Credit Risk in Islamic Banking: A Literature Study

Acu Kusnandar *(a)*

*(a)* STIE Ekuitas, Bandung, Indonesia

**A B S T R A C T**

The application of sharia principles in banking, which does not involve the elements of interest (riba), betting (qimar), and uncertainty (gharar) is unique and draws attention, resulting in an increase in popularity of this type of banking. Financing products have also emerged with a variety of services. Although Islamic banking does not involve those three elements, it is still faced with the risk of disbursed financing. This issue is important to observe considering its relationship with growth and competitiveness in the banking industry. Credit risk that arises can be caused by two factors, including unsystematic and systematic factors or those that cannot be eliminated or controlled. Several previous studies have described the elements that can put a bank’s credit at risk, particularly in the case of Islamic banking. Therefore, this research using a literature study aimed to classify factors that can indicate credit risk, both systematic and unsystematic in Islamic banking.

---

**Introduction**

Islamic banking differs significantly from conventional, the application of sharia principles does not involve the elements of interest (riba), betting (qimar), and uncertainty (gharar) (Hassan et al., 2019). This is a unique aspect for Islamic banking to develop and become more popular. In its operational activities, Islamic banking also provides distribution of funds to the community, although not in the form of loans, but rather as financing, consisting of musharakhah, mudharabah, murabahah, istishna, qardh, ijara, and as salam. Even so, Islamic banking remains faced with risks from the financing carried out. This is an issue that must be addressed in order for Islamic banking to develop. In line with this, efforts are needed to continue to establish and compete in the banking industry, which is credit risk management (Akram & Rahman, 2018). The increasing trend in profit sharing returns, as well as the decreasing trend of non-performing financing (NPF) from time to time, are indications of the prudent role of Islamic banks as investment managers (Harahap et al., 2010).

NPF in Islamic banking is one of the risk measurements for bad credit (Faiz, 2010). Bad credit is a parameter of sluggishness in the real sector in response to broader economic conditions so that the banking sector is often affected and falls into crisis conditions. Despite the fact that Islamic banking has a unique system and application of sharia principles, it is assumed that Islamic banking also carries a high risk. When compared to conventional banking, Islamic banking has a greater credit risk due to the lack of proper management instruments in managing risk (Effendi & Yuniarti, 2018). Even after the late 1990s monetary crisis, conventional banking’s NPL level continued to fall, indicating an improved condition, whereas Islamic banking’s NPF level remained stable on a range of 2 to 4% (Iqbal, 2017).

Risk in banking or also known as credit risk needs to be minimized with excellent management and known factors causing it. Credit risk is characterized by two factors, including unsystematic and systematic factors (cannot be controlled or eliminated) (Misman & Bhatti, 2020). In a study conducted by Waemustafa and Sukri (2015) the determinants of bank-specific can significantly affect credit risk as well as macroeconomic factors for both Islamic and conventional banking. Credit risk can be influenced by company-specific as well as macroeconomic factors also, although interest rates and inflation are irrelevant in this study (Al-Wesabi & Ahmad, 2013). On the other hand, Wijoyo dan Sholeh (2016) stated that short-term and long-term financial growth did not have an effect, unlike FDR which showed a positive effect on NPF. The financing structure has a significant positive effect on non-performing financing, while the level of GDP and unemployment have a strong effect (Haryono et al., 2016). This is also reinforced by the study conducted...
by Misman, Bhatti, Lou, Samsudin, and Rahman (2015), showing that specific variables of Islamic banks have an effect on credit risk.

Based on this explanation, this study aimed to classify several things that can reflect credit risk in Islamic banking, both systematically and unsystematically.

**Literature Review**

**Credit Risk Management**

Risk management in credit is essential to be applied to various types of banking because it aims to protect credit exposures within the acceptable parameter limits and maximize risk-adjusted returns. (Ikatan Bankir Indonesia, 2015b). Besides, measuring, monitoring, and managing exposure are also the primary tasks of credit risk management (Hanggraeni, 2019). Credit risk is a normal risk considering the activities carried out are lending-based (Hanggraeni, 2019). It is a loss on counterparty opportunities caused by failure to meet obligations so that it can allow the debtor’s inability to pay, the inability to pay principal and coupons (bonds purchased by banks), and non-performance between one party and the bank (Hardanto, 2016). Therefore, it is necessary to measure the credit risk emerging from the distribution of financing carried out.

Based on Hanggraeni (2019), in measuring and calculating credit risk, three components need to be understood, including:

1. Credit exposure or also known as Exposure at Default (EAD) is an assessment of claims on parties who have obligations;
2. Default means the status and condition of loan transaction activities carried out with its probability of default (PD). In Indonesia, the quality of earning assets can be categorized into five statuses including “Current”, “Under Special Supervision”, “Substandard”, “Doubtful”, and “Bad”; and
3. Loss Given Default (LGD) or the value of the loss which is generally represented as exposure in the form of a percentage resulting from a specific loss event.

The measurement of the magnitude of credit risk has a different approach depending on the type of credit to be assessed. The approach using a rating system is commonly utilized for individual measurements for both corporate and commercial objectives, in contrast to the portfolio approach which is commonly utilized to measure consumer credit risk (Ikatan Bankir Indonesia, 2015a). In addition, the five Cs factors that consist of character, capacity, capital, economic condition, and collateral can also be involved in measuring the credit risk given. Analysis that has been carried out by experts, the five Cs can be the most commonly used risk measurement system (Masood et al., 2012).

Failure to pay in the past becomes a necessary expense that must be factored into the component of the loan’s interest rate (Ikatan Bankir Indonesia, 2015c). Therefore, credit risk management requires to be carried out to ensure that credit risk does not exceed the limit in accordance with the bank’s risk appetite (Ikatan Bankir Indonesia, 2015a). It’s also important to realize that the credit analysis carried out encompasses all risky aspects of functional activities that could result in losses (Ikatan Bankir Indonesia, 2015a). Although the risks in Islamic banking can be different and complex, the basis of credit and also market risk management still apply to all types of banking, requiring risk identification to assess the impact on risk management in practice (Masood et al., 2012).

**Systematic Factors**

Systematic factors or also known as systematic risks are risks that occur as a result of macro situations that give an impact entirely (Arifin, 2009). The factor of changes in economic, political and party policies, and macroeconomic can be categorized into systematic risks (Effendi & Yuniarti, 2018). Market risk or systematic risk occurs because macroeconomic conditions affect the state of the market so that this risk cannot be avoided (Fakhrunnas, 2019). Systematic risk cannot be diversified or controlled (Misman & Bhatti, 2010). Systematic risk cannot be diversified or controlled. It allows agencies to experience distress conditions due to macroeconomic shocks causing simultaneous failure for a group of particular institutions or companies (Nabella et al., 2020).

**Unsystematic Factors**

Unsystematic factors or also known as unsystematic risks are unique risks because they are only attached to particular businesses or companies (Arifin, 2009). Factors that are classified as unsystematic are related to individual customers include their relationship to customer capital and financial solvency, personality, general terms and conditions, as well as credit insurance (Haryono et al., 2016). Systematic factors are unique but the causes happen at random, which can be mitigated by diversification and control with good corporate governance (Misman & Bhatti, 2010). Although these factors can be minimized, their existence, as well as systematic factors, can occur in financial institutions, giving a negative impact on performance when they fail to manage operational risk properly (Al Rahahleh et al., 2019). All investment and business activities will be exposed to a variety of risks, including unsystematic risks so that they need to be managed and addressed in order to control these risks (Misman & Bhatti, 2010).

**Research and Methodology**

There have been many previous studies explaining the effect of particular basic that can lead to the risk of bad credit. Even so, no classification of these factors has been developed, whether they are categorized into systematic or unsystematic factors in Islamic banking. With this in mind, this study intends to classify which of these two factors can affect credit risk by using a literature study. Systematic factors and unsystematic factors that greatly affect the level of credit risk so that it is expected that there will be knowledge development in the future. The information used was obtained from previous research that was accessed online from Google Scholar, Science Direct, Emerald Insight, and other international and national databases. As a research subject, Islamic banking in its implementation is certainly different from conventional banking. Even so, credit risk for the disbursed financing remains possible to
occur. The risks posed are possible to experience differences and contrasting levels of complexity from conventional banking, but the basic of credit and market risk management still apply (Masood et al., 2012) leading to questions regarding which factors are classified as systematic and which are classified as unsystematic. The classification used for credit risk needs to be carried out to determine the characteristics of each different factor. While several risks can be minimized, others cannot. With this in mind, this research will begin with the level of urgency of risk management that needs to be applied to avoid bad credit in Islamic banking, followed by grouping the factors by classifying them as systematic and unsystematic with both having the potential to affect credit risk in Islamic banking.

Findings

Islamic Banking Credit Risk Management

Risk management is essential to be interpreted not only for Islamic banking but also various types of banking. Banking skills in developing and using credit risk management are highly possible with the progress of techniques derived from events experienced in conventional banking (Elgari, 2003). The application of good risk management in Islamic banking can reduce arising risks. Credit risk factors can be identified and measured using the credit scoring framework for prospective customers (Hafsa Orhan Astrom, 2013). Although Islamic banking activities involving equity-based businesses are less risky than conventional banking, this can be effectively mitigated via the implementation of suitable and effective risk management processes (Shaikh & Jalbani, 2009). Even so, to remain competitive, it is essential for Islamic banking to recognize every existing risk and then control and monitor it on a regular basis (How et al., 2005).

Non-Performing Loans and Systematic Factors

Systematic factors are comprehensive risks that have an impact on the entire industry and particular companies. Despite the fact that these factors are not part of the risk that can be eradicated, banks, particularly Islamic banks, need to anticipate them. Every bank must have faced the risk of non-performing loans at some point, but as long as the risk does not exceed the specified threshold, the risk of non-performing loans can be classified as safe. The smaller the percentage of non-performing loans, the better. The threshold applicable in Indonesia based on Bank Indonesia Regulation Number 15/2/PBI/2013 s indicated by difficulties that can be said to endanger business continuity if it meets one or more criteria, such as the existence of a net non-performing loan exceeding five percent of the total loans disbursed. Although the systematic factor is macro, the risk arising from interest rates are not for Islamic banking because their operations are interest-free (Artifin, 2009). In line with this, Al-Wesabi and Ahmad (2013) stated that interest rate is an irrelevant variable.

Macroconomics (inflation, M3) can have a negative effect on Islamic bank credit risk and significantly (Waemustafa & Sukri, 2015). Inflation, GDP, and the ratio of financing to savings together have a significant effect on financing problems (Firmansari & Suprayogi, 2015). Macroeconomic variables analysis (inflation, unemployment, and GDP) has an impact on credit risk (Elfendi & Yuniarti, 2018). The same as GDP and inflation which has an effect, the exchange rate also has a positive effect and significantly on Non-Performing Financing (NPF), indicating that international transactions can occur in Islamic banks due to exposures as well as Hajj savings and time deposit accounts using foreign currencies (Fakhrunnas, 2019). Similarly, Lin et al. (2016) marked that the exchange rate has a positive effect on the risks of both Islamic and conventional banks significantly, the greatest impact in Islamic banks. According to them, this was due to the appreciation of the exchange rate which had a detrimental impact on the decline in the ability to repay loans, especially for business people who depend on exports. Of the overall macroeconomic variables used, only two variables (money supply and exchange rate) have a significant influence on credit risk, which indicates that Islamic banks are more resilient in the economic crisis. NPL provides a response to macroeconomic conditions (inflation, unemployment, and GDP growth) thereby showing in the real economy the strong influence of the banking system (Klein, 2013).

Non-Performing Loans and Unsystematic Factors

The unsystematic factors are the unique risks because every industry and even companies have different risks. Every banking has different credit distribution and even the level of the ratio can be different depending on each performance. Banks with large equity tend to have risky financing activities when compared to those with low equity (Al Rahahleh et al., 2019). Bank-specific determinants can affect credit risk as indicated by regulatory capital (REGCAP), earning management, and liquidity have a positive impact, in contrast to company size and DER have a negative impact on Islamic banks (Waemustafa & Sukri, 2015). Incekara dan Çetinkaya (2019) in their research found a positive relationship between the growth of Islamic banks and credit risk significantly as indicated by a capital adequacy ratio with a reliability level of 95 percent, total assets with a natural logarithm, and reliability level of 99 percent, and the share of the net worth of total assets with a reliability of 99 percent as well. The inclusion of the ETA variable can significantly affect the risk of Islamic banks and the size of the bank (Fakhrunnas, 2019). Similarly, Haryono et al. (2016) stated that bank size, financing growth, cost efficiency, profitability, ownership, and diversification, and unsystematic bank capital can be factors that have an impact on credit risk. Specific ratios in Islamic banks affect credit risk shown by CAR and quality of financing with consistent results although the risk is higher for foreign if seen from the ownership status of local Islamic banks (Misman et al., 2015). Performance and measures of inefficiency as benchmarks for bank-specific variables have a function as a parameter in guiding future problem loans even though it applies to banking in general (Louizis et al., 2012).

Based on the explanation that has been provided, non-performing loans have risks that are categorized into two factors including systematic and unsystematic factors. Experts have different opinions on the two elements that can cause non-performing loans in Islamic banking. The explanation is summarized in Figure 1.
Based on the figure, several factors are categorized into systematic factors of Islamic banking, including inflation, unemployment, gross domestic product (GDP), money supply, and exchange rates. Interest rates, which are generally factored into the risk of many businesses, are not factored into Islamic banking because interest rates have no bearing on Islamic banking in line with Arifin’s (2009) research. This is due to the application of sharia principles that do not use the element of interest. Inflation, unemployment and GDP definitely have an impact on Islamic banking credit risk because these are related to the country’s economic performance. Inflation rates, low unemployment, and high gross domestic product (GDP) are among the parameters of the good economy of the country. The declining level of employment has made the country's economic growth tendency to lag behind (Hodge, 2009). In the long term, inflation and unemployment can reduce the rate of economic growth (Mohseni & Jouzaryan, 2016). Other systematic factors, including the exchange rate and money supply, can also affect the credit risk experienced by Islamic banking. The high volume of money circulating in the community will have an impact on the decline in people’s purchasing power which eventually will also affect the payment of obligations previously proposed by customers. Declining purchasing power can have an impact on decreasing the earnings of customers who work as business actors. Similarly, the exchange rate can have an effect on the risk of non-performing loans in Islamic banking. Although the operational activities of Islamic banking involve sharia principles, which other banking sectors do not necessarily have, the exchange rate can still overshadow credit risk. The provision of Hajj savings services, foreign currency deposits, and export activities are among other things that allow currency exchange to occur, allowing the exchange rate to become a systematic factor in Islamic banking credit risk.

Besides, other unsystematic factors have an impact on Islamic banking credit risk, which are regarded as unique factors that are attached to a particular industry or company. First, equity or capital in previous research shows that equity or capital owned by Islamic banking can affect credit risk. Furthermore, regulations related to capital and capital adequacy ratios can also give an effect. Second, earning management or management of the income generated can also affect credit risk. The ability to gain profit or profitability is also related to this issue. Third, the net worth share of total assets related to the net worth of existing assets. Fourth, liquidity related to the ability of assets to be traded easily becomes the next factor that has an effect on credit risk. Fifth, the size of the established Islamic banking can affect the inherent credit risk. It is strongly related to the first factor on the categorization factor. Sixth, the growth and quality of financing can affect the credit risk that occurs. High financing growth might affect Islamic banking’s credit risk and quality, thus the provision of financing to prospective customers must be properly examined and analyzed to avoid risk. The last two unsystematic factors, including cost efficiency and ownership status of Islamic banking, might also affect risk. The ownership status of local Islamic banking is a higher risk than foreign-owned Islamic banks.

**Conclusions**

Islamic banking is banking that has its characteristics, namely by not involving elements of interest (riba), betting (qimar), and uncertainty (gharar) so that Islamic banking is increasingly in demand. Although it does not involve the elements mentioned above, it does not make Islamic banking safe from risk. Islamic banking is the same as conventional banking which has risks in this case related to credit risk. Therefore, risk management is an important thing to be implemented by Islamic banking. One of these risk measurements is using NPL or what is known as a Non-Performance Loan. In this regard, several factors influence it, including the
presence of systematic and unsystematic factors. Systematic factors arise due to macro situations that have an overall impact and unsystematic factors arise due to the uniqueness of the business or company so that its existence is very attached to the company. Based on the study conducted, several systematic and unsystematic factors give rise to credit risk. Risks that are classified as systematic factors include inflation, GDP, unemployment rate, exchange rate, to the amount of money in circulation. Inflation rate and GDP are things that can affect the credit risk of Islamic banking considering this has an impact on the economic performance of a country. The same is true of the unemployment rate which can have an impact on trends related to a country's economic growth. The exchange rate factor and the amount of money in circulation are also a risk, if the money supply is too much it will have an impact on purchasing power and also an impact on decreasing income for customers, especially those who work as entrepreneurs. In addition, unsystematic factors that affect Islamic banking consist of several things including equity, earning management, the net worth share of total assets, liquidity, company size, growth and quality of financing, cost efficiency, to ownership status attached to the bank.

Institutional Review Board Statement: Ethical review and approval were waived for this study, due to that the research does not deal with vulnerable groups or sensitive issues.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy.

Conflicts of Interest: The author declares no conflict of interest.

References


**Publisher’s Note:** SSBFNET stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

© 2022 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).