Islamic Credit Risk Management in Murabahah Financing: The Study of Islamic Banking in Malaysia

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A B S T R A C T

Background: The understanding of risk and the concept of it is occurs associated in Islamic financing was well-known in financial industry by the using of Profit-and-Loss Sharing (PLS). It was presently in any Islamic financial transactions in order to comply with shariah rules. However, the existence of risk in Murabahah contract of financing is an ability that the counterparty is unable to completes its obligations within the agreed terms. Therefore, it is called as credit or default risk. Credit risk occurs when the client fails to make timely payment after the bank makes complete delivery of assets. Thus, it affects the growth of the bank as the banking business is in no position to have appropriate measures to cover the risk. Therefore, the bank may impose penalty on the outstanding balance. Objective: This paper aims to highlight the credit risk determinant and issues surrounding in Islamic bank in Malaysia in terms of Murabahah financing and how to manage it by using the proper techniques. Finally, it explores the credit risk management concept that might solve the problems arise. Results: The study found that the credit risk can be managed properly by improving the use of comprehensive reference checklist of business partners on their character and past performance as well as their comprehensive database. Conclusion: Besides that, prevention of credit risk can be done by using collateral as security against the risk and we also argue on the shariah guidelines and procedures should be implement coherently by the banking business because so that the risk would be control by having an effective instrument for Islamic modes of financing.

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INTRODUCTION

The practices of Islamic banking business are fundamentally based on the idea that the concept and understanding about it are supported by a strong social responsibilities and accountabilities. The practices in Murabahah financing has evolved as an alternative of conventional banking system since it has reached sustainability of funding as compared to the other types of financing offered in Malaysia.

To date, Murabahah financing has been largely use for a long time and has contributed maximally to the total Islamic business such are financing consumer goods, real estates, machinery and equipment. By applying Murabahah financial transactions, Islamic banks are exposed to credit risk as meanwhile. The risk may arise when the bank delivers to the client the commodity at an agreed time, but may not receive the payment at the agreed initial date. Thus, the inability to re-pay is called as credit risk.

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Determinants of credit risk in Murabahah financing has affect to the arising of the main problem in terms of the parties included. Such elements of default has arisen due incomplete of payment within agreed time and carry higher risks as same as conventional banking practices which based on interest (Riba).

Ismal, R. (2009) explains that the occurrence of price risk when the entrepreneurs take an advantage to gain the profit by pretending to be default. Based on this statement, he assumes that the moral hazard and the condition triggering as well as the probability they take the risk of pretending to be default because of the bank charge the additional cost or penalty to them. Ahmad (2004) meanwhile views that an effective of risk management is depend on how large the bank large extent and how well the bank identify what are the key factors affecting the risk in credit in terms of total asset’s size, risk-weighted asset and efficiency in management. The study suggested that since hedging, some of policy implications are not possible in operations in Islamic financing. Besides that, the study also suggested to reduce the adverse selections and strengthening internal control to enhance the activity of mitigating the risk especially in area of credit in Islamic banks.

The other views are given by Wesabi and Ahmad (2013) as both of them argue on the influence of credit risk and they assume that the credit risk in banking institutions are affected by two (2) types of factors, which are the factor of macro and firm-specific factor as well as in other countries. It is reveal that both of the factors are largely determined as quality in management, bankruptcy, risky assets in portfolios and Growth Domestic Product (GDP) in the country. Makiyan (2009) in his research on risk management and it challenge in Islamic banking, he mentions that to facing the major challenges in various risk in the future, the risk management concept and understanding of it is still not effective enough and the bankers or manager of the bank should fully understand the issues or problems arises. Therefore, by understanding those problems ethically, an appropriate solution can be applied to prevent the attributions of risk of financial product especially in Murabahah financing.

The other view is shared by Khan and Ahmed (2001) who believed that the determinant of credit risk in Murabahah financing would arise as the client was unable to complete the payment within agreed time and it is called as payment risk as well as when the banks is not receive the cash after deliver assets to the client. To extent this, the assortment effect in terms of portfolio of granting loans has been showed in the study and they recognize that the meaning of mitigating the risk in credit is to absolutely reduce the risk by constructing a minimum portfolio of risk.

Nevertheless, Murabahah financing in the point of view of Shariah, the determinant of risk in Murabahah consists of risk in price, commodity, market and mainly in credit to be mitigated by the bank. Therefore, focus on this paper is to study on the credit risk issues surrounding in Islamic bank in Malaysia in terms of Murabahah financing and how to manage it by using the proper techniques, thus explores the credit risk management concept that might solve the problems arise.

**Literature Review:**

Various risks to banking institution especially in Islamic banking have influence in the world wide financial landscape. Noted that, the main risk that affect the most of the viability in banking institutions are the existence of credit risk from 1997 financial crisis. To date, numerous researchers discussed on credit risk in Islamic financial institution and the most distinguished study is carried out by Sarker (2009) who found that the bad debt is arises in the practices in Islamic financial institution which provided the Islamic financial product. Further, Khan and Ahmed (2001) found that there is no full of understanding about the risks involved in Islamic banking business nowadays and they mention it in terms of the view of the bankers. To extent this, the determinants of credit risk is because of the practices in Murabahah financing which is exposed to the counterparties included in the contract agreed. Khayed and Mohammed (2009) studies the existence of risks of Islamic modes of finance in banking product offered and they opined on various types of existence on risks in Islamic banking operation. They views on determinant of credit risk in Murabahah financing occurs when the banks may result based on their findings that it is critically disadvantaged of cash on hand and it may tend to the inability to meet it financial liabilities and obligations as well as when the borrower repeatedly fail to pay their maturing debts within the agreed time of payment. In other researcher’s view of credit risk based on the opinion by Khan and Ahmad (2001), they assumes that the bankers perceive to have higher credit risk in Islamic financing product in terms of profit-and loss-sharing (PLS) modes. Therefore, Sundarajan and Errico (2002) opine that the influence to credit risk in Islamic banking practices is because of the application of modes in PLS concept. Furthermore, since the asset under this mode are collateralised, the banks therefore may tends to have a highly increase the overall degree of risk in the balance sheet under the asset side. The result is on the ratio of risk of assets and it should generally higher in Islamic banking business that conventional bank.

Elgari (2003) elaborates on the existence of the risk in credit in Islamic banking and finance. He claims that direct financing offered by the bank is not reliance on the existence of credit risk. Besides that, the problem arises in terms of acceptance paper and guarantees because of the inability of financial instrument’s originator which is owed by the bank to meet his obligations and it is faced by the most of Islamic banking modes of financing that they offered especially in Murabahah financing. It is cause of delayed payment thus creating...
additional debts in the bank’s account. On top of that, additional charges or another term called interest in Islamic banking operation is also taken into account along with interest rate of loans. As mention again by Elgari, the practices in Islamic banking system do not decline this but they mention that operations in Islamic bank carry higher in credit risks. It is reasonable that the financing’s cost be higher when the interconnection among the credit risk and return is directly commensurate. Therefore, this problem causing an issue that requires attention and consideration to be manage it well. It is because it gives the results on the capability of the banks to enhance competitive in industry and it also effects on the policies of central banks in Malaysia (BNM) especially in directing and supervising the banking system which based on Islamic practices.

Apart from that, Mousavi and Mahdavi (2008) views on the Islamic justification for managing credit risk in Islamic banking. Both of them revealed that the risk in credit which occurs in Islamic banking system presents in the framework of settlement risk and the risk thus increase when the banks carries assets in Murabahah financing contract before receives their own cash or assets and then they are bring up itself to potential to be loss. In their study, they use primary study to conduct the research. In result, they say that utilizing Credit Default Swaps (CDS) contract for managing credit risk in Islamic bank can be applicable and beneficial.

Besides that, based on the views from Al-Jarhi and Iqbal (2001), most Islamic bank in other bank especially in Gulf Cooperation Council (GCC) countries, they prefer fixed return modes especially in Murabahah financing product. In their research finding, the share in terms of Islamic financing products especially in Murabahah is higher rather that other Islamic financing product. Thus, the banks must be fully understanding and well-prepared to mitigate the risks in credit especially in Murabahah financing to ensure that the sustainable of growth in Islamic financing product and maintaining their performance as a purely Islamic banking practices.

Credit Risk In Murabahah Financing:

A discussion on the determination of the credit risk is made in line with Islamic financing product especially in Murabahah. As mention earlier, Murabahah is one of the most popular financing sales used for purchasing commodities and other products on credit. The parties involved in Murabahah contract agreement is between the bank, the client (buyer) and the seller. Under this contract, it is known as a contract of sale that based on the agreed-upon profit. As mention earlier, the contract of Murabahah financing contains the sale on deferred payment basis and it involves the amount to be paid which includes a margin of profit payable to the seller based on mutually agreed stated in the contract. Therefore, there is an agreed-upon profit between the parties involved in Murabahah financing on the date at the maturity day. The risk under this financing contract occurs when the client (buyer) inability to complete the obligations and thus will tend to default in making payment to the bank. The bank thus faces the risk to manage it well. This subject can be implied from the verse of Al-Quran:

Meaning:

“Nor does anyone know what it is that he will earn on the tomorrow”.

(Surah Luqman 31:34)

Based on the above verse in the Al-Quran is to tell that the risk occurs is unknown in the future. In the practice in Islamic banking operation, banks are exposed to the risk. By applying Murabahah financing transactions, they are exposed highly in credit risk in an integrated way. Therefore, there are needs to identify and manage it in a proper way. Makiyan (2009) mention in his study that the efficiency and effective management in risk in banking system especially in Islamic financial institution must look further on a strategy how to manage it based on the proposed regulatory framework and sufficient industrial development.

Risk Management Guideline According To The Policy And Framework Under Murabahah Financing:

Under principle 4 of central bank of Malaysia guideline, the Islamic financial institution (IFI) must institute and implement sound risk management system to effectively manage risks associated with Murabahah contract. At minimum, the risk management policies shall address five (5) different steps and requirement. First, IFI should process and procedures for the identification, measurement, monitoring, reporting and control of all risks exposure associated with Murabahah contract. Second, IFI should set internal limits on risk exposure (concentration) in line with the IFI’s risk appetite and capacity. Third, IFI should address the type of funding source used to finance Murabahah transaction. Fourth, IFI should implement the appropriate risk mitigation measures to minimise risk arising from Murabahah transaction and lastly, IFI should address the type, nature and frequency of reporting to the Board, senior management and Shariah Committee.

Under BASEL II of Islamic financial industry, it is revolutionized the concept of risk management. There are three (3) Pillars discussed. The first pillar concentrates on the calculation of the minimum capital charge using several optional methodologies. There are three (3) approaches includes the Standardized Approach (SA), Internal Rating Based Approach (IRB) and Securitization frameworks. Next is Supervisory Review which has limited applicability for Islamic banking. Credit concentration risk sometimes is very large in Islamic banking and Basel II recommendations can be applied in order to manage it. The third Pillar is market disclosure which
is largely applicable to IFI. Disclosures related to business activities, profits and losses, use of funds and investment. Thus, risk management operations and practices in Islamic banking are evolving and thus it is important to enhance the good practices for the industry as well. In contrast, Basel II is primarily for conventional banks and thus does not offer a great help to Islamic banking. However, some of the guidelines and principles of risk management are applicable to Islamic banking industry, thus the fundamental role of capital and risk management cannot be changed.

Besides that, the Islamic Financial Standard Board (IFSB) plays an important role in the development of standard for risk management in the Islamic financial industry. Under the principle of credit risk, The IFSB standard recognizes credit risk exposures at different stages of the contract and it focuses on both types of credit risk. The IFSB suggests identifying methods for the treatment of retained profits to avoid the risk occurs.

Credit Risk Management Techniques Of Murabahah Financing:

According to Golin (2001), credit risk in general term meaning is the loss in risk occurs on financial obligation and it tends to default. Therefore, it is the degree of the potential loss. Traditionally, banks were placing great emphasis on the relationship with their customers; however, nowadays they must be able to assume and predict thus consider the behavior of their customers in terms of payment obligations. Therefore, having several of the borrowers, banks have to apply methodologies and techniques for implementing sophisticated models in order to enhance their credit risk management systems especially in a way of Murabahah financing contracts according the method from (Akkizidis and Khandelwal, 2008). There are five (5) steps of handling the risk of credit in Murabahah, which are first is identification of credit risk exposure, the second is applying the credit risk assessment models, valuation of credit risk, the fourth is risk mitigation and lastly having the validation of credit rating systems.

Identify The Exposure In Credit Risk:

To analyze the credit exposure, there are a need to identify the relations between the counterparties, the Islamic financial contracts and the guaranties and collaterals used to cover a percentage of the potential losses of defaults. Each party is linked together and they may be linked to the several contracts and many different types of guaranties and collaterals are used to cover in parallel the exposure of several contracts and counterparties.

Counterparties play an important role in Islamic financial products and they are involved in the Islamic contracts agreements and partnerships. In the case of Murabahah financing, both the seller and buyer are considered as the counterparties.

Therefore, to have a good system in place that links all counterparties. There is a need to show the links with guaranties and collaterals that will be used to cover the risks of defaults. In the case of Murabahah contracts, counterparty may agree with the contracts offers. Thus, the issue is that collaterals or guaranties may be linked with other collaterals or guaranties that have different ratings. Any group of the same contracts or a link between them must also be identified.

In Islamic finance, there may be special identification in regards to the ratings for the guaranties and collaterals, financial institutions may have only certain indications of the actual risk coverage to their contracts’ exposure. However, such indications must be defined quantitatively and be part of the risk management system.

Credit Risk Assessment Model:

A research from Saunders (1999), risk analyst should consider the understanding and implementation of the methodologies used. There are three (3) models to assess in credit risk, such Qualitative methods or known as expert systems, quantitative models and hybrid methods.

By using the methods of expert systems, banks are assessing the credibility of the borrower that agrees on Islamic financial contracts based on qualitative methods. Such methods define systems that are based on the judgement of experts who are involved in the credit-approval process. The resulting expert systems combine the analysis of the credit-worthiness of the obligor with the practical experience and observations of the experts who apply the analysis. Apart from that, expert systems are driven by rules that combine the criteria used for the expert’s judgements. The purpose is to design and then merge expert rules by taking into the experiences of client’s behavior. In addition to this, the rules must consider any information related to the type of contract, the market conditions, as well as any other factors that influence the client’s behavior.

Thus, by applying the Murabahah contract, the ‘expert’ of banks is facing the challenge of how to identify the criteria that will evaluate whether the buyer of the financing will complied the agreed payment obligations or not.

By providing the Islamic financial products which based mainly on quantitative statistical-based models, there are a need to assess the credit risk occur. There are two (2) types of information data that financial institutions can consider for modeling the credit risks that they are exposed to, such are the data that refer to the past and current behavior of the counterparty such as lender and partner and the data that defines the losses of the associated risks. In contrast, there are an issues arise under this model which are under Murabahah...
financing, issues on legal is arise in collecting information related to borrowers are critical. Besides that, there are problems in regards to the data clearance and unification.

By using only empirical models of credit risk assessment, qualitative or quantitative-based models, banks may tend to poor results of forward-looking. Both models are useful that could employ advance fuzzy logic systems that use the qualitative empirical systems that expressed as linguistic rules and the results from the quantitative analysis.

**Credit Risk Mitigation:**

As mention earlier, the Murabahah contracts are exposed to additional credit risk via the guarantees. The risk is mitigated by employing collateral or guarantees granted by tier counterparties. Thus, the mitigation of the risks is expressed in terms of reducing the EAD and LGD and by using guarantees; the reduction is expressed in terms of risk weights. There are a specific rules when guaranties are applied, which is the eligibility may or may not be allowed to use specific of collateral. Then, the amount of collateral is used to reduce the sum of the whole exposure. Finally, there are needs of allocation of the coverage as it is the way to reduce the risk associated to different claims and thus the credit risk can reduce by enhancing the reference checklist on the past performance and character of clients and maintaining the comprehensive database.

**Credit Rating Systems:**

Similarly the conventional banking systems, there are two (2) types of techniques for assessing the credit rating systems, namely point-in-time rating, through-the-cycle-rating and the other one is qualitative and quantitative rating. However, many financial institutions, including the ones that are providing Islamic financial products, may hire their own credit analysts and thus prepare and use their credit ratings for internal use. In addition to this, to validate the credit rating systems, in should be validated carefully at pre-defined intervals as well as whenever there are new or modified parameters due to market and contract conditions. Therefore, the criteria must firstly examine carefully, qualitative criteria then move to quantitative criteria.

To extent this explanation, under rating systems, data integrity plays an important role in the quality of the results from the systems. So, Islamic financial institutions should follow the requirements for the data definition, collection and usage. First, IFI should follow the rating history of the obligors and guarantors, then the time where the data have been used for assigning the ratings. Besides that, there are needs to keep the key data management methodology used to derive the ratings and it is important to IFI to follow the dates and circumstances of such defaults and lastly is focus on the data on the PDs associated with ratings grades.

**Conclusion:**

The determinant of risk in Murabahah financing in Malaysia contains several of risks to be handled and reduced by the banking industry. The risks included such as the risk in pricing, commodity risk, market risk and credit risk. Therefore, focus on this paper is to study on the credit risk issues surrounding in Islamic bank in Malaysia in terms of Murabahah financing and how to manage it by using the proper techniques, thus explores the credit risk management concept that might solve the problems arise. This paper has given insight into credit risk exposure identification analysis by identifying the influence of the relations between the counterparties, Murabahah financing contract and the guaranties and collaterals used to mitigate the potential losses in case of defaults. Furthermore, different methods and techniques for developing models for credit risk that result from Murabahah financing. The paper also discussed on how Islamic banking are mitigating or reducing credit risks by employing collaterals or guarantees granted by tier counterparties. It is found that, the credit risk can be minimized by enhancing the reference checklist on the past performance of the clients and their character and maintaining the comprehensive database. Apart from that, credit rating systems should be validated at pre-defined intervals as well as whenever there are new or modified parameters due to market conditions. In addition to this, this paper revealed that there are needs to implement and practicing the guidelines by Shariah views and their compliance on procedures based on Islamic principles would be a good instrument in managing the risks occurs in Islamic banking industry especially in the case of Islamic financial institutions in Malaysia. It hopes for further research to discuss on the problems arises in credit risk in dual banking systems in Malaysia and the methods to manage it in a proper way.

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