# The importance of credit risk management in banking

Finance, Banks



Credit risk implies a potential risk that the counterparty of a loan agreement is likely to fail to meet its obligations as per the original loan agreement, and may eventually default on the obligation. Credit risks can be classified into many forms such as options , equities , mutual funds , bonds , loans and other financial issues as well , which in extensions of guarantees and the settlement of these transactions. (International Auditing Practice Statement 1006 Audits of the Financial Statements of Banks)

#### IS IT Important For the Banks To manage Their Credit Risks?

Risk is always associated with the banking activities, and taking risk is the important part of any banking operation, there is hardly any banking operation without the risk. Most of the bankers are said to be sound when they have a clear overview of what is the amount of risk involved in the current transaction and they make sure that some of the partly earnings are therefore kept for these risks. The granting of any form of credit is the common form for any bank and this risk is very common and this is the source of risks the banks are always exposed to. (Anderson et al, 2001).

By being exposed to credit risk banks have been faced with a lot of problems. The banks couple of years ago realised that credit risk is important and the banks need to monitor, identify, control and measure it is very significant. Due to this the effective management of credit risk has become a critical component of approaching risk management. This approach will be especially important in terms of the long term success of any bank. Banks now ensure that they have large amount of capital against any form of credit risks so that they can be in a position to adequately tackle any risks which will be incurred. (Bank for International Settlement, 1999)

The credit risk is in the entire portfolio of any bank and also the risk which is associated in individual credits or any other transactions have to be managed adequately. It is always a ascertained that the relationship between the credit risk and other forms of risks need be to considered very seriously in to account, in order to

- Increase shareholder value through value creation, value preservation and value optimization
- Increase confidence in the market place
- Alleviate regulatory constraints and distortions (Amitabh Bhargava ICICI, 2000)

The Basel II Accord specifies that banks must have new procedures for measuring against credit risks.

# Advantages and Disadvantages of Credit Risk Management

The advantages of Credit risk management include:

- Credit risk management allows predicting and forecasting and also measuring the potential risk factor in any transaction.
- The banks management can also make use of certain credit models which can act as a valuable tool which can be used to determine the level of lending measuring the risk.
- It is always better to have some alternative techniques and strategies for transferring credit, pricing and hedging options.

The disadvantages of Credit risk management include:

- Deciding on how good a risk you are cannot be entirely scientific, so the bank must also use judgments.
- Cost and Control associated with operating a credit scoring system.
- With the existence of different models, it? s hard to decide which to use, more often than not, companies will take a one model fits all approach to credit risk, which can result in wrong decisions.

## How Banks Measure Credit Risk

The level of credit risk faced by a bank is provided by the structure of a bank? s credit portfolio. If the portfolio consists of large amount of loans in a certain asset class then this might be an indication of an increased risk. Similarly the presence of complex financial transactions such as lending may also indicate a larger risk.

In general a risk always comprises of two kinds: One is risk exposure and the other one is the uncertainty element, and for the credit risk and the credit quality represents the uncertainty element and credit exposure represents risk exposure. Therefore a bank can assess its credit risk by analysing the credit quality of an obligation and its credit exposure.

While assessing credit quality and exposure a bank must consider three issues:

 Probability of default or any sort of possibility whether the other party which is the counter party will default on the obligation either over the life of the obligation over a specific period of time.

- The exposure of credit or the amount of the outstanding obligation which again depends on the size if there is any case of default.
- Rate of recovery this is the extent towards which the credit can be recovered through some banking processes like bankruptcy and other proceedings of settlements.

In the last decade or so many banks have started to make use of models in order to assess the risks for their credit which they lend. The credit risk models are very complex and include algorithm based methods of assessing credit risk. The aim of such model is to help banks in quantifying, aggregating and managing credit risk. Despite the method the focus of credit risk assessment stays credit quality and risk exposure.

# Analysis of the Quality of Credit (Credit Quality)

Credit quality is a measure of the that counterparties? s ability to perform on that obligation?. (Contingency Analysis, 2003) A bank adopts different approaches for assessing credit quality of considering loans to individuals or businesses. If it is for small businesses then the credit quality will be assessed through a process of credit scoring. This is based on information obtained by the bank about the party who want the loan. The information which is gathered tends to be about annual income, existing debts etc. Credit score is generally calculated by a formula which is applied to the information which is obtained which gives a number based on it the score is generated. The credit score is a highly accurate prediction of how likely the party is to pay bills, the higher the score the better it looks to the bank. (Curry, 2007) However, assessing a large party is based on credit analysis of the loan done by specially designated credit analysts. This just like mention above is base on credit scoring but it involves human judgement. It involves an in depth analysis of various aspect of the party in question including balance sheet, income statement etc. Also assessing the nature of the obligation is taken into account as well. On basis of credit analysis the analyst assigns that party a credit rating. This allows the bank to make decisions regarding credit. A bank can also use credit ratings to measure the share of the borrowers with creditworthiness in its portfolio and get a clear indication of default risk.

#### **Measuring Credit Exposure**

Credit exposure also needs to be taken into account when assessing credit risk or risk exposure. If for example a bank has loaned money to a business, the bank may calculate the credit exposure rate as the outstanding balance on the loan amount. However, in case if the bank by any chance has increased or extended the line of credit but none of the line have been drawn down then the approach will be different. In this case the risk exposure may seem to be nil, but it does not reflect any sort of right by itself to draw down the line of credit. If the firm gets into any financial difficulty it can be expected to draw on the credit line before any bankruptcy. Therefore in this case the bank may consider its credit exposure to be equal to the line of the credit. Credit exposure as a fraction can also be used sometimes to calculate the credit exposure for the total line of credit. (Duffie & Singleton, 2003)

## How Banks Mange Their Credit Risk

Credit risk management practices differ from bank to bank. Generally these type of practices are dependent on the type and complexity of the credit activities which are taken by the banks. In recent years banks have been using models for credit risk management.

# Bank Credit Risk Management Practices: Yesterday and Today

The traditional approach to managing credit risk has been based on establishing a limit of credit at various levels for the individual borrowers an sometimes also based on geographical are and industry type. Also collateral and relationship exiting hardly seem adequate to cope with the declining economics of loan markets. (Gontarek, 1999) These limits specify the maximum exposures a bank is willing to take. Until the early 1990? s , credit risk analysis was limited only based on the reviews of the loans of individuals and most of the banks kept the loans on their books for maturity. (Bernanke, 2006)

In recent years banking industry has made strides in managing credit risk.

Managing the credit risks is the main focus of any banking operation these days and many banking? s are looking now from transaction management to portfolio management. And have slowly changed from monitoring to practising and also predicting their performance. Banks are still holding onto traditional credit risk management tools but these are becoming more and more sophisticated. Various forms of tools and models have been generated to measure and predict the performance and management of portfolio risks which in turn build competitive advantage. Despite the differences in the credit risk management practices the credit risk management in any bank rest on four pillar of:

- appropriate credit risk environment
- Sound credit-granting process or criteria that includes a clear indication of the bank? s target market
- Appropriate credit administration, measurement and monitoring process
- Adequate controls over credit risk. (Basel Committee on Banking Supervision, 2000)

Therefore whether traditional or modern, credit risk management in banks involves reviewing creditworthiness of counterparties, setting credit limits for counterparties, evaluation of credit risk and reporting credit limits and exposures to management. (Caouette et al, 1998)

## **Recent Trends in Credit Risk Management by Banks**

The credit risk management is undergoing an important change in the banking industry. Banks have clearly indicated that centralization, standardization, consolidation, timeliness, active portfolio management and efficient tools for exposures are the key best practice in credit risk management. (SAS, 2004) A bank in America is considering having efficient tools for ? what if? analysis and tools. Also another bank is focusing on stress testing, concentration risk, macro-hedges and capital market risk management. (SAS, 2004) The majority of the world? s large banks agree that integrating environmental and broader social issues into their core credit risk management process is essential to managing credit risk in the 21stcentury. (Huppman, 2005) Leading banks including Barclays now view that these non traditional issues as real credit risk variables that potentially affect their client? s bottom lines as well as their own.

Quantitative models are being used by banks to measure and manage credit risk. Most of the Commercial bankers have started to opt for making use of the credit risk models for their credit options especially with relation to consumer lending and mortgage. These models are known as credit scoring models and were developed for consumer lending. On the other hand it has been a few years ago where the use of these credit risks models have been implemented successfully and are integrated these days with almost every bank to manage their risk. (Bluhm et al , 2003)

In 2001, the UK? s biggest mortgage bank, Halifax, developed a forward looking credit risk management strategy which made use of quantitative models for risk management. (Algorithmics Incoporate, 2001)

Similarly HSBC serves over 125 million customers worldwide and is the one of the world? s largest banking and financial services organizations. The world largest provider of quantitative credit risk solutions to lenders (Moody? s KMV) have decide to provide HSBC with this, which will provides HSBC a methodology for rapid, accurate measurement and benchmarking of credit risk portfolio. (Vyse, 2006) The board of directors of a bank approve and review the credit risk strategy and significant credit risk policies of the bank. The bank? s strategy reflects the bank? s tolerance for risk and the level of profitability the bank expects to achieve for incurring credit risks. These days banks establish and enforce internal controls and other practices to ensure that exceptions to policies, procedures and limits are reported in a timely manner to the management. Due to this credit risk is constantly monitored by the management.

## **Innovations in Technology and Credit Risk Management**

Credit risk management in banks is also getting affected by innovations in technology. Innovations in technology have made significant improvements in bank information systems. This has also been encouraged by Basel II. The improvements in bank information systems has certainly increased the abilities of many banks and their management process to measure and identify and also control the characteristics of any kind of risk. For example ICBC (Industrial and Commercial Bank of China) the credit management computer system was further perfected with risk alert and conversion functions and it performed effective real-time monitoring on the quality and operations of the credit assets. (ICBC, 2001)