) titled "Credit Rating Techniques on Reducing The Default Risk In Commercial Banks." has been accepted in partial fulfillment of the Degree of Master of Science in Management.

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LIST OF ABBREVIATIONS

MDA	-	Multiple Discriminate Analysis
CMEL	-	Capital Management Earning and Liquidity
WC	-	Working Capital
TA	-	Total Assets
RE	-	Retained Earnings
S	-	Sales
EBIT	-	Earning Before Interest and Taxes
MVE	-	Market Value of Equity
TL	-	Total Liabilities
POD	-	Probability of Default
BIS	-	Bank for International Settlement
LIED	-	Lost In the Event of Default
EL	-	Expected Loss

ABSTRACT

Counterpart risk rating is the heart of the banking business. Most of the commercial banks have faced with the problem of huge amount of loss provision due to the non-performing loan portfolio in their books. Bankers are spends much of their time on appraising credit proposals. They are using different methods in this process. In the new Basel agreement II internal ratings have been given a central role. Thereby bank might use quantitative measure when evaluating the eligibility of borrowers on the internal rating based approach. According to the current situation there is no such significantly developed scientific methods using in Sri Lankan commercial banks.

Based on the data from Sri Lankan commercial banks and using a multiple discriminate analysis model the researcher finds that it is easy to identify strongly inferior rating system. It can measure either the quality of borrower good or bad. As well as the borrowers default probability can also be forecasted. In addition to that it is included the impact of the qualitative criteria on the borrowers assessment. The researcher uses the logistic regression analysis to estimate the default probability of borrowers. In this study it was considered the two main criteria on assessment of borrower for lending purpose such as Quantitative criteria and the Qualitative criteria. Basically the quantitative criteria based on the Altman's Z- score model. Using the multiple discriminate analysis model weights were allocated on each criteria.

As per the results achieved there is no significant impact to change overall credit rating by using the qualitative criteria. However there is a correlation between industrial environment and the financial data. Therefore it can be used in proper grading system. The qualitative aspects of the borrowers for credit rating techniques are being used by the out side rating agencies also. Applying that model to the borrower data risk rating were identified. By comparing the result with Altman's revised model, sample results and the existing borrowers' grade are observed that this model can used to identify the future default risk in commercial lending.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In the credit approval process the relationship managers of the commercial bank must balance several often – conflicting business objectives. They must respond to their customers in a timely manner, while making objectives, consistent and accurate credit decision. On the other hand they must also reduce the risk of bad debt and should maximize the profit of the bank. To arrive at correct credit decision they evaluate the borrower's credit requirements. The risk is that the borrower may probably default in servicing the loan and repayment. This uncertainty is known as credit or default risk. The credit analysis management process helps the banks in many ways. Such as determining the borrowers risk; Pricing the loan; Monitoring the portfolio; Managing the risk involve in the portfolio.

A scientific way of the risk rating is achieved through credit scoring / rating. The credit rating agencies play a crucial role by providing rating and information to the investors. Consequently to the rating agencies, the commercial banks also analysis their customers in order to detect changes in credit worthiness and also to take corrective action and to avoid the credit losses. Estimating the probability of default for a loan loss is usually carried out through the internal credit rating systems, which involves both qualitative and quantitative factors analysis. Most of the commercial banks have drawn-up their own internal rating record and assigned rating to their customers. However such analysis is mostly limited to the financial statements.

According to the new Basel Committee agreement, which will be fully implemented from the year 2007, all commercial banks should use either standard approach or their own credit rating system as same way in external credit assessment institutions. As well as the commercial banks have to calculate and maintain the risk weight on their credit exposure. A capital requirement will be applied to the banks on either side of collateralized transactions. For an example both Repo and Reveres Repo deposits are subject to capital requirement. The risk weight on the collateralized portion will be subject to a flow of 20%. However it can be received the risk weight of 0% or 10% depending on the conditions. Therefore such credit rating system has given considerable value to the commercial banks. When implementing a rating mechanism there are deficiencies in traditional risk rating analysis and management process. As a result, banks are looking for more scientific methods of managing credit risk.

The technology of risk assessment through internal credit rating has received considerable attention. Risk managers and regulators around the world are now sharing the views that banks ought to meet minimum capital requirements that are sensitive to all the risk including interest rate risk and default risk. Therefore financial institutions are primarily concerned with the measurement and management of various risk involved in loan portfolio. They emphasis on both theoretical and practical oriented way–out on the management of credit portfolio. For this purpose banks use rating data either from external rating agencies or from the bank internal rating activities.

In this study it takes a closer look at the methodologies and experiences used in commercial banking industry in order to assess their borrowers. In particular it focuses to identify various types of information used for determining of credit rating and how important they are in defining the final rating. The empirical part of the study will build on a special data set collected from the Sri-Lankan bank. It contains detail information about corporate borrowers in a commercial banking sector.

1.2 Nature of the Problem

As previously mentioned, the internal credit rating technology can be used to avoid the credit manager's struggle to assess their borrowers. The scientific assessment of the borrower is supporting to the credit approval decision. Initially credit proposals are submitted by the relationship managers or the credit staff. They are responsible for the marketing of banking services in the highly competitive environment. On the other hand commercial bank and all other financial institutions evaluate the performances. Such evaluations are done on the basis of the profitability. Therefore basically the credit staff is responsible for approving the quality loans. Especially, in the case of larger loans. Monitoring and reviewing of credit portfolio are to be done at regular interval.

One of the most crucial problems faced by the banker is how they can minimize the risk arising on the credit portfolio and they have spent much of their valuable time on that. Because the future risk is very important factor in commercial bank lending activities.

The increasing of non-performing loan portfolio is directly hit to the profit of the bank. In terms of the current regulations imposed by the governing authority of the financial institutions grading of the borrowers has become a mandatory requirement. The new Basel committee agreement has agreed to maintain a proper rating system in all commercial banks with a view to reduce the future default risk in such institutions and also the banks will have to provide loan loss provisions according to the rating applicable.

The credit rating is a widely used technique in determining the borrower's risk. But the rating agencies and the financial institutions are being used various different methods in credit rating process. Some of them are more complicated and not practical in assessing the borrowers. This research attempts to identify use of the credit rating model in measuring the borrowers for credit purposes. It is also attempt to identify the important criteria in assessing process. The typical problem is the correct measurement and the appropriate method for the banks to assess their borrowers. Therefore the major problem of this research is finding a suitable credit rating technique in measuring the customer for lending purpose.

1.3 Research Question

The accurate assessment of credit cost requires a fairly modern credit risk assessment and management system. Poor credit risk management is the most serious problem faced by domestic banks. Today the commercial banks have been functioning with the heavy competitive environment. For banks, clearly defining and measuring the link between risk and pricing is the most critical factor. Risk adjusted pricing and risk adjusted performance measurement are considered increasingly important.

At the same time banks maybe foregoing attractive customer segments due to poor understanding of the risk or badly designed pricing framework. Subsequently the local banks have made huge amount of provision from their profit annually on non-performing loan portfolio. As a result banks are struggling to avoid such unnecessary default risk in order to maximize their profits and overcome the competitive prevailing in the industry. The major problem of this study is how commercial bank identifies and evaluates their customer to minimize the future default risk.

1.4 Objectives

The research focuses on the following objectives.

Primary Objective

- To identify the suitable credit rating method in assessing the borrowers for lending purpose in the commercial banks.

Secondary Objective

- To identify the criteria given impact in credit rating process.
- To examine how credit ratings can be used for lending purposes in the commercial banking sector.

1.5 Sample Selection

For the purpose of this study the sample consists of 51 companies from the both public and private limited liabilities. The study based on the financial statements of sample companies for the year ended 2004. The selected companies are banking with the local commercial banks.