

CHAPTER IV

RESEARCH FINDINGS & DISCUSSION

1.1 Descriptive Variables

The descriptive statistics for all the variables were shown to identify each variable used in this research.

Table 4.1 Descriptive Variables

	ROA	IJARA	ISTISNA	MUDHARABAH	MURABAHAH	MUSHARAKAH	QARD
Mean	1.981944	5822.139	385.5833	11068.25	72948.28	24479.33	10323.28
Median	1.995000	5344.000	352.5000	10963.50	69241.00	22310.00	10985.00
Maximum	2.520000	10481.00	582.0000	13878.00	110565.0	39874.00	13135.00
Minimum	1.360000	2417.000	285.0000	8560.000	37855.00	14600.00	5922.000
Std. Dev.	0.213526	2723.026	86.18431	1549.601	24254.34	8118.676	2032.753
Skewness	0.014085	0.412802	0.960968	0.195802	0.153370	0.498098	-0.831609
Kurtosis	4.236269	1.794768	2.446428	2.035017	1.554355	1.863053	2.594218
Jarque-Bera	2.293733	3.201310	6.000422	1.626819	3.275970	3.427582	4.396429
Probability	0.317631	0.201764	0.049777	0.443344	0.194371	0.180181	0.111001
Sum	71.35000	209597.0	13881.00	398457.0	2626138.	881256.0	371638.0
Sum Sq. Dev.	1.595764	2.60E+08	259970.8	84044261	2.06E+10	2.31E+09	1.45E+08
Observations	36	36	36	36	36	36	36

Source: SBS 2011-2013, OJK

Table 4.1 shows the entire variables used in this study with monthly periods. It displays the descriptive variable from all the data. The dependent variables were ROA (return on assets), while financing variables (*mudharabah*, *musharakah*, *murabahah*, *istisna*, *ijara*) and social variable (*qard*) were the independent variables.

From table 4.1, it shows the following results: ROA's mean, median, maximum, and minimum values are, respectively, 1.981944, 1.995000,

2.520000, and 1.360000. Second, *ijara*'s mean, Median, Maximum, and Minimum values are, respectively, 5822.139, 5344.000, 10481.00, and 2417.00. Third, *istisna*'s mean, median, maximum, and minimum values are, respectively, 385.5833, 352.0000, 582.0000, and 285.0000. Fourth, *mudharabah*'s mean, median, maximum, and minimum values are, respectively, 11068.25, 10963.50, 13878.00, and 8560.000. Fifth, *murabahah*'s mean, median, maximum, and minimum values are, respectively, 72948.28, 69241.00, 110565.0, and 37855.00. Sixth *musharakah*'s mean, median, maximum, and minimum values are, respectively, 24479.33, 22310.00, 39874.00, and 14600.00. Last *qard*'s mean, median, maximum, and minimum values are, respectively, 10323.28, 10985.00, 13135.00, and 5922.000. The results indicate all variables show positive mean. The values of Skewness for ROA, *ijara*, *istisna*, *mudharabah*, *murabahah*, and *musharakah* were positive, they were, respectively, 0.014085, 0.412802, 0.960968, 0.195802, 0.153370, 0.498098. Meanwhile the value of Skewness for *qard* was negative, it was -0.831609. Including, the values of Kurtosis for ROA, *ijara*, *istisna*, *mudharabah*, *murabahah*, *musharakah*, and *qard* are positive, they are, respectively, 4.236269, 1.794768, 2.446428, 2.035017, 1.554355, 1.863053, and 2.594218. While the probability of Jarque-Bera for all variables was more than 0.05 (for *istisna* is 0.0497 and it is squared up to 0.05) means all the variables are normally distributed.

The regression would be conducted with the data from the data that described in the table above.

1.2 Research Methodology

In this study, the analysis method was use the multiple regression method. The analysis would use OLS method, however, before analyze the regression, the classical assumption test should conducted first. After the classical assumption completed, then the regression analysis could be done. All the test was use *Eviews* program.

1.2.1 Classical Assumption Test

There were be some classical assumption test before conduct analysis on the regression result. The test was conduct in order to meet the requirement of multiple regression analysis with OLS.

1.2.1.1 Autocorrelation Test

In this study, the autocorrelation test was use the serial correlation LM test. The Obs*R-squared statistic was the Breusch-Godfrey LM test statistic.

The serial correlation LM test on residuals results were:

Table 4. 2 Autocorrelation Test Result

Residual	Probability of Obs*R-squared
ROA with all independent variables	0.9367

From the table above, it shows that the Probability of Obs*R-squared statistic of the Breusch-Godfrey LM of residuals from the serial correlation LM test is more than 0.05 or (>0.05). Its mean, the residuals were complete the

autocorrelation assumption test. With this result the regression analysis can be conducted.

1.2.1.2 Heteroscedasticity Test

In this study, the heteroscedasticity test was use the white test. White's test was general because it made no assumptions about the form of the heteroscedasticity (White 1980). Because of its generality, White's test may identify specification errors other than heteroscedasticity (Thursby 1982).

The result of white test on residuals were:

Table 4. 3 Heteroscedasticity Test Result

Residual	X² probability
ROA with all independent variables	0.8832

Based on the probability value of the white test on residuals above, both of the residuals got the probability value more than 0.05 or (>0.05), it mean that the residual was free from heteroscedasticity. With this result, the regression analysis could conducted to see the result of the regression.

1.2.2 Coefficient Determination

Coefficient of determination or denoted R^2 or r^2 and called (R-squared), was a number indicate the proportion of the variance in the dependent variable which was predict from the independent variable in statistics. *Eviews* was use as the econometrics tool to analyze the data.

The result of the regressions were:

Table 4. 4 R-squared value

Variables	R-squared value
ROA with all independent variables	0.614078

The R square value from the table 4.4 was the model compatibility percentage, or value show how the independent variable explain the dependent variable. Based on the table 4.4, the R square value of return on assets (ROA) regression with all independent variables was 0.614078, mean the value of independent variables explain the return on assets (ROA) variable was 61.4078%, while the 38.5922% was explained by other factors that were not in the model.

1.2.3 F-Test

F-test would be use-in the regression to identify the influence of (all independent variables) to the dependent variable (Basuki, 2015).

The result from the F-test:

Table 4. 5 F-test Result

Variables	F-Test Probability
ROA with all independent variables	0.000053

The F-test probability value from the table above was 0.000053, it mean it was less than 0.05 (<0.05). With this result, H_0 is rejected, it means that in the regression, there were at least one variable that was important in explaining the ROA variable (dependent variable).

1.2.4 T-Test

In this study, t-test would be used in testing the hypothesis. T-test is an analysis of two populations means through the use of statistical examination; a t-test with two samples was commonly used with small sample sizes, testing the difference between sample when the variances of two normal distributions were not known. A t-test looks at the t-statistic, the t-distribution and degrees of freedom to determine the probability of difference between populations; the test statistic in the test was known as the t-statistic.

The t-test probability from the regression results were:

Table 4. 6 T-test probability

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IJARAH	-1.01E-05	3.95E-05	-0.256920	0.7991
ISTISHNA	0.001953	0.001456	1.340825	0.1904
MUDHARABAH	-0.000115	0.000105	-1.100904	0.2800
MURABAHAH	5.29E-05	1.13E-05	4.679658	0.0001
MUSHARAKAH	-0.000136	4.86E-05	-2.803890	0.0089
QARD	-4.06E-05	1.92E-05	-2.118761	0.0428
C	2.458686	0.768958	3.197425	0.0033

Based on the result from the regression at table 4.8, the t-test probability from the independent variables was IJARAH t-test probability was 0.7991, it was more than 0.05, means IJARAH was statistically not significant in explaining ROA. ISTISHNA t-test probability was 0.1904. It was more than 0.05, means ISTISHNA was statistically not significant in explaining ROA. MUDHARABAH t-test probability is 0.2800, it is more than 0.05, means MUDHARABAH was statistically not significant in explaining ROA. MURABAHAH t-test probability was 0.0001, it was less than 0.05, means MURABAHAH was statistically significant in explaining ROA.

MUSHARAKAH t-test probability was 0.0089, it was less than 0.05, means MUSHARAKAH was statistically significant in explaining ROA. QARD t-test probability was 0.0428, it was was than 0.05, means QARD was statistically significant in explaining ROA.

1.3 Result Discussion

As mentioned above, financial variables consists of 5 contracts variables which were *mudharabah*, *murabahah*, *musharakah*, *ijara*, and *istisna*. While the social variable are the *qard al-hassan* contract. All the 6 independent variables influence to ROA would discussed one by one.

For the *mudharabah*, one of the financial variables, the coefficient was negative, it mean that *mudharabah* was in a negative relationship, but it had no significant relationship with the Islamic bank profitability. Although it had no significant relationship, when *mudharabah* was increase in bank, the bank would not get any increase in profit. The insignificant result probably caused by the partnership between the bank and the user was not running well, and also, the data used was the national data, so, it was the data summary from all Islamic bank that operated in Indonesia.

For the *murabahah* as the second financial variable, the coefficient value is positive, it means that *murabahah* was in positive relationship, and from the regression, the result was *murabahah* significantly influence ROA. It means that, when the *murabahah* increase, the profitability of the Islamic bank would also increase. As a financing variables, increasing *murabahah* was

giving good impact to the bank, because it would make the profitability of the Islamic Bank increasing.

Musharakah was the third financial variable, the coefficient value was negative, it means that *musharakah* was negative relationship, and according to the t-test probability, *musharakah* had significant relationship with the ROA. It means, when *musharakah* was increasing, the profitability of Islamic would decrease. *Musharakah* got negative relationship with ROA probably caused by the loss that occurred, since this contracts was the profit and loss sharing. However, the negative impact to the ROA was probably caused by the system of the *musharakah* in Islamic bank. The current system of *musharakah* contract in Islamic banks in Indonesia were probably caused the *musharakah* contract to produce more loss rather than profit. It was probably because from the contract, in this contract, the borrower of the money shared the risk with the bank, while the money came to banks were from the depositors with their deposit contracts and also from the people saving with saving contract. From that way, when there was loss in the *musharakah* contract, the bank should bear the loss shared by the users, while in the other hands, bank still got their responsibility to give the profit sharing to their depositors for their money invested with the agreement made before they invest money and also give the people who save their money in the Islamic bank some rewards (this was probably what mostly happens in Islamic bank in Indonesia). In this kind of situation, the Islamic bank would only get the loss from the *musharakah* contracts, plus the bank should pay the depositors for the money they invest

and the people who save their money in the bank, it was happens because there were only the profit sharing agreement in the saving and deposits contracts, while the loss sharing agreement were in financing contracts. With this condition, the Islamic bank would only reduce their profitability if the *musharakah* contracts were increase.

From the system above, it was clearly seen that the money the bank used were not fully from the investment money, which were the money supposed to be used by bank for their business, but the bank also used the saving money from the people. The deposit contract, was using long term contract that was the reason why the money was supposed to be used by bank, because the investor invest their money to get some profit from bank. While, the saving contracts probably used by the people were use *wadiah* contract, and it is a short term contract, mean the people only need bank to keep their money. Since those got high possibility to withdraw their money anytime they need. When the bank use the saving money to add the source of funds for *musharakah*, this can create some chaos in the Islamic bank system itself. The profit sharing, loss sharing, and rewards system for the people who save their money were in different contracts, and the Islamic bank should deal with all of that contract. From the reason explained above, it was probably the cause why the *musharakah* was giving negative impact to the ROA.

In order to get rid of that problem, the Islamic bank probably should not combined the saving account with the deposit account, moreover, change their roles from intermediaries to facilitators. Currently, *musharakah* contract was

put bank play role as an intermediary for contract users and the depositor of the money, so bank would only bear the loss. If bank's role change into facilitator, bank would only need to make the *musharakah* users meet the people who want invest their money to them. With this role, the bank would get their profit from the services they provide, while the profit and loss sharing would be shared only between the *musharakah* users and the investor itself. These solution probably can could how the Islamic bank can get their profit, not only for *musharakah* contract, but also for all other contracts that Islamic bank provided.

For the fourth financial variable, *ijara*, the coefficient value was negative, means that *ijara* was in negative relationship. Based on t-test probability, *ijara* had insignificant relationship to ROA, mean the number of *ijara* increase, the profitability of the bank would not affected. This *ijara* got insignificant result probably caused by the small number of this contract.

For the fifth financial variable, *istisna*, the T-statistic value was positive, means *istisna* in positive relationship. Based on t-test probability, *istisna* had insignificant relationship to ROA. It mean, when the number of *istisna* increase, the bank would not get increase in their profitability. This insignificant result probably caused by the small number of this contract.

The *qard al-hassan* variables was identified as social variables had negative T-statistic value, means it had negative relationship, and according to the t-test probability it is significant to the return on assets (ROA). While the *qard al-hassan* increase, it would decrease the profitability of the Islamic bank.

The negative result probably caused by the Islamic bank which use the commercial account, and should be used only for commercial purpose, Islamic bank did not have the specific social account for this contract. There were also another factors that probably caused the negative impact of *qard al-hassan* to the ROA.

The tables bellow were comparison between incomes of *qard al-hassan* with the total Operating Income in Indonesian Islamic Bank.

Table 4. 7 *Qard Al-hassan* Income in Income Statement

<i>Qard al-hassan</i> on 2015		<i>Qard al-hassan</i> on 2016	
July	IDR 108 B	January	IDR 31 B
August	IDR 244 B	February	IDR 60 B
September	IDR 275 B	March	IDR 92 B
October	IDR 304 B	April	IDR 127 B
November	IDR 336 B	May	IDR 160 B
December	IDR 373 B	June	IDR 194 B

Source: SPS 2016

Table 4. 8 Total Operating Income from Income Statement

Operating Income in 2015		Operating Income 2016	
July	IDR 24586 B	January	IDR 3781 B
August	IDR 28584 B	February	IDR 6727 B
September	IDR 32104 B	March	IDR 10173 B
October	IDR 35675 B	April	IDR 13410 B
November	IDR 39229 B	May	IDR 16888 B
December	IDR 43042 B	June	IDR 20217 B

Source: SPS 2016

Based on the table above, it was shown that the value of *qard al-hassan* is so small in the income statement especially compared with total income. The income from *qard al-hassan* was small probably caused by the contract itself. According to Chapra (1995), *qard al-hassan* is a paid back credit at the closing stages of the agreed upon load period which the borrower is not engaged in any

interest or profit and loss of the loan, mean *qard al-hassan* is a contract that doesn't give any profit to the bank. Moreover, *qard al-hassan* is a contract that only available for *mustahiq* or people in needs. Those were probably the cause why the *qard al-hassan* gave negative influence to return on assets (ROA).

With the result of this research, the Islamic bank probably should provide the social account for this contract, in example ZIS account (*zakkah*, *infaq*, *sadakah*), so the *qard al-hassan* source of funds would not come from the commercial account, and should functioned as profit maker. From the social function, the Islamic bank may also create an account that differ from the commercial account, or in short, the Islamic bank may create a social account that intends to maximize and optimize the social function of Islamic bank itself. When the Islamic bank got their specific account for social, for example: *zakah*, *infaq*, and *sadaqah* account, Islamic bank did not need to take the money from their commercial account to do the social function.

With the social function of the Islamic bank, they probably might encourage people in using *qard al-hassan*, since this research identified *qard al-hassan* did not influence any return on assets (ROA). When there were many people were helped by *qard al-hassan*, it would help the development of microeconomics sector, because *qard al-hassan* was a contract to help people in needs and not for the people who wealthy already.

By increasing the number of *qard al-hassan* user, it would also increase the number of people who are using the services provided by the Islamic bank. When there were many users of *qard al-hassan*, it probably would increase the

user of other contracts and, it probably would increase the profitability of the bank, because some of the contracts were had positive significant influence to the profitability of Islamic bank.