

# **RISK ASSESSMENT OF LOAN PRICING**

(A Case Study at PT. Bank Rakyat Indonesia Malang Kawi Branch Office)

## **RESEARCH ARTICLE**

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*ABSTRACT*

The tight competition in banking sector has stimulated banks to initiate breakthrough by providing a wide range of banking products and facility to their customers. This undeniably effects the assessment of loan pricing and credit risk. The purpose of this study is to understand the methods used by a bank in loan pricing and credit risk analysis. In addition, this study is aimed to find out whether the effect of the magnitude of inherent risks have a role in determining the credit interest rate. This research employs descriptive qualitative as the research method in which the object under study is PT. Bank Rakyat Indonesia Malang Kawi Branch Office. This study focuses on the process of credit retail realization, specifically on credit risk assessment. Based on the analysis, the findings show that PT. Bank Rakyat Indonesia uses two methods in the analysis of credit risk. The methods are 5C's and Credit Risk Rating (CRR). It was found that the implementation of the methods were in line with the Basel Principles formulated by the Basel Committee on Banking Supervision. Credit analysis process is also used by the bank as a reference in determining lending rates.

Keywords: Credit Bank, Loan Pricing, Credit Risk, Credit Risk Analysis.

**A. INTRODUCTION**

The World Bank (2013) projected that Indonesia's economic growth for 2014 is in downturn. Economic growth rate in 2014 was predicted at the level of 5.3%, which decrease for 0.3% over the previous year and became the slowest growth since 2009. The president elections, inflation, and rupiah exchange rate which tends to be fluctuating have become the major factors. Several issues also determine the economic growth, such as fluctuating investment growth, and tighter financing conditions, as well as regulatory uncertainties.

On Bank Indonesia's (BI) survey (2013), respondents expected average mortgage interest rates would increase by 6-27 bps. This situation will certainly have an impact on the declining of bank credit demand and increasing the risk of no return of distributed funds (non-performing loans). Bank Indonesia in 2013 predicts that the growth of bank's credit will decline at 3-5 percent from the level of 20% in 2013 with NPL rate of 2.8% -3.2%. In facing these conditions, banks need to anticipate the rise in the level of NPLs by being more selective in distributing credit product. BI has also issued a recommendation to reduce the flow of credit distribution to anticipate the unstable economic conditions.

Credit is the main source of income for banks but it is also among the riskiest product. Basel Committee on Banking Supervision (1999) stated that loans are the largest and most obvious source of credit risk. In lending, banks need to consider two important elements, namely the rate of profit and risk (Kashmir, 2002). In term of profit's element, bank needs to set a competitive interest rate by paying attention to the total cost and determining the targeted profit to be achieved. While in terms of risk,

bank needs to know the level of risk faced by the possibility of failing to achieve targeted profit and the risk of loss arising from a debtor that unlikely to pay its obligations. This is a classic problem that often occurs. No Unpaid loans or better known as the Non-Performing Loans (NPLs) would have an impact on the condition of the bank's cash flow. In the long run, bankruptcy is the worst effects of the credit risk that could affect the economic health of its region. Thus, the precautionary principle is essential to firmly held by the bank.

To anticipate the credit risk, banks must conduct proper risk management and assessment. In Tampubolon (2004), Widigdo Sukarman defines risk management as a whole system of management and control of the risks faced by banks consisting of a set of tools, techniques, process management and organization devoted to maintain both levels of profitability and soundness of banks that have been applied in the corporate plan. The role of the implementation of the risk management in other than accordance with the provisions of the regulatory, also has a positive impact for the bank. Credit risk management aims to maximize risk-adjusted return and keep the exposure to credit risk is within the acceptable limits parameters. As listed in Article 2 Sec 2 of PBI No. 5/8/PBI/2003, the scope of risk management process covers: risk identification, risk measurement, risk monitoring, risk mitigation process, risk control, and reporting system.

In gaining profit from credit product, Sudirman (2013) stated that the bank's loan specifies certain interest rate to be determined. The interest rate is used to cover the costs that arise from bank activities in collecting funds. Determination of interest rate consists of several basic components, namely the cost of funds, bank overhead costs, risk costs, spread (profit), and taxes. As one of the component in determining the interest rate risk cost is determined by the reserve bank in preventing the possibility of unpaid loans disbursed. In determining the cost of risk, the bank will also use the results of risk assessment analysis that has been done on the credit portfolio. The results of the calculation of the risk analysis process is categorized into a particular rating and scoring. The more risky the venture to be funded, the rate to be charged by the bank will also be higher.

Bank Rakyat Indonesia (BRI) is a state-owned bank that was established in 1895. As the oldest bank in Indonesia, BRI at this time has grown into a superior bank. With more than 9736 BRI offices throughout Indonesia and some representative branches in other countries. By focusing primarily on the areas of banking services on micro, small, and medium enterprises (MSME's), BRI tries to reach all levels of society in Indonesia by providing a wide range of products and services. In 2012, BRI's profit reached about IDR 18.69 trillion (BRI Annual Report, 2012). The achievement placed BRI as a bank with the highest profit in Indonesia. In term of credit products in 2012, BRI has disbursed loans amounted to IDR 362.007 billion or 22.92% growth from 2011 achievement. The loan attainment is also supported by the increased quality of loan that is seen from the decreased level of gross NPL rate from 2.30% to 1.83%. Seeing the excellent performance of BRI, the researchers wanted to know how BRI maintaining earnings growth while still able to minimize the risk which can be seen in the low NPL rate achievement.

This study deals with the risk assessment of loan pricing in Bank Rakyat Indonesia. The objectives of the study are (1) To understand the credit risk assessment method of BRI., (2) to understand the role of risk assessment in loan pricing by the BRI., (3) to understand the basic principles used in the analysis of risk by the BRI.

## B. LITERATURE REVIEW

### **Bank**

According to Rose & Hudgins (2013), Bank is financial intermediary that offers the widest range of financial services-especially credit, savings, and payment services-and performs the widest range of financial function of any business firm in the economy. Bank as an intermediary entity, collects funds from the surplus spending units and channels the fund to the deficit spending units through the sale of financial services (Taswan, 2010).

Trust is the main basis for bank activities. Banks need to manage customer trust in entrusting their funds to be maintained by the bank. To maintain the trust of customers, banks need to preserve both health and stability of the company. There are five factors which are commonly used in assessing the condition of banks covering capital adequacy, asset quality, management system, achievement of profit and liquidity (Taswan, 2010). If bank can maintain the quality of these five factor, the reputation of the bank will increase and have a good impact on customer confidence.

### **Credit**

Credit derives from the word *crede* and *creditum*. *Crede* is derived from the Greek word which mean confidence, while *creditum* is the translation from latin word which mean belief in the truth (Taswan, 2010). The meaning of the word implies that any lending activities must be based on trust. In banking, this trust is a belief on the part of banks to borrowers in meeting their obligations.

Credit is the primary source of revenue for banks. In the distribution of credit, banks will charge a certain rate of interest used to pay interest for the owners of capital, recoup costs, and bank's profits. In the process of credit there is a gap between the delivery of the funds and acquaintance that may cause the risks of unpaid debt. If bank fails to maintain circumspection in assessing and controlling credit product, bankruptcy is the worst effects of unhealthy banking conditions. Bankruptcy can cause a domino effect on the condition of other banks in the region. In a broader scope, the bankruptcy of a bank can affect the condition of the national economy.

### **Credit Risk**

Credit risk arises when and where any two parties go into a borrowing and lending agreement, so that one party (lender) agrees to lend another party (borrower) a fixed amount of money for a fixed period of time (till maturity) (Novosyolov, 2010). Credit risk is the potential risk of loss as a result of counterparty (counterparty) who fails to meet the obligation or the principal and interest payments on bank loans (Banking Association for Risk Management, 2010).

With no return of funds and that have been disbursed, it will directly impact on the bank's cash flow and profit. Revenue target will be affected, and the bank also remains obligated to pay interest to the owners of the funds. According to Sudirman (2013), credit risks reduce the ability of the bank to meet its obligations or affect the liquidity risk. No return of funds distributed is the risk that can adversely affect the health of the bank as a whole. Bank revenues will decrease, and the reserve fund owned by banks will be in deficit as well. Therefore, banks need to consider the risks carefully and cautiously. Banks need to formulate several methods that can minimize the possibility of these problems.

## **Credit Risk Management**

Implementation of risk management is increasingly urgent, not only to meet the requirements of regulators, but also the needs of banks in managing risk. Credit risk management aims to maximize risk-adjusted return and keep the credit risk exposure within the acceptable parameters (Basel Committee on Banking Supervision, 1999). The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization. Therefore, banks need to manage credit risk from the portfolio level process to detect early risk there.

In the management of credit risk, banks utilize risk management to ensure the amount of credit risk remained at acceptable rates. To facilitate this process, the bank will do segmentation of credit to categorize the level of risk and specific treatment for each credit portfolio (LSPP, 2000). By doing the analysis and measurement of credit risk, banks can estimate losses from the risks that can arise. In the initial analysis of the loan portfolio, the bank will determine the amount of the expected loss which is used as consideration in the determination of loan interest rate.

## **Basel Principles**

The Basel Committee on Banking Supervision (BCBS) is a committee of banking supervisory authorities that was established by the central bank governors of the Group of Ten countries in 1974. It provides a forum for regular cooperation on banking supervisory matters. Its objective is to enhance understanding of key supervisory issues and improve the quality of banking supervision worldwide. The committee also frames guidelines and standards in different areas, among them, are the international standards on capital adequacy, the Core Principles for Effective Banking Supervision and the Principles for the Management of Credit Risk.

Basel II, initially published in June 2004, was intended to create an international standard for banking regulators to control how much capital that banks need to put aside to guard against the types of financial and operational risks that banks (and the whole economy) face. Bank Indonesia states that Basel II aims to improve the safety and health of the financial system with, emphasis on risk-based capital calculation, supervisory review process, and market discipline. Basel II Framework is based on a forward-looking approach that enables improvements and adjustments of time to time. This is to ensure that the Basel II framework may follow changes in the market and developments in management risk.

The Basel II calculate capital requirements in accordance with the bank's risk profile, as well as providing incentives for improvement in the quality of risk management practices in banking. By using a variety of alternative approaches (approaches) to measure credit risk (credit risk), market risk (market risk) and operational risk (operational risk), then the result is the calculation of bank capital which is more sensitive to risk (risk sensitive capital allocation).

In Basel II, bank capital calculations are contained in Pillar 1 - Minimum Capital Requirement. Various alternative approaches basically can be grouped into two major groups, namely the standard approach applied to all banks (standardized models) and the model of developed internal business activities in accordance with the characteristics and risk profiles of individual banks (internal models) making it more sophisticated. In the Principles for the Management of Credit Risk published in July 1999, the Principle 10 also stated that bank should develop and utilize internal risk

rating systems in managing credit risk. The rating system should be consistent with the nature, size and complexity of a bank's activities.

Internal risk ratings are an important tool in monitoring and controlling credit risk. With the use of internal rating system, it will allow more accurate determination of the overall characteristics of the credit portfolio, concentrations, credits problem, and the adequacy of loan loss reserves. Internal risk rating system categorizes credits into various classes ranging from satisfactory to unsatisfactory designed to take into account the gradations in risk.

### **Credit Portfolio Analysis**

Credit Analysis is an important point to prevent the possibility of the emergence of the credit risk. With a good credit process and appropriate procedures, the bank will be able to assess the applicant's credit profile, credit applicant's financial condition, a risk that can arise, and even the character of the applicant's credit. Credit process involves several independent units but support each other in analyzing a loan application. One of the output from the credit process is the cost of expected loss which will be allocated in the credit interest rate.

In general, the granting of credit depends on the confidence the lender has in the borrower's credit worthiness. Credit worthiness which encompasses the borrower's ability and willingness to pay is one of many factors defining lender's credit policies. Creditors and lenders utilize a number of financial tools to evaluate the credit worthiness of a potential borrower. The evaluation relies on analyzing the borrower's balance sheet, cash flow statements, inventory turnover rates, debt structure, management performance, and market conditions. Creditors favor borrowers who generate net earnings in excess of debt obligations and any contingencies that may arise

### **Loan Pricing**

Pricing management is a management activity to determine the interest rate of products offered by the bank, both the assets and liabilities with the determined composition (Banking Association for Risk Management, 2010). Meanwhile, the pricing itself is defined as the price level or rate of the components of the asset (asset pricing) or passive (liability pricing) in a certain period of time.

In lending, the bank will determine fee that is commonly referred to credit interest rate. Interest in generally is a percentage of the amount of disbursed funds. The process of the determination of credit interest rate is loan pricing. Loan pricing is determined based on the consideration of the cost elements of public funds, the cost of the risk premium, regulatory costs, overhead costs both for raising funds and credit process. There are some basic components in determining the size of credit interest rate charged against the debtor. The five components are (Setiabudi, 1999): Cost of Funds, Reserve Requirement, Risk Cost, Overhead Cost, and Spread.

The bank interest rate is a vital component which may affect the financial condition of the bank. The bank must determine a competitive rate while considering the profit, overhead costs, and risk. Determination of risk is directly related to credit analysis. With good credit analysis, bank will be able to know the more accurate inherent risks.

### **Determination of Lending Rates**

In determining the price of any products or services, Cravens (1999) stated that there are four factors that can be used as the basis for consideration. These factors concluded become 4C that among other factors, Cost, Company Internal, Government Control, and Competitor. These factors are aimed to obtain optimum benefits.

In the banking sector, the determination of lending rates should be considered from two factors, internal factors and external factors. The internal factors are desired positioning, product cost, corporate objectives, and the environment. Meanwhile, the external factors are price competitors, elasticity of demand, and added value to customers. Precision in analyzing these factors would provide an accurate and competitive price.

### **Calculation of Interest Rates**

There are two concepts in the calculation of mortgage interest rates (loan pricing). The concepts are the historical average cost of funds and the marginal cost of funds concept (Setiabudi, 1999).

## **C. RESEARCH METHOD**

Qualitative research method is used to answer the research questions of this study. According to Creswell (1994), qualitative research method is an approach to investigate the value-laden nature of the study and nature value of information gathered from the field. Qualitative study is inquiry process of understanding a social or human problem, based on a complex, holistic picture, formed with words, reporting detailed views, and conducted in a natural setting. Research design that is used in this research is a case study. Case study is a single or multiple entities of phenomenon and activity including program, event, process, institution, or social group, which are observed from time to time and explored. The detailed information is collected by employing a variety of data collection procedures during a sustainable period of time (Yin, 1989 in Creswell 1994). In addition, descriptive case study is used to describe an intervention or phenomenon and the real-life context in Bank Rakyat Indonesia Malang Kawi Branch Office. According to Yin (2003), Descriptive theory establishes the overall framework serving as the guidelines for conducting this study. Descriptive research aims to provide an overview of the specific details of a situation, environment, society, or relationship.

The scope of this study is focused to the loan pricing or determination of credit interest rate, specifically about credit risk assessment in BRI and the object of the study is focused on credit retail process. The loans for medium-sized businesses ranging up to IDR 5 Billion, which is based on the business's cash flow.

The unit of analysis in this study is the risk assessment method at Bank Rakyat Indonesia, particularly on the credit risk assessment and loan pricing. In the credit-granting process, the bank would analyze credit portfolio that proposed by the debtor. By this process, the bank will identify the level of the risks that may arise. Then, the cost of risk will be appointed and charged on interest rate, combined with cost of fund, spread, and overhead cost. Therefore, this specific method would be analyzed in this study.

This study employs primary and secondary source of data. Berg (2001) mentioned that primary and secondary source of data which explained that primary source of data involves the oral or written testimony of eyewitnesses which refers to the related event described. The purpose of the use of primary data in this study is to identify the banking risk management, particularly the loan pricing in Bank Rakyat Indonesia. Primary source of data was collected through documentation from PT BRI Malang Kawi Branch Office, whereas secondary data that would support the research are documents such as portfolios, standards or policies, as well as company websites.

Data collection method is used to gather the information related to objectives of this study. Thus, the technique used to collect the information and data is documentation. Documentation refers to archival records. Denzin (1978) in Berg (2001) categorizes those records into public and private. Public archival records are written records in more or less standardized form and arranged systematically in the archive, whereas private records are the records that are typically intended for personal or private audiences.

Technique used to analyze data in this research is qualitative descriptive method based on Basel principles, BI Regulation, & BRI Internal Regulation. The analysis of qualitative data according to Bogdan and Biklen (1982) in Moleong (2006) is the effort made by way of working with the data, organizing the data, sorting the data into manageable units, performing the synthesis process, finding the patterns, finding what important to be learned, and deciding what can be shared for others. The data collected will be processed and analyzed with descriptive methods of risk assessment is to know in the process of credit disbursement and loan pricing.

## **D. RESEARCH FINDINGS & DISCUSSION**

### **General Description of PT. Bank Rakyat Indonesia Tbk**

PT Bank Rakyat Indonesia (Persero) Tbk. is the oldest bank in Indonesia. Its history was started back on 16 December 1895, when Raden Bei Aria Wiraatmaja founded a small financial institution with the name of De Poerwokertosche Hulp en Spaarbank der Inlandsche Hoofden. The institution was a mosque-based association, whose function was to manage and disburse trusted fund to community in a very simple scheme.

Over the years, the institutions went through name changes and evolve with the surrounding condition. In 1912, the name was changed to Centrale Kas Voor Volkscredietwezen, and in 1942 – by Japanese government it was changed to Syomin Ginko. In the independence era, Syomin Ginko was replaced by the name of Bank Rakyat Indonesia. After going through several name changes, finally in 1992 the official name of the institution was PT Bank Rakyat Indonesia (Persero), and being one of the state owned enterprises.

With the support of mature experience and ability in providing banking services, especially in the SME segment, BRI is able to record achievements for nine consecutive years as the bank with the largest profits and managed to second rank in terms of assets in the banking industry in Indonesia. BRI also continues to develop various consumer banking products and services like for urban communities. To support these efforts, BRI develops a network that is now recorded as the largest bank in terms of number of units of work in Indonesia, which now amounted to 9808 units and 3 overseas units of work connected in real time online. With a large number of

customer base reflected in the accounts of more than 48 million deposit accounts, BRI continues to develop e-banking services to be accessible to the public via the Internet, telephone, short message services (SMS), and e-services through other channels such as automated teller Machine (ATM), Cash Deposit Machine (CDM), Electronic Data Capture (EDC), dan Kiosk with total e-channel network reaching for 104,570 units.

### **Brief History of PT. BRI Malang Kawi Branch Office**

PT. BRI Malang Kawi Branch Office was inaugurated on 12 April 1988 by Mr. Arief Kamardy as the Director of BRI. PT BRI Malang Kawi Branch Office is located at JL. Kawi No 20 and became the first branch office was established in Malang. Establishment of Branch Office BRI Malang Kawi aims to expand market share in order to be closer to customers.

BRI Malang Kawi continues to evolve into one of the BRI branch offices that has excellent performance in East Java. Malang Kawi Branch Office is also predicated as a branch with Grade IA performance, which is the highest grade in the categorization of branches. With a large market share and economies supported by the growing city of Malang, the performance of Malang Kawi Branch Office also shows a positive trend. From 2010 to 2013, there were significant earnings growths. In 2013, Malang Branch Office Kawi achieved around IDR 129,150 million profits. There is a significant growth of IDR 44 billion compared to 2010 profit which only grossed for IDR 85 billion. The profit was in line with the decline in the percentage of non-performing loans (NPL), in December 2013 the percentage of NPLs amounted to only 1.62 % Retail. This figure is remarkably lower than NPLs retail percentage in December 2010 that was 10.19 %.

### **Credit-Granting Process**

Credit-Granting process/lending process consists of two stages. Credit Retail initiatives undertaken by the proponent officials includes: Initiative or credit application, Analysis and Evaluation of Credit, Credit Negotiation, Determination of Structure and Types of Credit, and Recommendation in Credit Granting. The second stage is credit granting decisions which are made by the officials in a certain limit, with attention to: Completeness of Credit Package, Analysis and Evaluation of the credit application made by the Officials Credit Initiators, and Recommendations of the credit application made by the Officials Credit Initiator. The credit realization process can be seen in the figure below:

**Figure 1: Credit Realization Process in BRI**



Source: BRI

### **Initiatives of Credit Application**

Each working units in BRI is able to perform the initiative of credit retail. Credit initiatives are made based on the borrowers domicile or business locations throughout Indonesia by considering the effectiveness and efficiency in conducting the examination coaching and monitoring of the debtor.

Against any loan application, the proponent officials conduct a preliminary assessment (Pre Screening) by taking into account, among others, the Target Market

(PS), Acceptable Risk Criteria (KRD), prohibited financed business types, type of business/ credit that needs to be avoided, and List of Bad Debts from Bank Indonesia.

In the later stage, AO search relevant information from various sources about the applicant that would support the analysis and evaluation of the applicant's credit 5C's.

### **Credit Analysis and Evaluation**

All of the loan application must be processed through process of analysis and evaluation by the Official Credit Line. Depth analysis is adjusted to the level and complexity of credit risk under consideration. The analysis process is divided into two stages and performed by two executors, namely AO and ARK. Credit analysis performed by the AO includes 5C's analysis consisted of qualitative and quantitative analysis. Qualitative analysis is conducted on the quality and stability of the business by taking into account the market position and competition, as well as their business prospects. It also conducts an assessment of the applicant's character, background and quality management. Quantitative analysis is performed to determine the applicant's financial condition. CRM (ARK) conducted an analysis and evaluation of the loan application that have been analyzed and evaluated by the Official Credit RM Line. The analysis conducted by the Officers in Credit CRM Line (ARK), covers the determination of the color classification of credit, including the calculation of CRR, verifying and checking the reasonableness of the qualitative analysis which is done by RM Line of Credit officers. ADK also can make improvements when needed.

Credit analysis and evaluation procedures undertaken by the initiators in RM Division (AO) by conducting data entry of financial and non-financial based on all sources of data that have been obtained after a field inspection (on the spot). The data entry of financial and non-financial conducted by the initiators officers will result in Credit Risk Rating (CRR) and the color classification of credit. Classification of color credit loans generates three possible colors, namely: Black, Grey, and White. Each color has specific clarification and regulation requirements. White color indicates that the purpose of credit is not included in the prohibited list of BI regulation, the financial condition of the debtor is able to pay the loan installments and interest, and there are no principal arrears. Grey Colour illustrates that there are arrears of principal or interest more than 30 days with a maximum of 90 days, this will affect the total score of the CRR is between 26 to 31. Meanwhile, the black color illustrate that the purposes of credit is prohibited by regulation, the conditions of the debtor is not financially able to pay off the loan installments and interest, and there are arrears of principal or interest in more than 90 days. The data that have been obtained will be summarized and analyzed in the form of a memorandum called as Memorandum of Credit Analysis (MAK). 5C's analysis, financial aspects and non-financial aspects analysis are included in MAK.

### **Credit Analysis and Evaluation of by Credit Risk Management**

Analysis and credit evaluation conducted by line of CRM (ARK) emphasis on risk analysis. The results of ARK analysis are outlined in the Memorandum of Credit Risk Analysis (MARK). At this stage ARK examines the reasonableness of the assumptions used by the RM in calculating the credit needs by considering the macro-data such as: economic growth, inflation, industry conditions, market share, BRI portfolio conditions and provisions of the government. Than the official ARK is also

responsible to evaluate the credit calculations performed by the RM with attention to the customer's needs, the planned use of credit, cash flow and customer line of credit scheme offered by RM.

After performing analysts and data evaluation in the proposed line, line of CRM (ARK) is also assigned to conduct a business risk analysis. ARK line is obliged to assess the business risk of the debtor's internal and external aspects. In addition to re-evaluate the RM analysis, ARK needs to consider the risks and company's business prospects. ARK lineup is also obliged to check the results of appraisal conducted by RM line. There are three risks that need to be considered: The risk of collateral coverage, the risk of collateral bonding, and risk insurance coverage. The analysis includes the analysis of credit (risk) aspects of the 5 C's, both by line of RM and CRM, implemented with the aim to determine the level of risk of the debtor quantitatively as outlined in the Credit Risk Rating form.

### **Credit Risk Assessment**

As the implementation of precautionary principle and credit prudential, credit analysis is one of the most important procedure. In BRI, credit risk analysis is carried out by using 5C's method (Character, Capacity, Capital, Collateral, and Condition). 5C's analysis is conducted and summarized in Credit Analysis Memorandum (MAK) made by the Accounts Officer after analyzing the loan applicant. After analyzing 5C's, the bank will process the data of credit applicants in the form of Credit Risk Rating (CRR). CRR is an internal system of credit risk assessment which categorizes the level of risk in the form of ratings/scorecard. With categorization of risk based on ratings, bank is able to take better decisions in accordance with existing procedures in each category.

In the assessment process CRR analyzes several factors, which cover assessing the level of credit quality, distinguishing the level of credit risk (risk differentiation), focusing on the future condition (focus on futures) and minimizing subjectivity (minimize subjectivity). CRR could also become a tool for the bank to determine the level of default probability of the debtor which is necessary to determine the amount of allowance for impairment, estimating the losses will occur (expected loss), and as a tool to assess changes in the ability of the debtor through the parameters.

CRR assessment is conducted on two categories of factors that influence the emergence of the possibility of default, which include financial category consisted of liquidity, solvency, and growth of corporate and non-financial category which includes lenders character, market position, and competition situation management. Assessment is done by using the scorecard in which each score represents variables / parameters which are considered influence the potential default of a debtor.

CRR assessment results will be used by the bank as a reference to determine whether the loan is rejected or further processed (especially for new loan application process), determine the loan interest rate, calculate risk-based pricing, observe the changes in the condition of the borrower (early warning sign), and determine the structure of credit terms. The assessment is done by using a scorecard in which each score represents variables / parameters that are considered influence potential defaults of borrowers. The results of the calculation are processed on the assessment column based on the parameters. These factors fall into the category of financial and non-financial. Financial category is a set of factors associated with the financial condition of prospective debtor which covers: Liquidity, Solvability, and Growth. The value

contained in non-financial category evaluation is done by comparing the assessed criteria on the real conditions of the credit applicant with the assessment regulation. Assessment criteria used to evaluate non-financial category are: Character, Market Position, and Management. After undergoing the process of analysis and evaluation, the CRR method will produce a specific rating. The rating is in the range of one to ten. Rating one indicates a very low risk debtor while ten indicates very high-risk debtor. The level of this rating will be taken into consideration for the decision makers.

#### Determination of Interest Rates (loan pricing) in BRI

Determination of credit rate in BRI is carried out by calculating the cost of funds and other charges by pooling system, with a cost-oriented basis. In line with business growth and credit risk, the determination of lending rates should consider the credit risk which is inherent in each debtor's portfolio.

Interest rate is generally the major consideration aspects for customers in applying credit (Banking Association for Risk Management, 2006). This suggests that the loan pricing has major role in banking competition. To determine the appropriate rate of BRI apply Pooling system / Cost Oriented, example of the calculation is as follows:

**Figure 2: Calculation of Credit Interest Rate**

Type of Fund	Outstanding Rates	Composition	Interest Cost	Interest Rate	Weighted Average
1	2	3	4	5=4/2	6=3X5
Giro	IDR 283,812	33,43%	IDR 6,879	2,41%	0,83%
Deposit	IDR 474,250	57,54%	IDR 54,570	11,51%	6,62%
Savings	IDR 49,167	5,97%	IDR 2,325	4,73%	0,28%
Additional Deposits	IDR 16,978	2,06%	0	0	0
Total	IDR 824,207	100%	IDR 65,774		7,74%
Promotional Costs			IDR 65,441		0,18%
Cost of Funds					7,75%
Reserve Requirement					5,00%
Cost of Loanable Fund					8,14%
Overhead Costs					1,00%
Cost of Money					9,14%
Risk Cost					1,15%
Spread					1,50%
Base Landing Rate					11,79%

Source: BRI

In accordance with the components of the calculation of credit interest rate that have been described in Chapter II, the calculation of credit interest rate / base lending rate is based on three components, cost of money, risk cost, and spread.

#### Discussion

Based on the analysis of credit granting process at PT Bank Rakyat Indonesia Malang Branch Office Kawi, it is found that the lending process is conducted using two methods of analysis and evaluation. Both of these methods include the 5C's analysis and Credit Risk Rating (CRR). The process of analysis and evaluation of the loan portfolio is used to calculate and evaluate the amount of the credit risk. Analysis and evaluation results will be used as consideration or recommendation for the bank to accept or reject the loan application.

5C's & CRR analysis system used by BRI are correspond with the guidelines of Basel Committee on Banking Supervision (BCBS) about management and control of credit risk. According to the Basel Committee on Banking Supervision (2006:230) in article 733, the bank must have a methodology to assess the credit risk inherent in the debtor's portfolio. Moreover, article 734 states that internal risk grading is an important tool in monitoring credit risk. Internal risk rating should be sufficient to support the identification and measurement of risk across the credit exposure, and should be integrated into the analysis of the overall institutional credit risk and capital adequacy. Ranking system should provide detailed ratings for all assets. This system is useful to identify any weakness in the portfolio and to be used to consider various risks through appropriate mechanisms securitization programs and complex credit derivatives.

In its implementation, BRI has conducted the recommendation from the Basel Committee on The First Pillar of Basel II about credit risk analysis approach. BRI uses Internal Rating Based (IRB) as the approach in conducting credit risk analysis by distinguishing the requirement based on the debtor's assets. IRB is the suitable approach for the BRI, by using different requirement analysis based on the amount of debtor's assets, the SME sector as the business focus BRI can be treated fairly. The IRB approach is implemented by BRI in the form of CRR scoring which is used as the risk assessment of the credit portfolio.

As the output of risk analysis, the amount of inherent risk may also affect the amount of interest rate charged. In the calculation of credit interest rate/ loan pricing, the risk cost / risk premium is one of the main components. Bankers Association for Risk Management (2010) also describe the Risk Cost/ Risk Premium as the fee charged to debtor to cover expected credit risk (expected loss). Determination of the risk premium method is done by judgmental with the amounts depends on the credit risk profile of the debtor according to the Bank. According to ALMA BRI (1999), in determining customer risk, debtor is classified into Prime Customer (less risk) and Non-Prime Customer (high risk). Categories of periodically rated customers will be determined by the loan committee for the Risk Adjustment. As an example, to prime customers a risk-adjustment is determined at -50%, while the non-prime set for risk adjustment by 25%.

At the current system of BRI, there is a lack of specific conversion from the result of CRR to be implemented in credit risk negotiation. Rate negotiation system at BRI is judgmental method by considering the existing risk rating and debtor contribution for BRI. If the debtor risk is low or very low, then the interest rate negotiation process can be done. Contributions of the debtor for BRI can also be used as consideration for credit interest rate negotiation, for example, the result of interest rate calculation for A Company is 17% but the A Company plea for lower interest rate of 15% with consideration of contribution in the form of export transactions through BRI which has a value of profits of 2% or more, then the 2% at lost rate of credit interest rate can be covered with the export transaction fee-based income from the debtor.

## E. CONCLUSION AND SUGGESTION

Based on the discussion and analysis of Risk Assessment of Loan Pricing at the BRI Malang Kawi Branch Office, the conclusions which can be drawn are as follows:

- 1) In performing the risk assessment, BRI uses two types of analysis, namely the 5C's and Credit Risk Rating (CRR). 5C's a credit analysis is more general, while CRR is an internal rating that categorizes levels of risk in a specific rating.
- 2) Risk is one of the cost variables in the determination of credit interest rate. The greater the credit risks of the portfolio, the greater the risk cost that will be charged, and vice versa.
- 3) Basel principles is the basic principle used in credit risk management. Basel principles established by the Basel Committee of Banking Supervision and retrieved by Bank Indonesia as the main principles of credit risk management for Indonesian banking system.

Based on the conclusions above, suggestions that can be given to PT Bank Rakyat Indonesia Tbk Malang Kawi Branch Office are as follows:

- 1) BRI should remain competitive with the competitors, while maintaining the quality of the provision of credit by following existing procedures. This is because credit risk is a major cause of banking problems.
- 2) BRI needs to establish specific conversion of the CRR score result which should be used for formulating recommendations in credit granting process and interest rate negotiation. CRR score conversion can be made either specific formula or percentage.
- 3) BRI needs to improve the current judgmental system in interest rate negotiation. This is to ensure the negotiation of interest rate is being properly managed and within level of prudential standards.

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