# CHAPTER V RESEARCH RESULT AND DISCUSSION

#### A. Result of the Research

Chapter V discusses about the factors that are affecting mudharaba payment. There are two variables in the research, they are dependent variable and independent variable. The dependent variable is mudharaba, and independent variables are Third Party Fund, Non Performing Financing, and Profit Sharing Percentage. The data of the research were taken from January 2010 to December 2015. The method used in the research is VECM (Vector Error Correction Model). This chapter explains about the research finding and the other explanation through the analyzed data and also all things related to the research.

#### 1. Descriptive Statistic

Descriptive statistic represents all population or sample of the research. It comprises standard deviation and dispersion of the data. Eviews 7 is used for econometrictool to analyze the data. The descriptive statistic of the research is as follows:

**Table 5. 1 Descriptive Statistic** 

	MUDHAR	TPF	NPF	PSP
Mean	11626.69	141730.8	5110.639	16.86792
Median	12024.50	148121.5	3650.000	16.03000
Maximum	15729.00	231175.0	10081.00	77.09000
Minimum	6556.000	52811.00	1054.000	11.64000
Std. Dev	2635.768	56812.56	2845.552	7.607271
Skewness	-0.259474	-0.099962	0.660011	7.013423
Observation	66	66	66	66

Resource: Data Processing, Appendix 1

The Mean, Median, maximum and minimum value of MUDHAR, TPF, NPF, and PSP can be seen on the graph

## 2. The unit root test- Augmented Dickey Fuller test.

The econometric analysis used in the research are VAR / VECM model. The first test is stationary test to find the appropriate econometric model. The unit root test was used to know the Akaikie Information Crition (AIC) and Schwarz Criterion (SC) through the level of Augmented-Dickey-Fuller Test (ADF-test) and the coefficient is 5 %. If the *t* value is higher than critical value, the data are at stationary level and it can be analyzed by using VAR method. If the t-coefficient is lower than critical value, so the data are not at stationary level. ADF-test is used to know the stationary data and the length of lag of the five variables in the research on the first level of difference. The data are analyzed by using Eviews 7 Program, and the result of the unit root test can be shown on the following table.

Table 5. 2 Unit Root Test - Augmented Dickey Fuller (ADF-test)

Test	ADF					
Variable	Level	Prob	Note	First Difference	Prob	Note
variable	t-statistic	Fron	Note	t-statistic	FTOD	Note
MUDAR	-1.755300	0.3994	Non stationary	-5.715107	0.0000	Stationary
TPF	-0.178075	0.9357	Non Stationary	-8.312013	0.0000	Stationary
NPF	-0.173689	0.9361	Non Stationary	-3.955665	0.0029	Stationary
PSP	-7.331311	0.0000	Stationary	-14.13662	0.0001	Stationary

Resource: Data Processing, Appendix 2

The result of table 5.2 shows that the values of Mudharaba (MUDHAR), Third-Party Funds (TPF), Non Performing Financing (NPF), dan Profit Sharing Percentage (PSP) are stasionary at First difference. The level of PSP is stasionary and still stationary at the First difference. So, the

variable should be changed into First difference. The value can be defined as the following equation:

$$DMUDHAR_t = A_0 + A1DTPFt_{-2} + A_2DNPFt_{-2} + A_3DPSPt_{-2} + e_t$$

In which D is at first difference

DMUDHAR : the first difference of Mudharabah

DTPF : the first difference of Third-party Funds

DNPF : the first difference of Non Performing Financing

DPSP : the first difference of Porfit Sharing Percentage

#### 3. Determining the length of lag.

Before continuing the next step to estimate VAR model, it is important to determine the length of lag. Optimal lag of endogenous variable is independent variable which is used in this model. Determining the length of lag is pivotal to overcome the autocorrelation problem in VAR model which is used to analyze the stability of VAR. So, the application of optimal lag in this model will eliminate the problem appeared in autocorrelation. Optimal value of the length of lag was counted by using available information criteria. The candidate of lag in the length of lag chosen is based on criteria of *likehood Ratio* (LR) Final Prediction Error (FPE), Akaike Information Criterion (AIC), Schwarz information Criterion (SC) and Hannan-Quin Criterion (HQ). The determination of optimal lag in the research was based on sequential modified LR criterion of statistic test.

Table 5.3 Lag Length Criteria

	LogL	LR	FPE	AIC	SC	HQ
0	-4648.286	NA	2.41E+55	138.8742	139.0058*	138.9263
1	-4615.676	60.35287	1.47E+55	138.3784	139.0365	138.6388*
2	-4596.710	32.83680*	1.35E+55*	138.2899*	139.4745	138.7586
3	-4581.821	24.00040	1.42E+55	138.3230	140.0341	139.0001
4	-4569.119	18.95793	1.60E+55	138.4215	140.6591	139.3069

\*indicates lag order selected by criterion

LR: sequential modified LR test statistic (each test at 5 percent level)

FPE: Final Prediction error

AIC : Akaike information criterion SC : Schwarz information criterion HQ : Hannan – Quinn information criterion

Resource: Data Processing, Appendix 4

The table shows the result of the automatic length of lag which is determined by Eviews 7. It indicates the value of information of Schwarz Criteria (SC) equal at lag 1, it is 139.0058. The value of LR is 32.83680, Final Prediction error (FPE), and the equal of AIC at lag 2 are 1.35E+55, and 138.2899. Eviews 7 automatically determines lag 2 as the exact length of lag VECM estimation. Therefore, optimal length of lag is used in causality test.

#### 4. VAR Stability Test

Before analyzing for further step, the stability of the result of VAR equation that has previously been determined needs to be tested by using VAR stability condition check. It is roots of characteristic polynominal check to all variables multiplied by the sum of lag from each VAR elements. The stability of VAR needs to be tested because if the estimation result of VAR is unstable, the IRF and FEVD analysis are not valid. Based on previously test that was done by the researcher, VAR system is stable if

modulus of all roots have less than 1 (one). If the root value and the sum of Modulus less than 1 (<1), it means that the variables are sufficient to be tested in VAR model. The following table shows the result of Polynomial test.

**Table 5.4 Roots of Characteristic Polynomial** 

Roots	Modulus			
0.033766 - 0.614513i	0.615440			
0.033766 + 0.614513i	0.615440			
0.568849	0.568849			
-0.553470	0.553470			
0.337546	0.337546			
-0.186376 - 0.253520i	0.314656			
-0.186376 + 0.253520i	0.314656			
-0.090889	0.090889			
No root lies outside the unit circle.				

Resource: Data processing, Appendix 5

Based on table 5.4 above, it shows that VAR system is stable if Modulus of the roots is less than 1 (<1). It means that the variables can be tested in VAR model. Thus, it can be said that the variables meet the requirements of stability control. It is stated that there is no roots over the unit circle in stability control. The research is categorized as stable if it can be used to analyze IRF.

# 5. Test cointegration

The next test is Cointegration test. It aims to determine whether variable group on certain level is stationary or not. The requirements of integration process for stationary variables are at the same degree, that is 1. Cointegration test in this research uses *Johansen Trace Statistic Test*. Long-

run information can be obtained after the researcher determined the cointegration rank. In cointegration rank, it is clear that the equation system can describe all systems. If all variables have been integrated, the variables have long-run correlation and it means that the test can be continued by using VECM model. If the variables are not co-terintegrated, they would be tested in First Difference VAR (FDVAR). To determine the criteria for cointegration test, it used probability test. If the coefficient of probability ( $\alpha$ ) is more than 5% ( $\alpha$ > 0.05), then the cointegration is rejected the hypothesis can be accepted if the sum of cointegration can be counted in the in equation system. So, this test is to know the variables to be tested whether there is long-run influence in the variables or not. If the variables can be obtained in coientegration test, the next step is to test the variables using VECM model. VECM model cannot be done if the variables are not proven cointegration.

Table 5.5 Co-integration test Johansen Juselius Test

Model	Hypothe- sized	Trace Statistic	Prob.	Max - Eigen Statistic	Prob.	Variable	Result
Lag	None *	116.6183	0.0000	40.86228	0.0000	MUDHAR	Trace statistic showed there
length	At most 1 *	47.54120	0.0002	18.62235	0.0123	TPF	are 4 co-integration and Max
= 2	At most 2 *	22.25874	0.0041	5.478156	0.0548	NPF	Eigen statistic showed there are 2 co-integration vectors
	At most 3 *	8.249504	0.0041	1.357428	0.0041	PSP	are 2 co-integration vectors

Source: Data Processing, Appendix 5

Based on table 5.5, it can be seen the result of cointegration test. MacKinnon-Haug-Mihelis p-value  $0.000 < \alpha = 0.05$ , it is to determine whether H<sub>o</sub> is rejected or Ha is, or the significant model. The statistic test shows the 4 co-integration and Max Eigen statistic shows 2 vectors of

cointegration among variables are 0.05. In other words, there is cointegration among MUDHAR, TPF, NPF and PSP. Based on cointegration test of Johansen Juselius, it indicates that 4 co-integration test among MUDHAR, TPF, NPF and PSP variables have long- run co-integration. The next method is VECM test for long-run and short-run.

## 6. Granger Causality Test

The next step is Granger Causality Test. The test is used to know whether there is correlation between the two variables or not. In other words, it is used to know whether there is a significant causal correlation or not. Because each variable can be endogenous and exogenous. *Bivariate* causality test in the research uses *Pairwise Granger Causality Test* and the coefficient is 5%. The result of causality test can be seen from probability value. If the probability value is less than 5%, Ho is rejected. *Granger* Causality test is used to test the causal correlation between the two variables. The strong prediction of previous information shows causal correlation for long run. If Ho is rejected, it means that there is causal correlation between the two variables.

Table 5. 6 Result Analysis Granger Quality

<b>Dependent Variable</b>	<b>Independent Variable</b>	Probability
	TPF	0.0361*
MUDHAR	NPF	0.3377
	PSP	0.0617
	MUDHAR	0.0115*
TPF	NPF	0.0651
	PSP	0.1079
	TPF	0.4419
NPF	MUDHAR	0.6420
	PSP	0.0006*

	TPF	0.8998
BHS	NPF	0.6554
	MUDHAR	0.9650
α 5%		

Resource: Data Processing, Appendix 6

Based on the result using Granger Causality test on table 5.6, there is a significant value between the dependent variable of MUDHAR and independent variables of TPF, NPF and PSP, that is TPF. TPF variable is statistically significant in influencing MUDHAR (0.0361), so Ho is rejected. If NPF and PSP are not significant, NPF and PSP are not influencing MUDHAR variable. So, MUDHAR variable Ho cannot be rejected. It can be concluded that there is one way Causality between TPF variable for MUDHAR variable.

MUDHAR variable is statistically significant in influencing TPF variable (0.0115), so Ho is rejected. If NPF and PSP variables are not significant, NPF and PSP variables are not influencing TPF variable. It can be said that TPF variable Ho cannot be rejected. It can be concluded that there is one way causality between MUDHAR variable for TPF variable.

PSP variable is statistically significant in influencing NPF variable (0.0006), so Ho is rejected. If TPF and MUDHAR variables are not significant, TPF and MUDHAR variables are not influencing PSP variable. It can be said that PSP accepts Ho. It can be concluded that there is one way causality of PSP variable for NPF variable.

TPF, NPF an MUDHAR variables are not statistically significant to influence PSP variable, so it can be said that PSP Ho cannot be rejected. It

can be concluded that there is no one way causality among TPF, NPF and MUDHAR variables for PSP variable.

#### 7. Empirical Model VAR / VECM

The next step is VECM test. It is to know the correlation between dependent variable and independent variable in the long-run and short-run. VECM model is used to determine long-run and short-run correlation among DMUDHAR, DTPF, DNPF and DBHS. The research uses lag 2. The result of DMUDHAR, DTPF, DNPF and DBHS are obtained based on the criteria of the length of lag as dependent variable. DTPF, DNPF and DBHS are decided as independent variable. Tabel 5.7 below shows the long-run and short-run correlation among mudharaba (MUDHAR) as dependent variable and the other variables. The results are as follows:

**Table 5.7 VECM Estimate Long-Run** 

Long-Term					
Variable	Coefficient	T-Statistic			
TPF(-1)	-0.037724	-13.6543***			
NPF(-1)	-0.073858	-1.43662			
PSP(-1)	83.26761	6.59648***			

Resource: Data Processing, Appendix 7

The result in table 5.7 shows all independent variables that influence MUDHAR, they are mudharaba (DMUDHAR), third party funds (DTPF), non performing finance (DNPF) and Profit-sharing Percentage (DPSP). The level of significance is a >5 percent, each of them is -13.6543, -1.43662 and 6.59648.

The first normalized equation in Long-Run Estimation :

$$MUDHAR = -0.037724 \ TPF \ (-1) - 1.43662 \ NPF \ (-1) - 0.002787$$
  
 $PSP \ (-1)$ 

It can be seen long-run estimation and long-run correlation among variables in the equation of VECM model. Mudharaba variable shows significantly positive value to PSP. Variables of NPF and TPF have significantly negative value.

**Table 5.8 VECM Estimate Short-run** 

Short-Run					
Variable	Coefficient	T-Statistic			
CointEq1	-0.249471	-3.30135***			
D(MUDHAR(-1))	0.492246	3.95757***			
D(MUDHAR(-2)	0.092281	0.68284			
D(TPF(-1))	-0.007608	-0.76935			
D(TPF(-2))	0.009705	0.98153			
D(NPF(-1))	0.038636	0.49847			
D(NPF(-2))	0.149953	1.77629*			
D(PSP(-1))	12.54282	2.67759***			
D(PSP(-2))	6.939737	2.02732**			
С	23.45327	0.42930			
R-squared	0.279334				
Adj. R-squared	0.169401				
***,**,*. 1%,5%,10%					

Resource: Data processing, Appendix 7

The table shows the estimation result of VECM model, there are short-run of Mudharaba, third party funds (TPF), non performing finance (NPF) and Profit-sharing Percentage (PSP). This analysis is to indicate the short-run influence in short-run, there are 3 variables which have coefficient 5%. There are significantly results of Mudharaba and Profit

sharing percentage variables in short-run. But, it can be found not significantly results for third party funds (TPF) and non performing finance (NPF). It means that long-run and short-run results of the variables have influence to mudharaba variable. In Mudharaba, 1 lag is significant and positive level on profit sharing percentage are 1 lag and 2 lag significantly positive to mudharaba.

The Second normalized VECM Short-Run Estimation:

DMUDHAR = 23.45327 + 0.492246D(MUDHAR(-

1))+0.092281D(MUDHAR(-2))-0.007608 D(TPF(-

1)+0.009705D(TPF(-2))+0.038636D(NPF(-1))+0.149953D(NPF(-1))

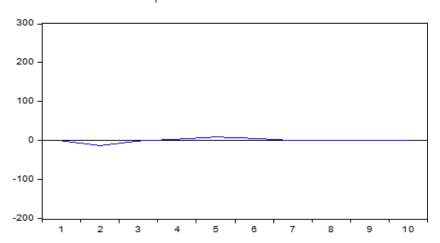
2))+12.54282 D(PSP(-1))+6.939737D(PSP(-2))-0.249471CointEq1

#### 8. Analysis of Impulse Response function

Impulse response function analysis will defines the effect of shock on a variable toward the other variables. This analysis is not only analyzed the short-run but also found out the response for further horizon as long-run information. This analysis can determine long-run dynamic response of each variable whether it is found certain shock of an error standard in each equation or not. Impulse respon function analysis is also to know how long the effect happened. Horizontal axis is period in year, and Vertical axis is response value in percentage.

**Picture 5.1 Response of MUDHAR to TPF** 

Response of Mudhar to TPF



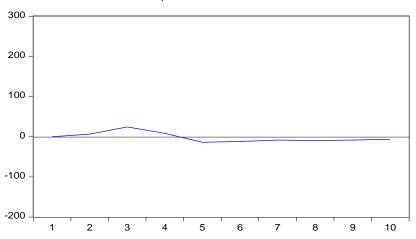
Resource: Appendix 8

The graph shows that mudharaba response can be seen because of Third Party Fund. The overall graph shows there is slightly very little movement. On the first period, Mudharaba experiences negative response to Third Party Fund and then, it decreases. In the second and the third period, Mudharaba experiences a bit increase. On the seventh period until the tenth period, Mudharaba is tend to stable on zero.

It means that Mudharaba response do not affect to Third Party Fund because there are the other funds or the other model that is offered by the bank and it is more potential comparing to Third Party Fund. Actually, funds of Third Party Fund is pivotal and it has important role in Islamic Banks to determine customers of the Bank and to develop Indonesian economy. The response of Mudharaba does not affect to Third Party Fund, it means that people have not responded to Mudharaba contract yet.

**Picture 5.2 Response of MUDHAR to NPF** 

Response of MUDHAR to NPF



Resource: Appendix 8

The above graph shows that Mudharaba response can be seen as a result of the alteration of Non performing financing. It also shows that there is negative response from the first period to the fourth period, but there is decline to negative point in the fifth period. It means that negative response of alteration in NPF will give good effect. If NPF is decreased, it will reduce any highly risks of Bank.

In the first and second period, response of Mudharaba to NPF shows positive, it happened because Mudharaba financing is categorized as much more circulating than its non performing financing (the difference between total financing and non performing financing). It indicates that NPF ratio is below 3 percent and not more than 5 percent, based on the regulation of Bank Indonesia on NPF. However, there is a deacrese on negative range in the fourth period to the tenth period. The decreased during the sixth period until the tenth period happened because of the influence of real

sector/economic inertia that affected to Small Medium Enterprises. They dominated Mudharaba financing in Islamic Bank, as happened in the end of 2016. Based on statistic data of Islamic Bank per October 2016 shows that Islamic financing is Rp 237.02 billion or raised around 14.08 percent comparing to October 2015 around Rp 207.76 billion. Non Performing Financing (NPF) ratio is still high around 4.39 percent per October 2016. The ratio in 2016 is raised around 4,31 percent comparing to NPF in the previous month. The greatest contributor of NPF is from commerce sector around Rp 2.4 billion. Comparing to October 2015, there is an increase to 17.48% from total NPF in last years' commerce sector around Rp 2.09 billion. The NPF ratio in commerce sector is still high around 8.36 percent in October 2016 or it is increased comparing to previous year around 8.24 percent.

FResponse of Mudhar to PSP

300
200
-100
-200
1 2 3 4 5 6 7 8 9 10

Resource: Appendix 8

Picture 5.3 Response of MUDHAR to PSP

It can be seen from the graph that there is Mudharaba response that resulted from the alteration in Profit Sharing Percentage. The response of

Profit Sharing Percentage shows negative value. The first period to the fourth period shows continuously decrease response. The fifth period shows a bit raise but it is still on negative points. It indicates there is decrease of Profit Sharing Percentage in Mudharaba contract, the higher Mudharaba level the more Mudharaba financing. The graph shows that Mudharaba response to Profit Sharing Percentage is decrease. It means that there is a decline trends of Profit Sharing Percentage on Mudharaba financing.

The movement of PSP based on IRF analysis is giving enough different view on the theoretical analysis commonly on the first period of Mudharaba response to the PSP movement is still on the static phase 0 but the transition of the first period until the fourth period shows the significant negative inclination.

#### 9. Analysis of Variance Decompotion.

Variance decomposition is used to detect Causal relationship among variables, it is to measure the contribution or composition of influence of each independent variable to dependent variable. It explains the level of variable which is described by the shock at all variables in VAR system. Variance decomposition measures error percentage variation of final prediction error which is described by the other variables in short-run dynamic and interaction. Variance decomposition does not provide information about how variables deal with the shock or innovation in other

variables. The research explores various decompositions based on VAR specification.

**Table 5.9 The result of Variance Decomposition** 

Period	S.E	MUHDAR	TPF	NPF	PSP
1	212.8454	100.0000	0.000000	0.000000	0.000000
2	353.2791	97.49455	0.122656	0.032191	2.350603
3	465.0474	93.16016	0.070947	0.290779	6.478116
4	558.4813	87.37243	0.053989	0.223507	12.35007
5	629.5199	82.76821	0.065541	0.224643	16.94161
6	684.4988	79.81727	0.063318	0.219573	19.89984
7	731.4863	78.12404	0.055519	0.205745	21.61470
8	774.8032	77.14307	0.049494	0.198628	22.60881
9	816.4295	76.54379	0.044601	0.189320	23.22229
10	857.0754	76.10249	0.040472	0.177381	23.67966

Resource: Data Processing, Appendix 9

Table 5.9 explains the result of decomposition variance of MUDHAR. In the first period is 100% influenced by the variable mudhar itself. After that, the influence of MUDHAR variable reduces into 76.1% at the tenth month. The table describes that MUDHAR variable in 1 period is 0% influenced by TPF, but TPF affects MUDHAR about 0,04% at the tenth month. The other explanation affects NPF variable about 0% at the first period 1 to MUDHAR, The influence of NPF to MUDHAR is about 0.17% at tenth month. Besides, PSP variable affects MUDHAR variable around 0% in the first period and PSP affects MUDHAR about 23.67% at the tenth month. In this case, PSP proves significantly affects MUDHAR.

#### **B.** Discussion

The finding of the research distorts the aims of the research that are found on the correlation among variables, they are Mudharaba (MUDHAR),

third party fund (TPF), non performing financing (NPF), and profit sharing percentage (PSP). Here is the discussion of the research.

## 1. The estimation of VECM in long-run

Financing in Islamic Banks has pivotal roles to develop Islamic Banks in Indonesia. Financing in Islamic Banks as one of determinants for better economy in Indonesia. The more people interested to get involved in financing of Islamic Banks, the more profit of Islamic Banks will get. *Mudharaba* or investment is to distribute some assets to worker or trader in order to get some profits. The business involves two parties, they are stakeholders that distribute asset and do not do business and the other one is those who are expert in doing and handling business but they do not own asset. The two parties are doing mutual contract in business (Almuslih, 2001: 168).

Mudharaba financing in Islamic Bank is known as the niche product of Islamic financing Institution (the transaction product that is proper in Islamic Financing Institution because it is fair, high empathetic to mudharib, and it supports the economic development). Asset of Third Party Fund is asset that is collected by the Bank from people, the biggest asset is collected from people, it can be isn the form of Mudharaba saving, Wadiah giro and Mudharaba deposit. The source of the asset is pivotal for the Bank to increase credit or financing that will be distributed to people or customers. In distributing credit or financing, Bank requires some asset sources. The more the asset sources owned

by the Bank, the more chances used by the Bank to run its function. The funds include fund from the Bank, fund from people, fund from the other institutions, and fund from people (Kasmir, 2002).

The theory explains that if Third Party Fund is increase, the financing will also increase. Otherwise, the result of the research assumes that. The conclusion of the research is derived from estimation of VECM. The results of VECM in long-run indicates that TPF has negative and significantly affect to MUDHAR value. The value is 0.037724 percent. It means that the increase of third party fund (TPF) affects to the decrease of MUDHAR about 0.037724 percent (Table 5.7). The result is quite the same with of Agustina Kurniawan and Zulfikar's research (2014) that TPF shows negative value. The higher TPF value which is collected by Islamic Commercial Banks will not affect to Mudharaba financing. Most researches show that TPF positively affect financing. The researches of Loevyati (2011), Arianti, et. al (2015) show the same results. It is because the increase of third party fund will affect the financing of Islamic Banks, it will also increase. It is quite different with the previous result that negative value of third party fund is as consequence of the increase of third party but it is a decrease as a trends of Mudharaba at that time. It happened because the lack of people interest to mudharaba, they consider more about the profit. They count on the loss and profit of Mudharaba contract. The raise of third party fund in the long-run and trends of Mudharaba decrease, become the reasons why the result is negative. The fund of third party fund is less in amount for Mudharaba financing, and most of third party fund is for the other financing. Because Mudharaba is decreased, Third Party Fund distributed to the other financing will also decrease. The decrease of Mudharaba because of the high risk of financing, therefore people tend to choose the other kinds of financing. There are some reasons why Mudharaba has high risk comparing to the other kinds of financing. The first reason is Side streaming. It happened when customers misuse the fund, they use the fund not as stated in the contract. The second reason is the customers inadvertently use or purposively misuse the fund. The third is the customers hide the profit, it means they are not telling the true amount of the profit. The high risk of using fund is not only coming from economic agents (businessmen) but also coming from asset owners. People or customers have responsibility to return the asset they lend, and they also take the risk of unstable profit sharing in running Mudharaba contract. Adversely, Bank will not have a charge of losing if customers or economic agents suffer financial lose. However, it is pivotal to have a good banking policy to supervise economic agents that have Mudharaba contract. Both Bank and economic agents should have correct information related to the contract.

**Tabel 5.10** 

Contract	2013	2014	2015
Mudharaba	13.625	14.345	14.820
Musyarakah	39.874	49.387	60.713
Murabahah	110.565	115.602	122.111

Source: Statistics Islamic Banking

By comparing the three kinds of contracts, the statistic data of Islamic bank show that the role of Mudharaba contract is lower than musyarakah and murabahah contract.

The finding is in accordance with Islamic Business Economist. He states that Bank customers consider profit level in investing on Islamic banks. If the profit sharing is low, the bank customers will probably allocate their funds to conventional banks (Basari, 2013).

In Glossary of Indonesian Bank, Non Performing Financing (NPF) is financing related to non-current account. It consists of a financing that might be of high risk; financing of certain group, doubtful and circulating asset but it can be in arrears in return.

According to (Sudarsono, 2007:123), Non Performing Financing or NPF in Islamic Banking is some credits that are included to performing loan, it based an Indonesia Bank requirements about qualified productive asset which is related to not performing loans, doubtful loans, and bad credits

. It is because people tend to have financing through Islamic Bank. NPF happened because economic agents are unable of returning the agreed asset as stated in the contract.

Non performing financing variable is negative and significantly affecting MUDHAR. The result of the research defines that the increase of Non performing financing (NPF) will affect to the decrease of MUDHAR around 0.073858 percent (Table 5.7). The finding is in accordance with the research of Adzimatinur, et.al (2016). The finding of the research concluded that NPF has negatively significant correlation to financing, both in the long run and short-run. In short-run, NPF is well-defined the movement of Islamic Banks in short run. NPF is problematic financing. The increasing demand on NPF will affect on financing, the fund cannot be circulated well. This condition influences the Bank to serve more expense to the abolishment. It can be the a cause that Bank should provide or distribute alternative fund to anticipate the risk of NPF, and it is also useful for internal maintenance of Islamic Bank. High ratio in NPF reflects the level of controlling financing and credit/bank policy by bank, the less the NPF ratio the higher financing that distribution by the bank. The higher of NPF shows the low of bank capacity in collecting credit. The less the loan return to the bank, the less fund of the bank to be distributed to people/customers. As a result, bank will reduce the fund that will be distributed to people/customers.

PSP variable has positive and significantly affect on MUDHAR. The result of the research defines that the increasing of PSP will affect to the increasing of MUDHAR. The increase is about

83.26761 percent (Table 5.7). The finding is in accordance to the research of Adzimatinur, et. al (2016) and loevyati (2011), Arianti, et. al (2013) and Agustina Kurniawan and Zulfikar (2014). Those researches show that PSP has positively affect to MUDHAR. Profit sharing percentage is a kind of return that is obtained by the bank from handling financing. The higher the profit sharing percentage, the more profit for the Bank. Besides, the increase of data about Mudhar financing in Islamic Bank will also increase customer interests or common people to PSP system.

#### 2. Estimation of VECM in short-run

The result of VECM in short-run indicates that third party fund on lag 1 has negative effect. The coefficient 5% is 0.007608, it means that 1 percent increase on the previous month will decrease mudharaba about 0.007608 percentage points in recent years (Table 5.8). 1 percent increase on the two first month will affect Mudharaba about 0.009705 percentage points (Table 5.8) on short-run in recently years. The finding is appropriate and consistent with the findings Kurniawan and Zulfikar (2014). They found that TPF is negative. It shown in the research that third party fund is negative and not significant on lag 1. It means that the movement of third party fund is tend to be increased but the trends of mudharaba contract is decreased.

The result of Lag 1 shows negative influence but it is not significant. It is because Islamic Bank allocates TPF as potential

financing and it becomes people interest. Based on the data of Islamic Bank, people are more interested in Murabahah and Musyarkah financing comparing to Mudharaba financing. In certain period (lag 2), TPF affects positively and not significant to Mudharaba. It happened because Islamic Bank can minimize the gap in financing allocation by determining percentage of TPF allocation. So, each of financing can be optimally useful. The function of TPF as the main asset in Islamic Bank can be handled well. The result of the analysis is in accordance with the previous research results of Loevyati (2011), Arianti, et. al (2015). The results show that if third party fund increases and it is followed by the increasing of trends in financing, it happened because third party fund is the source of fund in financing.

Non performing financing variable is positive and not significantly affect to Mudharaba. The result of the research shows that the increase 1 percent in previous month in non performing financing will also increase mudharaba about 0.038636 percentage points in recent year (Table 5.8). 1 percent increase in previous two month on non performing financing will increase mudharaba about 0.149953 percentage points (Table 5.8) on short-run in recent year. The result is different from the results of Loevyati (2011), Arianti et. al (2015). In their research, they define that NPF is negative. The result in short-run is different result in the long-run. at lag 1 and 2 NPF positive and not significant to mudharaba. This happens because the

increase in the NPF is not greater than the difference in financing (total financing-financing total NPF = pure) data from Islamic Banking NPF levels (Commercial Bank Syariah / Sharia) Based Financing Group in Indonesia

Table 5.11: Islamic Banking NPF levels (Commercial Bank Syariah / Sharia) Based Financing Group in Indonesia

Year	<b>Amount of Financing</b>	Amount of NPF
2009	46.886	1.882
2010	68.181	2.061
2011	102.655	2.588
2012	147.505	3.269
2013	184.120	4.828

Source: Statistics Islamic Banking, January 2015

**Table 5.12: Pure Financing** 

Year	<b>Financing Difference</b>
2009	45.004
2010	66.120
2011	100.067
2012	144.236
2013	179.292

The data show that the increase of NPF is also followed by the increase of genuine financing. It indicates that Islamic Bank enables to minimize NPF, by maintaining on Banking and also maintaining customers or candidate customers. Islamic Bank can be survived in profitability although level of NPF is continually increase.

Profit sharing percentage variable shows positively and significantly affect to mudharaba. The result of the research defines that 1 percent increase in previous month on profit sharing

percentage will increase mudharaba about 12.54282 percentage points in recent year. 2 percent increase in previous two month will increase mudharaba about 6.939737 percentage points in recent year in short-run. The finding is in accordance with the research of Adzimatinur, et. al (2016), and Loevyati (2011), Arianti, et. al (2013), and Kurniawan and Zulfikar (2014). The results of the show that lag 1 and 2 in short-run shows positive. It happened because profit sharing percentage affects mudharaba financing. The higher the profit sharing percentage the bigger volume of financing profit-sharing based will circulate.

## 3. Forecasting Variance Decomposition.

The summarized result Forecasting Variance of Decomposition that shows dependent variable is Mudharaba. It shows that profit sharing percentage variable is the most shocking variable to affect the other variables. The second variable is NPF, and the last variable is TPF. The result shows that PSP brings about 23.67% impact on mudharaba shock and non performing financing affects 0.17%. The impact of TPF, is about 0.04%. The most influence variable on Variance Decomposition is profit sharing percentage. The effect is about 23.67%. If the influence of profit sharing percentage is changed, it will affect Mudharaba which has the biggest shock. So, it is suggested to bank owners to manage profit-sharing percentage well, because it has a significant influence on the quantity of Mudharaba.

Most people know that profit sharing percentage is one of main factors which determine the quantity of financing profit-sharing based. It is pivotal that profit sharing percentage is a kind of financing with profit-sharing based on mudharaba financing. It tends to have high risk comparing to the other kinds of financing because it has uncertain return from Islamic Bank.

## 4. Interretation Economics

#### a. Related Variable

One of Mudharaba principle application is in financing, Mudharaba is applied to finance in working capital such as trading and service working capital. In certain asset, it is also called *mudharaba muqayyadah*. It is certain source of fund with certain distribution and certain requirement as stated by *shahibul maal*. According to (Saiful Rosly, 2005) mudharaba is based on partnership of capital and service. In this sense, allocation of profits and losses between the mudharib and rabbulmal must be made with care to prevent gharar (uncertainty) in contractual obligations. In principle, Mudharaba provides a system of distribution as follows:

1) Profit distribution: the contract specifies a stated fraction or ratio, say 40 percent to rabbulmal and 60 percent to mudharib. The ratio is set on the basis of project risks, value-addition, and liabilities.

- Loss distribution due to market risks: absorbed by rabbul mal.
- 3) Loss distribution due to negligence/moral hazard (ghasib) absorbed by mudarib.

On the loss distribution role arising from market risks, it looks unfair to burden the rabbulmal alone while the mudarib goes free.

If the implementation of Mudharaba application can be optimally held, the effectiveness of Mudharaba can be used both micro and macro measurement. The analysis of Mudharaba influence on micro Mudharaba can rise profitability of the Bank and it also can increase self-employed of customers in managing asset or fund that has been distributed by the Bank. By using Mudharaba payment, Islamic Bank can increase risk of Bank management. So, it can be accountable, profitable, and transparent. Macro application of Mudharaba payment can increase economic growth by allocating financing entrepreneur sector. Mudharaba payment can encourage new entrepreneurs because it can get guarantee asset from Islamic Bank. It is based on Scumpeter's opinion on the growth of Economy theory, the said that the growth of economy of a state is determined by the growth of its entrepreneurs. So, the application of Mudharaba payment can indirectly support the growth of economy. Not only that, It requires the bank as *rabbulmal* to assess the firm's (i.e., *mudarib*) entrepreneurial visions and objectives. Business plans should be able to lay out the firm's market strategy, financial projections, and manufacturing processes. This is also supported by the opinion of (Saiful Azhar Rosly, 2005) who said that the main concern here is about financing small and medium-scale industries. Although many entrepreneurs have attended development workshops to learn the skills of financial management, accounting, and marketing and to acquire numerous motivational tips to sharpen business acumen, the bottom line remains the same, i.e., capital.

## b. Micro Economy and Banking

1) Islamic Bank finance: Islamic Bank worry in optimizing Islamic financing is the increase of operational fee and administration fee (high cost dan market cost). Theoretically, the problems emerged in financing can be solved by innovating banking products. So, people can have high interest to the products. One of them is by encouraging customers in doing and cooperating business with business consultant (to anticipate customers in setting new entrepreneurship). The other way is to increase security of fulfilling customers-based by the requirements administration when they cooperate with customer consultant.

(anticipating non potential customers). Both ways can indirectly minimize and erase information gap between bank and customers.

- c. Macro Economy and Indonesian Economy
  - Banking and poverty elucidation (the implementation of Cooperatives of Small Medium Enterprises)

According to (secretary of state) The policy of UMKM ( Usaha Mikro Kecil dan Menengah ) establishment held by government will ease the admission of UMKM. The policy brings a great impact to economy agents, government allows UMKM to handle finance in conventional bank and Islamic Bank. The finance using UMKM scale is more preferable than the finance in conventional bank, the consideration is related to low interest rate. People are more interested in interest rate of UMKM than in conventional bank. They prefer financing in Islamic Bank to financing in conventional bank. It can be said that commercial bank or sharia Business Unit is for real sector rather than for monetary sector, just like obligation stock that is tend to real sector. Hopefully, there will be more financing for economic agents in developing UMKM. When economic agents increase the fund and get asset to handle business, not only productivity will increase but work force will also increase. If work force increased, the entrepreneurs will create work field and reduce unemployment. It will also increase income. If income increases, the consumption will also increased. Here is the root of economy growth. From monetary sector, bank distributes fund and finance to people. So, the economy will be developed. The growth of economy will lead to the increase of banking sector. Investors are interested in invested in making invensment Indonesia. The investment will encourage Indonesia in this global era, so Indonesian economy will be stable and invite more investors to invest.

The policy of government to ease the admission of UMKM will automatically increase UMKM. The more UMKM the more people are interested in finance in Islamic Bank. It will increase NPF. When it happened, Bank will get problem in supervising or managing the economic agents.

Moral hazard in economy is economic actions that discourage both economic agents and the other parties. To justify whether it is included in moral hazard or not, it is necessary to study more about principles in Islamic transaction. It requires to know whether something is allowed or prohibited based on Islamic values. Moral hazard in Islamic Bank will cause economic bubble for economic agents, it is interpreted as phenomena of the increase price

of asset to the highest level and it is far from its fundamental values. It seems that there is growth of economy and also financing is inscrease, but there are some problems found in liquidity. Furthermore, the work of Bank can be seen from its liquidity.

If NPF is increase, economic bubble will also increase. The result of the research shows that NPF is continuously increased. According to Rosly (2005) Islamic banking should consider the Mudharaba financing model seriously if it desires to command a market niche. The rules of mudharaba, protects the bank from moral hazard because of the two reasons firstly, fixed salary does not constitute Mudharaba expenses. Secondly, it is as a form of the rabbulmal from claiming the personal wealth of the mudarib (i.e., by due process of the law) if the lose arise from negligence.