JOURNAL OF BUSINESS AND MANAGEMENT

Vol. 3, No.2, 2014: 191-203

COMPARING DETERMINANT OF PROFITABILITY BETWEEN ISLAMIC BANKS AND CONVENTIONAL BANKS IN INDONESIA (CASE STUDY: EIGHT ISLAMIC BANKS AND EIGHT CONVENTIONAL BANKS IN INDONESIA PERIOD 2010-2013)

Dita Herdiana and Arson Aliludin School of Business and Management Institut Teknologi Bandung dita.herdiana@sbm-itb.ac.id

Abstract-The main theme of this research is profitability and focus on finding determinant profitability in Islamic banking. It also explain the differences determinant of Islamic banking and conventional banking in Indonesia. This research uses quarterly bank's financial report from July 2010 until September 2013 from 8 Islamic banks and 8 conventional banks. The sample selections from Islamic banks are 3 non foreign exchange banks and 5 foreign exchange banks; and, the sample from conventional banks are 1 non foreign exchange bank, 2 state owned banks and 5 foreign exchange banks. This research used multiple regression method as analysis statistic tools to determine which factors affect each dependent variable. The dependent variables are Return on Asset (ROA), Return on Equity (ROE) and Net Interest Margin (NIM). The independent variables from Islamic banks are IB wadiah demand deposit, IB wadiah saving deposit, IB mudharaba saving deposit, IB total saving deposit, IB mudharaba time deposit and IB total depositors funds, mudharaba receivable, placement in Bank Indonesia, placement in other banks, security in investment, then small enterprise credit, non-small enterprise credit, property credit, non-property credit, quick ratio and core depositors to depositors funds ratio. The independent variables for conventional banks are demand deposit, saving deposit, time deposit, cash, placement in Bank Indonesia, placement in other banks, security in investment, small enterprise credit, non-small enterprise credit, and restructured credit property credit. The result showed the independent variables that significantly affects ROA is IB wadiah demand deposit for Islamic banks and demand deposit for conventional banks; the independent variables that significant variable with ROE is IB wadiah demand deposit for Islamic banks and demand deposit for conventional banks; and the independent variables that significant variable with NIM is IB mudharaba time deposit for Islamic banks and time deposit for conventional banks. This research shows depositors' funds have significant effect for ROA, ROE and NIM.

Keywords: Islamic Banking, Conventional Banking, Depositors Funds, Profitability, Multiple Regressions

Introduction

The development of banking system in Indonesia is carried in dual banking system way in within Indonesia Banking Architecture (API) corridor. Conventional banking systems and Islamic Banking Systems are worked as an alternative to mobilize consumer's funds and to emphasize national economy sector. (www.bi.go.id). the main objective of banks, both commercial banks and Islamic banks, is to increase and maximizing the owner/shareholder's return by optimizing the bank performance.

Islamic banking is a rapidly growing part of the financial and banking sector in the world. More recently, it has caught the attention of conventional financial markets as well. According to some estimates, more than 250 financial institutions in over 45 countries that has been growing at a rate of more than 15 percent annually for the past five years (Helmy, Muhammad, 2012). In 2009, there were six Islamic banks (BUS), 25 Islamic Business Unit (UUS), 138 Islamic rural banks (BPRS) with the number of Islamic banking offices in 1223 spread in Indonesia regions. Based on 2012 Islamic Banking Outlook, during the period of 2012, the number of Islamic banks (BUS) and Islamic Business Unit (UUS) until October 2012 did not change; however, the number office network increased. Bank branches increased from 452 offices to 508 offices, while Branch Office (KCP) and Cash Office (KK) have increased by 440 during the same.

As main function of bank is as collector and distributor of public funds and aims to support the implementation of national development in order to improve the development, economic growth, national stability and improving the living standard of the people. Therefore, to increase the bank's performance, bank must increase its performance by maximizing profit, lowering its operating cost, and managing the risks, indeed. These research objectives are to get evidence of the determinant that can exacerbate profitability of Islamic banks and conventional banks in Indonesia.

Literature Review

Traditional Performance Measurement

Traditional accounting performance measures, such as Earnings per Share (EPS), Earnings on Invested Capital (EOIC), Return on Investment (ROI), Return on Assets (ROA), and Return on Equity (ROE), appeared in the late 1910s (Epstein, 1925; 1930; Sloan 1929).

Return on Assets (ROA)

Return on Assets measures the effectiveness of the management to generate profit with the company's available asset. Return on Assets is a measure of profit per dollar of assets. Return on Assets is calculated as (Gitman, 1991:274):

$$ROA = \frac{Net \, Profit \, after \, Taxes}{Total \, Asset}$$

Return on Equity (ROE)

Return on Equity is a measurement of how the stockholders fared during the year. Because benefitting shareholders is the goal, Return on Equity is an accounting tool to measure the return earned on the owner's investment on the firm. Return on Equity is calculated as (Gitman, 1991: 275):

$$ROE = \frac{Net \, Profit \, after \, Taxes}{Stockholder \, Equity}$$

Net Interest Margin (NIM)

Net Interest Margin (NIM) is used to be helpful in tracking profitability in investment in banks and lending activities over specific course of time. Net Interest Margin is calculated as:

$$NIM = \frac{Investment\ Returns - Interest\ Expenses}{Average\ Earning\ Assets}$$

Islamic Financial Instruments

According to Bank Indonesia report of Islamic Banking Statistic, the instrument of Islamic Finance is explained as:

- 1. Wadiah contract
 - A contract between the owner of the goods (the money) and the custodian for safekeeping.
- 2. Mudharaba contract

A contract between a capital provider and an entrepreneur or a fund manager, whereby the entrepreneur or fund manager can mobilize the funds of the former for its business activity within the Islamic guidelines. Profits made are shared between the parties according to a mutually agreed ratio.

Multiple Regression

Multiple Regression Model with k independent variables:

$$Y_{i} = \beta_{0} + \beta_{1}X_{1i} + \beta_{2}X_{2i} + \beta_{2}X_{2i} + ... + \beta_{k}X_{ki} + \epsilon_{i}$$

Where:

 $\beta_o = Y$ intercept

 β_1 = slope of Y with variable X_1 , holding variables X_2 , X_3 ,..., X_k constant

 B_k = slope of Y with variable X_k , holding variables $X_1, X_2, X_3, ..., X_{k-1}$ constant

 ε_i = random error in Y for observation i

Coefficient of Multiple Determination

The coefficient of multiple determination is equal to the regression sum is squares (SSR) divided by total sum of squares (SST).

$$r2 = \frac{regression sum of squares}{total sum of squares} = \frac{SSR}{SST}$$

Adjusted r²

Adjusted r^2 reflects both number of independent variable in the model and sample size. It is important to compare two or more regression models that predict the same dependent variable but have a different number of independent variables. Equation of adjusted r^2 is:

$$r_{adj}^2 = 1 - \left[(1 - r^2) \frac{n - 1}{n - k - 1} \right]$$

F-test

Overall F test tests whether there is a significant relationship between the dependent variable and the entire set of independent variables (the overall multiple regression model). The F_{STAT} test statistic is equal to the regression mean square (MSR) divided by the square error (MSE).

$$F_{STAT} = \frac{MSR}{MSE}$$

 F_{STAT} = test statistic from an F distribution with k and n-k-1 degrees of freedom k = number if independent variables in regression model

Methodology

Research methodology is the underlying processes of system of procedures to find the facts. The author implements several steps in doing this research.



Figure 1. Research Processes Flowchart

Data Collection and Analysis

The data population is financial statement of Islamic banks and conventional banks (balance sheet, income statement, earning capital quality and capital adequacy ratio) which taken from the library of Bank Indonesia. The data that will use are quarterly data from year 2010 until third quarter of 2013. The sampling technique in this research conducted with the criteria that the bank's quarterly financial report is complete for based on following criteria:

- The banks' quarterly financial report from July 2010 until September 2013.
- The sample must have data particularly information about (depositors funds, bank assets, financing and liquidity ratio).

Islamic Banks	Bank Sector	Conventional Banks	Bank Sector
Bank BCA Syariah	Non Foreign Exchange	Bank BCA	Foreign Exchange
Bank BRI Syariah	Non Foreign Exchange	Bank BRI	State Owned
Bank Mega Syariah	Foreign Exchange	Bank Mega	Foreign Exchange
Bank Muamalat Indonesia	Foreign Exchange	Bank CIMB Niaga	Foreign Exchange
Bank Panin Syariah	Non Foreign Exchange	Bank Panin	Foreign Exchange
Bank Bukopin Syariah	Non Foreign Exchange	Bank Bukopin	Foreign Exchange
Bank Mandiri Syariah	Foreign Exchange	Bank Mandiri	State Owned
Bank Victoria Syariah	Non Foreign Exchange	Bank Victoria	Non Foreign Exchange

Table 1 Banks Sample Selection

Based on the above criteria, the samples in this research are stated in table 1 on. Dependent variables in this research are Return on Asset (RoA) as Y1 and Return on Equity (RoE) as Y2 and Net Interest Margin as Y3. Independent variables are divided between conventional banks and Islamic banks with similarity in group variables; depositors' funds, total assets, and credit/financing. The independent variables for Islamic banks are (1) Third Party Funds/ Depositors Funds: a. IB wadiah demand deposit (X_1), b. IB wadiah saving deposit (X_2), c. IB mudharaba saving deposit (X_3), d. Total saving funds (X_4), e. IB mudharaba time deposit (X_5), f. Total depositors funds (X_6); (2) Bank Asset: a. Mudharaba receivable (X_7), b. Placement in Bank Indonesia (X_8), c. Placement in other banks (X_9), d. Investment in security (X_{10}), e. Total Asset (X_{11}); (3) Credit Risk: a. Small enterprise credit (X_{12}), b. Non small enterprise credit (X_{13}), c. Property financing (X_{14}), d. Non property financing (X_{15}), e. Total Credit Risk (X_{16}); (4) Liquidity Risk: a. Quick ratio (X_{17}), b. Core depositors to depositors funds (X_{18})

The differentiating is happened because in Islamic banking there is more specified product with contract. Meanwhile, the independent variables for conventional banks are (1) Depositor Funds; a. Demand deposit (X_1) , b. saving deposit (X_2) , c. Time deposit (X_3) , d. Total depositors funds (X_4) ; (2). Bank Assets: a. Cash (X_5) , b. Placement in Bank Indonesia (X_6) , c. Placement in other banks (X_7) , d. Investment

in security (X_8), e. Total assets (X_9); (3) Credit Risk: a. Small enterprise credit (X_{10}), b. Non small enterprise credit (X_{11}), c. Restructured credit (X_{12}), d. Property credit (X_{13}), e. Total credit (X_{14}).

Islamic Bank

ROA

The coefficient of determination measures how many percent of these independent variables can explain dependent variable. The indicator used is coefficient of multiple regressions (R²). The score of R² in the table 2 shows .410 which is indicate the determined independent variables jointly affect 41% of dependent variable. The remaining 59% are affected by others which do not included in this research.

Table 2 Model Summary for ROA Islamic Banks

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
4	.640 ^d	.410	.385	2.83721	1.845

d. Predictors: (Constant), X1, X8, X13, X2 e. Dependent Variable: Return on Asset

F test statistic is used to show that all independent variables Included in the model have influence simultaneously against the dependent variable. The hypothesis can be tested by technical analysis of variance (ANOVA).

Table 3 ANOVA of ROA Islamic Banking

Mode	I	Sum of	Df	Mean Square	F	Sig.
		Squares				
	Regression	530.362	4	132.590	16.471	.000 ^e
4	Residual	764.728	95	8.050		
	Total	1295.090	99			

a. Dependent Variable: Return on Asset e. Predictors: (Constant), X1, X8, X13, X2

Based on ANOVA table 3, the F value is 16.471 with 0.000 of significance value. Hence, the significance value is smaller than significance level (0.05), it can be concluded that the predictor variables; IB wadiah demand deposit (X1), Placement in Bank Indonesia (X8), Non small enterprise financing (X13) and IB wadiah saving deposit (X2) are simultaneously affect the ROA of the banks.

From the data processing, there are four variables significantly affect ROA because the significance value is smaller 0.05. T statistical test shows how far one independent variable influenced if the other constant. The result of the test statistics shows that each of the selected independent variables has significant effect on ROA.

Table 4 T-Test Result for ROA Islamic Banks

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	.699	.284		2.464	.016
	X1	1.850	.285	.511	6.487	.000
4	X8	955	.285	264	-3.347	.001
	X13	.815	.285	.225	2.858	.005
	X2	.601	.285	.166	2.106	.038

Based on the data processing, it can formulated the equation of regression model Y1 = 0.699 + 1.850 (X1) - 0.955 (X8) + 0.815 (X13) + 0.601 (X2)

The test results and discussion of hypothesis are as follows:

- H1: IB wadiah demand deposit is statistically positive significance to ROA
 Variable X1 (IB wadiah saving deposit) influences the ROA of the banks. It can be seen from t-value
 6.487 with significance value o.ooo. IB wadiah demand deposit has statistically positive relationship
 with ROA.
- 2. H1: Placement in Bank Indonesia is statistically negative significance to ROA Variable X8 (Placement in Bank Indonesia) influences the ROA of the banks. It can be seen from t-value -3.347 with significance value o.o1. Placement in Bank Indonesia has statistically negative relationship with ROA.
- 3. H1: Non-small Enterprise Financing is statistically positive significance to ROA Variable X13 (Non-small Enterprise Financing) influences the ROA of the banks. It can be seen from t-value 2.858 with significance value 0.05. Non-small Enterprise Financing has statistically **positive** relationship with ROA.
- 4. H1: IB wadiah saving deposit is positively significance to ROA
 Variable X2 (IB wadiah saving deposit) influences the ROA of the banks. It can be seen from t-value 2.106 with significance value 0.038. IB wadiah saving deposit has **positive relationship** with ROA.

ROE

The coefficient of determination measures how many percent of these independent variables can explain dependent variable. The indicator used is coefficient of multiple regressions (R²). The score of R² in the table shows .984 which is indicate the determined independent variables jointly affect 98.4% of dependent variable. The remaining 1.6% is affected by others which do not included in this research.

Table 5 Model Summary for ROE Islamic Banks

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
3	.992 ^c	.984	.981	8.82955

F test statistic is used to show that all independent variables Included in the model have influence simultaneously against the dependent variable. The hypothesis can be tested by technical analysis of variance (ANOVA).

Table 6 ANOVA Test Result for ROE Islamic Banks

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	88294.474	3	29431.491	377.516	.000 ^e
3	Residual	1481.258	19	77.961		
	Total	89775.732	22			

Based on ANOVA table test, the F value is 377.516 with 0.000 of significance value. Hence, the significance value is smaller than significance level (0.05), it can be concluded that the predictor variables; IB *mudharaba* saving deposit, placement in other banks and IB *wadiah* saving deposit are simultaneously affect the ROE of the banks.

T-statistical test shows how far one independent variable influenced if the other constant. The result of the test statistics shows that each of the selected independent variables has significant effect on ROE. It is showed from significance value < significance level (0.05).

Table 7 Correlation Test for Significance Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		В	Std. Error	Beta			
	(Constant)	26.132	.485		53.843	.000	
٦	X3	-11.520	.634	-1.564	-18.160	.000	
3	X9	-4.600	.575	684	-8.003	.000	
	X1	12.337	2.450	.152	5.036	.000	

Based on the data processing, it can be formulated the equation of regression model:

$$Y_2 = 26.132 + 12.337 (X_1) - 11.520 (X_3) - 4.600 (X_9)$$

The test results and discussion of hypothesis are as follows:

- H1: IB wadiah demand deposit is statistically positive significance to ROE
 Variable X1 (IB wadiah demand deposit) influences the ROE of the banks. It can be seen from t-value
 5.036 with significance value 0.000. IB wadiah demand deposit has statistically positive relationship
 with ROE.
- 2. H1: IB *Mudharaba* saving deposit is statistically negative significance to ROE Variable X3 (IB *mudharaba* saving deposit) influences the ROE of the banks. It can be seen from t-value -18.160 with significance value 0.000. IB *mudharaba* saving deposit has statistically **negative relationship** with ROE.
- 3. H1: Placement in other banks is statistically negative significance to ROE
 Variable X9 (Placement in other banks) influences the ROE of the banks. It can be seen from t-value
 -8.003 with significance value 0.000. Placement in other banks has statistically negative relationship with ROE.

NIM

The score of R² in the table shows 0.463 which is indicate the determined independent variables jointly affect 46.3% of dependent variable. The remaining 53.7% is affected by others which do not included in this research.

Table 8 Model Summary for NIM Islamic Banks

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
3	.681 ^c	.463	.434	1.65969

F test statistic is used to show that all independent variables Included in the model have influence simultaneously against the dependent variable. The hypothesis can be tested by technical analysis of variance (ANOVA).

Table 9 ANOVA Test Result

Mode	I	Sum of Squares	df	Mean Square	F	Sig.
	Regression	133.077	3	44-359	16.104	.000 ^e
3	Residual	154.256	56	2.755		
	Total	287.333	59			

Based on ANOVA table 9, the F value is 16.104 with 0.000 of significance value. Hence, the significance value is smaller than significance level (0.05), it can be concluded that the predictor variables; IB

mudharaba time deposit, placement in Bank Indonesia, and mudharaba receivable are simultaneously affect the NIM of the banks.

Table 10 Correlation Test Result for Significance Variables

Model		Unstandard	ized Coefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	6.613	.380		17.415	.000
٦	X5	-2.839	.470	613	-6.040	.000
3	X8	522	.179	293	-2.907	.005
	X7	516	.214	237	-2.405	.019

From the data processing, there are 3 variables that have significance value more than significance level 0.05. They are IB mudharaba time deposit (X5), placement in Bank Indonesia (X8), and mudharaba receivable (X7). It means that other fifteen variables have no significant effect to NIM in Islamic Banks.

Based on the data processing in table 10, it can be formulated the equation of regression model:

$$Y_3 = 6.613 - 2.839 (X_5) - 0.516 (X_7) - 0.522 (X_8)$$

The test results and discussion of hypothesis are as follows:

- 1. H1: IB mudharaba time deposit is statistically negative significance to NIM

 Variable X5 (IB mudharaba time deposit) influences the NIM of the banks. It can be seen from tvalue -6.040 with significance value 0.000. IB wadiah saving deposit has statistically negative
 relationship with NIM
- 2. H1: Placement in Bank Indonesia is statistically negative significance to NIM Variable X8 (Placement in Bank Indonesia) influences the NIM of the banks. It can be seen from t-value -2.907 with significance value 0.005. Placement in Bank Indonesia has statistically negative relationship with NIM.
- 3. H1: Mudharaba receivable is statistically negative significance to NIM

 Variable X7 (Mudharaba receivable) influences the NIM of the banks. It can be seen from t-value
 2.405 with significance value 0.019. Mudharaba receivable has statistically negative relationship with NIM

Conventional Banking

ROA

The score of R2 shown in the table 11 is 0.636 which is indicated that independent variables jointly affect 63.6% of dependent variable, ROA, in this model. The remaining 36.4% is affected by other independent variable which do not included in this research.

Table 11 Model Summary Regression for ROA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
5	.798	.636	.619	.67423	1.748

Based on ANOVA score in table 11, the F value is 16.847 with 0.000 of significance value.

Table 12 ANOVA Test

Model	Sum of Squares	Df	Mean Square	F	Sig.
5	Regression	84.234	5	16.847	.000
	Residual	48.185	106	.455	
	Total	132.420	111		

Hence, the significance value is smaller than the significance level (0.05), it can be conclude that the independent variables X1 (demand deposit), X2 (saving deposit), X3 (time deposit), X6 (placement in Bank Indonesia) and X7 (placement in other banks) are simultaneously affect the ROA as dependent variable.

Based on the data processing in table 12, it can be formulated the equation of regression model:

$$Y_1 = 2.277 + 0.669 (X_1) + 0.422 (X_2) + 0.290 (X_3) + 0.165 (X_6) + 0.152 (X_7)$$

The test results and discussion of hypothesis are as follows:

- 1. H1: demand deposit is statistically positive significance to ROA

 Variable X1 (demand deposit) influences the ROA of the banks. It can be seen from t-value 10.448 with significance value 0.000. Demand deposit has statistically **positive relationship** with ROA.
- 2. H1: saving deposit is statistically positive significance to ROA Variable X2 (saving deposit) influences the ROA of the banks. It can be seen from t-value 6.587 with significance value 0.000. Saving deposit has statistically **positive relationship** with ROA.
- 3. H1: time deposit is statistically positive significance to ROA Variable X3 (time deposit) influences the ROA of the banks. It can be seen from t-value 4.257 with significance value 0.000. Time deposit has statistically **positive relationship** with ROA.
- 4. H1: placement in Bank Indonesia is statistically positive significance to ROA Variable X6 (placement in Bank Indonesia) influences the ROA of the banks. It can be seen from t-value 2.578 with significance value 0.011. Placement in Bank Indonesia has statistically **positive relationship** with ROA.
- 5. H1: placement in other banks is statistically positive significance to ROA Variable X7 (placement in other banks) influences the ROA of the banks. It can be seen from t-value 2.368 with significance value 0.020. Placement in other banks has statistically **positive relationship** with ROA.

	Table 13 Coefficient ROA Conventional Banks							
		Unstandardized		Standardized			Collinearity	
		Coefficient		Cofficient	Т	Sig.	Statistics	
		В	Std. Error	Beta			Tolerance	VIF
5	Constant	2.277	.064		35.738	.000		
	X1	.669	.064	.612	10.448	.000	1.000	1.000
	X ₂	.422	.064	.382	6.587	.000	1.000	1.000
	X3	.290	.064	.265	4.527	.000	1.000	1.000
	X6	.165	.064	.151	2.578	.011	1.000	1.000
	X ₇	.152	.064	.139	2.368	.020	1.000	1.000

Table 13 Coefficient ROA Conventional Banks

ROE

The score of R2 shown in the table 13 is 0.504 which is indicated that independent variables jointly affect 50.4% of dependent variable, ROE, in this model. The remaining 49.6% is affected by other independent variable which do not included in this research.

Table 14 Model Summary Regression for ROE

Model	R	R Square	Adjusted R	Std. Error of	Durbin-
			Square	the Estimate	Watson
5	.710 ^e	.504	.480	6.32080	1.955

Based on ANOVA score in table 14, the F value is 21.530 with 0.000 of significance value. Hence, the significance value is smaller than the significance level (0.05), it can be conclude that the independent variables X1 (demand deposit), X2 (saving deposit), X3 (time deposit), X5 (Cash) and X8 (investment in security) are simultaneously affect the ROE as dependent variable.

Table 15 ANOVA Test Result

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	4300.949	5	860.190	21.530	.000 ^f
5	Residual	4234.970	106	39-953		
	Total	8535.920	111			

Based on the data processing in table 15, it can be formulated the equation of regression model:

$$Y_2 = 23.902 + 4.602 (X_1) + 2.046 (X_2) + 2.717 (X_3) - 2.075 (X_5) + 1.303 (X_8)$$

The test results and discussion of hypothesis are as follows:

- 1. H1: demand deposit is statistically positive significance to ROE Variable X1 (demand deposit) influences the ROE of the banks. It can be seen from t-value 7.670 with significance value 0.000. Demand deposit has statistically **positive relationship** with ROE.
- 2. H1: saving deposit is statistically positive significance to ROE Variable X2 (saving deposit) influences the ROE of the banks. It can be seen from t-value 3.410 with significance value 0.001. Demand deposit has statistically **positive relationship** with ROE.
- 3. H1: time deposit is statistically positive significance to ROE Variable X3 (time deposit) influences the ROE of the banks. It can be seen from t-value 4.529 with significance value 0.000. Time deposit has statistically **positive relationship** with ROE.
- 4. H1: Cash is statistically negative significance to ROE
 Variable X5 (cash) influences the ROE of the banks. It can be seen from t-value -3.459 with significance value 0.001. Cash has statistically **negative relationship** with ROE.
- 5. H1: Investment in security is statistically positive significance to ROE
 Variable X8 (investment in security) influences the ROE of the banks. It can be seen from t-value
 2.171 with significance value 0.032. Investment in security has statistically **positive relationship** with ROE.

Table 16 Coefficient ROE Conventional Banks

Model		Unstandar Coefficient		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		В	Std. Error	Beta			Tolerance	VIF
	(Constant)	23.902	.597		40.019	.000		
	X1	4.602	.600	.525	7.670	.000	1.000	1.000
١,	X3	2.717	.600	.310	4.529	.000	1.000	1.000
5	X5	-2.075	.600	237	-3.459	.001	1.000	1.000
	X ₂	2.046	.600	.233	3.410	.001	1.000	1.000
	X8	1.303	.600	.149	2.171	.032	1.000	1.000

NIM

The score of R2 shown in the table 17 is 0.690 which is indicated that independent variables jointly affect 69% of dependent variable, NIM, in this model. The remaining 31% is affected by other independent variable which do not included in this research.

Table 17 Model Summary NIM Conventional Banks

Model	R	R Square	Adjusted R	Std. Error of	Durbin-
			Square	the Estimate	Watson
6	.831 ^f	.690	.673	1.10926	1.811

Table 18 ANOVA Test Result

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	287.863	6	47.977	38.991	.000 ^g
6	Residual	129.199	105	1.230		
	Total	417.063	111			

Based on ANOVA score in table 18, the F value is 38.991 with 0.000 of significance value. Hence, the significance value is smaller than the significance level (0.05), it can be conclude that the independent variables X1 (demand deposit), X2 (saving deposit), X3 (time deposit), X6 (placement in Bank Indonesia), X7 (placement in other banks) and X12 (restructured credit) are simultaneously affect the NIM as dependent variable.

Table 19 Coefficient NIM Conventional Banks

М	lodel	Unstanda Coefficier		Standardized Coefficients	Т	Sig.	Collinearity Statistics	
		В	Std. Error	Beta			Tolerance	VIF
	(Constant)	4.813	.105		45.914	.000		
	X3	1.268	.105	.654	12.039	.000	1.000	1.000
	X1	.794	.105	.409	7.538	.000	1.000	1.000
6	X7	.370	.105	.191	3.514	.001	1.000	1.000
	X2	.286	.105	.148	2.720	.008	1.000	1.000
	X6	.275	.105	.142	2.615	.010	1.000	1.000
	X12	249	.105	129	-2.370	.020	1.000	1.000

Based on the data processing in table 19, it can be formulated the equation of regression model:

$$Y_3 = 4.813 + 0.794 (X_1) + 0.286 (X_2) + 1.268 (X_3) + 0.275 (X_6) + 0.370 (X_7) - 0.248 (X_9)$$

The test results and discussion of hypothesis are as follows:

- 1. H1: demand deposit is statistically positive significance to NIM Variable X1 (demand deposit) influences the NIM of the banks. It can be seen from t-value 7.538 with significance value 0.000. Demand deposit has statistically **positive relationship** with NIM.
- 2. H1: saving deposit is statistically positive significance to NIM

 Variable X2 (saving deposit) influences the NIM of the banks. It can be seen from t-value 2.720 with significance value 0.008. Saving deposit has statistically **positive relationship** with NIM.
- 3. H1: time deposit is statistically positive significance to NIM Variable X3 (time deposit) influences the NIM of the banks. It can be seen from t-value 12.039 with significance value 0.000. Time deposit has statistically **positive relationship** with NIM.
- 4. H1: Placement in Bank Indonesia is statistically positive significance to NIM Variable X6 (Placement in Bank Indonesia) influences the NIM of the banks. It can be seen from t-value 2.615 with significance value 0.010. Placement in Bank Indonesia has statistically **positive** relationship with NIM.

- 5. H1: Placement in other banks is statistically positive significance to NIM Variable X7 (Placement in other banks) influences the NIM of the banks. It can be seen from t-value 3.514 with significance value 0.001. Placement in other banks has statistically **positive relationship** with NIM.
- 6. H1: Restructured credit is statistically negative significance to NIM

 Variable X12 (Restructured credit) influences the NIM of the banks. It can be seen from t-value
 2.370 with significance value 0.020. Restructured credit has statistically **negative relationship** with NIM.

Conclusion

From the data processing of conventional bank, the differences of determinant of profitability between Islamic banks conventional banks are stated in table 19. Based on the research the profitability performance (ROA, ROE, and NIM) of Islamic bank and conventional bank is overall both affected by depositors' funds, but with difference percentage and variables. *Mudharaba* receivable is also significantly influence NIM in Islamic banks. IB *wadiah* demand deposit has significance influence to ROA and ROE. Demand deposit in *Wadiah* contract is most preferable than *mudhraba* contract. Demand deposit has significance influence to ROA and ROE in conventional bank. Meanwhile time deposit has significance influence to NIM of conventional bank; the IB mudharaba time deposit is influence in NIM Islamic bank. The overall of variables is from depositors' funds group.

	Table 20 Distinction of Determinant							
		Islamic Bank	Conventional Bank					
	R Square	.410	.636					
ROA	Regression Model	Y1 = 0.699 + 1.890 (X1) + 0.601 (X2) - 0.955 (X8) + 0.815 (X13)	Y1= 2.277 + 0.699 (X1) + 0.422 (X2) + 0.290 (X3) + 0.165 (X6) + 0.152 (X7)					
ROA	Most Significance Variable	IB wadiah demand deposit	Demand deposit					
	R Square	0.984	0.504					
ROE	Regression Model	Y2 = 26.132 + 12.337 (X1) - 11.520 (X3) - 4.600 (X9)	Y2 = 23.902 + 4.602 (X1) + 2.046 (X2) + 2.717 (X3) - 2.075					
	Most Significance Variable	IB wadiah demand deposit	Demand deposit					
	R Square	.463	0.690					
NIM	Regression Model	Y ₃ = 6.61 ₃ - 2.8 ₃ 9 (X ₅) - 0.51 ₂ (X ₇) - 0.52 ₂ (X ₈)	Y ₃ = 4.81 ₃ + 0.794 (X1) + 0.286 (X2) + 0.275 (X6) + 0.370 (X7) - 0.248 (X9)					
	Most Significance Variable	IB <i>mudharaba</i> time deposit	Time deposit					

Table 20 Distinction of Determinant

Recommendation

From the results analysis of the research, the author proposes some suggestions;

- 1. Indonesia Financial Services Authority as regulator should monitor the bank's performance to increase its performance and competitiveness. It will result good situation for banking systems environment. People will have more trust to save their money or wealth in banks. Depositors' funds are also gotten higher.
- 2. Banks must maintain its stability and its amount of investment in generating income but should refer to regulation. Depositor trustiness is also maintained to make good long term relationship.
- 3. Banks (both Islamic bank and conventional bank) can make various items of deposit product. Depositors' funds are the main transaction of bank. Getting more funds usually spending more promotional cost. Bank should have the allocated funds to avoid excessive or unimportant cost.

References

Ahmad, Z., Iqbal, M, and Khan, F. (1985). Money and Banking in Islam. *J. Res. Islamic Econ.* 3(1), 93-99 Ahmad, A.U. F and Hassan, M. Kabir. Riba and Islamic Banking. Journal of Islamic Economics, Banking and Finance.

Algifari. (2013). Analisis Regresi Teori, Kasus dan Solusi Edisi 2. BPFE Yogyakarta. Yogyakarta

Antonio, M.S. (2001). Bank Syariah dari Teori ke Praktek. Gema Insani Press, Jakarta

Bank Indonesia. (2012). Kajian: Model Bisnis Perbankan Syariah. Direktorat Perbankan Syariah

Bank Indonesia. (2013). Kajian Stabilitas Keuangan No. 20. Departemen Penelititan dan Pengaturan Perbankan Grup Stabilitas Sistem Keuangan

Bank Indonesia. 2008-2011. Direktori Perbankan Indonesia

Bank Indonesia. Ringkasan Eksekutif: Memperkuat Perekonomia Nasional di Tengah Ketidakseimbangan Pemulihan Ekonomi Global

Chong, B.S and Liu, M. (2007). Islamic Banking: Interest-Free or Interest Based?.

Damodaran, A. (2001). Corporate Finance: Theory and Practice. Mc Graw-Hill Companies. New York.

Dar, H. A. and Presley, J.R. Lack of Profit Loss Sharing in Islamic Banking: Management and Control Imbalances. ERP No. 00/24

Dusuki, A.W. (2008). Banking for the Poor: the Role of Islamic Banking in Microfinance Initiatives. Humanomics.

Dusuki. A. W. (2008). Understanding the Objectives of Islamic Banking: a Survey of Stakeholders' Perspectives. International Journal of Islamic and Middle Eastern Finance and Management.

Ghazali, I. (2006). Aplikasi Analisis Multivariate dengan Program SPSS. Badan Penerbit Universitas Diponegoro. Semarang

Gitman, L.J. (2006). Principles of Managerial Finance: 11th edition. Pearson Education, Boston.

Hanif. M. (2011). Differences and Similarities in Islamic and Conventional Banking. International Journal of Business and Social Science

Hasan, Z. (2008). Islamic Banks: Profit Sharing, Equity, Leverage Lure and Credit Control. MPRA Paper Hassan, H. H. Financial Intermediation in Framework of Islamich. IRTI. IDB

Hassan, M. K. and Bashir, A.H. Determinant of Islamic Banking Profitability. ERF Paper

Iqbal, Z. and Mirakhor, A. (2007). An Introduction to Islamic Finance: Theory and Practice. John Wiley and Sons (Asia) Pte Ltd. Singapore.

Jobst, A.A. (2007). Derivatives in Islamic Finance. Islamic Economic Studies

Karim, A. A. (2008). Bank Islam: Analisis Fiqh dan Keuangan, Raja Grafindo Persada. Jakarta