# ISLAMIC BANKS' PROFITABILITY AMID THE COMPETITIVE FINANCING IN INDONESIA

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**Abstract:** This study attempts to analyze the role of internal bank factors towards Islamic banks' performance in Indonesia during 2006-2013. For this purpose, this study uses panel data approach to estimate the empirical model. In this research, the random effects model is selected to explain the Islamic banks' profitability behaviour. The results present that all independent variables are good predictor for profitability which is measured by return on asset (ROA). The model shows that net profit margin and financing deposit ratio are significant predictors for Islamic banks' financial performance. In contrast, non-performing financing and operating efficiency have negative impact to return on asset. In addition, this study indicates that capital adequacy ratio has negative correlation with profitability. It is evident from regression model that the Islamic banks' profitability strongly depends on the profit margin and funds mobilization. Moreover, increasing in non-performing financing and operating expenses will reduce their profit. These results indicate that Islamic banking industry in Indonesia has not well developed. This study also reveals that the Islamic banks in Indonesia are probably facing losses in recent years. Islamic banks need to invite more funds from depositors and to mobilize their financing into more various business sectors. Islamic banks need to strengthen their risk management frameworks and to ensure their financing stability within the market.

**Keywords:** profitability, financing, deposit, capital, asset.

**JEL:** E21, G21, O16

#### 1. INTRODUCTION

In recent years, financial institutions including Islamic banks in Indonesia have faced high competitive situation at national and international level. Since 2005, Islamic banks in Indonesia have grown in many areas of business as an alternative way for developing various economic activities. Sufian (2007) noted that despite it was developed to accomplish the requirements of Muslims, at present Islamic banking has currently achieved worldwide acceptance. Akhtar, Ali, & Sadaqat (2011) pointed out that Islamic banking is documented as one of the greatest rising areas in finance and banking in the world.

Islamic banking in Indonesia began well before a formal legal framework for Islamic banking operations was brought into force. The government sanctioned

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Islamic banking through Government Decree No.72 of 1992 relating to Banks Applying Share Base Principles in 1992. Thereafter, these regulations served as the legal framework for Islamic banking operations in Indonesia. Between 1992 and 1998, one Islamic commercial bank and 78 Islamic rural banks were operated. The Act No. 10 of 1998, amending Act No. 7 of 1992 related to banking came into force and gave stronger legal foundation for the existence of Islamic banking in Indonesia. Then, Act No. 23 of 1999 related to Bank Indonesia authorized Bank Indonesia to also conduct its operations according to *Shari'ah* principles. Izhar & Asutay (2007) noted that Islamic banking industry in Indonesia has been growing rapidly since then.

The significant changes of the development of Islamic banking industry in Indonesia took place in 2002 when Bank Indonesia launched the "Blueprint of Islamic Banking Development in Indonesia". The blueprint contains the vision, mission, and objectives to be achieved by Islamic banks in the country. Islamic banking industry in Indonesia was targeted to capture 5 percent of the total market share of the banking industry by the year 2009. The government issued the Islamic Banking Act No.21/2008 that provides a legal basis for further effective development of the Islamic banking industry in Indonesia. In addition to generally develop Islamic banking industry, this regulation is expected to accelerate achieving this target (Kasri & Kassim, 2009).

Indonesia's banking sector is growing along with its economy which it represents a small portion of the overall financial sector. Indonesian banking authorities reiterated the ambitious goal of having 10% of the country's total banking assets under shariah-compliant management by the year 2015. In fact, at the end of 2012, Islamic bank assets contributed only about \$16 billion or less than 5% of the total asset in the banking sector. At the end of 2013, Indonesia has 11 full fledge Islamic banks plus another 32 conventional banks with a shariah window/shariah business and 160 Islamic rural banks. There are two leaders; Bank Mandiri Syariah and Bank Muamalat, which together account for at least half of Indonesia's Islamic finance sector. Total deposits at all Islamic banks in Indonesia rose by 30% in 2012 to a total of approximately \$16 billion USD, representing about 4.6% of Indonesia's total bank assets. Since this year, office network has been rapidly increasing up to 16.7% despite slow growth in number of banks. Due to high GDP growth, Islamic Bank assets grow as fast as 38.40% due to higher financing demand. Total Asset is amounted to USD 22.4 billion with Financing up to USD17.45 billion. Islamic Banks resilience is maintained as CAR keeps stable on 14.71% and ROA preserves at 2.01%. FDR of Islamic banks is around to 102%, while NPF net reach 2.00%. With its impressive growth rate, Indonesia Islamic Banking industry has even extended its influence to other Islamic financial sectors (Annual Report of Bank Indonesia, 2012).

The main problems faced by Islamic banks since 2009 were generally related to increasing in liquidity risk and slowing down their financial performance. These

are suspected as an impact of the global economic crisis occurred in the previous year. Related to the potential deceasing in financial performance, the global financial crisis has specifically affected the Islamic banking profitability. This is due to high equivalent rate of margin and profit-sharing ratio imposed by Islamic banks to the customers as the main source of income. In fact, Islamic banks still have higher fixed costs and at the time they require to allocate more allowance for earning asset losses that subsequently reduce their profitability (*Indonesian Islamic Banking Outlook 2010*).

Since the Islamic bank's performance fluctuates periodically, the assessment system of bank's health must be reviewed periodically to adjust to the recent condition. In this context, Bank Indonesia as the central bank must evaluate the assessment system of bank's health in order to achieve their optimum performance. For the banks, the result of bank assessment may be used as an instrument to formulize the strategies for bank further development. For this reason, this paper attempts to provide an evidence of profitability analysis of the Islamic banking industry. This research investigates the profitability of selected Islamic banks as research samples.

## 2. THEORETICAL FRAMEWORK

Profitability generally measures objective of private organization or firm as indicated by return on sales, assets, and owners equity. Profitability ratio can be simply defined as the ability of a business to earn a profit which is left of the revenue a business generates after it pays all expenses directly related to the generation of the revenue, such as producing a product, and other expenses related to the conduct of the business' activities (Ali, Shafique, & Razi, 2012). The determinants of bank's profitability might come from two sides, internal and external factors. Internal factors include financial statement variables and non financial statement variables. The internal determinants are controlled under the bank management; meanwhile external factors such as inflation, government policies, taxes and also competition, bank management, scarcity of capital are sometime unpredictable.

Profitability ratio is an important indicator for the manager and shareholders of the firm including bank to avoid unfavourable conditions which includes losses on loans and unforeseen sudden changes in economic conditions. Return on assets (ROA) and return on equity (ROE) are the largely pertained ratios used to measure financial performance in the Islamic banking profitability analysis. Some papers studied this issue using the profitability from these two dimensions. These papers used internal factors such as Bank's Size, Gearing Ratio, Asset management, NPLs Ratio, Capital Adequacy, and Operating Efficiency as explanatory variables (Akhtar et al., 2011; Siddiqui, 2008; Sufian & Habibullah, 2009). However, these papers found different role of each explanatory variable to the profitability.

Another earlier paper which combines macroeconomic and internal factor for profitability analysis was conducted by (Haron, 2004). He found that interest rates,

inflation and size have significant positive impact on the profits of Islamic banking. He also pointed out that profit-sharing ratio between banks and the user of funds which is a main predominance of Islamic banking seems to be very favourable to the bank. The profit-sharing ratio between the banks and the providers of funds also indicates mutual advantages which create an equitable benefit among them. Furthermore, Ali *et al.* (2012) found that market share and money supply have an adverse effects on profits.

Some researchers such as Sufian (2007) and Sufian & Noor (2009) provide various results of Islamic banking performance across banking systems. (Sufian, 2007) found small and home private banks emerge to be the utmost efficient. Sufian & Noor (2009) concluded that the Islamic banks have to improve their competent in taking advantage of their resources to the optimum extent. Akhtar et al., (2011) and Hassan, Mohamad, & Bader (2009) pointed out that banks are generally more competent in utilizing their resources to produce profits and revenues in Pakistan and on a cross-country among 11 Organization of Islamic Conference (OIC) nations.

In addition, Shahimi, Ismail, & Ahmad (2006) stated that profits from traditional activities in Islamic banks are generally measured by net income margin (NIM). This variable could be calculated as the ratio of the difference between income from investment of depositors' fund and income attributable to depositors, to total assets. This margin reflects cost of bank intermediation services and the efficiency of the banking sector. Furthermore, the bank with low cost and high efficiency will consequently have a high income. Since this variable has positive correlation with profit, the higher the NIM causes the higher banks profitability. This condition will potentially make a stable banking sector in a country.

An interesting research which identified the determinants of profitability in Islamic Banks was conducted by (Bashir, 2003). He focused on cross-country analysis of 14 Islamic banks in 8 countries for the period of 1993 to 1998. This research reported that loan ratios and capital are significantly affected return on asset (ROA) as a proxy of profitability indicators. In addition, (Akhtar et al., 2011) reported that Size of the bank does not significantly affect the Islamic banks' profitability. They also found that most of the Islamic banks in Pakistan are facing losses in recent years. Moreover, capital adequacy ratio has a significant relation with profit which is expected as an impact of prudential regulations tightens by the State bank of Pakistan.

According to these literatures, we can summarize that the profitability is generally measured by Return on Asset (ROA) and Return on Equity (ROE). Flamini, Mc Donald, & Schumacher (2009) noted that ROA is a better key proxy than ROE because an analysis on ROE neglects financial leverage. This conclusion is also supported by Wasiuzzaman & Tarmizi, (2010). The ROA is defined as the ratio of net profits to average total assets expressed as a percentage. Theoretically, it can be highlighted that there are some variables may affect bank profitability, such as

capital adequacy ratio (CAR), financing to deposit ratio (FDR), operating efficiency ratio (OER), non performing financing (NPF) and net profit margin (NPM).

CAR indicates the bank's ability to cover the decreasing assets which is lost of those can cause the losses. Based on central bank regulation, banks have to full-fill minimum capital adequacy ratio at the level of 8%. The high capital ratio means that the bank protects the depositor. Furthermore, it increases the level of customer loyalty. Banks should manage CAR at the optimum level to ensure that the banks operate at the right way. This variable is potentially affect bank's profitability.

FDR determines how far the capability of bank in paying back the fund of depositor. The higher credit tends to create the greater income. Based on Bank Indonesia's Regulation No. 6/23 DPNP/2004, the acceptable limit of FDR is between 85% and 100%. It seems that the banks should maintain the FDR in order to achieve the profit target. Theoretically, it has negative correlation with some profitability ratios.

Operating efficiency ratio (OER) generally measures a capability of bank management in controlling operating expense. The lower ratio means that the bank is well operated. For example, if the OER is close to 75%, it indicates that bank is operated efficiently. However, if this ratio is above 90% and close to 100%, it means that the bank performs the low efficiency. Based on regulation of Bank Indonesia, the OER level which can be tolerated by bank of Indonesia is maximum 93.25%. It can be inferred that OER has negative effect to bank's profit.

According to the regulation of Bank Indonesia No. 6/9/PBI/2004/2004, non-performing credit ratio where in Islamic banking is called as non-performing financing (NPF) is maximum 5%. The lower NPF means the lower credit risk guaranteed by the bank. Bank with Higher NPF, will get larger fee even in reserve of earning asset or any other fees. Therefore, it has the potentials to lose. In this case, NPF has negative correlation with profit.

Profits from activities in Islamic banks could be effectively measured by net profit margin (NPM). It is calculated as the ratio of the net income and operating income. The margin creates a wedge between returns on deposits and loans, and reflects cost of bank intermediation services of the Islamic banking sector. In general, the higher the NPM, the higher are the banks' profitability, and the banking sector will be more profitable.

As was pointed out earlier, this research intends to understand the determinants of Islamic banks profitability. With the Islamic banks sector is in the development process in Indonesia, this study expects the banks to manage their assets better rather than earn profit. Furthermore, to extend the literature on the profitability of Islamic banks, this study also looks to provide scholars the new empirical support on the determinants of profitability of the Islamic banks in Indonesia.

#### 3. RESEARCH METHOD

Since this research attempts to analyze the Islamic banks profitability in Indonesia, an appropriate method is needed. The theoretical framework provided in the previous section has presented some basis in determining the various factors of Islamic bank profitability. Based on this section, this research uses ROA to measure bank profitability with five independent variables, namely CAR, OEA, FDR, NPF and NPM where the definition of those have been defined before. The population in this research is Islamic commercial bank in Indonesia in within the period of 2013. Since the total number of Islamic banks in Indonesia until 2013 is 11 banks, however, due to the minimum requirement and sufficient data, this research only uses 3 banks as the samples which are the main leader in Islamic banks industry. They are Mega Bank Muamalat Indonesia (BMI), Bank Syariah Mandiri (BSM), and Bank Mega Syariah (BMS).

#### 3.1. Data

The data used in the empirical analysis are collected from the banks' published quarterly financial reports of Bank Indonesia and the selected Islamic banks. This research employed quarterly data for the period of 2006.1-2013.4. By polling the data, 96 data series were collected from various documents.

## 3.2. Definition and Variables Measurement

This research analyzes the Islamic banks' profitability using ROA as a dependent variable and five independent variables, namely CAR, FDR, OER, NPF, and NPM. These variables are defined and explained as follows:

## ROA (Return on Assets)

This ratio shows how well management is using assets to make profit. ROA shows the capability of a bank in managing assets available to earn net income. Return on Assets ratio is calculated from Net Income divided by Total Assets.

$$(ROA) = \frac{Net \, Income \, before \, Tax \, 100\%}{Total \, Assets}$$

## CAR (Capital Adequacy Ratio)

Capital adequacy ratio is equal to equity divided by Total assets. This ratio shows a bank's capital to its risk. In other words, it measures how well bank is able to protect its depositors and lenders from bank failure. According to regulation of Bank of Indonesia No.6/23/DPNP/2004, CAR is formulated as:

$$CAR = \frac{Bank Capital}{Asset(Risk Weighted Average)} \times 100\%$$

FDR (Financing to Deposit Ratio)

This variable reflects the bank's ability to mobilize the depositor funds. According to Bank Indonesia's rule, FDR is calculated using the ratio between total financing in commercial Islamic bank and total depositor funds.

$$FDR = \frac{Total \, Financing}{Total \, Depositors \, Funds} \times 100\%$$

OER (Operating Efficiency Ratio)

OER is used to measure the capability of bank management in controlling the operating expense to the operating income. OER is calculated by using comparison between operating expense and operating income. The OER formula is as follows:

$$OER = \frac{Operating\ expenses}{Operating\ income} \times 100\%$$

NPF (Non-Performing Financing).

This variable measures the bank's ability to manage the financing to the customer. NPF is the ratio between non-performing financing and total financing. According Bank Indonesia's rule, NPF is defined as follows:

$$NPF = \frac{Non\ Performing\ Financing\ (Substandard\ , doubtful\ and\ loss)}{Total\ Financing} \times 100\%$$

NPM (Net Profit Margin)

This variable indicates bank's profitability which also reflects the bank's efficiency. It is calculated as the ratio of net income and operating income.

$$NPM = \frac{Netincome}{Operating\ Income} \times 100$$

# 3.3. Method of Analysis

This research analyzes empirical model Islamic banks' profitability using panel data of three Islamic banks. The model estimates profitability ratio which is

measured by ROA and five explanatory variables, they are CAR, FDR, OER, NPF, and NPM. The model assumes that CAR, FDR, and NPM have positive correlation with profitability ratio. Meanwhile, OER and NPF are thought to have a negative correlation with the dependent variable. Since the study involves unbalanced panel data, the appropriate model for this kind of analysis is a regression for panel data.

For example, consider an economic model which explains relationship between a dependent variable (Y) and two observable explanatory variables ( $X_1$  and  $X_2$ ) for number of units and more than one period. That is a set of panel data for Y,  $X_1$ , and  $X_2$ . The panel data consists of N-units and T-time periods, and therefore the model has N times T observations. A theoretical model can written as follows:

$$Y_{it} = f\left(X_{1it'}, X_{2it}\right) \tag{1}$$

Then, the panel regression model is given by:

$$Y_{it} = \beta_{0it} + \beta_1 X_{1it} + \beta_2 X_{2it} + \mu_{it} \text{ for } i = 1, 2, ..., N \text{ and } t = 1, 2, ..., T$$
 (2)

Where  $Y_{it}$  is the value of Y for the unit i and for the time period t;  $X_{1it}$  is the value of  $X_1$  for the unit i and for the time period t, and  $\mu_{it}$  is the error for the unit i and for the time period t. Error term for the regression model is decomposed into two components. The first component represents all unobserved factors that vary across units and over time as constant effects which lead to fixed effects model. The second component represents all unobserved factors that vary across units and time as a random effects through residual which lead to random effects model. It is assumed that unobservable factors for the unit i and period at t will affect constant at the empirical model.

In this research, the basic model of Islamic banks' profitability ratio (ROA) is formulated as follows:

$$ROA_{it} = f(CAR_{it'}FDR_{it'}OER_{it'}NPF_{it'}NPM_{it'})$$
(3)

By extending equation (3), the panel regression model which consists of data with index i referring to Islamic bank i and t to quarterly period t is expressed as follows:

$$ROA_{i_t} = \beta_0 + \beta_1 CAR_{i_t} + \beta_2 FDR_{i_t} + \beta_3 OER_{i_t} + \beta_4 NPF_{i_t} + \beta_5 NPM_{i_t} + \varepsilon_{i_t}$$
(4)

As widely known, there are three approaches of panel data namely common, fixed and random effects model. Basically, random effects model is widely preferable because it covers characteristics of the data based on time period. In this model, the estimation results do not lose degrees of freedom, as is the case in and common and fixed effects. However, it needs preconditions test before choosing the best model (Hidayat & Abduh, 2012). Model selection among these three approaches will be conducted using Chow test and Hausman test. A Chow test is

used to choose which a better model between common and fixed effects is. Meanwhile, fixed effects against random effects approach will be selected based on Hausman criterion.

# 4. RESEARCH FINDING AND DISCUSSION

This research analyzes a set of panel data from 92 quarterly observations, corresponding to 3 Islamic banks for the period between first quarter 2006 and fourth quarter 2013. The data were obtained from financial report of Bank Indonesia and these selected Islamic banks. Table 1 shows the descriptive statistics of the statistical characters of all variables, meanwhile Figure 1 and Figure 2 describe the volatility of the data based on quarterly period.

Several steps in the analysis using panel data should be processed in order to select which model is better; common, fixed effects or random effects model. The common model assumes that the intercept (individual effects) and slope (coefficient regression) are the same for each unit. In other words, the regression results are considered applicable for all individuals at every time. Furthermore, this model considers that individual characteristics across unit and time variant do not affect the regression coefficients. Moreover, fixed effects model assumes that differences across units of observation can be captured by differences in the constant term. An

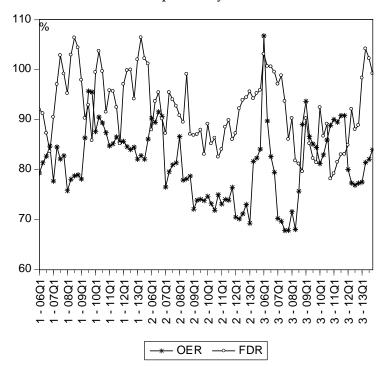


Figure 1. Data OER and FDR, 2006.1-2013.4

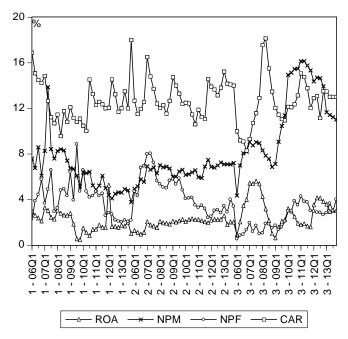


Figure 2. Data ROA, NPM, NPF and CAR, 2006.1-2013.4

Table 1 Descriptive Statistic of the Variables

Year	Statistic	ROA	OER	CAR	FDR	NPM	NPF
2006	Mean	2.06	87.37	12.16	93.77	6.51	3.57
	Maximum	3.98	106.76	16.88	103.12	8.59	6.94
	Minimum	0.89	79.29	8.30	83.60	4.35	0.55
	Std. Dev.	1.03	7.61	2.68	6.17	1.40	2.32
2007	Mean	3.30	76.73	12.61	94.56	8.38	4.40
	Maximum	5.59	84.52	16.50	102.87	13.87	8.04
	Minimum	1.53	67.78	9.32	86.08	6.31	1.01
	Std. Dev.	1.65	6.22	2.07	4.93	2.00	2.66
2008	Mean	2.44	78.09	13.06	92.35	7.53	3.72
	Maximum	4.25	89.03	18.14	106.39	8.41	5.66
	Minimum	0.98	68.02	9.57	79.58	6.73	1.06
	Std. Dev.	0.83	5.63	2.65	9.30	0.66	1.70
2009	Mean	1.70	83.26	12.09	87.57	7.31	4.38
	Maximum	2.76	95.71	14.73	97.93	11.38	8.86
	Minimum	0.45	72.05	10.82	81.39	5.15	1.36
	Std. Dev.	0.76	8.80	1.29	4.73	1.93	2.31
2010	Mean	2.00	82.36	12.08	90.32	9.23	4.09
	Maximum	3.18	90.52	14.53	103.71	15.49	6.59
	Minimum	0.81	71.84	10.03	78.17	5.24	2.98
	Std. Dev.	0.72	6.96	1.28	7.52	4.46	0.94

contd. table 1

Year	Statistic	ROA	OER	CAR	FDR	NPM	NPF
2011	Mean	1.78	83.36	12.80	87.03	9.23	3.62
	Maximum	2.22	90.80	15.07	95.82	16.14	4.71
	Minimum	1.38	73.07	11.06	79.20	4.88	2.42
	Std. Dev.	0.26	7.031	1.38	5.47	4.93	0.74
2012	Mean	2.87	77.91	13.06	92.72	8.60	2.72
	Maximum	5.24	85.66	14.54	99.96	14.70	3.10
	Minimum	1.54	70.11	11.16	84.90	4.11	2.09
	Std. Dev.	1.23	5.85	0.981	4.83	4.43	0.31
2013	Mean	2.27	81.27	13.79	99.73	7.65	2.97
	Maximum	3.57	86.10	18.00	106.44	11.66	4.01
	Minimum	1.01	69.24	12.00	94.22	3.78	2.02
	Std. Dev.	0.73	4.29	1.60	3.91	2.94	0.73

important assumption in random effects model is that the unobserved random effects are uncorrelated with the explanatory variables. A Hausman test is a common method used to compare the fixed and random effects for testing to this assumption (Baltagi, 2001; Wooldridge, 2003). Table 2 presents the result of test between common against fixed effects. Based on F and Chi-square statistic, it can be inferred that fixed effects model is better than common model.

The next step is to assess whether the panel data model follows fixed effects or random effects model. The result of Hausman test based on chi-square statistic as reported in Table 3 show that the corresponding effects are statistically insignificant. It means that null hypothesis which states that random effects is true should be accepted. The conclusion of the test is that random effects model is appropriate model for this analysis. The arguments of the model are that fixed effects model often results in a loss in large number of degrees of freedom and it also eliminates a large portion of the total variation (Shahimi et al., 2006). Finally, further analysis profitability will be conducted based on random effects model.

Table 2
Test for Common and Fixed Effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	9.579544	(2,57)	0.0003*
Cross-section Chi-square	27.818221	2	0.0000*
Period F	1.639877	(31,57)	0.05260
Period Chi-square	61.205959	31	0.0010*
Cross-Section/Period F	2.333030	(33,57)	0.0024*
Cross-Section/Period Chi-square	82.052523	33	0.0000*

*Note*: Ho: Common model is true; Ha: Fixed effects is true. \* = Ho is rejected at 0.01 significance level. It means that fixed effects is better than common model.

Table 3
Hausman Test: Fixed and Random Effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	2.973998	5	0.7040

*Note*: Ho: Random effects is true; Ha: Fixed effects is true. Ho is accepted at 0.10 level of significance. It means that random effects model is better than fixed effects.

The empirical results of random effects are presented in Table 4. All independent variables in model using random effects are significant. As we expect, OER and FDR positively influence the dependent variable, meanwhile NPM and NPF have negative correlation with ROA. Surprisingly, CAR has negative effect to the profitability. It indicates that overall the model is not significant. The F-statistic resulted in model shows that overall test of all independent variable is significant at 1 percent significance level. Generally, the empirical model confirms that the profitability of Islamic banks in Indonesia strongly depend on the some internal factors.

A negative correlation between CAR and ROA in this study does not fit with some previous studies, which had found a positive relationship between capital ratio and profitability. Some other papers found that capital adequacy has positive relationship with profitability (Akhtar et al., 2011; Ali, Akhtar, & Ahmed, 2011; Ramlall, 2008). One possible reason why CAR has negative correlation with ROA can be explained by risk management perspective. In the case that Islamic banks' risk is measured by capital, banks with high levels of non-traditional activities have larger capital ratios, allowing greater capacity to absorb asset losses from the activities. Finally increasing in capital ratio tends to decrease the profitability ratio.

As we expect, the coefficient of operating efficiency is statistically significant even though at the 0.01% significance level. Akhtar et al. (2011) and Sufian & Habibullah (2009) also found similar result which operating cost negatively affect profitability ratio. In contrast, (Izhar & Asutay, 2007) concluded that operating cost variable has an insignificant and positive relationship with profitability indicators. Based on these various results, it can infer that the relationship between operating efficiency and profitability indicators may runs in two ways. First, it indicates quite good expenses management since this promotes good performance. Secondly, it could also be interpreted that the more profitable the bank will spend a higher salary expense.

In this model, non performing financing which measures credit risk has negative correlation with profitability ratio. This finding implies that Islamic banks with high involvement in business activities are less risky. This phenomenon is in line with the situation in Malaysia (Shahimi *et al.*, 2006). A similar finding was concluded by 'Akhtar *et al.*,' (2011) for the data of Islamic Banks in Pakistan. Consequently,

Islamic banks in across countries should manage their financing better in order to improve their financial performance.

Next discussion comes to another bank characteristic that is the relationship between FDR and profitability ratio. Since FDR represents the bank's ability to mobilize depositors' funds, it is expected that this variable positively affect the profitability ratio. In fact, this study presents positively significant impact of the financing-deposit ratio on ROA. This is not in line with the findings of Izhar & Asutay (2007) who found that depositors' funds result in adverse effect on the profitability indicator. Our finding is seems reasonable one where the higher financing will probably makes more profit.

The analysis of NPM to ROA demonstrates that the percentage of incomes from financing activities had a positive relationship with profitability measure. It confirms the findings of Izhar & Asutay (2007), as NPM increases will result in an increase of *ROA*. This also indicates that the increase of Islamic banks' income from financing activities lead to bring the better banks' performance. This result suggests that business activities relating to the Islamic banks tend to be more prospective.

As a final point, with regard Islamic banks activities, bank-specific characteristics used in this empirical model are able to explain the determinants of the financial performance indicator among Islamic banks in Indonesia. For addition, the empirical estimation using random effects model exhibits the variation effects of its coefficients due to cross section and time period variant. Table 5 presents empirical estimates which contain heterogeneity effects due to cross section individual unit. Based on this estimates, Bank Mega Syariah has a highest constant, meanwhile Bank Mandiri Syariah experiences with a lowest autonomous profitability. Figure 3 depicts the volatility of the heterogeneity effects caused by time variant. This figure describes low volatility of banks' profitability across this period.

Table 4
Estimates Result of Random Effects

Variable	Coefficient	t-Statistic	Prob.
Constant	6.771585	4.532131**	0.0000
Capital Adequacy Ratio	-0.070669	-1.871551*	0.0645
Operating Efficiency Ratio	-0.093293	-9.851671**	0.0000
Financing Deposit Ratio	0.036867	3.421809**	0.0009
Non Performing Financing	-0.147220	-3.779596**	0.0003
Net Profit Margin	0.143694	6.716483**	0.0000
R-squared	0.848921		
F-statistic	8.428559		
Prob (F-statistic)	0.000000		
Durbin-Watson stat	1.434944		

*Note:* \*, \*\* = significant at 0.10 and 0.01 significance level respectively.

Table 5
Cross Section Effects of ROA Estimates

No.	Unit of Islamic Banks	Effects
1	Bank Mega Syariah	0.573341
2	Bank Muamalat Indonesia	0.058213
3	Bank Mandiri Syariah	-0.631553

#### Time Series Effect

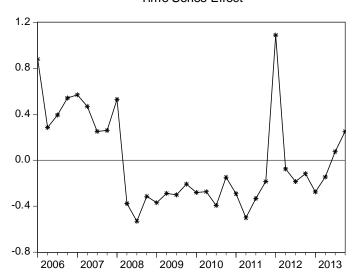


Figure 3: Time Series Effects of ROA Estimates

#### 5. CONCLUSION

In the growth of Islamic banks, many factors may affect their profitability. This study investigates the role of internal bank factors towards Islamic banks' financial performance in Indonesia. For this purpose, this study uses panel data approach to estimate the empirical model. The result shows that random effects model is the best model compared to fixed effects and common model respectively. The results present that most of those independent variables are good predictor for profitability which is measured by ROA. The random effects model shows that net profit margin and financing deposit ratio are significant predictors for Islamic banks' financial performance. Other two variables, non performing financing and operating efficiency have negative impact to return on asset. In addition, this study indicates that capital adequacy ratio has negative correlation with profitability.

This result indicates that Islamic banking industry in Indonesia has not well developed. It is evident from regression model that the Islamic banks' profitability depends on the profit margin and funds mobilization. In contrast, increasing in

non-performing financing and operating expenses will reduce their profit. These phenomena reveal that the Islamic banks in Indonesia are probably facing losses in recent years. Islamic banks need to invite more funds from depositors and to mobilize them into more various business sectors. Since among Islamic banks face different asset quality, it is critical that Islamic banks to strengthen their risk management frameworks in order to manage their financing. In the current volatile environment, Islamic banks also need to ensure financial stability within the market.

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