

COMPARING THE RETURN ON MUDHARABAH DEPOSIT AND THE RETURN ON EQUITY: ASSESSING THE FAIRNESS IN INDONESIAN ISLAMIC BANKING INDUSTRY

Nurul Fadhilah

Faculty of Islamic Economics and Business IAIN Sultan Amai Gorontalo

nurulfadhilahsasia@iaingorontalo.ac.id

Achmad Tohirin

Magister of Islamic Finance & Economics Universitas Islam Indonesia

achmad.tohirin@uii.ac.id

Keywords:

Islamic bank, Islamic banking, return on asset, mudharabah, equity

ABSTRACT

This paper compared the return on mudharabah deposit (ROMD) and the return on equity (ROE) in Indonesian Islamic banks to unveil the differences and factors that affect them. The purpose of this paper is to evaluate the profit and loss sharing mechanism in Islamic banking through the return on mudharabah deposit and on equity. The quarterly financial report from 10 Islamic banks within the period of 2011 to 2016 are processed using independent t-test to compare means and panel regression method to disclose the variables affecting the behavior of ROMD and ROE. The results show that the ROMD and ROE are statistically different, with ROMD tend to be lesser than ROE. It also found that ROA, total equity/ total asset, total total deposit/ total asset, total financing/ total asset, bank size and total of mudharabah deposit accounts are affect the variability of ROMD, and the same variables, exclude the mudharabah deposit account, affect the ROE. Following this result, Islamic banks in Indonesia need to evaluate the governance to treat the mudharabah contract as a mode of equity participation in nature, as like as the contract with the shareholders, in order to comply with Islamic economic framework through the presence of the fairness in banking business.

Kata Kunci:

Perbankan Syariah, ROA, Mudharabah, Ekuitas

ABSTRAK

Makalah ini membandingkan return on mudharabah deposit (ROMD) dan return on equity (ROE) pada bank syariah Indonesia untuk mengungkap perbedaan dan faktor-faktor yang mempengaruhinya. Tujuan dari makalah ini adalah untuk mengevaluasi mekanisme bagi hasil dalam perbankan syariah melalui pengembalian deposito mudharabah dan ekuitas. Laporan keuangan triwulanan 10 bank syariah periode 2011-2016 diolah dengan menggunakan independent t-test to compare means dan metode regresi panel untuk mengungkapkan variabel-variabel yang mempengaruhi perilaku ROMD dan ROE. Hasil penelitian menunjukkan bahwa ROMD dan ROE secara statistik berbeda, dengan ROMD cenderung lebih kecil dari ROE. Ditemukan juga bahwa ROA, total ekuitas/ total aset, total simpanan/ total aset, total pembiayaan/ total aset, ukuran bank dan total rekening deposito mudharabah berpengaruh terhadap variabilitas ROMD, dan

variabel yang sama tidak termasuk rekening deposito mudharabah. , mempengaruhi ROE. Menyusul hasil ini, bank syariah di Indonesia perlu mengevaluasi tata kelola untuk memperlakukan akad mudharabah sebagai bentuk penyertaan modal, seperti halnya akad dengan pemegang saham, agar sesuai dengan kerangka ekonomi Islam melalui adanya keadilan. dalam bisnis perbankan.

INTRODUCTION

The emergence of Islamic banking was to eliminate some prohibited elements in economics according to Islam. One of integral parts of Islamic financial system is the prohibition of *riba* in the economy. The consensus of the jurists/*fuqaha* interpreted this word as an excess of money demanded over the principal sum loaned for a specific period. Despite of the interpretation arose several differences among jurists, the majority of the Islamic scholars agreed that the excess of loan existed in the current financial transaction is under this injunction (Khan, 1985).

As the alternative of replacing the *ribawi* system in financial transactions, there are two types of sharia compliant modes which are *syirkah* (partnership) and *mudharabah* (agency relationship). The modes was modified to fit with the modern banking operation. In Islamic banking, the mudharabah mode is implemented under the two-tier *mudharabah* system, or *mudharib-yudharib*. In this system, one party as the *rabbul mal* (investor) and another party as the entrepreneur to run the business. Profits derived from the business are shared according to the pre-determined profit sharing ratio. The losses occurred to be borne by the financier/*rabbul mal* if they are not due to the *mudharib* negligence. The *mudharib* has the entire responsibility in running the business while the *rabbul mal* does not have the right to interfere the business process.

Contrasting the ideal of the concept, the current condition of Islamic banking industry that been highlighted by many scholars is that the need to evaluate the orientation of Islamic banking practices that has been more concentrated in the trading function more than in investment maximization. The product with trading contract, such as *murabaha*, *ijarah*, *istisna'*, *salam*, etc. are the popular products offered by Islamic bank, while the early spirit of Islamic bank was to empower the economic stability through the profit-loss sharing (PLS). The contract of profit sharing is become less encouraged in Islamic banking operation nowadays, whereas, the PLS system is expected to counter the interest-based banking practices. However, Islamic banking completed their banking services with the secondary sharia-compliant modes of contract. However, after decades, the profit loss sharing system become less popular compared to trading contracts. One of the problems is due to the unsolved nature problems rooted in the system while Islamic banking environment trapped in the conventional banking operation. This issue has been discussed as the global phenomena experienced by Islamic banks in all over the world.

The high focuses in trading contracts might be sourced from the less attractive product offered by the bank with the unsolved problem inherent with it. When the bank offered the profit-loss sharing contract that is embedded by its nature in term of risk, the bank is expected to differ the treatment of PLS contract with the conventional debt financing as the risk profile is different each

other. One of the risk characteristic faced by PLS contract is the uncertainty of the return for the depositors. In conventional banking operation, the uncertainty could be removed since the bank charge the debt with fix interest. Unlike the Islamic bank, the implementation of PLS cause the bank to face uncertainty of the return since the risk exposed the bank will also be transferred to the depositors. Hence, the depositors in Islamic bank surfaced to the higher risk than the conventional depositors do (Tohirin, 2004).

One if issues arise of this contract is about the potential source of unfairness to the investment account holder (IAH) in term of the return. The writing of Rosly & Zaini (2008) found that the equity principle has yet to be operationalized and reflected in the return on mudharabah deposit (ROMD) and return of equity (ROE). *Mudharabah* is commonly treated as fixed deposit in conventional point of view, where banking risks are borne by the bank's capital. Thus, Islamic banking could not find the edge of competitiveness by offering profit sharing. The result supported by Diaw & Mbow (2011) using a broader scope of the previous reseach, surveyed nine Islamic banks in seven different countries over a period of five years. It concluded that the ROE in the samples tend to be at least two times higher than ROMD. The issue of unfairness arises in the profit distribution in mudharabah practices. The reseach suggested that Islamic banks should utilized other concept than mudharabah, if they are interested to adopted the conventional deposit framework associated with risk-return profile.

The depositor funds is the main source of the bank to run its business. The regulation that is implemented in Islamic banks nowadays indicated the less protection and proportional treatment to the depositors compared to the shareholders. They should have at least the same portion of protection as the shareholders have, particulary because their deposit is far greater than the shareholders capital. Besides, the portion of the return between the ROE and ROMD look like quite different, while the essence of mudharabah deposit is an equity participation as like as the shareholders contribution. This issue exposed the imbalance in nature of feature and the regulations that need the adjustment to fit the function of intermediation throug PLS in Islamic banks (Chapra, 2003, El-Hawary *et al.*, 2003).

Based on the above backround of study, the reseacher is concerned to write the study of the issues associated to mudharabah practice to evaluate the sytem and operation practiced in Indonesian Islamic banking through indentyfing the factors affecting the return on Mudharabah deposit compared to return on equity (ROE).

Literature Review

The features of Islamic banking instruments are unique, unlike the conventional banking. The different nature of instruments derived the difference in treatment and regulation for each feature. The contract of deposit in Islamic banking is considered as partnership contract, not a debt contract, and not "capital certain", thus the depositors are required to accept the negative return. These uniqueness of the contract create the important implication in structuring the regulation to maximize the benefit of the profit sharing instruments. Several scholars believed that Islamic banking required to restructure and redesign the legal framework and financial regulation related to

the operation of profit sharing instruments (Archer et al, 1998; Hawary, et al, 2004; Archer & Karim, 2009; Awadzi, et al, 2015).

The feature of deposit under PLS system is based on investment basis since mudharabah is an instrument of investment. Depositors and shareholders in Islamic bank activities have several similar characteristic of their contractual profile. Both of the contracts are exposed to profit and losses from the banking operation. The contract of mudharabah deposit create consequences that the mudharabah deposit holders are not allowed for some of rights that are accessibe for the shareholders. In term of transfer of ownership, mudharabah depositors are less liquid compared to shareholders because of the existence of secondary market for stock trading. Table 2.1 summarized the difference and similiarities in contractual profile of depositors and shareholders in Islamic bank.

Table 1. Depositors and Shareholders Comparison in Islamic banking System

	Depositors	Shareholders
Contracts	• Mudharabah	• Musharakah
Contribution	• Financial capital as investment deposits	• Financial capital as shared capital
Rights Rewards	• Return on deposits based on pre-agreed profit share	• Return on Equity
Rights of Control	• No specific control right	• Control rights via shareholders general meeting • Right of inspection • Right to access to financial report
Transfer Ownership	• No transfer ownership allowed	• Able to sell the ownership through secondary market
Risk	• Exposed to all business risk	• Exposed to all business risk
Protection	• Under Lembaga Penjamin Simpanan (LPS)	• Shareholder protection under the prevailing laws

Source: *Ismail & Tohirin (2010)*

Hawary et al. (2004) distinguished the intruments of Islamic banks into two categories of contract. The first is transactional contracts, consisted of products that are based on trade contracts like murabaha (cost plus/mark up sales), bay muajjal, bay salam, which is to provide financing on such economic transactions. From the conceptual balance sheet, several problems arises in the practices of Islamic banking that differ from the theoretical model (Hawary, et al, 2004). First, the choices and application of accounting policies that affect the allocation of income between

shareholders and account holders or between different classes of account holders. Islamic bank should be consistent with clear barriers between those funded by demand deposit, general investment account, special investment account, and equity. But the practice is that all the asset is treated as one large bucket with all stakeholder's funds commingled together. Islamic bank claims to operate in a universal banking model with combining both model of commercial banking and investment banking. However, unlike the conventional universal banks, Islamic banks do not distinguish their investment and commercial banking services. Investment accounts are not separated from other funds, including the equity holders'. Second, investment accounts of Islamic bank should operate the PLS principles. Islamic bank is required to create a clear distinction among the asset types. The practice hints the criticism that when the bank does write down the value of assets, they do not in practice write down the value of deposits. The consequence is that the losses on the asset side will be absorbed either by deposit holders or the equity holders.

According to Archer & Karim (2009), the profit sharing account does not meet the legal definition of "deposit", neither the customer's capital nor any return on it is guaranteed by bank. Islamic bank does not meet the criteria to be classified as a depositary institution as required by banking regulations in majority of countries. The market perceptions interpret the unrestricted PLS account as the substitute of conventional deposit. The regulatory requirement treated the PLS account in the same way. The industry supervisors required Islamic bank to manage unrestricted PLS with Profit Equalization Reserve (PER) and Investment Risk Reserve (IRR), as the conservative investment strategies, to avoid losses on the account holders and to smooth the periodic return paid on them. As the consequence, the profit share paid to PLS account holders is the outcome of a process of earnings management and accounting manipulation that seeks the shadows of the rates paid to the conventional deposit holders. The other problem, is the issue of corporate governance raised by the fact that PLS account holders are exposed to the risk of equity investors, but have no right in governance, even the right to access the financial performance. To solve the corporate governance issue related to PLS account holders, Islamic bank is proposed to separate the legal entity for fund management activities. This will enable the banking activities and the fund management activities to be separately supervised. Thus, the fund management is expected to give the PLS account holders the type of protection that similar to the investors in mutual fund.

Awadzi et al., (2015) also emphasized on the issue of balance sheet consideration in Islamic banking operation. Assets and liability composition in Islamic bank tend to differ from its conventional counterpart. Its asset portfolio represents a more complex structure. Treating Islamic bank the same way with conventional bank will raise the problem of unfairness and thus not comply with sharia principle. In PLS product features, for example, the bank does not guarantee the principal amount and the returns to the PLS account holder, and they do not enjoy the legal protections that depositors in conventional commonly get. The concern on restructuring the financial regulation and balance sheet design is necessary to maximize and improve the performance of profit loss sharing investment in Islamic banks. Consequently, it will affect the resolution on corporate governance.

The governance structure currently practiced by Islamic bank looks not quite enough in the perspective of mudharabah depositors. This problem presents several number of “contractual hazard” (Archer et al., 1998). In the unrestricted mudharabah, mudharabah account holders authorize the bank to invest the funds with the consequences that the funds are commingled with the shareholder’s and invest them in the same investment portofolio. While in the project, bank do not give the mudharabah account holders to access the financial performance.

The total asset pool practiced by Islamic bank is mostly financed by the mudharabah deposit funds, plus some of the shareholders’s equity and other sources. If the investment portofolio yields the positive return, it will shared based on the proportion of their investment. The banks share the profits to the shareholders funds and other funds from the portfolio investment even thought they are not PLS-basis. The bank’s shareholders absorbs the profit from this activities, not the mudharabah account holders. Mudharabah account holders get the paid on the predetermined percentage of profit attributable to what specified in the contract. The total of profit allocated to the bank is set up as the return to the shareholders. On the contrary, if the bank earns negative return on the portfolio invested, the loss is borne by the mudharabah account holders and shareholders in *pro rata* of their investment.

An essential empirical evidence provided by Al-Deehani, et al (1996; cited in Archer et al., 1998), that if an increase in investment account financing receives positive shareholder income, it will increase the return on equity without the additional financial risk. The market value of the capital increase, while the cost of capital remain constant. In other words, Islamic bank could run a strategy to increase the investment financing to the higher limit while keeping shareholder’s equity capital at minimum. An increasing to the retun on equity is due to the leverage effect of the mudharib share. This judgment specifies that shareholders would be unconvincing to have incentives to engage in over high-risk project since the upper to the lower risk is share with the mudharabah account holders. Nevertheless, since mudharabah account bear the risk of loss equally, the shareholders are less threatened of bankruptcy.

Risk Profile of Mudharabah Contract and Equity Investment in Islamic banking

Several problems are common in the nature and practices of PLS contracts. At least six difficulties existed in nature; the problem of asymmetric information, adverse selections, the problem of moral hazard, incentives and the issue of aligning incentives between counterparts, agency cost within the principle-agent relationship in financial transactions, and the need for monitoring the counterparties behavior. The nature of contracts may derive the PLS mode to shift the direct credit risk of Islamic banks to their depositors; they may also increase the overall degree of risk in the assets side of bank balance sheets. In the practice, PLS modes make Islamic banks vulnerable to risk normally borne by investors, if compared to holders of debt. The contract of mudharabah in institutions offering financial services (IIFS) exposed to displaced commercial risk and operational risk (Tiby, 1956). The displaced commercial risk is arised when the institution encourage their investment account holder by increasing the rate of return to keep the funds. Therefore, the institution give away a portion of their share of profit. The rate of return to the customer is smoothed at the expense of profit normally attributed to the institution’s shareholders.

The risk is arises as the result of 1) Rate of return risk that occurred when funds are laced into the long-term maturity, and the rate of return is no longer competitive with other alternative investments. 2) when a bank underperforms during a certain period and is unable to generate suitable profit to be distributed to the account holders.

Secondly, the mudharabah contract is exposed to operational risk. In this case, the rabbul mal share the profit with the mudharib, and bear all the losses occurred in the project without the right to intervene in the business management. Two major problems arises in this condition; 1) the problem of moral hazard, 2) the issue in corporate governance that is arised from the fact that the investor should bear all losses. According to Sundararajan & Errico (2002), there are several reasons for this. First, the administration of PLS mechanism is more complicated than a debt based contract. There is a virtually unlimited list of activities that Islamic banks can engage in, because the bank is permissible to create product based on PLS or trade-based contract. But in this circumstance, standardization of Islamic banks product may become more difficult to achieve. Second, Islamic banks have no legal means to control the entrepreneur who manages the business financed by them. The entrepreneur has the complete freedom to run the business according to his best judgment. In Musharakah, and direct investment contracts, banks have better opportunities to monitor the business they invest in, because in this contract partners may include in the decision making process and exercise voting rights.

Table 2. Major risks faced by Islamic banking products

Product Based on	Major risks	Risks Classification
<i>Murabahah</i>	Credit risk	Unsystematic
<i>Musharakah</i>	Market and agency risk	Systematic
<i>Mudharabah</i>	Market and agency risk	Systematic
<i>Ijarah tsumma al-bay</i>	Credit risk	Unsystematic
<i>Ijarah wa iktina</i>	Operational and payment risk	Unsystematic
<i>Salam</i>	Delivery risk	Systematic
<i>Istisna'</i>	Delivery risk	Systematic
<i>Bay al inah</i>	Credit risk	Unsystematic
<i>Tawarruq</i>	Credit risk	Unsystematic
<i>Commodity Murabahah</i>	Credit risk	Unsystematic

Source: Rosly & Zaini (2008)

The possible reason of the higher return in ROE rather than in ROMD is that the Islamic bank's capital will absorb all systematic and unsystematic risks. However, the theory is that mudharabah contract carries significant amount of risk in nature, but in reality not recognized by the banking regulators.

In this field of study, several researches conducted in investigating the need to evaluate the profit loss sharing mechanism, especially mudharabah, in term of the distribution of profit compared to its risk embedded. The previous researches are presented as follows:

Assessing the fairness of profit distribution towards the mudharabah depositors and the equityholders.

Tohirin (2004) examined that under Islamic banking system, the investment account holders (mudharabah depositors) face the higher degree of risk due to uncertainty of the deposits and its rate of return. Under the current legal framework of Islamic banking companies, a kind of unfairness prevails between depositors and shareholders due to the different risks faced by the contracts and the different access to the bank, recalled that depositors and shareholders as the capital provider for the bank. Similarly, Ismail & Tohirin (2010) argued that the existence of mudharabah deposits under Islamic banking system exposes very different character from that in interest-based deposits. The difference has important implication towards the financial system. Mudharabah deposits could be treated as equity capital similar to the shareholders fund. Therefore, it is important to create a specific institutional protection for mudharabah depositor to adapt with the natural form of mudharabah which is different with conventional deposits.

Furthermore, Rosly & Zaini (2008) studied the differences on the yields of Islamic and conventional bank's deposits and capital. The results is that the conventional banks have the higher ROE than the return to depositors. This condition is due to the contractual differences between the fixed deposit and the banks capital. In Islamic banking, the same path was found on the ROE and its return to deposit. This condition reflected that Islamic banks do not reflect their risk profile which are different which conventional banks, as the study found that the return on deposit is smaller than ROE. A further research to compare the return on Mudharabah deposit towards the ROE in nine Islamic banks in seven different countries over a period of five years (2005-2009) was conducted by Diaw & Mbow (2011). This study was analyzed by using mean-variance framework. It found that ROE in the sample tend to be two times higher than the ROMD. In addition, the ROMD was more correlated to conventional interest rate than to ROE. The latest inquiry led by Hasan (2010), emphasised on the unjust in return on mudharabah depositors because the use of standard form contracts. The rate of return to depositors are normally getting are not much different from the corresponding interest rate of the conventional banks deposit return. While reported from The Bank for International Settlement, commercial banks earn anywhere from 11-31% per year as ROE going to their shareholders. While the return on depositors in Islamic banking reflected the conventional return on deposit.

Factors affecting the return on Mudharabah deposits and return on equity

Chong & Liu (2009) examined the causality between investment deposit rate in Islamic banking in Malaysia and the conventional deposit rate. The result exhibited that the investment deposit rate in Islamic banking and companies were lower than the conventional counterpart. The rate was found to be high correlated with conventional rate on a maturity-matched basis. The Granger causality test was also conducted to see the causality, it show that a change in Islamic deposit rate do not cause adjustment in conventional deposit rate. In addition, a change of conventional deposit rate cause the change in investment deposit rate in Islamic banking and finance companies. In different writing, Cevik & Charap (2011) assessed the behavior of Islamic and conventional bank

deposit return in Malaysia and Turkey. This study was conducted using the monthly data from January 1997 to August 2010, and analyzed through cointegration test, causality test, and VECM approach to identify inter-temporal linkages between variables. It found that the return in PLS and conventional bank deposit has the long run cointegration. The multivariate causality test show that changes in conventional deposit rate derived the changes in Islamic bank deposit rate.

In similar topic, a case study was lead in Kuwait Finance House Malaysia from 1978 until 2009 to investigate the influence of return on Asset (ROA), profit attributable to depositors (PADOP), total deposit as percentage of total asset (TDTA) to ROMD. Second, it investigate the influence of ROA, profit attributable to equityholders as percentage of operating profit (PAEOP), and total equity as percentage of total assets (TETA) towards ROE. The results implied that the proportion of total assets is an important factors to improve ROE, but it did not play a significant role in ROMD (Diaw & Mbow, 2011). In addition, the results indicated that the return on investment account that is risky like equity cannot be explained in a risk-return framework. While equity is in line with risk-return theory.

The latest study focused on this issue was conducted by Hamza (2016) that examined the compliance of investment deposit return towards the profit loss sharing (PLS) principles. Through panel data analysis of 60 banks in 15 countries, observed from year 2004 to 2012. The study measured the impact of of two categories. This study concluded that the government structure through the board of directors and sharia boards has no impact to the return on deposits, while the variable of ownership concentration affect positively the deposit return. In addition, the investment deposit return seems not reflected the PLS principles due to two major behavior of the Islamic Bank and Investment account holder. The moral hazard proble arises related to IB opportunistic beviour to absorb the capital. In Invesment account holders (IAH) side, the unique motivation of profit leads them to refuse low return that is contractst to their return expectation. This problem caused IB face high competition with convetional banks. IB is constraint to use interest rate as benchmark for the price of deposit to face competition and to avoid the depositors withdrawal. Furthermore, the variable of Total Equity to total asset (TETA), total deposit to total asset (TDTA), total financing to total asset (TFTA) are found significant to influence the ROE in Islamic banks (Ramlan & Adnan, 2016)

RESEARCH METHODOLOGY

This study is conducted by utilizing the secondary data. The data are taken from the quarterly reports of the 10 Islamic banks, they are Bank Muamalat Indonesia, Bank Syariah Mandiri, Bank BRI Syariah, Bank BNI Syariah, Bank Mega Syariah, Bank Syariah Bukopin, Bank BCA Syariah, Bank Panin Syariah, Maybank Syariah, and Bank BJB Syariah. The data of total units of mudharabah deposit account are derived from Statistik Perbankan Syariah. The bank's quarterly report is taken from year 2011 to 2016 to show the information of total assets, total equity, total deposits, operating profit, return on Mudharabah deposits, and return on equity.

The variables that may affect the Return on Mudharabah Deposit (ROMD) and Return on Equity (ROE) are constructed based on the justification written below:

a. Return on Asset (ROA)

In this research, ROA as the explanatory variable to describe the link between the bank performance and the return both to depositors and shareholders. The use of return on asset to draw the relationship between bank performance and the return to mudharabah depositors and shareholders is also written in Diaw & Mbow (2011), Hamza (2016), and Saraswati (2016).

b. Total Deposit per Total Asset (TDTA)

Total deposit in respect to total asset revealed the growth in the deposit fund in Islamic banks. This variable is involved to see the leverage effect of total deposit towards the return.

c. Total Equity per Total Asset (TETA)

Total equity in respect to total asset revealed the growth in the equity fund in Islamic banks. This variable is involved to see the leverage effect of total equity towards the return.

d. Total Financing per Total Asset (TFTA)

Total financing in respect to total asset reflected the intermediary function of Islamic banks in financing the customers project. This variable is involved to see the leverage effect of total financing towards the return.

e. Bank Size (BS)

Bank size, measured by the logarithm of total assets of the banks, is assumed to affect the ROMD. The increase in total assets indicates the good performance and competition of the bank that will lead the investors to participate their fund in it.

f. Total units of Mudharabah Depositors Account (MDA)

Total units of mudharabah deposit account exposed the number of the mudharabah depositors account in Islamic banks.

Hypothesis

Based on the analysis discussed above, the hypotheses are constructed as follows:

H1 : There is a significant difference between ROMD and ROE in Islamic Banking

H2 : *ROA, TDTA, TETA, TFTA, Bank size, MDA* affect the ROMD

H3 : *ROA, TDTA, TETA, TFTA, Bank Size* affect the ROE

The methodology to proof the hypothesis is, first, based on the independent t-test to compare means between ROMD and ROE. Secondly, panel data is done to see the effect of the variables to ROMD and ROE.

Statistical equation (of ROMD) for panel data analysis is as follows:

$$Y_{it1} = \beta_0 + \beta_1 X_{1it1} + \beta_2 X_{2it1} + \beta_3 X_{3it1} + \beta_4 X_{4it1} + \beta_5 X_{5it1} + \beta_6 X_{6it1} + u_{it}$$

Where:

Y_{it1} = ROMD

X_1 = ROA

X_2 = TDTA

X_3 = TETA

X_4 = TFTA

X_5 = BS

X_6 = MDA

β_0 = Constant

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ = Regression coefficient

i = Islamic banks (10 Banks)

t = Periods (Quarterly, start from 2011-2016)

u_{it} = Residual

The second equation (for ROE):

$$Y_{it2} = \theta_0 + \theta_1 X_{1it2} + \theta_2 X_{2it2} + \theta_3 X_{3it2} + \theta_4 X_{4it2} + \theta_5 X_{5it2} + u_{it}$$

Where:

Y_{it2} = ROE

X_1 = ROA

X_2 = TDTA

X_3 = TETA

X_4 = TFTA

X_5 = BS

θ_0 = Constant

$\theta_1, \theta_2, \theta_3, \theta_4, \theta_5$ = Regression coefficient

i = Islamic banks (10 Banks)

t = Periods (Quarterly, start from 2011-2016)

u_{it} = Residual

RESULT AND ANALYSIS

Compare Means

Table 3. Descriptive Statistics

	ROMD	ROE	ROA	TETA	TDTA	TFTA	BS	MDA
Mean	5.6726	10.360	0.8400	15.874	53.467	77.619	164913	22821
Median	5.8300	5.6750	1.0000	10.450	57.330	76.185	644105	23159
Maximum	9.6200	74.430	5.6100	59.470	74.830	124.22	788317	35642
Minimum	1.0000	-49.050	-20.130	5.4800	9.0700	37.550	103303	129394
Std. Dev.	1.3400	17.595	2.6338	12.083	13.960	13.996	203146	74966
Sum	1361.4	2486.6	201.60	3809.8	12832.	18628.	3.9600	547717
Sum Sq. Dev.	429.15	73994.	1657.9	34897.	46579.	46819.	9.860	1.3400
Observations	240	240	240	240	240	240	240	240

Source: Processed data using Eviews 8 (2017)

The risk is captured by the standard deviation. The data disclosed the higher standard deviation of ROE than ROMD, means that the risk for shareholders is greater than to depositors. The mean of ROE and ROMD showed that the ROE is higher at 10.3 and the ROMD at 5.67. The mean of TETA and TDTA presented the equity participation; it described the greater equity participation of the depositors than the shareholders.

This data implicated that the risk-return framework is well implemented in Islamic bank. However, it captured that mudharabah deposit in Islamic banking is contrasting the basic concept of mudharabah deposit, which is the equity participation as like as the feature of equity. Thus, Islamic banking still treat the mudharabah deposit as like as the conventional deposit, which is less risky than the equity.

The result of independent t-test is summarized in the table 4.2 below. Partially, there are several banks that shown the statistically significant different in ROMD and ROE with ROE is greater than ROMD, they are Bank Muamalat Indonesia, Bank Syariah Mandiri, BNI Syariah, and Bank Mega Syariah. The other three banks showed no statistically significant difference between ROMD and ROE, which are BRI Syariah, Bank Syariah Bukopin, and Bank panin Syariah. A unique result showed in the other three banks that pointed out the statistically significant difference with the greater ROMD than ROE, which explained that the return for mudharabah depositors are greater than return on equity in the period of 2011 to 2016. However, the result of the simultaneous test pointed out the statistically significant difference between the ROMD and ROE in 10 Islamic banks in Indonesia. This finding indicated the different treatment on depositors and equity holders in Islamic banks in the period of 2011 to 2016.

Table 4. Independent T- Test for ROMD and ROE in Islamic Banks

No	Bank	Var	Means	Mean Difference	Result	Conclusion
1	Bank Muamalat	0.000	0.000	-14.269	Significant	Different: ROMD < ROE
2	Bank Syariah Mandiri	0.000	0.000	-31.733	Significant	Different: ROMD < ROE
3	BRI Syariah	0.000	0.373	0.3316	Not significant	No difference
4	BNI Syariah	0.000	0.000	-4.5166	Significant	Different: ROMD < ROE
5	Bank Mega Syariah	0.000	0.000	-16.011	Significant	Different: ROMD < ROE
6	Bank Syariah Bukopin	0.000	0.369	0.1883	Not significant	No difference
7	BCA Syariah	0.004	0.000	2.6662	Significant	Different: ROMD > ROE

8	Bank Panin Syariah	0.000	0.169	0.6895	Not significant	No difference
9	Maybank Syariah	0.000	0.001	10.155	Significant	Different: ROMD > ROE
10	BJB Syariah	0.064	0.008	5.6166	Significant	Different: ROMD > ROE
11	All samples	0.000	0.000	-4.6883	Significant	Different: ROMD < ROE

Source: *Processed data using Eviews 8 (2017)*

Estimation Results

The panel regression is started with specifying the model for regression. In this research, Fixed effect estimation is used after running the chow test and hausman test to specify the model whether common effect, fixed effect, or random effect is applied. The result for Y_1 (ROMD) is summarized in Table 4.3. as follows:

$$\text{ROMD} = 14.7221625736 - 0.020638638914 \cdot \text{ROA} + 0.0150733550909 \cdot \text{TETA} - 0.0226022780602 \cdot \text{TDTA} - 0.0165715403439 \cdot \text{TFTA} - 0.0418370771883 \cdot \text{BS} - 0.497602925493 \cdot \text{MDA} + [CX=F]$$

Table 5. Regression Result for Y_1 (ROMD)

Variable	Coefficient	Prob.
ROA	-0.020639	0.4634
TETA	0.015073	0.3224
TDTA	-0.022602	0.0224
TFTA	-0.016572	0.0046
BS	-0.041837	0.8291
MDA	-0.497603	0.0117
R-squared	0.610711	
Adjusted R-squared	0.584642	
S.E. of regression	0.863615	
Sum squared resid	167.0663	
Log likelihood	-297.0755	
F-statistic	23.42716	
Prob(F-statistic)	0.000000	

Source: *Processed data using Eviews 8 (2017)*

In equation 1, the value of R^2 suggested that only 58% of the variability of ROMD is explained by the independent variables. The F statistic is significant at α 5% at value 0.000. It indicate that the variables of ROA, TETA, TDTA, TFTA, BS, AND MDA are simultaneously affect the ROMD.

The t-statistic specified, at α 5%, that ROA does not affect the ROMD with the probability of 0.4634. This finding indicated that the value of return on mudharabah deposit is not based on the return on asset. The same result for Total equity/total asset, which is not significant at p-value at 0.3224. This finding means that the increasing in total equity does not give impact to the variability of ROMD. Variables of Total Deposit/total asset (TDTA) and total financing to total asset (TFTA) have the statistically significant p-value at 0.0224 and 0.0046 with negative relations. It means that the increasing of 10% TDTA led the decreasing in ROMD on average 2,26%. The same trend for TFTA to ROMD, an increasing of 10% TFTA led to 1,65% of the return on mudharabah deposit. The size of the bank, represented by the total asset, was found not significant to ROMD. It means that the variability of ROMD is not influenced by the size of the bank. The total account of mudharabah deposit show the statistically significant effect to ROMD with negative relation. An increasing of 10% of total mudharabah deposit account led to 4,9% declining in ROMD.

Data analysis of Independent Variable to ROMD

a. ROA

ROA is the explanatory variable that linked the between the bank performance and the return on mudharabah deposit. The output of the regression implied that the ROA do not influence the ROMD. This result indicated that the return on mudharabah deposit does not base on the variability of the return on asset. In line with the prior study led by Diaw & Mbow (2011), ROA is not the factor that have impact to ROMD.

b. TETA

The variable of TETA is included to see the effect of the growth of equity to the ROMD. This variable is not significant to have effect to the ROMD. The growth of equity does not influence the return on mudharabah deposit.

c. TDTA

This variable is involved to draw the relationship between the growth of deposit and the return to mudharabah depositors. TDTA is found to affect the ROMD. This finding is similar with the result conducted by Diaw & Mbow (2011), that the change in total deposit will have impact to ROMD since the deposit is the main component of the ROMD determination. But this study found that the impact of TDTA to ROMD is in negative relationship. The growth of TDTA will weaken the ROMD.

d. TFTA

The variable of TFTA is involved to see the leverage effect of the total financing to the return of mudharabah depositors. Total financing theoretically should affect the return, since the return comes from the business activities run by the bank. TFTA is assumed to affect the return on mudharabah deposit since the financing is the main business of the bank to gain the profit. This study found that the TFTA does affect the variability of ROMD, but in negative relationship. The growth in total financing tends to reduce the ROMD.

e. MDA

This variable is involved to draw the relationship between the numbers of depositor accounts to the variability of return. The total of MDA is assumed to affect the ROMD positively. The

reason is that the portion of the depositor's fund is reported more than 50% in the bank's total asset. The greater the depositor's fund is assumed to increase the asset that the banks manage to earn profit. However, this research found that the total mudharabah deposit account has the impact to variability of ROMD in negative relationship. This finding indicated that the greater number of depositors would reduce the value of ROMD.

f. BS

Bank size, measured by the logarithm of total assets of the banks, is assumed to affect the ROMD. The increase in total assets indicates the good performance and competition of the bank that will lead the investors to participate their fund in it. The growth of asset will attract the investor to contribute their funds on the bank. however, this research indicated that the total asset of the bank does not have any impact to the variability of ROMD.

To specify the model for Y_2 , we run the chow test to decide between common and fixed model, and run the Hausman test to decide between the fixed and random effect model. For the second regression, fixed effect estimation is applied. The result of the second regression summarized below in Table 4.4. :

$$ROE = 97.2150636287 + 3.23080836628*ROA - 0.458527093676*TETA + 0.0774152810834*TDTA + 0.0422356292293*TFTA - 5.64041321135*BS + [CX=F]$$

In Equation 2, the value of R^2 represented that 63% of the variability of ROE are explained by ROA, TETA, TDTA, TFTA, and BS. The other 37% are explained by the variables outside the model. The F statistic is statistically significant at α 5%, means that the independent variables are simultaneously influence the ROE. The t-statistic disclose the individual relation of the independent variables toward the ROE. ROA, TETA, and Bank Size are statistically significant at α 5%, means that the variability of ROE is influenced by the ROA, total equity, and total asset. An increasing of ROA at 1% will increase the ROE at 3.23%. 1% increasing in TETA led to declining in ROE by 45%. A growth in total asset or bank size by 1% led to diminishing in ROE at 5,64%. The variables of TDTA and TFTA were found not sensitive to ROE.

Table 6. Regression Result for Y_2 (ROE)

Variable	Coefficient	Prob.
ROA	3.230808	0.0000
TETA	-0.458527	0.0177
TDTA	0.077415	0.5425
TFTA	0.042236	0.5570
BS	-5.640413	0.0239
R-squared	0.618069	
Adjusted R-squared	0.594304	
S.E. of regression	11.20732	

Sum squared resid	28260.89
Log likelihood	-912.7767
F-statistic	26.00798
Prob(F-statistic)	0.000000

Source: *Processed data using Eviews 8 (2017)*

Data Analysis of Independent Variable to ROE

a. ROA

This study include the ROA as the explanatory variable that linked the between the bank performance and the return equity. This research found that the ROA has the effect to the change in ROE. The relationship is also positive; the greater the ROA, the higher the ROE. This finding also in line with several studies, that the ROE is dependent to the variability of ROA (Diaw & Mbow, 2011; Saraswati, 2016).

b. TETA

The variable of TETA is involved to draw the relationship between the growths of total equity to the ROE. This study found the negative relationship in these two variables. The higher TETA would reduce the ROE.

c. TDTA

The variable of total deposit to total asset (TDTA) is included to see the effect of the growth on total deposit to the change in ROE. This study concluded that the total deposit does not have impact on the return on equity. This finding is in contract with Saraswati (2016) that disclosed the significance of the total deposit to affect the ROE in sharia rural banks (BPRS).

d. TFTA

The variable of total financing to total asset is assumed to affect the ROE, since the financing activities is the major source of the profit gained by the bank. However, the relationship of ROE to the growth of profit is reflected by its relationship with the return on asset.

e. BS

The total asset of the bank measures the bank size. This variable is verified to have impact on the ROE. The higher total asset will attract the investor to contribute their funds in the bank. However, this study found that the BS affect the ROE with the negative relationship, means that the growth in total asset will decline the ROE. This finding is in line with Hamza (2016) that the small banks seem to offer better return to their shareholders. The higher return is offered to attract more investors to participate their funds.

Within 6 years of observation in 10 Islamic banks, total deposit to total asset (TDTA), total financing to total asset (TFTA), and total of mudharabah deposit account (MDA) were statistically verified to have impact on the ROMD. The other three; ROA, TETA, and Bank Size; were the purposed variables that are insignificant to the variability of ROMD. This result verified the current practice of Islamic banking, where the banks tried to compete with the conventional banks through “smoothing” their return on deposits. Since mudharabah deposit is the major source of the bank’s funds (>50% of total assets), the depositors should gain the competitive rate of return so they would not move their funds to earn the higher profit in conventional bank. Numbers of research

were conducted to prove that, in the most cases, Islamic banks used the conventional deposit rate as a benchmark to deposit return (Cevik & Charap, 2011; Chong & Liu, 2009; Hamza, 2016). Depositor's portion of income generated by the investment of PLS deposit might be less than the market share, Islamic banks would top up this depositor's portion to reach the competitive market (Nienhaus, 2005). The insignificance of ROA indicated the disconnection between the profit gained by the bank and the portion of profit attributable to mudharabah depositors. The variable of MDA (mudharabah deposit account) has the impact on ROMD with the negative relation, in other words, the higher the number of depositors the less the return, or when the number of depositors decrease, the return would increase. This finding reflected the aim of the banks to attract more investment to run the activities. The same case also verified in the statistical result of variable TFTA which have the negative relation towards the ROMD. TFTA are supposed to be the major sources of the bank to earn profit (from deposits and financing activities). The output identified that the TFTA has negative relationship with ROMD; the greater the TFTA, the lower the ROMD. This fact could be caused by niche market currently tapped by the Islamic banks. The small market size derived the bank to have the negative relation on the This finding implied that the determination of ROMD is not based on the profit gained by bank, and by the total amount of depositors and financing activities. This issue had been profoundly discussed by number of scholars to evaluate the mechanism of profit and loss sharing in Islamic banks (Nienhaus, 2005; Greuning & Iqbal, 2007; Ismail & Tohirin, 2010; Diaw & Mbow, 2011)

In the second regression, the ROE was found sensitive to ROA, total equity per total asset (TETA), and size of the bank. ROE is sensitive to the TETA and has negative relation; when TETA is reduced 1%, the ROE will increase at 4.58%. TDTA and TFTA were found not significant to influence the ROE. While the bank size has impact the ROE with negative relation, when the size of the bank declining 1%, it strengthen the ROE at 5.64%.

This finding implied that the ROA is more sensitive to ROE than ROMD. This conclusion was in line with the previous research by Diaw & Mbow (2011). It indicated that the equityholders benefit from the leverage effect while the mudharabah depositors do not. The variable of TFTA also has the different impact to ROMD and ROE. TFTA is more sensitive to ROMD than to ROE. This point suggested that the depositors exposed to the risk of financing activities while the equityholders are safe. The variable of BS (bank size) was found more sensitive to ROE than ROMD. It denoted that the banks would prefer to attract the equityholders to invest rather than the investment in deposit.

The issue of the different treatment to equityholders and depositors in Islamic banks has been intensely conferred among the scholars. Mudharabah depositors, which is in nature, is the equity participation contract. Furthermore, the equityholders have the right to sell their ownership in the secondary market, while the depositors do not have the same facility. The equity holders are allow to controll the business, while the depositors do not have the access to it. In addition, the proportion of the return shared by the banks to equity holders and the depositors are not reflected the essence of the contract which has the same feature; equity-participation. The regression result shows that the ROMD in Indonesian Islamic banks are mostly influenced by the Total deposit/total asset, total financing/total asset, and total of mudharabah deposit account. The statistically insignificant of

ROA and bank size to ROMD might be caused of the “smoothing” process of the return to mudharabah depositors. Numbers of research were conducted to proof that, in the most cases, Islamic banks used the conventional deposit rate as a benchmark to deposit return (Cevik & Charap, 2011; Chong & Liu, 2009; Hamza, 2016). Depositor’s portion of income generated by the investment of PLS deposit might be less than the market share, Islamic banks would top up this depositor’s portion to reach the competitive market (Nienhaus, 2003). This finding reflected that the Islamic banks have not implemented the PLS mechanism.

In the second regression, the ROE was found sensitive to ROA, total equity per total asset, and size of the bank. This fact that the ROA and bank size are more sensitive to ROE than ROMD indicated that the equity holders benefit from the leverage effect while the mudharabah depositors do not, as mentioned earlier in the prior research by Diaw & Mbow (2011).

CONCLUSION

This paper investigated the return on mudharabah deposit and on equity. The result found that the ROMD is tend to be smaller than ROE in Indonesian Islamic banks, even though both of the instruments are equity participation in banking business. This paper investigated the return on mudharabah deposit and on equity. The result found that the ROMD is tend to be smaller than ROE in Indonesian Islamic banks, even though both of the instruments are equity participation in banking business. This study also concluded that the Total Deposit per Total Asset (TDTA), Total Financing per Total Asset (TFTA), and Mudharabah Deposit Account (MDA) affected the variability of the return on mudharabah deposit (ROMD). While the return on asset (ROA), Total equity per total asset (TETA), and bank size (BS) do not give any impact to the ROMD. In addition, the ROA, TETA, and BS affected the variability of return on equity (ROE). The other variables, TDTA and TFTA, were found unsensitive to ROE.

The factors affected to ROMD and ROE also enlightened about the unfair treatment between depositors and shareholders in Islamic banks through the different return and facility under the same type of risk-bearing instruments. This finding also implies that the Islamic banks need to evaluate the mechanism of PLS to meet the suitable governance for the nature of the contracts. As a result, the proper implementation of the contract will create the fairness to all the stakeholders that is comply to sharia values in banking business.

Islamic banking industry, especially in Indonesia, requires an evaluation in their current banking activities to get into the proper path of the aim of Islamic economic framework; to promote the fairness and equal distribution in business. Additionally, without the improvement in the governance of Islamic banking, the current practices that are contrasting the ideal theory would lead to the increased riskiness in institutional and systemic level. Besides, Islamic banking would not be functioning with the full potential and contribute to the better economic condition. The policy-makers should also consider this fundamental requirement of the institutional and regulatory infrastructure to protect the investors in Islamic banking industry under the umbrella of the positive law.

The weakness of this research is that the findings could not be generalized in the global perspective, since the other countries might have the different experiences. The larger sample across countries experiences would draw the global condition of Islamic banking industry.

REFERENCES

- Archer, S., & Karim, R. A. (2009). Profit-sharing Investment Accounts in Islamic Banks: Regulatory Problems and Possible Solutions. *Journal of Banking Regulation Vol.10,4*, 300--306.
- Archer, S., Karim, R. A., & Al-Deehani, T. (1998). Financial Contracting, Governance Structures and The Accounting Regulation of Islamic Banks: An Analysis in Term of Agency Theory and Transaction Cost Economics. *Journal of Management and Governance* 2, 149-170.
- Awadzi, E. A., Chartouni, C., & Tamez, M. (2015, November). Resolution Frameworks for Islamic Banks. *IMF Working Paper*. International Monetary Fund.
- Cevik, S., & Charap, J. (2011). The Behavior of Conventional and Islamic Bank Deposit Returns in Malaysia and Turkey. *IMF Working Paper*.
- Chapra, M. U. (2003). Financial Stability: The Role of Paradigm and Support Institutions. *Islamic Financial Architecture: Risk Management and Financial Stability* (pp. 109-138). Jakarta: Islamic Research and Training Institute.
- Chong, B. S., & Liu, M. H. (2009). Islamic Banking: Interest-Free or Interest-Based? *Pacific Basin Finance Journal* 17, 125-144.
- Diaw, A., & Mbow, A. (2011). A Comparative Study of The Returns On Mudharabah Deposit and On Equity in Islamic Banks. *Humanomics Vol.27 No.042*, 229-242.
- El-Hawary, D. A., Grais, W., & Iqbal, Z. (2003). Regulating Islamic Financial Institutions: The Nature of The Regulated. *Islamic Financial Architecture: Risk Management and Financial Stability* (pp. 51-92). Jakarta: Islamic Research and Training Institute.
- Hamza, H. (2016). Does Investment Deposit Return in Islamic Banks Reflect PLS Principle? *Borsa Istanbul Review* 16-1, 32-42.
- Hasan, Z. (2010). Profit Sharing Ratios in Mudaraba Contracts Revisited. *The International Journal of Banking and Finance Vol.7 Number 1*, 1-18.
- Hawary, D. E., Grais, W., & Iqbal, Z. (2004, March). Regulating Islamic Financial Institutions: The Nature of The Regulated. *World Bank Policy Research Working Paper 3227*. World Bank.
- Ismail, A. G., & Tohirin, A. (2010). Islamic Law and Finance. *Humanomics Vol.26 No.3*, 178-199.
- Khan, W. M. (1985). *Towards an Interest-Free Islamic Economic System: A Theoretical Analysis of Prohibiting Debt Financing*. Leicester, U.K.: Islamic Foundation & The International Association for Islamic Economics.
- Nienhaus, V. (2003). Corporate Governance in Islamic Banks. In T. Khan, & D. Muljawan, *Islamic Financial Architecture: Risk Management and Financial Stability* (pp. 289-311). Jakarta: Islamic Research and Training Institute.
- Otoritas Jasa Keuangan. (2016). *Statistik Perbankan Indonesia*. Jakarta: Otoritas Jasa Keuangan.

- Ramlan, H., & Adnan, M. S. (2016). Profitability of Islamic and Conventional Bank: Case Study in Malaysia. *Procedia Economics and Finance* 35, 359-367.
- Rosly, S. A., & Zaini, M. A. (2008). Risk-Return Analysis of Islamic Bank's Investment Deposits and Shareholders Fund. *Managerial Finance Vol.34 No.10*, 695-707.
- Saraswati, R. (2016). Perbandingan Imbal Hasil Pemegang Saham dan Dana Pihak Ketiga pada BPR Syariah. *Master Thesis*. Yogyakarta: Postgraduate Program, Magister Ekonomi dan Keuangan, Universitas Islam Indonesia.
- Sundararajan, V., & Errico, L. (2002). Islamic Financial Institutions and Products in The Global Financial System: Key Issues in Risk Management and Challenges Ahead. *IMF Working Paper*.
- Tiby, A. M. (1956). *Islamic Finance: How to Manage Risk and Improve Profitability*. Hoboken, New Jersey: John Wiley & Sons, Inc.
- Tohirin, A. (2004). Mudharabah Contracts: Comparing Depositors and Shareholders Return. *National Seminar in Islamic Banking & Finance, Global Challenges & Competitiveness on Malaysian Financial Institutions*. Malaysia: Faculty of Economics & Muamalat, Islamic University College of Malaysia.