

# RISK MITIGATION OF MORAL HAZARD ON MUDHARABAH FINANCING

(CASE STUDY : AN ISLAMIC BANK)

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*Abstract – Literatures on Islamic economics and islamic banking reveal that profit and loss sharing become the most important financing in the financial system, but islamic banking practice is highly dependent on mark-up financing with murabaha financing. Islamic banks avoid financing for the results especially with mudharabah contract due to the high risk on this financing. Banking statistics shows that the composition of financing with mudharabah contract is low compared to murabahah financing. This is because Islamic banks avoid mudharabah financing due to its high moral hazard risk, although financing Mudharabah can drive the real sector economy.*

*This study proves that moral hazard risk of mudharabah financing can be reduced by incentive compatible constraints as risk mitigation of islamic banks. The findings of this study indicate that the high moral hazard risk on mudharabah financing in Bank Nagari Syariah from 2011 to 2015 can be minimized by establishing several covenants at the beginning of the contract. Establishing the covenant at the beginning of the contract is an incentive compatible constraints. Incentive compatible constraints format was introduced by John R. Pressley and Session as an asymmetric risk mitigation of moral hazard information. The Bank Nagari Syariah mitigates moral hazard risk through supervision and monitoring. The data mining process uses structured interviews run by financing analysts and sharia risk management team of Bank Nagari Syariah. Documentation in the form of bank financial statements, implementation guidelines of sharia financing and sustainability report 2014. Qualitative data are obtained through interviews and documentation, while quantitative data are sourced from bank financial statements by doing financial ratio analysis. Descriptive qualitative is the technique for data analysis. The results of this study explain that Islamic banks can set some requirements at the beginning of the contract to avoid the occurrence of moral hazard risk on mudharabah financing. Incentive compatible constraints is effective to reduce moral hazard for corporate costumers.*

**Keywords:** moral hazard, mudharabah financing, risk mitigation

## I. INTRODUCTION

Financing by the principle of profit and loss sharing is a substitute for conventional banking based interest-principle so as to meet the the

community need in banking transactions in accordance with the principles of sharia (Mansoori, 2011; Sattar, 1989). One form of profit-sharing financing is mudharabah financing. However, the realization of mudharabah financing is very low in islamic banks due to its high risk so that islamic banks avoid the distribution of financing with this contract. Hassan and Lewis (2007), and Gamal-Abdalla (1999) also held the view that mudharabah is a highly risky partnership contract because it requires strong confidence and trust between customers and banks.

The risks in mudharabah financing are uncertain risks. The risk assessment includes three aspects: (Antonio, 2001) first, Business Risk (financed business risk); second, Shrinking Risk (reduction value risk); third, Character Risk (bad mudharib character risk). The low realization of mudharabah financing in islamic banks is caused by the moral problems of the customers. Moral hazard is one form of risks that arises because one of the parties is not well informed and cannot participate in business activities, as disclosed by Boatright (2008) and Bagchi (2011). Habib Ahmed (2002) explained that incentive compatible constraints can be used as an alternative to reduce moral hazard on profit and loss sharing by using company assets as collateral and adverse selection i.e. choosing a viable company for investment.

Financing provided by islamic banks can be seen in the statistical development of financing realized by Sharia Commercial Bank and Sharia Business Unit published by the Financial Services Authority in 2010 to May 2015. Based on the statistics of Islamic banking published by OJK (*Financial Services Authority of Indonesia*) there is a very significant difference between the amounts of financing realized in the form of murabahah and mudharabah financing, musharakah from 2010 until 2015. Murabahah financing increased around 2% to 4% each year. Mudharabah financing compared to total financing also increased. An increase in the amount of financing realized by banks also has an impact on the increase in the

number of bank mudharabah financing. Of the total financing realized, murabahah financing is still a superior product for sharia banks with a percentage of 57.8% in May 2015 of total financing. Mudharabah financing reached 7.3%, and musharaka financing made 26.5% in May 2015.

Based on a report published by Bank of Indonesia, there has been a growth of total financing at Bank Nagari Syariah in 2012 by 85.3% from 52.4% in the previous year. This growth of financing was dominated by murabahah contract. During the period, murabahah financing was reported growing from 56.1% to 59.7% of total financing share of Sharia Commercial Bank and Sharia Business Unit. The published quarterly report of Bank Nagari Syariah shows that there was a significant increase in the number of financing each quarter until the end of December 2013. The financing increased to 68% from 2010 to 2011. The increase by 46% happened from 2011 to 2012; and from year 2012 to 2013 there was an increase by 40%. In 2014 the amount of mudharabah financing decreased up to 0.6% from the previous year. In 2015, profit sharing proceeds increased 22% from the previous year. The increase indicates that Bank Nagari Syariah was able to manage and overcome the high risk of financing based on the profit sharing contract.

## II. METHODS

This research is a descriptive-qualitative field research. A case study was conducted at Bank Nagari Syariah. This research is a theoretical study looking for empirical evidences; thus, the research findings are expected to provide inputs to the economic development, especially to the Islamic economy and sharia banking.

### A. DATA SOURCES

Primary data sources used in this study derived from finance analysts team and sharia risk management team, the sharia banking division of Bank Nagari Syariah. A finance analyst is a party directly related to the realization of mudharabah financing process. The process and approval decision of mudharabah financing application of a prospective customer is based on consideration of financing analysis result done by bank analysts. The risk management team was chosen for their role in risk identification, measurement and mitigation. Secondary data sources are in the forms of documents that exist in Bank Nagari Syariah. The published bank financial statements are used as a financial ratio analysis and bank development statistics based on bank financial data. Sharia Funding Policy and Guarantee Document are an operational standard for financing implementation, bank sustainability report, journal and reference book related to research theme and sharia banking statistic published by Bank of Indonesia and Financial Services Authority.

### B. TECHNIQUES AND DATA COLLECTION

This research uses two data collection techniques: (1) structured interview, conducted on account officers and risk management team of Bank Nagari Syariah. (2) Documentation in the forms of published bank financial statements, Analyst Section Financing Report, Internal Financing Report, Bank Sustainability Report 2014, and Shariah Financing Operational Standards; used to strengthen arguments and written data of respondents.

### C. DATA PROCESSING AND ANALYSIS TECHNIQUES

Data used in this research are qualitative data and quantitative data. Qualitative data are obtained from interview and documentation. This study applies Asymmetric Information theory since the customers tend to have more information than the bank, and be dishonest in delivering their business development. To find out how moral hazard arises in mudharabah financing, an interview to the bank management is conducted. Financial ratio analysis is done to find out the investment policies undertaken by the Bank Nagari Syariah, especially the policy on the distribution of mudharabah financing. Having identified the cause of moral hazard risk, then the incentive compatible constraints analysis is used as a mitigation model of moral hazard risk on mudharabah financing.

Minimizing the risks posed by profit and loss sharing financing, incentive compatible constraints model by Presley and Session (2002) adopted by Adiwarmar Karim (2005) is used to reduce the risk of asymmetric information. Risk mitigation to minimize moral hazard risk, is described by using incentive compatible constraints and establishing some covenants in financing disbursement. In incentive compatible constraints, there are four major covenants that can be used to overcome the moral hazard risk.

## III. RESULTS

The Bank Nagari Syaria identifies internal and external factors as the causes of moral hazard risk. External factors are divided in two: (a) factors caused by macroeconomic conditions, and (b) factors derived from customers. Internal factors are factors related to human resources and internal bank policy. External factors come from government policies and regulations, and fraudulent acts committed by customers which cannot be observed by banks. Moral hazard risk can be caused by internal bank such as false analysis by account officer against request for customer financing, unsupported bank SOP, less competent bank human resources, and fraud.

External factors causing moral hazard, sourced from clients, are the most difficult risks to avoid in mudharabah financing. The potential risk

faced by mudharabah financing is the misuse of funds already received by the customer for purposes that are not in accordance with the contract agreement. The Customer makes a deliberate negligence resulting in a loss to the bank, and being dishonest in delivering the business development (Rivai et al. 2008). In mudharabah financing, the risks derived from the bad characters of customers in Islamic Economic literature are known as moral hazard risk.

The Bank mitigates internal risks to minimize moral hazard risk caused by internal factors. The form of internal mitigation related to the human resources which becomes the supporting factor of the bank's success to analyze the prospective customer. Customer characteristics are analyzed by using 5C + 1S analysis. The Account Officer analyzes the characters of the customers and gets information about the characters of the customers from various sources. The sources of information come from BI's customer information sources, direct interviews with customers, solicitation, information from neighboring businesses, applicant business partners, bank archives, and customer finance application data. Character analysis is intended to mitigate moral hazard risk that will occur due to bad characters of customers. According to Muhammad and Presley (2002), character analysis is done on aspects of skill, reputation and the origin of prospective customers. Bank Nagari Syariah performs analysis of customers' characteristics using two methods: (1) analysis of the relationship between the prospective customers and banks through BI Checking and National Blacklist, and (2) analysis of customer characteristic from third parties / other information from various parties that can be trusted.

The customers' bad characters are the main factor causing the emergence of moral hazard risk. The Bank conducts characters analysis of prospective customers to minimize the risk of moral hazard even though the risk of moral hazard is very difficult to identify. The characters of the customers may change at any time and cannot be controlled, therefore the sources of information from other parties are very necessary to the bank to do this analysis. Moral hazard risk occurs after the funds received by the customer, so the bank does mitigation analysis to the customer financing at the beginning and after the funds reach the customer. Risk mitigation is done by banks after funds reach customers through supervising and monitoring. Supervising and monitoring are conducted to avoid misuse of funds by customers and avoid false reports from customers to banks. Bank Nagari Syariah supervises and monitors every month.

Bank Nagari Syariah supervises and monitors cooperatives as customers receiving mudharabah financing. Supervision and monitoring are conducted on the financial statements of the cooperative as well as on the capabilities and skills

of the cooperative. Monitoring on the abilities and skills of cooperative management will impact on the act of negligence and deviation from the contract. The Bank monitors on the spot by coming directly to the operational office of the cooperative. The bank conducts direct checking on cooperative documents and this will minimize the chances of fraudulent acts and misuse of funds by cooperatives. Monitoring is divided into three, ie on desk monitoring, on site monitoring, and exception monitoring (Rivai, et al. 2008). Bank Nagari Syariah implements two types of monitoring: on desk monitoring and on site monitoring. On desk monitoring, Bank Nagari Syariah monitors the financial statements of cooperatives and also digs information from third parties. On side monitoring is conducted by monitoring the customer's business to prove the suitability of the client's financial report with the business physical condition of the customer.

Additional collateral on mudharabah financing in the form of an asset with a fixed economic value is one of the requirements for financing application at Bank Nagari Syariah. This additional collateral shows that banks find it difficult to provide mudharabah financing on a trust basis. There is no tool to measure trust and it is difficult to judge characters as a customer assurance. Difficulty in determining the level of customer's honesty makes the Bank Nagari Syariah apply additional collateral in the form of fixed assets in the case.

Bank policy to reduce moral hazard risk on mudharabah financing is by selecting customers with low business risk. Business risk relates to operational risks arising from customers' business activities. Operational risk will affect the bank to take the approval decision of mudharabah financing application. Mudharabah financing given to cooperatives is one of the banks' efforts to select costumers with low operational business risk.

Cooperatives granted mudharabah financing from Bank Nagari Syariah because cooperatives have lower operational costs compared to other business sectors. The low operational cost is considered by Bank Nagari Syariah to determine mudharabah financing. The moral hazard risk that can be mitigated by using this covenant is the risk of profit concealment by the customers.

Bank Nagari Syariah requires a financial statement for customers who will apply for mudharabah financing. The financial statements should be reported to the bank periodically and audited by an independent auditor appointed by the respective customer. The use of an independent auditor aims to keep the financial statements made by the customer completely trustworthy and appropriate to the actual circumstances. The interviews with the risk management show that the existence of audited financial statements is very

helpful for banks to assess the validity of a financial report.

The use of independent third parties such as auditors who audit the financial statements of customers is a bank strategy to avoid the manipulation of financial data that will harm the bank. Regular monitoring is also done by the Bank Nagari Syariah to avoid customers who do not make deviations. The Bank conducts a direct visit to the customer's business location known as on the spot at Bank Nagari Syariah.

The financial statements of the cooperative are audited by an independent auditor appointed directly by the cooperative. Direct appointment of auditors by cooperatives aims to reduce costs incurred by banks. Based on the bank agreement with the customer at the beginning of the contract, the audit fee is charged to the cooperative. The Bank will only accept the financial statements of the cooperatives that have been audited. The cooperative has an obligation to report any event in particular related to the development of the customer's business to the bank. The Bank will receive monthly income statement of cooperative. Submission of monthly reports and any occurrences to the bank can prevent the asymmetric information. Regular information received by the Banks will help banks to mitigate the possibility of customers performing moral hazard.

The policy of Bank Nagari Syariah uses revenue sharing method because the uncontrolled cost in the mudharabah scheme is difficult to detect by banks and customers. The Bank performs risk mitigation based on revenue sharing. Bank Nagari Syariah will get the revenue share from the cooperative. Profit sharing received from cooperative profits with costs incurred from cooperative business activities is borne by the cooperative. This rule is based on the agreement between Bank Nagari Syariah and Cooperative at the beginning of the contract and in accordance with the SOP of financing for the cooperative.

## DISCUSSION

This study applies the financial ratio analysis of NPF that can detect the occurrence of financing problems. Financing problems are caused by various factors; related to the focus of this research, one problem of mudharabah financing is caused by the existence of moral hazard risk. Moral hazard risk cannot be detected by the bank because this risk occurs after the funds received by the customer. In addition, moral hazard risk is related to the behavior or morale of the customer. Fraudulent acts committed by the customer cannot be controlled by the bank, the bank does not have the authority to participate in the customer's business management and this is in accordance with the rules of the mudharaba agreement. This

study explains some actions taken to minimize the occurrence of moral hazard risk on mudharabah financing. Moral hazard risk mitigation in this study begins by identifying the factors causing the emergence of moral hazard risk; starting from the selection of the application for customer financing until the return of financing by the customer to the bank. The Bank assesses the characters of a customer based on the customer's data history related to the bank. Having identified the factors causing the risk of moral hazard, the study explains what actions the bank takes to mitigate the moral hazard risk. This research determines the causal factors and then finds solutions to overcome the risk of moral hazard. This research can be used as reference material for other sharia banks to overcome high moral hazard risk on mudharabah financing so that mudharabah financing can be developed and become the product of interest by Islamic banks. The expansion of mudharabah financing will increase the welfare of people in the real sector.

## IV. CONCLUSION

Based on the analysis and research findings, it is concluded that:

The Bank Nagari Syariah identifies the moral hazard risk on mudharabah financing as a step in making the right risk mitigation policy. Moral Hazard risk is caused by two factors: internal factors and external factors. Internal factors are caused by bank management such as lack of financing analysis performed by account officer, unsupported and fraud bank SOP. External factors are caused by customer deliberate negligence, data manipulation in recording financial statements of a customer's business such as profit concealment and fee mark-ups, inappropriate use of funds, contracting economic / political / policy conditions and pressure from various political forces.

Risk mitigation as a preventive action by banks has a positive impact in reducing the moral hazard risks. The effectiveness of risk mitigation is indicated by the declining problematic mudharabah financing, mudharabah financing ceiling, and bank income. The effectiveness of mitigation also affects bank income derived from profit sharing of mudharabah. The bank's income increased due to an increase in revenue sharing for mudharabah financing. High moral hazard risk in mudharabah financing can be mitigated by incentive compatible constraints, especially to corporate customers in the form of cooperatives and institutions with financial reports. The covenant in incentive compatible constraints is difficult to apply to individual customers especially to clients who do not have financial statements. Incentive compatible constraints will be effective as a mitigation of moral hazard risk to customers in the form of institutions that have financial reporting records.



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