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# CREDIT RISK MANAGEMENT CONTROL ON SME SEGMENT: STUDY CASE OF XYZ BANK BRANCH SURABAYA

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Abstract: The study is conducted to explain the suitability of credit risk control management to minimize the non-performing loans at XYZ Bank Branch Surabaya as stipulated by the Basel Accord Committee in Financial Services Authority Regulation No. 18/PJOK.03/2016 about the Implementation of Risk Management for Commercial Banks. Based on the Basel III guidelines, credit risk management includes seven mechanisms. The seven mechanisms are the policy framework, credit risk rating framework, credit risk limits, credit risk modeling, credit risk mitigation, credit audits, and loan review mechanisms. The study uses a qualitative study by the case study approach. The results showed that the control of credit risk management implemented by Bank XYZ Surabaya Branch to minimize non-performing loans to individual debtors in the SME segment had not run effectively. It was primarily about the evaluation of credit risk, which led to the emergence of a new set of risks such as errors in credit risk evaluation, target market losses and ineffective allocation of loan funds, and inadequate strategies for collecting net credit to customers. The study also provides several recommendations for credit risk management as the strategy to reduce the risk of lending to individual debtors in the SME segment at XYZ Bank Branch Surabaya.

Keywords: Risk Management, Credit Risk, Financial Services Authority, Regulation

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> The global financial crisis that ravaged the economies of various countries has emphasized the importance of risk management practices in

the banking context (Ýncekara and Çetinkaya, 2019). This follows the Basel Committee's recommendation to banks worldwide to redesign risk management processes through the implementation of risk-based due diligence to identify, prevent and

Corresponding Author: Eric Harianto, Citraland CBD Boulevard, Surabaya, Indonesia, E-mail: eric.harianto@ciputra.ac.id, DOI: http://dx.doi. org/10.21776/ub.jam.2022. 020.02.17 mitigate all risk events, including financial and nonfinancial events, to minimize the possible adverse impact on performance. The bank as a whole (Borodacheva et al., 2016). The urgency of implementing risk management is because banks play a major role in providing credit to support the sustainability of manufacturing, agricultural, service and commercial companies, providing jobs and increasing purchasing power, consumption, and savings. In Indonesian banking, lending is still dominated by National Commercial Banks, although it has not been fully implemented to support the development of MSMEs. During the COVID-19 pandemic, the Indonesian government has organized the National Economic Recovery Program (PEN) with a total MSME financing budget of Rp 123.46 trillion, both in the form of interest subsidies, tax incentives, and guarantees for new MSME working capital loans (Yayuningsih et al., 2020).

As a bank accepts a loan application, the risk manager must be able to decide, based on the profile of the prospective debtor, whether to give him credit or not. It will be very important for banks to evaluate the risks associated with lending money to potential debtors. Therefore, credit lending must be decided carefully to maintain its efficiency and effectiveness (Istrate et al., 2016). Given that the purpose of credit management is to minimize risk and maximize bank profits, it is necessary to make a rule to distinguish who will be given credit and who will not. This is made possible by accurately analysing prospective debtors' demographic and socio-economic profiles (Caruso et al., 2020). In simple terms, credit risk can be commensurate with the risks that arise due to the debtor's inability to fulfil his obligations following the agreed terms (Bennouna and Tkiouat, 2019). This reflects that credit risk comes from bank lending to companies, individuals, or other parties (Anna et al., 2015). Credit risk can be demonstrated through the level of nonperforming loans (NPL), which indicates substandard, doubtful and bad quality loans. In Indonesia, the total NPL of MSME loans throughout Indonesia during 2018 was between 2-43% to 2.95%, indicating that the credit risk faced by Indonesian banks is still reasonable. For the East Java region, the average total NPL is 3.59% (Otoritas Jasa Keuangan, 2018).

Bank XYZ Surabaya branch posted an increase in the ratio of bad loans or non-performing loans (NPL) of Rp. 8,695,000 in 2019 (before the pandemic) to Rp. 27,492,117,231.35 throughout 2020. The uncertainty situation from March 2020 until now has increased the NPL ratio before and after the Covid-19 pandemic. This is a credit risk that is beyond the control of the bank. However, credit that had become NPL before the pandemic must still be observed. The restructuring relaxation from the Financial Services Authority (Otoritas Jasa Keuangan usually abbreviated as OJK) through Financial Services Authority Regulations (Peraturan Otoritas Jasa Keuangan usually abbreviated as POJK) 11/2020 allows NPLs to be detained. However, NPLs that occurred before the Covid-19 pandemic entered Indonesia and outside the POJK 11/ 2020 scheme are still considered. The percentage of NPL from customer loans at Bank XYZ Surabaya branch during 2020, with the lowest NPL of 0.08% occurring in August 2020, while the highest NPL occurred in March 2020 of 2.47%, which indicates that the credit risk faced by Indonesian banks still at a reasonable level. However, the Bank XYZ Surabaya branch must be more alert to this condition due to high spikes.

#### LITERATURE REVIEW

The researcher uses five previous studies to investigate bad loans in various banks worldwide and see how bank management overcomes these problems. Research at the Corporation Bank of Malaysia (CBM) by Kiat and Kumar (2012) suggested that the best practice of credit risk assessment can involve financial, non-financial, and behavioral factors. The final score is given by following sequential evaluation steps on financial, non-financial, and behavioral factors, making an initial risk rating, identifying warning signals, parent/group support, manual replacement and making a final assessment. Dewi and Anggono (2013) suggested that banks must own the development of an integrated and structured credit risk management policy in the cycle of the credit risk management process. This

is intended to give banks good credit quality and minimize potential risks and credit losses. The research was conducted at one of the leading banks in Indonesia. Desda and Yurasti (2019) found that BPR SAN needed additional staff for credit supervision who managed non-performing loans, tightened risk profile assessment, especially for consumer loans, and carried out asset rescue for high-risk debtors. This must be done because the NPL level has reached 11.89 %. Hasibuan et al. (2019) found that the high risk profile was due to a lack of internal supervision by the micro unit in the bank, resulting in the monthly increase in the number of bad loans. Afriyie et al. (2018) suggested that banks must have a credit department with a separate role in evaluating credit risk, setting credit terms and limits, monitoring and controlling debt, ensuring that customer master files are current and accurate, and collecting payments from borrowers. This will enable banks to control risk effectively and quickly.

Several theories explain the importance of risk management for financial institutions, especially banking, such as the financial economy approach, institutional theory, agency theory and stakeholder theory (Hudin and Hamid, 2014). The main objective of banking risk management based on a financial economy approach is to increase the company's value. This is based on bank managers with limited resources and the ability to spread company investments due to limited capital and the concentration of returns on human capital (Das and Ghosh, 2017). The institutional theory focuses on rules and regulations imposed on institutions by outsiders, especially by government regulatory agencies. Norms and values are incorporated into the role as part of the socialization process or procedure. Therefore, the institutional theory provides an important understanding of the promising reasons for risk management in banks (Liberman, 2016). Agency theory has two basic assumptions. First, principals, as well as agents, pursue to maximize their interests. Second, the agent's interests may deviate from the principal's interests, and the agent may not work in the principal's best interests. Proponents of agency theory assume that shareholder wealth shifts to managers because hedging is very broad and opposes the practice of risk management so that risk management can be used to overcome these problems (Dell'Ariccia and Marquez, 2016). Banking risk management is required to meet regulatory requirements. Banking risk management is needed to align the interests of managers with shareholders' interests. Banking risk management is also needed to reduce expected bank tax payments. Banking risk management is necessary to reduce the possibility of financial distress, business failure or bankruptcy. Banking risk management is necessary to protect an organization's specific investments. Banking risk management is also needed to assist banking business organizations in developing financial plans and investment activities. Banking risk management is also needed to maximize the bank's shareholder value. These things are based on stakeholder theory (Fernando and Nimal, 2014).

Credit risk is one of the main and most important types of banking risk, indicating the possibility that the contractual counterparty will not fulfil its obligations due to a decrease in the ability to pay or a reluctance to comply with the contract (Colquitt, 2007). This risk is a threat for banks that cannot collect principal or interest on loans and securities as promised, thus being the biggest cause of declining bank performance (Adeusi et al., 2014). In the commercial banking industry, there is ample evidence that banks do not understand the characteristics of borrowers or the lending industry as a whole. This is assumed to be the main source of banking failure, which has caused severe credit problems (Kessey, 2015). Commercial banks only attract as many borrowers as possible to produce quality assets. However, asset quality problems also increase credit risk (Afriyie et al., 2018). Therefore, a fundamental transition in credit guarantee standards also needs to be prioritized to avoid poor risk management practices due to the tendency to neglect risk management, clear loan documentation, risk monitoring, and inaccurate targeting of credit services (Ntiamoah et al., 2014). However, banks can reduce credit risk through the implementation of effective risk management by conducting a comprehensive credit risk analysis based on scanning and monitoring of the most trusted loan applications, collateral levels, diversification of loan portfolios, accurate loan pricing according to repayment capability, including the intention of the borrower (Kattel, 2016).

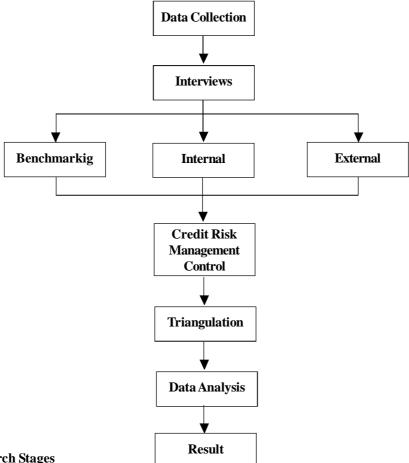
Credit risk management includes various stages such as identifying, measuring, monitoring and controlling risk exposure. Thus, the credit risk management framework includes various policies and rules related to monitoring credit risk to maintain a balance between risk and return, ensuring asset diversification or quality (El-Bannan, 2017). However, credit risk management is not intended to eliminate credit risk as a whole but rather to keep existing risks low or to reconcile the ratio between risk and profit levels to maintain the stability of bank income (Akram and Rahman, 2018). Credit risk management will ensure banking monetary stability because credit risk management has clearly defined credit policies used by banks. Credit risk management practices play an important role in determining banking operations' profitability, liquidity, and soundness (Mohamed et al., 2015). Standard guidelines for implementing integrated credit risk management were introduced in 2004 by the Second Accord of the Basel Committee on Banking Supervision (Basel II). The use of this standard has been practiced since June 2006. All banks must practice it in Europe in 2008 (Pham and Daly, 2020). In Indonesia, Basel II was socialized by Bank Indonesia in 2008 and must be practiced by all Indonesian banks in 2012. After the global crisis in 2008 shook the world, the Basel Committee again revised Basel II to Basel III, where the Indonesian Financial Services Authority required risk management practices are mandatory for banks to implement by the end of 2020 (Otoritas Jasa Keuangan, 2016).

#### **METHOD**

The type of research used in this research is qualitative research with a case study approach. This study seeks to understand the phenomena that occur at Bank XYZ, where this study aims to explain the implementation of credit risk management to minimize non-performing loans at the bank. Furthermore, this research was carried out in stages (see Figure 1). This research was conducted at Bank

XYZ Surabaya Branch. The research will be conducted from April to May 2021. Informants used in this study can be divided into internal and external informants. Internal informants are the main informants in this study, namely members of Bank XYZ management who are directly involved with risk management practices. External informants are supporting informants. External informants can also be said to be people outside the management of Bank XYZ who have understood risk management or have direct experience in the field.

Purposive sampling This study uses purposive sampling in the search for respondents. The process involves identifying and selecting individuals or groups with knowledge of or experience with interesting phenomena (Miles et al., 2018). In this study, the researcher becomes the key instrument or main research tool because only humans as instruments can understand the meaning of human interaction, read the facial language, and explore feelings and values contained in the respondents' words or actions. (Sugiyono, 2016). In This research, triangulation was conducted by six informants are as follows: SME and Micro Risk Head Regional (DA), SME Head Regional (GW), Executive Business Officer (SP), Regional Ritel Collection and Recovery Head (DS), Marketing Manager Bank (IY), Director Corporate Business and Bank Commercial (PB). Semi-structured interview techniques on four internal informants and two internal. External people were used to facilitate researchers in extracting information from research informants by preparing topics and a list of questions before conducting interviews with selected informants. Data validity testing is carried out by triangulation of sources by examining the answers given by the source, and data reliability testing is carried out using the dependency technique (Yin, 2017). Method, investigator, theory, and data source triangulation are the four types of identified triangulations (Creswell, 2014). Meanwhile, this study uses triangulation of data sources in qualitative studies, such as talks on using focus groups (FGs) and individual in-depth interviews (IDI).



### Figure 1. Research Stages

### RESULTS AND DISCUSSION Implementation of Risk Management

Standard procedures for credit policies that apply in Indonesia are generally carried out based on Bank Indonesia regulations (currently taken over by the OJK) as attached in the Financial Services Authority Regulation (POJK) Number 42/Pojk.03/ 2017 concerning Obligations to Prepare and Implement Credit or Bank Financing Policies for Banks General, where this regulation requires Indonesian banks to apply credit or financing guidelines. The standard procedure for credit policies that apply at bank XYZ is based on Bank Indonesia regulations (from prudential lending, credit monitoring, administration, and documentation to managing non-performing loans). Therefore, every loan submitted must meet the credit terms and conditions (SPK) approved by the four committees at Bank XYZ. The four committees are the risk management committee (RMC), the asset committee, the capital and investment committee (CIC), and the operational risk committee.

"Standard procedures for credit policies that apply to Bank XYZ are called bank risk management policies (KMRBM), which are divided into two provisions, namely general provisions and more specific provisions that provide detailed explanations on the indicators of general credit policy provisions. This credit policy procedure is adjusted to the termination and type of credit proposed by the prospective debtor. For SME loans (up to Rp 500,000,000), the risk management system is implemented using a computerized system analysis, while for high loan applications (Rp 500,000,000 to Rp 25,000,000,000), credit policy procedures are carried out using external analysis, including involving a committee credit [IY3/L2]."

"There is such a thing as (our) bank credit policy, having a reference in the credit industry." There is an operating standard that governs everything that can and cannot be done from above. Credit policies are listed above, while operational standards for implementing the policies are listed below. Banking is a highly regulated business, meaning it is heavily controlled since it has a high level of risk, affects a large number of people, and involves large sums of money. Banks are required to create policies that reference the Financial Services Authority's (OJK) banking rules or other government legislation. Furthermore, the bank (us) has internal regulations that are not controlled under the OJK [DS2/M1-2]."

The standard procedure for credit policies that apply at bank XYZ is carried out following Bank Indonesia regulations (starting with prudent lending, credit monitoring, administration, documentation, and management of non-performing loans). Therefore, every loan submitted has complied with the regulations and credit requirements (SPK). The risk management committee (RMC), asset committee, capital and investment committee (CIC), and operational risk committee at Bank XYZ have all been approved. In the banking industry, risk management refers to the integration of rules, procedures, and people to prevent potential losses (Dexu and Wenlong, 2016). This is supported by the findings of interviews with the four internal informants listed below.

"Policies are regulated from general to specific; general policies are governed

by credit conditions, while derivatives are governed by conventional credit procedures and other more detailed restrictions." Depending on the rate of credit termination and the type of credit. The risk management system is implemented through the system for loans such as home ownership. It will be different, however, for loans such as tiny sector to business credit. It involves a credit committee for corporations, and it will be regulated by the system for small businesses up to a specific amount. The micro-segment accounts for less than 500 million people. Meanwhile, the commercial portion is included in the figure exceeding 25 billion [DA2-4/H1-2]."

"It is necessary to adhere to government regulations, Bank Indonesia regulations, and Bank Mandiri's regulations. There is an SPK afterwards when it is lowered (regulatory and credit terms). Risk management certification is required for all employees. Our authority will be suspended if the bill is not passed. The SME category ranges from \$500 million to \$25 billion, with amounts more than \$50 billion requiring a shift to commercial banking [GW3/I1]."

#### **Credit Risk Reduction Strategy**

Communication and negotiation in the risk management process involving other members is an important element of the risk management approach so communication and negotiation with internal and external stakeholders should be considered at every stage of the risk management process (Australian/New Zealand Standard, 2004). In this case, the operational work units involved in providing credit at XYZ are the credit committees of each branch, which consists of four work units, namely business units, risk management units, credit operations, and recovery units.

"A business unit and a risk management unit make up the credit committee. In credit termination, the two parts work together. Marketing, credit analysis, and customer relationship management are all handled by this business unit. It has to do with credit termination analysis for the risk management unit [DA6/ H21."

"There are four pillars: the business unit that attacks the market, the second pillar of risk management that manages risk, and the third pillar of risk management that manages risk." Between the business unit and risk, there are four eyes. Risk management entails not just identifying and reducing risk but also mitigating it. The third pillar is known as operation, and it is the final gatekeeper. If the BU and risk management are both in good shape, Credit Operation will check for completeness [GW4/I2]."

The business unit consisting of an assistant relationship (AR) and relationship manager (RM) is in charge of carrying out marketing activities (salesperson) for credit products, managing acquisitions, and collecting debtor data, as well as maintaining relationships with customers. The risk management unit is tasked with checking debtor documents, analyzing the debtor's ability related to the proposed credit, identifying risks, and mitigating the risks involved, including determining limits and making methodologies related to the credit portfolio of prospective debtors. The credit operations unit then checks the completeness of the credit booking documents, credit administration, credit collateral, compliant reviews, and legal documents. Based on the operation collateral verification report, the credit recovery unit is tasked with carrying out the required recovery activities from non-performing loans. Furthermore, the business unit and risk management visited to conduct interviews with prospective debtors and cooperate in making credit decisions. In practice, the determination of credit policy at Bank XYZ is also based on external regulations applicable in Indonesia, as is done in the implementation of lending at other banks. In this case, the OJK regulations have become the reference for determining the applicable credit policies at Bank XYZ, namely by involving other institutions outside the regulator, such as people's business loans involving regulations issued by the relevant ministries according to government programs. OJK provisions are the foundation used by Bank XYZ, which is stated in the work order (SPK).

The focus of the context setting stage in credit risk management is to understand the background of the organization and its risks, define the scope of risk management activities and develop a framework to be followed (Australian/New Zealand Standard, 2004). Therefore, the policy of minimizing the risk of Bank XYZ's loss from lending has been adjusted to the needs. The guidelines used are risk acceptance criteria (RAC), including consideration of the type of credit granted and periodic checking of transaction and community data to determine strategic steps that can be taken to minimize the risk of credit losses. In addition to making an assessment based on the RAC indicator, bank XYZ's policy in minimizing losses in lending is also carried out by looking at the type of credit given. Bank XYZ applies life insurance coverage to minimize risk on consumer credit and credit insurance to minimize credit risk in the micro and SME segments. At the same time, the corporate guarantee strategy is used to minimize large loans. Therefore, repeated assessment of the credibility and collectability of prospective debtors is a key policy in credit risk management at XYZ bank, both in terms of transaction history and from information obtained in community checking activities among similar entrepreneurs. However, bank XYZ is currently concentrating more on program credit, such as credit for strategic projects at the national level. In this credit program, the main contractor who becomes the debtor is a customer of corporate bank XYZ. The credit program that has been active for the last four years has proven to be very helpful for XYZ bank in minimizing the risk of loss, considering that corporate customers are given loans whose credit instalments are financed directly by their subcontractors.

The risk identification stage is the stage of identifying risks that exist within and outside the organization to be managed in a structured and systematic process because risks that are not identified in this stage may not be identified in further analysis (Australian/New Zealand Standard, 2004). Bank XYZ, in practice, also uses several internal and external factors that commercial banks commonly use in Indonesia in identifying and minimizing credit risk. Internal factors include identifying the characteristics of prospective debtors for each accommodated segment. In contrast, external factors include the 5C guidelines recommended by Bank Indonesia or Financial Services Authority (Otoritas Jasa Keuangan), including community checks to determine the credibility of prospective debtors in credit applications. The main internal factor used to identify and minimize credit risk given to customers is to analyze the characteristics of the respondents.

"The first step in (our) bank's strategy for reducing the risk of loss from lending is to apply 5C, and the second step is to appropriately examine and adapt the situation of the company in question." Monitoring is carried out every six months to see if the firm is still operating or if any impediments result in a fall in business and the like, so that if there is a decline, it may be predicted sooner [IY4/L2-3]."

"We use the portfolio guideline to decide which industry to enter" Determine which industry to enter (portfolio guideline), then assess the capabilities of human resources and infrastructure to determine what techniques are employed to attain these goals. Of course, it also takes into account the potential dangers, and a Risk Acceptance criterion is established. Every month, checkups are performed to reduce the danger of occurrence [BS6/M2]."

"It depends on the situation. It is referred to as the Risk Acceptance Criteria in this bank (RAC). It can also be observed in its products, such as consumer loans, where banks require life insurance. Credit insurance is used for the micro-segment and some SMEs. You can utilize a personal gift for huge groups (corporate guarantee) [DA6/H2]."

"Factors that (our) banks utilize to identify and minimize credit risk both internally and externally." Internally, by determining the authenticity of customer documents such as business licenses and legal documents such as ID cards and family cards. Externally, by determining the borrower's business feasibility in detail, as well as how the company operates, its background, and who manages it, with a focus on the consumer [IY6/L3]."

"Monthly checkups are performed to reduce the hazards that may arise. Following that, the consumer, business strategy, and legitimacy of the business must all be evaluated. Furthermore, we have begun to integrate transactional-based lending, which requires that lending be based on acceptable transactions. Customers who have never had an account or transaction with will be unable to [BS6/M2]."

"For the time being, we're focusing on program credit. National strategic project loans, for example, where the major contractor is a corporate bank customer. A loan is issued to the corporation, which is financed by the subcontractor. Subcontract work must be paid for by the primary contractor, which reduces risk because it is guaranteed to be paid for. The loan is paid by the main contractor. Bookings from new

bank clients have been declining over the past three to four years. Because this consumer does not have a bank account with a non-affiliated institution, this customer is oblivious to their behaviors. We're going on a hunt in our backyards to see who's at risk and who isn't [SP8/ J2]."

However, the analysis of respondent characteristics in the individual segment is subject to a different process than the business entity segment. In terms of collateral, for example, where the assetbased lending method can only be used for small segments, while the transaction model analysis method and business patterns are used for larger segments. Meanwhile, community checking is the external factor that guides in identifying and minimizing credit risk at XYZ bank. This is done by looking at the history of loan transactions that have been carried out at Indonesian banks (trade checking) and includes identifying the perceptions of the owners of the related company (e.g. suppliers) to determine the level of credibility of the prospective debtor.

Every commercial banking needs the right strategy to overcome the credit risk due to the loss of principal and interest payments to avoid disruptions to cash flow and increased collection costs (Wachira, 2017). This is because a lot of evidence shows that banks do not fully understand the characteristics of borrowers or the lending industry. This is assumed to be the main source of banking failure, which has caused severe credit problems (Kessey, 2015). Therefore, the credit rating (rating) is also used by XYZ bank in consideration of granting credit to prospective debtors. The rating (credit level) process applies to all segments, most of which are carried out using a computerized system. The system makes assessments ranging from business fields, collectibility at other banks, and account transactions to assets used as collateral. These factors are then analyzed to determine the achievement score in the low risk or high risk category. Bank XYZ has implemented credit rating as one of the main functions of bank risk management which is managed by the Risk Management Committee (RMC) and Asset Liability Committee (AMC). The duties and

responsibilities of the Board of Directors are to supervise and approve market risk management policies and market risk limits. Credit rating for the small and micro segments is carried out using the system and is calculated automatically by the system. The greater the value of the loan proposed by the debtor, the more complicated the analysis process must be carried out. Credit ratings for large debtors (starting from IDR 5 billion) cannot be done using the system, so rating analysis is carried out by external parties, such as auditors (external) or other professional institutions. Bank XYZ also uses the risk rating system to map the market to direct credit assets to segments with lower risk levels.

"In the system, there is a credit rating as a measurement tool that has been controlled. This rating is used to categorize client risks from low to high, and it has been applied to working capital loans, investment loans, consumer loans such as mortgages, and vehicle loans, and it has been controlled in the system [IY7/L3]."

"Rating is a method of internally verifying hazards. Bapindo, on the other hand, uses an external rating system. Except for the very low, all credits were given a rating [BS7/M3]."

"Some institutions make use of the system as well. The rating system is used in the small and micro-segments. Therefore the data will enter the system and be calculated by the system. (Rating analysis) is carried out by particular organizations, such as auditors (external) or other professional institutions, because the larger the debtor, the harder it must be to analyze. Therefore, large debtors cannot use the system [DA8/H3]."

"Everything is controlled by the system. The credit rating for my segment is true, but not all clients with a ceiling of less than \$5 billion or \$10 billion have impeccable financial statements. It's possible that the rating isn't always correct. The system can rate it, but it isn't precise [GW8/I3]."

"In this company, the procedure of applying the rating (credit level) to all segments and rating each segment by the system can apply to all segments." The system examines the first line of business, the second line of business's collectability at other banks, the third account transactions, and the four collateral assets. All of this will determine whether you have a high or low achievement score; if your achievement is low, you'll need to undertake additional risk mitigation. This bank's called this system rating or scoring [SP8/J2]."

"Credit rating exists and is used in a variety of settings, one of which is risk management. The ranking is also decided by the four committees. At RMC and ALCO, credit ratings have already been established. Credit from a dangerous market can show how the risk management unit's rating and operational functions are related to portfolio credit. This credit score is also used to determine which parts can be sold. To figure out which degree of risk is the lowest [DS4/K2]."

Credit administration is the main component that supports credit risk management's effectiveness in providing customers loans. Credit administration regulates and manages all credit administration processes so that banks can measure portfolio quality so that lending can be right on target with the smallest possible level of risk (Kumar and Kavita, 2016). Furthermore, the business unit and credit operations implemented XYZ bank's credit administration management procedure. Credit administration is regulated by a credit operations unit, a kind of loan admin, which analyzes and stores documents such as credit analysis notes. On the other hand, the business unit also keeps duplicate copies of the file, which fur-

ther validates customer data (checking the completeness and validity of documents), filing, insurance closures, execution of insurance closures, insurance claims, disbursement, including preparing credit documents. The business unit then collects data that has been validated as a credit document to the credit operation, which is then forwarded to the credit operation to re-check before conducting a credit search. In the context of credit at XYZ bank, the credit application mechanism begins with a credit application from the customer, where the credit application document is then submitted to the credit committee. After collecting documents and analyzing customer data, the business unit then collects data to analyze the feasibility of the credit application, according to the credit score submitted. The process of analyzing the creditworthiness of the application is adjusted to the amount of the loan submitted. The amount of loans granted to the SME segment is between Rp 25 billion to 50 billion. A higher credit unit in XYZ bank management will decide on loans with large limits.

Furthermore, the determination of the total exposure is carried out by identifying the business groups owned by the customer for consideration to reduce the risk that occurs due to the collapse of the parent company, which will directly affect the subsidiaries within it. The granting of credit is also considered on the type of business. Bank XYZ prefers to give credit to companies with high credibility than other entrepreneurs (e.g. BPR). However, collateral for bank XYZ is also an important factor in lending to the SME segment, where the higher the value of the collateral submitted, the higher the loan amount to be extended. In general, the average financing that can be given for each loan, investment or project is 70%-80% of the loan submitted for financing. In certain situations, XYZ bank dares to provide 100% financing, including loan deposit guarantees, especially if the proposed loan model accepts invoice financing. It is where a third party has the source of repayment (e.g. suppliers and customers), so the bank can benefit from discounted payments. In the context of credit management at XYZ bank, some lending segments do not depend on collateral as the main factor but rather

on the ability of the business to operate properly. This makes the credit distribution segment have a good ability to pay. Except for the SME segment, collateral is the main consideration before granting credit to prospective debtors. Therefore, for the non-SME segment, the debtor's ability to make payments is the most important thing. Collateral is not needed if XYZ bank credit management considers that the debtor-owned company is running well, has a good market, has good production capabilities, and continues to grow. In a case like this, the debtor concerned must first become a customer of bank XYZ before getting a loan for his business so that credit management work units can assess the company's performance as an internal assessment factor in the lending process. Registering prospective debtors as customers will make it easier for XYZ bank to test credibility before granting credit loans.

Derivatives are financial instruments related to the transfer of financial risk from credit-related parties so that credit derivatives become credit risk transfer instruments that are often traded between the two parties. In practice, credit derivatives are being considered by XYZ bank credit management to assess the cycle of money flowing from the business of the prospective debtor. The use of credit derivatives can make it easier for XYZ bank to calculate and consider the nominal loan given to prospective debtors to minimize credit risk. Allowance for Impairment Losses (AIL) is a percentage that shows the possibility of debtors default which causes banks to face high credit risk in the future so that banks have good protection against the solvency of credit failures. For XYZ bank, AIL was used as a credit management strategy in overcoming the incidence of bad loans or defaults. The practice of AIL at bank XYZ is carried out based on tier ratings, from low to high, where the practice is carried out based on Basel III guidelines. This strategy also follows the practice of credit risk management in benchmarking companies due to an increase in NPL >1.3% in 2020, where credit management at the bank is to increase the reserve cost of up to Rp. 9.1 trillion (an increase of 60% compared to the previous year). Offset the decline in credit quality to keep the NPL at a safe level (3%).

Banks use insurance as an instrument of credit risk mitigation. The existence of mandatory credit insurance taken by all debtors provides an additional guarantee to the bank that the debtor can return the credit issued. As a result, banks will have better capital and operational resilience in providing credit. Insurance has important implications in the loan supervision system for bank financial stability in the long term. Similar to using insurance in commercial banks as a strategy for mitigating credit problems, bank XYZ also uses insurance to cover credit risk in the consumer credit sector.

On the other hand, XYZ bank provides credit to finance businesses owned by SME debtors, so credit risk mitigation has been regulated in the Risk Acceptance Criteria (RAC), which is the initial guideline in selecting debtors who apply for credit at XYZ bank. Life insurance is only applied to consumer credit applications, not productive ones since life insurance premiums for SMEs are quite expensive. When XYZ bank credit management finds out the debtor has died, several approaches are taken as mitigation measures. First, if the business owner as the debtor dies, the credit will be passed on to the heirs. If the heirs or parties authorized to run the business can run the business properly, the credit management of XYZ bank does not take any steps, and the credit loan can be continued. However, if management finds that the company cannot run because the company is run by one main personal person who later died without a successor to the company, then the mitigation strategy taken by XYZ bank is to sell the company's assets as a mitigation measure. Thus, even though bank XYZ already knows that his wife (but separated assets) has the good financial ability to pay off the debt that her late husband bears, XYZ bank credit management still cannot carry out this strategy. This is because the separation of assets has been protected by positive law in force in Indonesia.

Banks in Indonesia generally recognize two types of credit risk: current and non-performing loans. The second type is divided into substandard, doubtful and jammed. Furthermore, non-performing loans (NPLs), which indicate the quantity or percentage of non-performing loans, are often used to measure me level of non-performing loans. A high NPL ratio will reflect the number of bad loans faced by banks with a maximum credit risk tolerance of 6% NPL (Lestari, 2018). For XYZ bank, risk evaluation is carried out in several steps, starting from collecting the debtor's documents, which are then written down in a credit analysis note. This memorandum is used for consideration by business and operational units to validate credit grants or make credit terminations. Such an evaluation is at least carried out in the first month to the third month of credit disbursement, then in the sixth month and first year of credit disbursement. The NPL limit set by bank XYZ is 3%, following OJK regulations based on the Basel III agreement.

Furthermore, the credit portfolio can be divided based on the type of credit and the highest nominal that the debtor can obtain at the time of credit application. This is what makes the credit portfolio must be based on historical tracks so that it can provide an ideal picture to determine the ability of credit repayments by debtors. In practice, the optimization of the loan portfolio by XYZ bank is also carried out by conducting industry analysis based on the portfolio guidelines that the credit management of XYZ bank has developed. These guidelines have been used for a long time to define the market segments to target. Generally, the loan portfolio is divided into three sections based on the type of industry targeted, namely the neutral, attractive and avoidable (selective) categories. This third category requires a more rigorous analysis than the other two portfolio categories, including direct validation from the head office before the loan application is given to prospective debtors.

Credit management will review the current economic condition of the debtor to determine the impact of external factors (e.g. the covid pandemic) or errors in implementing policies that impact increasing the bank's NPL if the bank finds an increase in the percentage of NPL in the SME sector. For example, in the case of granting credit to farmers who harvest every three months but with a credit payment period of one month, the credit administration review must be re-done to avoid the risk of default. For cases like this, reviews are car-

ried out daily by certain units appointed to conduct the analysis. Credit risk evaluation at XYZ bank is carried out every month regularly so that credit management can find out which segments have obstacles. The evaluation results carried out by business and operational credit units are then submitted to the Asset and Liability Management Committee (ALCO) or Risk Management Committee (RMC). Thus, the two committees at XYZ bank can identify sectors that contribute to margin or potential cash management (CM) so that lending policies can be shifted to more profitable sectors. Therefore, credit risk evaluation is also an early warning signal for XYZ bank to identify and mitigate credit problems related to the company's internal and external problems. Credit risk evaluation is also used to measure the likelihood of the debtor's business surviving. Bank XYZ sometimes carries out credit restructuring by delaying credit payments borne by the debtor and providing additional credit to save the debtor's business so that the bank does not experience bad credit problems in the future.

#### CONCLUSIONS

Two things are the conclusions of this study. Credit management at bank XYZ Surabaya branch can use a review process including risk acceptance, criteria checking, personal data checking, validation, and an evaluation process to reduce credit risk to individual debtors in the SME segment. Furthermore, regarding credit risk reduction techniques, communication and negotiation are the most important factors. The Risk Management Committee (RMC) and the Asset Liability Committee (AMC) are the supervisors in this scenario, and they determine the market risks that will be faced.

In terms of policy execution, all that is required is for each policy to be tightened. The bank must examine various factors when adopting policies, including economic, political, and other factors. Credit risk analyses should be carried out regularly, not just for the SME credit segment but also for other segments. The evaluation cycle can be repeated for several months so that XYZ bank credit management can identify danger signals in the SME sector borrowers' business portfolio performance. Further-

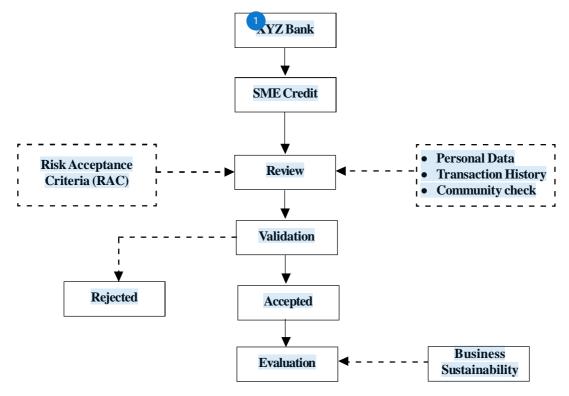


Figure 2. SME Segment Credit Risk Minimization Strategy

more, external support from companies like PT. Askrindo is critical in reducing the danger of negative credit. Furthermore, extra employees in the business unit responsible for periodic assessments are critical, particularly for loans above Rp 500,000,000.

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