

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The banking sector has played an essential part in improving modern society's economic and financial aspects. The industry is the core driver of the country's financial development, and the country's economic growth has a high dependency on the optimal operation of the banking sector (Dilip, 2014). Evidence from the past economic events shows financial collapse has connectivity with the bank's failure. For example, during the global financial crisis of 2007/2008 a number of financial institutions performed poorly, totally collapsed, and were bailed out by the governments (Gropp and Köhler, 2010). Among large banks, those with more Tier 1 capital, deposits, and less funding fragility performed better during the crisis (Beltratti and Stulz, 2012).

Since its establishment, banks have been known for their main activities providing credit or loans to consumers. Through credit creation, banks have generated multiple credit activities in a country's economic system. According to Bank Negara Malaysia (2001), banking institution in Malaysia has the most significant assets in the loan portfolio and the primary source of revenue. Due to that, credit risk remains the largest source of risk in Malaysia's banking institutions (Bikker and Bos 2005). The credit activity has not gained global attention until the financial crisis of 2007/2008. The crisis evidence credit activities are the leading cause of the economic collapse, with some economists calling the 2007/2008 crisis the credit crisis (Nazir, Safdar & Akram, 2012).

Started from the subprime mortgage crisis in early 2007, the excessive debt activities during the early stage of the crisis led to the massive financial collapse (Claessens et al., 2014). The risk-shifting feature of debt-based financing has been recognised as the ultimate cause of an ever-growing number of defaults and bankruptcies, hence contributing to economic collapse (Hamzah et al., 2018). At that moment, the risk of default was being shifted from homeowners to small lenders, investment banks, investors and ultimately to the taxpayers (Mirakhor, 2011). Due to the overleveraging situation and severe disruption of the financial market system, the financial crisis of 2007/2008 was also acknowledged as the most significant credit crisis of the century. The credit crisis in 2007/2008 occurred due to uncontrollable credit risk levels of entities in the financial system (Hamzah et al., 2016).

Holton (2004) defined risk as an exposure to a proposition of which one is uncertain. Credit risk creates a financial crisis when banks have to bear the consumer's risk of loan impairment. In addition, disproportionate default risk levels may cause banks to experience financially distressed positions (Reinhart & Rogoff 2008). Financially distressed banks may lead to various consequences. Purnanandam (2008) highlighted three high costs that resulted from financial distress. Firstly, the financially distressed bank may lose its customers, suppliers and key employees. Secondly, the economically distressed bank has a higher tendency to violate its debt covenants or fail to meet its obligations. Lastly, the financially distressed firm may need to surrender its positive net present values projects due to high external financing costs. In other words, credit risk exposure experience by the banks not only leads to bankruptcy in the long run but also various causes in the short run.

Credit risk is one of the threats to the reliability of commercial banks. Since the main activity in commercial banks is credit creation, credit risk may become an internal determinant of bank performance (Kargi, 2011). Proper risk management may ensure performance benefits among the banking sectors (Star Business News, April 2009). Since the Asian Financial Crisis (AFC) 1997, banks have been advised to implement the "know your customer" principle to minimize credit risk exposure (Demirgüç-Kunt and Detragiache, 1997). It is because the customers are the role player in determining the default occurrence in the credit activities. The Basel Committee on Banking Supervision (2017) elaborates that credit risk may evaluate a bank entity's sustainability.

Hence, high credit risk fluctuations may cause the banks to have a high tendency to collapse during financial shocks, as in GFC 2007/2008.

The GFC 2007/2008 also has become an important milestone for the risk management framework to become essential in the bank's sector (Naomi, 2011). Basel II Accord states the international standard in proposing guidelines for the bank's credit risk management system that has recommended wiser and stricter credit practices (Basel II). Some of them impose a minimum capital requirement for the credit risk in which banks should operate above the minimum regulatory capital ratios. This envisages banks to establish adequate credit risk assessment processes specific to each bank to develop unique capital adequacy requirements and obligate the bank's supervisory authorities to review the credit risk process regularly. The Basel II committee has highlighted the importance of having a proper credit risk management framework to ensure bank performance, especially during any financial crisis in the future.

Through the importance of risk management in a banking institution, Jorion (2009) indicates that the risk models primarily encountered difficulties since the financial markets' regulatory and technical changes in 2008 were still unclear. Over the decades, many large banks have established advanced systems to model credit risk. However, many recurrent issues distort the establishment of a credit risk model with regulatory requirements (Basle, 1999). In consequence, there are series of regulations—Basel I, II and III (Basel II) to decode the bank's credit risk model. Basel, I Accord (1988) is the first official regulation that focused on credit risk management with the idea of the capital adequacy ratio, also known as the capital to asset risk ratio. The ratio needs to be maintained at a minimum level of 8 percent. There are two tiers in Basel I, Tier 1 is the primary funding source (shareholders' equity and retained earnings), and Tier 2 is the subordinated loans, reserves and provisions.

Basel II (2004) was established to eliminate the limitations of Basel I. This new Basel introduces three ways to estimate credit risk: standardize, foundation, and advances Internal Rating Based (IRB) approach. Furthermore, the Basel III (2019) implementation has been postponed due to the Covid-19 pandemic until January 1st, 2023. This new Basel is expected to incorporate several risk measures to counter issues identified and highlighted in GFC 2007/2008. However, the concept of building an internal model and external ratings for the banks uses the probability of default (PD),

loss given default (LGD) and Exposure at Default (EAD) are still being practiced. That is where this thesis on exploring ratios related to credit risk management is highly reliable.

In addition, the series on bank's regulation on credit risk indicates that continuous stress and scenario analyses are needed to strengthen position-based risk estimates. Besides, a forward-looking model on banks' credit risk management will predict the risks for banks and guide the investors in preventing them from making wrong judgments on their investment decisions.

Until the current year, risk management of banking institutions has become crucial (Zainudin, Sok-Gee & Shahrin, 2018; Ahmad, 2020 & Kahyaoglu and Kurt, 2020). Since risk management significantly impacts a bank's share performance, most countries have provided a complete risk management procedure. For example, the Central bank of Nigeria (CBN) in 2004 increased the bank's capital to 25 billion to give a margin of safety for stakeholders and depositors (Soyemi, 2014). The CBN mandate to capitalize banks using a capital base of 25 billion resulted in forceful mergers and acquisitions of some money deposit banks, reducing their number from 39 to 21. This mandate made Nigerian banks compete favorably in the global financial market and generate a high capital base that will provide banks with the resources to meet the cost of compliance in credit and market risk management (Sanusi, 2010).

This research argues that a comprehensive risk management procedure may ensure a bank's profitability and share performance. Based on previous papers (Taofeek Sola Afolabi et al., 2020; Alta'ani et al., 2020; Zou and Li, 2014; Akomeah & Frimpong, 2020; Kamani, 2019; Bialkowski & Wei, 2020) used the combination of four ratios to indicate credit risk management of the banks and hence, their performance. The ratios are Loan Loss Reserve (LLR), Non-performing Loan (NPL), Loan Loss Provision (LLP) and Net-Charge Off (NCR). Therefore, those variables are suitable measurements to represent the risk management of a bank. Hence, this research will analyze the components of Malaysian banks' risk management that will affect the banks' share performance.

1.2 Problem Statement

Credit risk as the main threat to commercial banks' vulnerability has been in a lengthy discussion (Tursoy, 2018). Significantly, following a series of financial crises, especially the AFC 1997/1998 and 2007/2008, has highlighted the importance of adequate credit risk management in the banking system. Regulators have identified the core principle of a bank's sustainability against any financial susceptibility by having a robust credit risk management system. As the evidence, Basel Committee has introduced three series of credit risk management guidelines for banks—Basel I, Basel II and Basel III. The latest has addressed the credit crisis issues in GFC 2007/2008. The importance of the credit risk management system has been seen due to banks; primarily commercial banks rely on credit activities as their crucial business function. Through credit creation, banks generate income when the customers pay for the services and interest expenses. The global financial crisis also indicates the importance of adequate risk management to ensure credit institutions' profitability (Adeusi, Akeke, Adebisi, & Oladunjoye, 2013; Fofack & Hippolytem, 2015). Moreover, Hosna et al. (2009) stated that success in risk management would lead to a satisfactory profit level. In emerging countries, credit risk management plays a crucial role in upholding investors' confidence to invest in Malaysia. Bank Negara Malaysia (2008) stated that a sound measurement of a bank's soundness might impact the stability of the financial system for a country.

Nevertheless, as of May 2021, the banking system has recorded a huge increment of non-performing loans (NPL), which amounted to 29,598.5 million, a 10 percent growth than April 2018. The statistics also show that the volume of NPL has a consistent increment trend of 1.3 percent every month, which amounted to 787 million (BNM, 2021). This situation is problematic since high NPL may indicate poor credit risk management, hence poor banking system performance. If this situation continues, Malaysia may lose the investors' confidence to invest in Malaysia, impacting Malaysian economic growth (Purnanandam, 2008). The importance of credit risk management to the banking system also has been emphasised by quite a few researchers (Alshatti, 2015; Cecchetti & Schoenholtz, 2015; Gherime et al., 2017). The researchers have identified that a robust credit risk management system may contribute to profitability and performance.

In today's financial market, investors are engrossed to observe the stock market patterns for investment purposes. Many have relied more on technical indicators such as moving average, risk strength indicator and many others. Undeniably, those indicators did wonder on forecasting a trend on the historical stock price of a bank. Hence, an investor can predict the stock price movement the next day or invest in a new entity. However, little that they know, the trend can change abruptly following other fundamental or economic indicators. For example, a company that strongly relies on international trade, their stock price movement can get badly impacted correlated to global events. Other than that, if a company is in the oil and gas sector, the company's stock price might get affected if there is war in the OIC countries. Thus, as for banks, which is a financial institution that does credit for a running, high credit fluctuation might impact their stock price performance.

Through the points of view, this study highlights the importance of banks to practice efficient credit risk management to ensure their consistent performance growth. Furthermore, this study also emphasizes the importance of investors knowing the characteristics of the entity that they are planning to invest in to minimize their possible losses. This study suggests four variables that may indicate the internal strength of a bank's credit risk management system. The high and low of these variables may indicate the credit risk exposure of the banks, hence predicting the bank's profitability, performance and sustainability. The variables are loan loss provision (LLP), loan loss reserve (LLR), non-performing loan (NPL) and net charge off (NCR) ratios. These ratios have their distinctive elaboration on recognizing credit risk exposure and hence credit risk management of the banks.

1.3 Research Questions

Based on the issues that have been highlighted before, this study is carried out the following research questions:

1. What is the impact of the four variables—LLR, LLP, NPL and NCR on the bank's performance?
2. What is the individual impact of the four variables—LLR, LLP, NPL and NCR on the bank's performance?

1.4 Research Objectives

The primary objective of this research is to identify the effect of credit risk management practice on the listed bank's performance. In order to answer this objective, this research has constructed a few sub-objectives as follows:

1. To find the effect of credit risk management variables—LLR, LLP, NPL and NCR on the bank's performance.
2. To investigate the impact of individual credit risk management variables on the bank's performance.

1.5 Significant of The Study

This study is significant to provide insights to the readers, investors and banks on the importance of credit risk management to the bank's performance. The investors may benefit from the analysis of variables that may influence the banks' credit risk practice, hence the banks' performance. Thus, by gaining knowledge of these variables, the investors may use technical indicators and fundamental indicators to judge their optimal investment options. Other than that, banks also may benefit from the study by acknowledging variables that may influence their credit practice and their performance. Thus, banks may need to focus on optimizing these four variables (on top of other variables) to stay reliable and favorable. Other than that, by strengthening these variables, banks also may increase their sustainability against financial shocks. These variables not only focus on the possible losses and default but also on the current accessible reserve and provision.

1.6 Scope and Limitation of the Study

This study uses data from ten commercial banks which are listed on the Malaysian Securities Exchange. The banks are CIMB Group Holdings Berhad, Alliance Bank Malaysia Berhad, Affin Bank Berhad, BIME Holdings Berhad, Hong Leong Bank Berhad, Hong Leong Financial Group Berhad, Malayan Banking Berhad, Public Bank Berhad, RHB Bank Berhad and AMMB Holdings Berhad. This study uses nine years of quarterly data from 2012 until 2020, and the data was collected from the bank's annual report and Fitch Connect database.

This study focuses on Malaysia since no study has been done yet on the impact of the credit management practices (by using four variables—LLP, LLR, NPL, NCR) on the bank's performance. Hence, while this thesis was written, this analysis is the first of its kind to study the impact of credit risk management practice on the bank's performance by using other variables than used by Basel II—Probability of Default (PD), Exposure at Default (EAD), Loss Given Default (LGD). However, these variables have reflected a similar direction to Basel II, which measures credit risk exposure of banks.

The four variables used in the study were chosen to avoid redundancy in the analysis since Basel II has provided banks with an internal and external rating system to the bank's credit risk exposure by using PD, EAD and LGD. Thus, the analysis of these additional four variables can be an added value for this study to Malaysia's credit risk research field. Furthermore, compared to the three variables used in Basel II, the four variables used in this study can be directly accessed in the bank's annual report. As such, no complicated calculation is needed to elaborate the ratios. Hence, for investors who have minimal accounting knowledge, the usage of the four variables in this study could be an advantage to optimize their portfolio risk.

However, this study is subjected to few limitations. Firstly, this study only carried out the analysis for Malaysian commercial banks listed on the Malaysian Stock Exchange, which result is only exclusive to Malaysian banks' credit risk management practice. Even though the notion of the ratios is to measure the banks' credit risk exposure and its impact on the bank's performance, until other research has been done, the results of this study can be generalized to all countries. In addition, this study also has included data for the pandemic year, which is 2020. As the pandemic has badly hit the country with a growing number of defaulters, this study might suggest that future researchers exclusively analyze the credit risk exposure and the bank's performance for the pandemic year only. If volatility is high, another research can investigate the credit risk management practice to the bank's performance without the downturn moment. Other than that, this study suggests future researchers consider more variables to compare the results of variables used in Basel II with other variables used in this study.

1.7 Organisation of the Study

This study is divided into five chapters: Introduction as chapter one, Literature Review as chapter two, Methodology as chapter three, Results from analysis as chapter four and Conclusion as the closing of the research. In the first chapter, the study elaborates the idea of the study as a whole. Here, the study background will be explained, the problem that needs to be solved will be identified, the objectives required to be achieved will also be listed out. This chapter also expounds on the benefits and significance of the analysis to be carried out, apart from addressing the study's scope and limitation.

The second chapter listed out evidence from the previous researchers on the reliability of the purpose of the study, the profound research gap, the connectivity of the variables with the credit risk management practice. In this chapter, the readers may get an idea of the significance of the study to be carried out and the basis of the research gaps that have been mentioned in chapter one. Chapter two also determines the reliability of the method used in chapter four and the difference in the results obtained in chapter four.

Chapter three discusses the flow of the methodology of this study. In this chapter, the researcher may explain the methods and models used to answer each objective. The steps described in this chapter are essential to ensure the results in chapter four can be obtained and the accuracy of the results can be guaranteed. Chapter four reports the results obtained following the methods used in chapter three. The findings from the results which answered the research questions and objectives will be discussed in detail. The relation of the findings with the theoretical background of the study also will be developed.

Finally, chapter five concludes all the points built up from chapter one to chapter four. In this chapter, the researcher summarizes the findings, highlights the essential elements of the results, potential contributions of the results to the research area and limitations of the findings. In conclusion, the researcher also recommends possible future research that may address limitations found in this study for other researchers to explore.