

REVENUE SHARING TRANSACTIONS, RISK AND PROFITABILITY IN  
ISLAMIC BANK OF INDONESIA

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**ABSTRACT**

**REVENUE SHARING TRANSACTION, RISK AND PROFITABILITY IN  
ISLAMIC BANK OF INDONESIA**

Islamic bank is a financial industry with huge potential to grow in Indonesia. Revenue sharing transaction which is adoption of profit risk sharing transaction distinguishes Islamic banks with conventional banks. Revenue-sharing agreement allows sharing of revenue between shahibul maal and mudharib in Islamic bank instead of using interest like conventional bank. This study aimed to observe the patterns of relationship between the revenue-sharing agreement to the profitability and risk of Indonesia Islamic banks. This research use panel data from several Islamic banks as sample and path analysis method. This research shows that revenue sharing transactions in Islamic bank simultaneously influential to the profitability. Therefore this research recommends Islamic banks to continue using and developing revenue-sharing agreement in its operational activities, hence to increase profitability.

**Keywords:** Islamic Bank, revenue sharing agreement, profitability, financing risk

**I. Introduction**

Majority people in Indonesia is a moslem, this fact made Indonesia as a potential market for Islamic Banking. Furthermore there are high awareness of using halal product in their daily live include in their financial activity. Since dual banking system are applied in Indonesia in 1992, Islamic bank succeeded to become a vast grown business. In this period, Islamic bank proved that they were not only success to gather consumer from moslem people but also from everyone who want their money save and grow with proper way.

The term profit sharing contract is identical with Islamic banks, Islamic banks even often known as the "Profit Sharing Bank". This statement is not entirely wrong because sharing system is a mechanism introduced by the Islamic economy to avoid interest which is clearly forbidden by Islam. Profit sharing agreement sees the relationship between a fund owner (shahibul mall) and fund managers (mudharib) not only as debtors and creditors but also as a partner. Therefore, the two parties get a fair distribution of benefits and equally bear the risk of loss in the event of a loss on the contract business. In addition, there is no assurance of refund process between fund manager to the fund owner as happened in the financial system that using interest. On the contrary, in profit risk sharing transaction, refund is determined according to the the contract/ agreement and if there is a risk there will be no refund to the fund owner. This is in line with the statement of Karim (2007) which profit risk sharing contract as natural uncertainty contract.

Profit sharing agreement financing offer a fair financing, which enable the risks and benefits are shared between Shahibul Maal and mudharib, but there is also the responsibility of risk sharing which makes this financing considered riskier than another type of financing agreement or lease purchase. Inherent risk for the profit sharing financing is associated with moral hazard and asymmetric information, all of which are related to the integrity of customer mudharib. This condition makes Islamic banks should always think twice and do a closer scrutiny to approve a financing.

However, Islamic bank is profit risk sharing bank, this term can not be fully justified in Indonesia. It is because the practice of Islamic banking in Indonesia also not fully applied profit risk sharing in its transaction. Instead of using profit risk sharing, Islamic bank in Indonesia use revenue sharing in its transaction. Accordance to the rule or fatwa MUI of DSN 15 / DSN-MUI / IX / 2000 this practice is allowed.

Revenue sharing transaction used both in financing and deposits structure activities. In financing activities, bank has a contract with the debtor or the fund manager. Meanwhile in deposits structure activities, bank has a contract with depositors to share the profits accruing the bank (Mirakhor and Zaidi, 2007). Besides of revenue sharing transaction, there are another aqad which commonly used by Islamic bank. Financing aqad in Islamic bank categorized as several aqad such as, financing with trade agreement (*murabahah, salam dan istishna*'), leasing agreement (*ijarah dan ijarah muntahhiyah bittamlik*), complement aqad (*hiwalah, qard, wakalah dan kafalah*) and financing with revenue sharing transaction (*murabahah dan musyarakah*). The most popular financing in Islamic bank is financing with trade agreement such as *murabahah, salam and istishna*'. Trade agreement financing dominate financing in sharia bank with 17% of the total amount of financing in 2002 and became 28% in February 2012.

But in fact, the drive to increase profit sharing financing was proposed by the government which is state in the Islamic Banking Act 2008, because in the long

run, profit sharing financing will encourage the equitable distribution of the national economy, because the advantages not only enjoyed by the owners of capital, but also by the management of capital. In some previous studies, facts about Profit Loss Sharing (PLS) is found. Habib (2002) showed that the mechanism of PLS contracts to minimize asymmetrical information and transaction costs. Based on the research and the findings, PLS should become a mainstay for the financing agreement and fundraising contract in Islamic banks.

Although profit loss sharing in Islamic bank in Indonesia is not fully applied, it is important to understand the adopted practice and its impact to the profitability and risk and make an improvement to this practice. As an intermediary institutions, Islamic banks would have commercial purposes in its operations. Fund raising activities and financing activities which is the main activity of Islamic banks, require consideration in the calculation and distribution related to the amount, the composition of each type of contract and consumer needs. Profitability and risk of default in the repayment process and maximizing the value added of the transactions of Islamic banks become the main consideration for Islamic banks in raising funds and providing financing. Therefore, this study was conducted to further verify the financial risk and profitability of the revenue sharing transaction, which known and believed to be more fair contract in Islamic bank.

## **II. Literature Review**

In this research, researcher have focused on how the revenue sharing transaction as an adoption of profit loss sharing transaction affect the profitability and risk in Islamic bank. So far, few studies in Islamic bank has found that PLS is profitable. Such as research by Muda and Ismail (2011) shows that the adoption of Profit-Loss Sharing arrangement in Islamic banking models can create value to their shareholders. Research by Khediri, Charfeddine and Youssef (2015), results show that Islamic banks are, on average, more profitable, more liquid, better capitalized, and have lower credit risk than conventional banks. Nasution and Wiliasih (2007) in their research about Bank Muamalat as the pioneer of Islamic bank practice in Indonesia, they found that ratio murabahah receivables ratio of the PLS financing resulted in an increase in bad loans. In addition, according to them, types of PLS financing such as mudaraba and Musharaka have shown that they can increase the awareness of Islamic banks and reduce moral hazzard on Islamic banks. Meanwhile Rahman and Rochmanika (2012) found that simultaneously trade agreement financing, profit sharing financing, and Non Performing Financing (NPF) ratio significantly influential to the profitability of Islamic bank. Sugema, Bakhtiar and Effendi (2010) found that in the framework of technology production on the conditions and competitive market both PLS and interest system demonstrate efficiency and accuracy, but in conditions of uncertainty due to shocks in the production process only the PLS system that shows efficiency and accuracy, as PLS can distribute risk at the individual level between the lender and the borrower. Meanwhile research by Habib (2002) showed that the mechanism of Profit Loss Sharing contracts minimize

asymmetrical information and transaction costs. And compared to the interest system Toutouchian (2009) stated that PLS contracts in Islamic financial institutions shows that they honor the rights of ownership by individual and institutions. based on previous research it is important to know the extent of the effect of adaptation of PLS on the risk and profitability, to further carry out the development of more daring in the application of PLS and risk management of financial institutions and Islamic banks.

### III. Methodology

This study aims to get a picture of the effect of revenue sharing transaction (Musharaka and mudaraba) to the financing risk and profitability of Islamic banks in Indonesia. The approach used in this study is the quantitative approach. The method used in this study based on the research framework is path analysis.

Purposive sampling method is used in this research to perform sampling of the population who meet certain criteria. The data used in this study is secondary data. This study uses financial data taken from quarterly financial statements of Islamic banks of Indonesia during the study period were determined. Researcher define some criteria to make the selection of the sample against Islamic Banks. Some sample criteria include Islamic Banks routinely publish quarterly financial statements during the study observation period since the first quarter of 2009 until the third quarter of 2012 addition. Based on these criteria, then there are four Islamic Banks that meet the criteria of sample, namely PT Bank Muamalat Indonesia, PT Bank Syariah Mandiri, PT Bank Syariah Mega Indonesia and PT Bank Syariah BRI.

There are two exogenous variables used in this study, which are revenue sharing financing, revenue sharing in deposits structure. Revenue sharing financing which used in this study are musyarakah and mudharabah financing divided by the total financing of the Islamic bank. While other exogenous variables, namely revenue sharing in deposits structure obtained from the collection of funds to third parties who use the mudharabah contract divided by total deposits of Islamic banks, in product savings deposits, time deposits and demand deposits of Islamic banks.

Revenue sharing financing<sub>i,t</sub> = (Mudharabah financing<sub>i,t</sub> + Musyarakah financing<sub>i,t</sub>) / Total financing of sharia bank<sub>i,t</sub>

Revenue sharing in deposits structure<sub>i,t</sub> = (time deposits<sub>i,t</sub> (mudharabah) + savings deposits<sub>i,t</sub> (mudharabah) + demand deposits<sub>i,t</sub> (mudharabah)) / Total of Third Party Funds in Islamic Bank<sub>i,t</sub>

Based on Bank Indonesia Circular Letter No. 12/11 / DPNP dated March 31, 2010, in this case the financing is provided to a third party and does not include funding to other banks is calculated based on the values recorded in the balance of payments position is not annualized. While financing is problematic loans classified as substandard, doubtful, and loss is calculated based on the

values recorded in the balance sheet per position. Risk financing used in this study is the risk of financing the next quarterly period ( $t + 1$ ). This is done because the classification of the financing problems require a period of more than 90 days. Another endogenous variables in this study is Return on Assets (ROA) changes or  $\Delta$  ROA.

NPF ratio is calculated by the following formula:

$$NPF_{i,t+1} = \frac{\text{Total Financing Troubled}_{i,t+1}}{\text{Total Financing Disbursed}_{i,t+1}}$$

ROA changes ( $\Delta$  ROA) is calculated by the following formula:

$$\Delta \text{ROA} = \text{ROA}_{i,t+1} - \text{ROA}_t$$

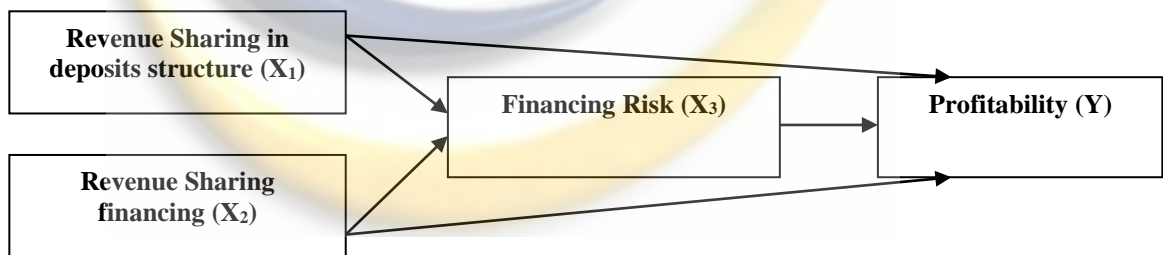
Meanwhile ROA ratio calculated by the following formula:

$$\text{ROA}_{i,t+1} = \frac{\text{Net Income}_{i,t+1}}{\text{Total Assets}_{i,t+1}}$$

Analysis of the data processing research using path analysis (path analysis). To describe the relationship between variables, the structure of relationships between variables can be described as follows:

**Figure 3.1.**

**Path Analysis Full Model**



There are 2 sub structures from the model above:

### **Sub structure 1**

Financing Risk =  $\rho_{X1 X3}$  Revenue Sharing in deposits structure +  $\rho_{X2 X3}$  Revenue Sharing financing +  $e_1 \dots (1)$

### **Sub structure 2**

Profitability =  $\rho_{X1 Y}$  Revenue Sharing in deposits structure +  $\rho_{X2 Y}$  Revenue Sharing financing +  $e_2 \dots (2)$

#### IV. Results and Discussion

Samples (n) used in this study were derived from the quarterly financial statements of Islamic banks since the first quarter of 2009 until the third quarter of 2012. Description of the data presented in Table 4.1. below:

**Table 4.1.**  
**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
RS_deposits structure	56	.576	.927	.81177	.091542
RS_financing	56	.009	.528	.27886	.167988
Financing Risk (NPF)	56	.014	.089	.03650	.012826
Profitability (ROA)	56	.002	.041	.01688	.009032

From the regression of the 2 sub structures above, we can find out some information as presented in table 4.2. below:

**Table 4.2.**  
**Regression of the full model**

	R <sup>2</sup> or R Square	Path coefficients				
		X <sub>1</sub> to X <sub>3</sub>	X <sub>2</sub> to X <sub>3</sub>	X <sub>1</sub> to Y	X <sub>2</sub> to Y	X <sub>3</sub> to Y
<b>Sub structure 1:</b>	0.218	-0.064	0.520			
<b>Sub structure 2:</b>	0.178	-	-	-0.443	0.303	-0.319
<b>Significance</b>		0.783	0.028	0.069	0.231	0.029

From this model we would find several informations:

1. From the sub structure 1 regression, revenue sharing in deposits structure, revenue sharing in financing are simultaneously influence to the financing risk.
2. From the sub structure 1 regression, we find that the coefficient determinant R Square is 0.178 which means that revenue sharing in deposits structure and revenue sharing in financing are able to explain 17.8% of the financing risk. It is also means that the influence of other variables that are not described in the model is also quite big which is 82.2%
3. From the sub structure 2 regression, revenue sharing in deposits structure, revenue sharing in financing and financing risk are simultaneously influence to the change of the profitability.
4. From the sub structure 2 regression, we find that the coefficient determinant R Square is 0.218 which means that the three variables: revenue sharing in deposits structure, revenue sharing in financing and

financing risk, are able to explain 21.8% of the profitability changes. It is also means that the influence of other variables that are not described in the model is quite big which is 78.2%.

5. Revenue sharing in deposits structure does not have direct effect on financing risk but it has direct effect on profitability changes.
6. Revenue sharing in financing has a direct effect on financing risk but has no direct effect on profitability changes.
7. Financing risk has a direct effect on profitability.

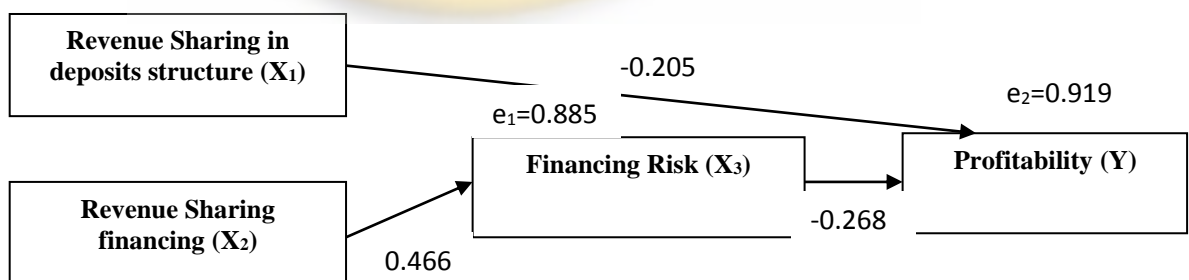
There are some information that made researcher should reduce the full model and after we reduce the model, we should recount the regression between variables. The information we get after the second regression is as follows:

**Table 4.3.**  
**Regression of the reduced model**

	R <sup>2</sup> or R Square	Path coefficients		
		X <sub>1</sub> to Y	X <sub>2</sub> to X <sub>3</sub>	X <sub>3</sub> to Y
<b>Sub structure 1:</b>	0.217	-	0.466	-
<b>Sub structure 2:</b>	0.155	-0.205	-	-0.268
<b>Significance</b>		0.139	0.000	0.055

The reduced model would be different from the full model and we can figure the relationship between revenue sharing transaction, risk and profitability in Islamic Bank of Indonesia would be:

**Figure 4.1.**  
**Path Analysis Reduced Model**



### Testing the Reduced Model

Testing the reduced model aims to compare how well the reduced model fits the data compared to how well the full model fits the data.

$$R_1^2 = 0.218, R_1^2 = 0.178$$

$$R_m^2 = 1 - (1 - 0.218)(1 - 0.178) = 1 - (0.782 \times 0.822) = 1 - 0.643 = 0.357$$

Meanwhile, M which is  $R_m^2$  for the reduced model is:

$$R_1^2 = 0.217, R_1^2 = 0.155$$

$$M = 1 - (1 - 0.217)(1 - 0.155) = 1 - (0.783 \times 0.845) = 1 - 0.662 = 0.338$$

$$Q = \frac{R_m^2}{M} = 0.357 / 0.338 = 1.05$$

Q=1 indicate that the reduce model is fit and dropping several predictors in this research is not uninformative or misleading.

### Direct and Indirect Effect

Also in this research we could understand and determine the direct and indirect effect between variables, as the table follows:

**Table 4.4.**  
**Direct and Indirect Effect Between Variable**

	Direct effect	Indirect effect (through X <sub>3</sub> )	Total
X <sub>1</sub> to Y	-0.205	-	-0.205
X <sub>2</sub> to Y	-	0.466 x (-0.268) = - 0.125	-0.125
X <sub>3</sub> to Y	-0.268	-	-0.268

## V. Conclusion

There are several informations that we can get from this research, include of the effect of revenue sharing transaction either in deposits structure and financing to the financing risk, the relationship patern of each variable, and the of either direct and indirect effect value of each variable. Both of the path model simultaneously influence to the endogenous variables. Also both of the revenue sharing transaction have influence to profitability changes, revenue sharing in deposits structure has direct effect on profitability changes, whereas revenue sharing in financing has no direct effect on profitability changes. Meanwhile revenue sharing in deposits structure has no neither direct and indirect effect to the financing risk, whereas revenue sharing in financing has direct effect to the financing risk. From the model, we found that the ability of these variables to explain the changes of profitability is small, this may be due to the small portion of revenue sharing transaction compared with other transactions, therefore this research recommends Islamic banks to continue using and developing revenue-sharing agreement in its operational activities, to increase profitability.

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