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Fin Performance of the bank crisis in Yemen: Does Islam Bank of counterparts?

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ABSTRACT

The paper looks at the actual performance of IBs and CBs in Indonesia where the portion of market share is still four percents and addresses two broad questions (i) have IBs performed differently than CBs during the financial crisis?; and (ii) what challenges has the crisis highlighted as facing IBs going forward? The existing research is still inconclusive regarding the relationship between financial crisis and Islamic banks performance. For this study, samples of two Islamic banks and ten conventional banks were chosen. The study covers the period 2003 to 2011. We shall apply a regression analysis using the panel data comprising 10 conventional banks and 2 Islamic banks for 9 years. The research shows that both Islamic banks and conventional banks in Indonesia are not affected by global financial crisis 2007-2009. Both are resilient and Islamic banks have a same performance with conventional banks.

Keywords: Fin Performance, bank crisis, Islam Bank of counterparts

1. Introduction

Banks play an important role in the economy. Among the primary roles of a bank is accepting excessive funds from surplus units in the form of deposits and providing financing to deficit units. The importance of banks can be seen from many aspects such as motivating people to save, channeling household savings into productive capital, facilitating productive use of surpluses to generate employment, promoting economic welfare and providing risk-free income to depositors. As a part of the financial system, banks have contributed towards economic growth (Kings & Levine, 1993; Levine & Zervos, 1998). Nowadays, banks are interconnected with the rest of the economy. The weaknesses of this interconnection are that when there is a bank failure, it will spread to others in the economy. The global financial environment enables the possibility of transmitting the crisis in the entire system and banks play a deciding role in the development of financial crisis. The sustainability of the world financial system has been significantly challenged in recent years by the effects of the global financial crisis. The recent global financial crisis which originated from the United States has had severe implications on the world economy. (For the last 24 years, there have been 124 financial crises in the world but the United States financial crisis which is global in nature has become the most severe and the worst crisis since 1930 (Jones, 2009; Nonomiya and Lanman, 2008; The New York Times, 2010; Volcker, 2010 in Mirakhor and Smolo, 2010)). The financial crisis has hinted that the perceived strength of modern financial markets was illusionary. Islamic finance has an opportunity and a chance to present itself as an alternative financial model which could sustain during the global crisis and recessions. Islamic finance which is based on the Shari'ah (Islamic law) has an ethical guidance for market players to be not greedy, to avoid interest, to avoid exploitation over others, etc. Practically, Islamic finance industry avoids financial engineering products such as Mortgage Backed Securities (MBS)/Collateralized Debt Obligations (CDO). It gives Islamic finance industry such as Islamic banks strength to survive.

Islamic banks have been affected differently from conventional banks during the global financial crisis (Hasan and Dridi, 2010). This IMF research mentions that Islamic bank business model helped limit in controlling the adverse impact on profitability in the year 2008, while weaknesses in risk management practices in some Islamic banks led to a larger decline in profitability in 2009 compared to conventional banks. Furthermore, Islamic bank credit and asset growth performed better than did that of conventional in years 2008-09, contributing to financial and economic stability (Hasan and Dridi, 2010).

Indonesian Islamic banks have shown similar results to general Islamic banks in the world during the financial crisis. Based on the data from Bank Indonesia, it is claimed that the Islamic banks in Indonesia after the monetary crisis period 1997-1998 had a relatively better recovery as compared to conventional banking institutions as indicated by the relatively low non-performing financing (NPF) ratio and there was no occurrence of negative spread in their operations. The data also indicated that Islamic banks were relatively more capable of channelling funds to the production sector with the financing to deposit ratio (FDR) returning to

the level over 100%, while conventional banks' loan to deposit ratio dropped below 50% (Gamaginta and Rokhim, 2010).

Low level of integration and simple transactions are two factors considered "shielding" the Islamic banks from the direct impact of shocks in the global financial system. The exposure of Islamic banking financing was still more geared to the domestic economy and therefore, the level of integration with the global financial system and the sophistication level of transaction were considered low (Bank Indonesia, 2009b). From the structure, it seems that Islamic banks appear to be more resilient to financial distress than conventional banks, but it does not mean that the performance of Islamic banks was better compared to conventional banks during the crisis, especially from 2007 to 2009. If Islamic banks of Indonesia really performed better than conventional banks, we need to find out the determinants of their stronger performance especially in terms of profitability.

2. Literature Review

Some literatures discuss bank performance from profitability view. There are only few literatures that discuss bank profitability on the US Banking system (Berger, 1995; Angbazo, 1997; De Young & Rice, 2004; Stiroh & Rumble, 2006; Hirtle & Stiroh, 2007) in (Sufian & Habibullah, 2010) and the banking system in the Western and developed countries e.g. New Zealand (To & Tripe, 2002), Australia (William, 2003), Greece (Pasiouras and Kosmidou, 2007; Kosmidou et al, 2007; Athanasoglou et al., 2008; Kosmidou & Zopounidis, 2008) in (Sufian & Habibullah, 2010). Dietrich

& Wanzenried (2011) analyse the profitability of 372 commercial banks in Switzerland over the period from 1999 to 2009 with GMM estimator technique. Their results show that profitability is, for the most part, explained by five factors: operational efficiency, the growth of total loans, funding costs, the business model, and the effective tax rate.

On the other hand, fewer studies have looked at bank performance in developing economies. Chantapong (2005) investigates the performance of domestic and foreign banks in Thailand during the period 1995–2000. Naceur & Goaid (2008) examine the impact of bank characteristics, financial structure, and macroeconomic conditions on Tunisian banks' net-interest margin and profitability during the period 1980–2000. Sufian & Habibullah (2010) examine the determinants of Indonesian banks profitability during the period 1990–2005 by using unbalanced bank level panel data. The empirical findings indicate that income diversification and capitalization are positively related to bank profitability, while size and overhead costs exert negative impacts.

Hassan & Bashir (2003) similarly consider a variety of internal and external banking characteristics as possible determinants of profitability for a sample of 43 Islamic banks in 21 countries over 1994–2001. Haron (2004) examines the effects of the factors that contribute towards the profitability of Islamic banks with panel data. This study finds that internal factors such as liquidity, total expenditures, funds invested in Islamic securities, and the percentage of the profit-sharing ratio between the bank and the borrower of funds are highly correlated with the

level of the total income received by the Islamic banks. Shahimi et al., (2006) investigate Islamic banks' involvement in various fee income activities.

There are some studies that compare the performance of conventional banks and Islamic banks. Rosly & Bakar (2003) compare the performance of Islamic and mainstream banks in Malaysia. They find that Islamic banking scheme (IBS) banks have recorded a higher return on assets (ROA) as they are able to utilize existing overheads carried by mainstream banks. Samad (2004) examines the comparative performance of Bahrain's interest-free Islamic banks and the interest-based conventional commercial banks during the post Gulf War period with respect to (a) profitability, (b) liquidity risk, and (c) credit risk.

Some studies that compare the performance of conventional and Islamic banks have lasted less than five years. Sultan and Siddique (2010) analyze the performance of Islamic banks compared to that of conventional banks in Pakistan. The comparison is based on the financial performance, product services and customer perception. In addition, Beck et al. (2010) compare conventional and Islamic banks and controlling for other bank and country characteristics. They use two different samples. They compare pre- and post-crisis performance of Islamic and conventional banks. The larger sample comprises 141 countries and 2,956 banks, out of which 99 are Islamic banks. The authors find few significant differences in business orientation, efficiency, asset quality or stability. The authors conclude the same result that conventional banks operating in countries with a higher market share of Islamic banks are more cost-effective but less stable. They also find consistent evidence that higher capitalization of Islamic banks plus higher liquidity reserves explain the relatively better performance of Islamic banks during the recent crisis.

In the existing literature, there are extensive studies that have evaluated the performance of both Islamic and conventional banks in many countries. And, there are some studies that have compared bank performance for both Islamic and conventional banks but unfortunately as far as we are concerned there aren't any studies that compare the performance of Islamic and conventional banks in Indonesia during the financial crisis 2007-2009. To fill the gap, our research focuses on bank performance of both Islamic banks and conventional banks in Indonesia.

The Objective of the Study

The aim of this paper is to investigate the impact of global financial crisis from 2007 to 2009 on the performance of banks in Indonesia. The paper looks at the actual performance of IBs and CBs in Indonesia where the portion of market share is still four percents and addresses two broad questions (i) have IBs performed differently than CBs during the financial crisis?; and (ii) what challenges has the crisis highlighted as facing IBs going forward? To address the questions, the paper examines a set of bank-specific and macro variables.

The existing research is still inconclusive regarding the relationship between financial crisis and Islamic banks performance. Some studies have researched samples of Islamic banks performance in many countries. Our research focus is Indonesia as no research has been done so far on the impact of financial crisis on the performance of Islamic banks in Indonesia. We

believe that we can investigate the determinants of Islamic banks performance during the crisis period. For this study, samples of two Islamic banks and ten conventional banks were chosen. The study covers the period 2003 to 2011. We shall apply a regression analysis using the panel data comprising 10 conventional banks and 2 Islamic banks for 9 years. This paper consists of 6 sections. Following the introduction, we look into the existing literature. Next, the objectives of the study are discussed in Section 3, followed by the research methodology in section 4. The empirical results and their interpretations are then analyzed in Section 5. Lastly, the conclusion, limitations and possible avenue for further research is considered.

3. Methodology

The primary objective of this study is to investigate the impact of global financial crisis towards the performance of Islamic banking and conventional banking industry in Indonesia. Moreover, it also utilizes bank specific factors as predictors for the performance of Islamic banks and conventional banks in Indonesia. For this study, a sample of two Islamic banks and ten conventional banks were chosen. The study covers the period 2003-2011. Data for a number of important variables were compiled from the Fitch-IBCA Bankscope (BSCA) database, which provides annual financial information for banks in 179 countries around the world. Other data sources include Datastream and Bank Indonesia. We have selected these banks based on data availability. In 2012, there were 11 Islamic banks in Indonesia. However, only 2 Islamic banks had completely reported financial statements and established since 2003. Therefore, this study uses the available data as samples in order to investigate the impacts of the financial crisis on the performance of Islamic banking in Indonesia. For conventional banks, we have chosen 10 banks as samples for different groups from 120 banks in Indonesia. We have chosen 10 conventional banks as samples from foreign exchange banks group, joint venture banks group, and state owned banks group. We compare the performance of these ten conventional banks with two Islamic banks. The list of banks is presented in Table 1 below.

Table 1: Banks Included in the Sample

No.	Islamic Banks	Conventional Banks
1	Bank Muamalat Indonesia	Bank Mega
2	Bank SyariahMandiri	Bank Mizuho Indonesia
3		Bank Sumitomo Mitsui Indonesia
4		Bank UOB Buana
5		Bank Central Asia
6		Bank CIMB Niaga
7		Bank Danamon
8		Bank Negara Indonesia
9		Bank Internasional Indonesia
10		Bank Pan Indonesia

Through the research question we try to examine the relationship between the performance of Islamic banks and conventional banks and the set of internal and external banking characteristics. As bank performance is dependent on several factors, we have to account for them in this study. For the purpose of this research, we have selected five internal determinants (equity over total assets, cost income ratio, loan loss provisions over total loans, bank size and liquidity ratio) and one external determinant (the real GDP). Hence, for the purpose of this research we are going to

look at this issue by running a regression analysis, with the performance of banks as the dependent variable (ROAA, ROAE & NIM) and equity over total assets, cost income ratio, loan loss provisions over total loans, bank size and liquidity ratio as independent variables. In this model, the focal point of interest is on the coefficient of bank performance, while the other variables are introduced as control variables. In lieu of with the above developed model, the following hypothesis has been formulated for the purpose of this research:

H0: The Islamic bank has the same performance as the conventional bank

H1: The Islamic bank does not have the same performance as the conventional bank

In order to help with the empirical analysis, a regression model is formed to carry out various econometric tests. The model below signifies the performance equation. It examines the relationship between the performance of banks and the set of internal and external banking characteristics. β is a coefficient of variables and represents the proportionate change in dependent variable due to independent variables, while ε is the error term and P_t is the performance of banks. The empirical model estimated for this study is as follows:

$$P_t = \alpha + \beta_1 (\text{RECESSION}) + \beta_2 (\text{CS}) + \beta_2 (\text{EF}) + \beta_2 (\text{CR}) + \beta_2 (\text{SZ}) + \beta_2 (\text{LR}) + \beta_3 (\text{GDP}) + \varepsilon_t$$

We employed a technique of panel data to arrive at our conclusion. Firstly, we employed both the random and fixed effect regression on our data set. The fixed effects method treats the constant as group (section) specific. This means that the model allows for different constants for each group (section). The fixed effects estimator is also known as the least squares dummy variables (LSDV) estimator because in order to allow for different constants for each group, it includes a dummy variable for each group. An alternative method of estimating a model is the random effects model. The difference between the fixed effects and the random effects method is that the latter handles the constants for each section not as fixed but as random parameters. The random effects model perceived to be superior to fixed effects model supported by the fact that random affects model allows interactions of error variation within and among groups. Furthermore, random effects model is more attractive because observed characteristics that remain constant for each individual are retained in the regression model (Hidayat & Abduh, 2012). Secondly, we ran the Hausman Test to assist in making choice between the fixed effects and random effects approaches. Presented below are the variables used in our model for which we collect data for 12 banks during the period 2003-2011.

4. Finding

External Indicators of Bank Performance

On the other hand, the external determinants, both industry and macroeconomic related, are variables that reflect the economic and legal environments where the financial institution operates (Sufian & Habibullah, 2011). The external variables reflect environmental variables that are expected to affect the profitability of financial institutions (Dietrich & Wanzenried, 2011). In this research, we have selected gross domestic product as external indicators of bank performance. We use data from datastream for gross domestic product. Below we can see a tabulated description of the variables selected:

Table 2: List of Variables

Variable	Description	Expected
Performance of Banks (P) (Dependent)	This is based on ROAA, ROAE & NIM. The return of net profits to average total assets of bank <i>i</i> in year <i>t</i> The return on average equity of bank <i>i</i> in year <i>t</i> The net interest margin of bank <i>i</i>	NA NA NA
Global Financial Crisis (RECESSION)	A dummy variable for financial crisis (1) and others (0)	-
Capital Strength (CS) (Internal Independent)	The equity over total assets of bank <i>i</i> in year <i>t</i>	+/-
Efficiency (EF) (Internal Independent)	The cost income ratio of bank <i>i</i> in year <i>t</i>	-
Credit Risk (CR) (Internal Independent)	The loan loss provisions over total loans of bank <i>i</i> in year <i>t</i>	-
Bank Size (SZ) (Internal Independent)	The logarithm of total asset of bank <i>i</i> in year <i>t</i>	+/-
Liquidity Ratio (LR) (Internal Independent)	The loan deposit ratios of bank <i>i</i> in year <i>t</i>	+/-
Gross Domestic Product (GDP) (External Independent)	The GDP per capita of country <i>i</i> in year <i>t</i>	+
Banking without interest (IB) (Dummy)	A dummy variable for Islamic banks (1) and conventional banks (0)	+

Empirical Results and Their Interpretation

The results reported are for two sets of model: the fixed effects (FE) model and/or the random effect model, depending on the result of the Hausman specification test at the level of five percents. The tables show the estimated coefficients for bank characteristics and macroeconomic indicators. The Hausman test is formulated to assist in making choice between the fixed effects and random effects approaches. From the table below, we can see that $p=0.7048 > \alpha = 0.05$. From taking a 5% significant level, we accept the null hypothesis that the differences in coefficients are not systematic thus indicating the efficiency of the random effect. For ROAA, the random effects are preferred and consistent. For ROAE, we can see that $p=0.3693 > \alpha = 0.05$. It shows that the random effects are preferred and consistent. For NIM, we can see that $p=0.3532 > \alpha = 0.05$. Out of the three models from three dependent variables (ROAA, ROAE & NIM), we find that the random effects model is preferable to fixed model. The advantage of random effects model is that it is more efficient compared with fixed effects model as it saves number of degree freedom. Thus, it can generate efficient regression coefficients.

Table 3: Hausman Specification Test

Cross-section random	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
ROAA	4.631708	7	0.7048
ROAE	7.599160	7	0.3693
NIM	7.770933	7	0.3532

For the first attempt, we try to run a fixed effect regression on each model based on all explanatory variables but the result from E-views mentions it as near singular matrix. We drop one of variables which is Islamic bank (dummy variable) and get the result from the three

models. The constant in the fixed effects method is treated as a group specific (section). This means that the model allows for different constants for each group (section). The fixed effects estimator is also known as the least squares dummy variables (LSDV) estimator because in order to allow for different constants for each group, it includes dummy variables for each group (Asteriou & Hall, 2007). It permits cross-section heterogeneity by allowing the intercept to vary across individuals. An alternative method of estimating a model is called random effects model. The difference between the fixed effects and the random effects method is that the latter handles the constants for each section not as a fixed but as random parameters (Asteriou & Hall, 2007). The random effects model treats the heterogeneity across individuals as a random component. Unlike the fixed effects regression, we put all the dependent variables in each model including Islamic bank. In random effect regression for ROAA, it can be seen that at 5% significance level, the F value is statistically significant. From the table, the R-squared was reported to be 41.6% which smaller than the Fixed Effects model. It shows that by authorizing the variation in intercept and error variance, it does reduce the goodness of fit for the model. It shows 41.6% of variability of ROAA explained by the equity over asset, cost income ratio, loan loss reserve to gross loan, logarithm of total asset, loan deposit ratio, gross domestic product, global financial crisis, Islamic bank plus the interaction between differences of intercepts and error variance. Similar with fixed effect regression, there are some variables that significantly have relationship with bank performance (ROAA ratio) which are equity over total asset, cost income ratio, logarithm of total asset plus loan to deposit ratio. There is significantly positive relationships between the ROAA ratio *vis a vis* equity over total asset ratio which is parallel with the findings from Berger & Mester (1997), Kosmidou et al. (2007) and Staikouras et al. (2008). Moreover, Naceur & Goaid (2008), Dietrich & Wanzenried (2011) indicate that the best performing banks are those who maintain a high level of equity relative to their assets. Besides equity over total asset, logarithm of total asset as representing bank size also has a significantly positive relationship to ROAA ratio. It supports empirical evidence by Pasiouras & Kosmidou (2007). This is because larger banks are likely to have a higher degree of product and loan diversification than smaller banks, and because they should benefit from economies of scale. Every one unit increases from capital adequacy (EOA ratio), it will increase ROAA by 8% . And, every one unit decreases from cost income ratio, it will increase ROAA by 3.7%. There is no change in the sign of coefficient compared for equity over total asset, cost income ratio and total asset under fixed effect regression. Interestingly, the more total asset (higher bank size), the ROAA ratio will increase by 44.5%. For loan to deposit ratio, there is significantly negative relationship with ROAA ratio. As our priori expectation, LDR can be positive or negative relationship. From the above table, every one unit decreases from liquidity ratio, it will increase ROAA ratio by less than 1%. This means that bank should decrease relying on borrowed fund in optimum portion in order to increase bank performance (ROAA ratio). From the bank specific coefficient, we can see that the value of random effect is not obviously varies across banks. It can be seen that the highest level of ROAA ratio shown by Bank Danamon (4.77) while Islamic banks such as Bank Syariah Mandiri shows (4.06) and Bank Muamalat Indonesia shows (4.2) and the lowest level of

ROAA ratio shown by Bank Mizuho Indonesia (3.7). From the below table, equity over total asset and cost income ratio variables are significant in one, five and ten percent significance level while loan loss reserve and loan deposit ratio variables are significant in one and five percent. In random effect regression for ROAE, it can be seen that at 5% significance level, the F value is statistically significant. From the table, the R-squared was reported to be 34.3% which is smaller than the Fixed Effects model. It shows that by authorizing the variation in intercept and error variance, it does reduce the goodness of fit for the model. It shows 34.3% of variability of ROAE explained by the equity over asset, cost income ratio, loan loss reserve to gross loan, logarithm of total asset, loan deposit ratio, gross domestic product, global financial crisis, Islamic bank plus the interaction between differences of intercepts and error variance.

There are only two explanatory variables that have a significant relationship with bank performance (ROAE ratio) which are equity over total asset and cost income ratio. Unlike return on average asset (ROAA) ratio, the equity over total asset (EOA) variable significantly has a negative relationship with return on average asset (ROAE). One unit decrease from equity over total asset (EOA) ratio will increase return on average equity (ROAE) ratio by 52.9%. There is also a significantly negative relationship between cost income ratio to ROAE ratio. One unit decrease from cost income ratio will increase ROAE ratio by 35.6%. This is the same as our priori expectation. In addition, there is no change in the sign of coefficient compared for cost income ratio under fixed effect model. Unfortunately, GDP and global financial crisis and Islamic bank are insignificant with ROAE ratio. It means that in a good or bad economic condition, bank performance remains unaffected. From the bank specific coefficient, we can see that the value of random effect does not obviously vary across banks. It can be seen that the highest level of ROAE ratio is shown by Bank Permata (57.9) while Islamic banks such as Bank Syariah Mandiri shows (52.9) and Bank Muamalat Indonesia shows (53.5) and the lowest level of ROAA ratio is shown by Bank Negara Indonesia (48.6). From the table below, cost income ratio variable is significant in one-, five- and ten- percent significance level while equity over total asset is significant in one- and five- percent.

Table 4: ROAE with Random Effect Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constanta	53.18507	13.49982	3.939686	**0.0002
Equity Over Total				
Asset	-0.529871	0.207417	-2.554619	*0.0122
Cost Income Ratio	-0.355899	0.068223	-5.216716	**0.0000
Loan Loss Reserve	0.260407	0.243003	1.071623	0.2865
Total Asset	3.756390	1.972177	1.904692	0.0597
Loan Deposit Ratio	-0.062352	0.034345	-1.815444	0.0725
Gross Domestic				
Product	-2.182354	1.558866	-1.399963	0.1647
Global Financial				
Crisis (Dummy				
Variable)	-1.714403	1.148438	-1.492813	0.1387
Islamic Bank				
(Dummy Variable)	5.420164	3.909169	1.386526	0.1687
Random Effects Cross				
Bank Negara				
Indonesia	-4.563478	48.621592		
Bank Permata	4.692931	57.878001		
Bank Syariah				
Mandiri	-0.273148	52.911922		
Bank Muamalat				
Indonesia	0.273148	53.458218		
		Effects	Specification	
			S.D.	Rho
Cross-section random			3.438946	0.3475
Idiosyncratic random			4.711932	0.6525

Note: *significance at 5% significance level
:**significance at 1%, 5%, and 10% significance level

In random effect regression for net interest margin (NIM), it can be seen that at 5% significance level, the F value is statistically significant. From the table, the R-squared is reported to be 21.1% which is smaller than the Fixed Effects model. It shows that by authorizing the variation in intercept and error variance, it does reduce the goodness of fit for the model. It shows 21.1% of variability of net interest margin (NIM) explained by the equity over asset, cost income ratio, loan loss reserve to gross loan, logarithm of total asset, loan deposit ratio, gross domestic product, global financial crisis, Islamic bank plus the interaction between differences of intercepts and error variance. There are only two explanatory variables that have a significant relationship with bank performance (NIM ratio) which are equity over total asset and loan loss reserve to gross loan. There is a significantly positive relationship between equity over total asset (EOA) to net interest margin ratio. When one unit increases from EOA ratio, bank performance (NIM) will increase by 20%. This is the same as our priori expectation. There is a significantly negative relationship between loan loss reserve to gross loan and bank performance (NIM). When one unit decreases from loan loss reserve to gross loan, it will increase bank performance (NIM) by 12.1%. This is same as our priori expectation. The lower loan loss reserve to gross loan means the lower the credit risk is; therefore, lower bad loans will bring higher bank performance. In addition, there is no change in the sign of coefficient compared for equity over the total asset and loan loss reserve under fixed effect model.

5. Discussion & Conclusion

The main objective of our study is to investigate the impact of the global financial crisis from 2007 to 2009 on bank performance in Indonesia. After we do an empirical framework by looking into the actual performance of Islamic banks and conventional banks in Indonesia, we find that there is no difference in bank performance between Islamic banks and conventional banks particularly during the global financial crisis. Generally, the global financial crisis does not have an impact on the bank performance in Indonesia in terms of return on average asset (ROAA), return on average equity (ROAE) and net interest margin (NIM). Furthermore, the macroeconomic condition which is reflected by GDP does not have an impact on the bank performance in Indonesia either. It seems quite unusual as macroeconomic condition always has an impact on banks, but empirical evidence shows that there is an insignificant relationship between GDP and bank performance (ROAA, ROAE, NIM).

In order to find out the determinants of bank performance in Indonesia, firstly, we do the Hausman test, and we find that the random effect model is preferable to the fixed effect model. Under the random effect model, we find that one unit increase from capital adequacy (EOA ratio), will increase ROAA ratio by 8%. And, one unit decrease from cost income ratio will increase ROAA ratio by 3.7%. Both variables (EOA & CIR) have a significant relationship with ROAA as our priori expectation. Interestingly, the more the total asset (higher bank size), ROAA ratio will increase by

44.5%. Generally, the ROAA ratio is influenced by equity over total asset, cost income ratio, total asset (bank size), loan to deposit ratio.

Return on average equity is less preferable to return on average asset (ROAA) since the nature of return on average equity (ROAE) is distorted by high equity multipliers. Under the random effect model, we find that one unit decrease from equity over total asset (EOA) ratio will increase return on average equity (ROAE) ratio by 52.9% and one unit decrease from cost income ratio will increase return on average equity (ROAE) ratio by 35.6%.

Net interest margin is commonly used as a bank performance indicator after ROAA/ROAE. Under the random effect model, we find that one unit increase from equity over total asset (EOA) ratio will increase bank performance (NIM) by 20% and one unit decrease from loan loss reserve to gross loan will increase bank performance (NIM) by 12.1%. The limitation of this study is the number of Islamic banks in our research. Nowadays, there are 11 Islamic banks in Indonesia but unfortunately 8 out of the 11

Islamic banks were established after 2007 while our research is to find out the bank performance including Islamic banks before the 2007 crisis. It is surprising that Islamic banks performance is not different from that of conventional banks in line with empirical evidence by Hasan and Dridi (2010) but both banks (Islamic banks and conventional banks) have already been resilient to the global financial crisis. This is due to the fact that banks in Indonesia have already prepared to face the crisis, especially after learning from the Asian financial crisis from 1997 to 1998.

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