

## CHAPTER 4

### DATA ANALYSIS AND DISCUSSION

In this chapter, the researcher will explain about the analysis and discussion of data required in this research. The data analysis is the process of research's data to be useful information to answer problems of this research. The problem in this research is how the different performance of sharia and conventional equity mutual funds in the period 2014-2015 using Sharpe, Treynor, Jensen,  $M^2$ , and Miller. The data needed in this research is Net asset value (NAV), interest rates of Bank Indonesia certificate, and IHSG in the period of 2014-2015.

This research utilised computer softwares that are Microsoft excel and spss. Microsoft excel was used to cultivate the data needed in the calculation of sharia and conventional equity mutual fund performance based on Sharpe, Treynor, Jensen,  $M^2$ , and Miller. While the spss was used to prove the hypotheses in this research.

#### **4.1. Descriptive Statistics of Research Variables**

Research data analyzed about the calculation of each performance of mutual fund portfolios in each company. The descriptive analysis of each performance of the portfolio of each mutual fund is as follows:

**Table 4.1.**

**Descriptive Statistics of Research Variables**

Variabel	N	Minimum	Maximum	Mean	Median	Std. Deviation
Return NAV Sharia	23	-,0962	,1787	,019479	,017342	,0738098
Return NAV Conventional	23	-,0845	,1702	,027620	,020053	,0700164
Market Return	23	-,0783	,0548	,002337	,011856	,0366139
SBI	23	,0750	,0775	,075217	,075	,0007203
Valid N (listwise)	23					

The minimum value of sharia mutual fund's return is -0.0962 in the period of July 2014 while the maximum value of sharia mutual fund's return is 0.1787 in period of October 2014. The mean score of mutual fund's return year 2014-2015 is 0.019479 with a standard deviation of 0.0738098. The mean score of 0.019479 so that it can be concluded that the rate of returns of sharia equity mutual funds is in good condition. While the median value is 0.017342.

The minimum value of conventional mutual fund's return is -0,0845 in the period of September 2015, while the maximum value of sharia mutual fund's return is 0,1702 in the period of October 2015. The mean score of mutual fund's return year 2014-2015 is 0,02762 with a standard deviation of 0,700164. The mean score is 0,02762 so that it can be concluded that the rate of returns of conventional equity mutual funds is in good condition with the median value is 0,20053.

The minimum value of market return is -0,0783 in the period of April 2015, while the maximum value of market return is 0,0548 in the period of October 2015. The mean score of market return year 2014-2015 is 0,002337 with a standard deviation 0,0366139. While the median value is 0,011856.

The minimum value of Bank Indonesia certificate is 0,075 or 7,5% while the maximum value of Bank Indonesia certificate is 0,0775 or 7,75%. The mean score year 2014-2015 is 0,075217 with standard deviation 0,0007203. While the media value is 0,075.

#### 4.2. Mutual Fund Performance

The results of the analysis of sharia equity mutual fund's performance in this research are as follows:

**Table 4.2.**

**Sharia Equity Mutual Fund's Performance Result**

Mutual Funds	Sharpe	Jensen	Teynor	M2	Model Miller
Avrist Equity-Amar Syariah	-1,531	0,012	-0,063	0,017	-6,711
BNP Paribas Pesona Syariah	-2,195	-0,049	-0,145	-0,008	-18,235
Cipta Syariah Security	-0,710	-0,052	-0,596	0,047	1,845
Mandiri Investa Atrakti Syariah	-0,437	0,037	-0,040	0,057	3,299
Mandiri Investa Ekuitas Syariah	0,200	0,034	-0,104	0,080	0,576
Manulife Syariah Equity Amanah	-0,883	-0,050	-0,178	0,041	-1,299
MNC Dana syariah ekuitas	-0,927	-0,114	2,996	0,039	-2,664
OSO Syariah Equity Fund	-0,904	-0,052	-0,202	0,040	-1,019

Panin Dana Syariah Saham	-0,401	0,114	-0,023	0,058	1,941
PNM Ekuitas Syariah	-1,945	-0,030	-0,104	0,002	-19,889
SAM Sharia Equity Fund	-0,308	0,056	-0,034	0,062	1,090
Sucorinvest Sharia Equity Fund	-0,961	-0,010	-0,083	0,038	-1,572
TRIM Syariah Saham	0,008	0,046	0,002	0,073	2,342
<b>Mean</b>	<b>-0,8457</b>	<b>-0,0045</b>	<b>0,1097</b>	<b>0,0420</b>	<b>-3,0997</b>
<b>Std. Dev</b>	<b>0,708</b>	<b>0,061</b>	<b>0,880</b>	<b>0,026</b>	<b>7,558</b>
<b>Max</b>	<b>0,200</b>	<b>0,114</b>	<b>2,996</b>	<b>0,080</b>	<b>3,299</b>
<b>Min</b>	<b>-2,195</b>	<b>-0,114</b>	<b>-0,596</b>	<b>-0,008</b>	<b>-19,889</b>

**Source: Data processed**

The minimum value of Sharpe index is -2,195 obtained by BNP Paribas Pesona Syariah, while the maximum value of Sharpe index is 0,200 obtained by Mandiri Investa Ekuitas Syariah. The mean score of Sharpe index in 2014-2015 is -0,8457 with the standard deviations of 0,708. The mean score is -0,8457 which can be concluded that the performance level of mutual funds based on Sharpe index is still relatively low. From the analysis of Sharpe index, it can be concluded that there are 11 sharia equity mutual funds that are not worth buying because it has a negative performance value. While there are 2 sharia equity mutual funds which are worth buying because of having positive performance values.

The minimum value of Jensen index is -0,114 obtained by MNC Dana Syariah Ekuitas, while the maximum value of Jensen index is 0,114 obtained by Panin Dana Syariah Saham. The mean score of Jensen index in year 2014-2015 is -0,0045 with standard deviations of 0.061. The mean score of -0,0045 can be concluded that the performance level of mutual funds based on Jensen index is still low. From the analysis

of Jensen index, it can be concluded that there are 7 sharia equity mutual funds which are not worth buying because it has a negative performance value. While there are 6 sharia equity mutual funds which are worth buying because of having positive performance values.

The minimum value of Treynor index is -0,596 obtained by Cipta Syariah Security, while the maximum value of Treynor index is 2,996 obtained by MNC Dana syariah ekuitas. The mean score of Treynor index in 2014-2015 is 0,1097 with the standard deviations of 0,880. The mean score of 0,1097 can be concluded that the performance level of mutual funds based on Treynor index is classified as good. From the analysis of Treynor index, it can be concluded that there are 11 sharia equity mutual funds which are not worth buying because it has a negative performance value, while 2 sharia equity mutual funds are considered as worth buying because of having positive performance values.

The minimum value of  $M^2$  index is -0,008 obtained by BNP Paribas Pesona Syariah, while the maximum value of  $M^2$  index is 0,080 obtained by Mandiri Investa Ekuitas Syariah. The mean score of  $M^2$  index in 2014-2015 is 0,0420 with the standard deviation of 0,026. The mean score of 0,0420 can be concluded that the level of mutual fund performance based on  $M^2$  index is classified as good. From the analysis of  $M^2$  index, it can be concluded that there is 1 sharia equity mutual fund which is not worth buying because it has a negative performance value, while the other 12 sharia equity mutual funds are worth buying because of having positive performance values.

The minimum value of Miller index is -19,889 obtained by PNM Ekuitas Syariah, while the maximum value of Miller index is 3,299 obtained by Mandiri Investa Atrakti Syariah. The mean score of Miller index in 2014-2015 is -3,0997 with the standard deviations of 7,558. The mean score of -3,0997 can be concluded that the level of mutual fund performance based on Miller index is classified as bad. From the analysis of Miller index, it can be concluded that there are 7 sharia equity mutual funds which are not worth buying because of having negative performance value, while the other 6 sharia equity mutual funds are worth buying because they show positive performance values.

The results of the performance analysis of conventional equity mutual funds in this research are as follows:

**Table 4.3.**

**Conventional Equity Mutual Funds Performance Results**

Reksadana Saham	Sharpe	Jensen	Teynor	M2	Model Miller
Avrist Equity-Cross Sectoral	-1,555	-0,169	-0,061	0,073	1,876
Abeerden Indonesia Equit Fund	-0,919	-0,074	-1,993	0,037	-984,545
Archipelago Equity Growth	-0,329	-0,172	-0,033	0,056	-5,506
Ashmore dana ekuitas nusantara	0,108	-0,113	0,009	0,054	-21,296
Bahana dana prima	-0,379	-0,088	-0,165	0,056	-65,351
Batavia dana saham	-0,740	-0,132	-0,060	0,039	-10,306
BNP Paribas Ekuitas	-1,027	-0,133	-0,120	0,039	16,123
CIMB-Principal Equity Aggresive	-0,131	-0,167	-0,013	0,058	-9,423
Dana Ekuitas Prima	-0,498	-0,059	0,248	0,056	67,523
Dana Reksa Mawar	-1,529	-0,149	-0,087	0,021	7,093
Eastspring investments alpha navigator	-0,539	-0,137	-0,132	0,056	25,946

Emco Growth Fund	-1,074	-0,128	-0,218	0,042	89,456
First state indoequity value select fund	-0,804	-0,199	-0,099	0,054	23,229
GAP Equity Fund	-0,488	-0,060	0,137	0,062	47,035
Grow 2 Prosper	-0,150	-0,101	-0,135	0,067	-21,888
Jisawi Progresif	0,153	-0,245	0,029	0,070	-5,622
MNC-Dana Ekuitas	-1,207	-0,275	-0,081	0,050	16,917
Mandiri Investa cerdas bangsa	0,161	-0,008	0,068	0,069	-47,879
Manuliffe Dana Saham	-1,127	-0,107	-0,816	0,041	1305,753
Maybank dana ekuitas	-1,829	-0,169	-0,090	0,019	14,003
Mega Asset greater infrastruktur	-0,726	-0,080	-0,125	0,033	-100,944
Millenium Equity	0,035	-0,341	0,005	0,069	-2,864
Panin Dana Maksima	-1,301	-0,173	-0,067	0,030	4,778
Pacific Equity Fund	0,158	0,851	-0,017	0,070	-1,983
Pratama Equity	-0,090	-0,132	-0,011	0,058	-16,702
Rencana Cerdas	-0,248	-0,120	-0,027	0,052	-20,973
Simas Danamas saham	-0,796	-0,115	-0,187	0,046	38,718
Syailendra Equity Opportunity Fund	-1,530	-0,165	-0,158	0,036	58,821
Sucorinvest Equity und	-0,260	-0,093	-0,133	0,061	-45,204
Tram consumption plus	-0,214	-0,108	-0,039	0,057	-28,021
TRIM kapital	-0,549	-0,095	-0,091	0,044	-44,298
<b>Mean</b>	<b>-0,6266</b>	<b>-0,1050</b>	<b>-0,1439</b>	<b>0,0508</b>	<b>9,1763</b>
<b>Std. Dev</b>	<b>0,570</b>	<b>0,189</b>	<b>0,381</b>	<b>0,014</b>	<b>300,940</b>
<b>Max</b>	<b>0,161</b>	<b>0,851</b>	<b>0,248</b>	<b>0,073</b>	<b>1305,753</b>
<b>Min</b>	<b>-1,829</b>	<b>-0,341</b>	<b>-1,993</b>	<b>0,019</b>	<b>-984,545</b>

**Source: Data processed**

The minimum value of Sharpe index is -1,829 obtained by Maybank Dana Ekuitas, while the maximum value of Sharpe index is 0,161 obtained by Mandiri Investa Cerdas Bangsa. The mean score of Sharpe index in 2014-2015 is -0,6266 with the standard deviation of 0,570. The mean score of -0,6266 can be concluded that the level of mutual fund performance based on Sharpe index is still relatively low. From the analysis of Sharpe index, it can be concluded that there are 26 conventional equity mutual funds which are not worth buying because they have negative performance

values, while there are 5 conventional equity mutual funds which are worth buying because of having positive performance values.

The minimum value of Jensen index is -0,341 obtained by Millenium Equity, while the maximum value of Jensen index is 0,851 obtained by Pacific Equity Fund. The mean score of Jensen index in 2014-2015 is -0,1050 with the standard deviation is 0,189. The mean score of -0,1050 can be concluded that the level of mutual funds performance based on Jensen index is still low. From the analysis of Jensen index, it can be concluded that there are 30 conventional equity mutual funds which are not worth buying because they have negative performance values, while there is 1 conventional equity mutual fund which is worth buying because it has a value of positive performance.

The minimum value of Treynor index is -1,993 obtained by Aberdeen Indonesia Equity Fund, while the maximum value of Treynor index is 0,248 obtained by Dana Ekuitas Prima. The mean score of Treynor index in 2014-2015 is -0,1439 with the standard deviation is 0,381. The mean score of -0,1439 can be concluded that the level of mutual fund performance based on Treynor index is classified as bad. From the analysis of Treynor index, it can be concluded that there are 25 conventional equity mutual funds which are not worth buying because they have negative performance values, while there are 6 conventional equity mutual funds which are worth buying because of having positive performance values.



The minimum value of  $M^2$  index is 0,019 obtained by Maybank dana ekuitas, while the maximum value of  $M^2$  index is 0,073 obtained by Avrist Equity-Cross Sectoral. The mean score of  $M^2$  index in 2014-2015 is 0,0508 with the standard deviation is 0,014. The mean score of 0,0508 can be concluded that the level of mutual fund performance based on Treynor index is classified as good. From the analysis of the  $M^2$  index, it can be concluded that the entire equity mutual funds are worth buying because of having positive performance values.

The minimum value of Miller index is -984,545 obtained by Aberdeen Indonesia Equity Fund, while the maximum value of Miller index is 1305,753 obtained by Manulife Dana Saham. The mean score of Miller index in 2014-2015 is 9,1763 with the standard deviation is 300,940. The mean score of 9,1763 can be concluded that the level of mutual fund performance based on Miller index is classified as good. From the analysis of Miller index, it can be concluded that there are 17 conventional equity mutual funds which are not worth buying because they have negative performance values, while there are 14 conventional equity mutual funds which are worth buying because of having positive performance values.

### 4.3. Comparison between Conventional and Sharia Equity Mutual Funds Performance

#### 4.3.1. Sharpe Index

This hypothesis testing aims to determine differences in the performance of conventional equity mutual funds and performance of sharia equity mutual fund based on the Sharpe index. The results of the hypothesis testing using independent t-test are as follows:

**Table 4.4.**  
**Hypothesis Testing Sharpe Index**

#### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Sharpe	Equal variances assumed	,190	,665	-1,083	42	,285	-,21911	,20238	-,62754	,18931
	Equal variances not assumed			-,989	18,843	,335	-,21911	,22147	-,68291	,24469

Source: Data processed, 2016

The average means of Sharpe index from the Table 4.2 and 4.3 are -0,8457 for Sharia and -0,6266 for Conventional with the mean difference of -0,21911. By using the t-test, it can be seen from the Table 4.4 that the test value of independent samples

based on equal variance assumed is -1,083 with the significance value is 0,285 which is larger than a standard probability of 0.1 Thus, it can be concluded that there is no significant difference between the performance of conventional equity mutual fund and sharia equity mutual fund based on the Sharpe index.

the similarity variant (homogeneity) with f test (levene's test), in advance. From the above data, it can be seen that the probability value (significance) in this research is 0.665. The probability is larger than a standard probability of 0.1 so that it can be concluded that both variants of this research are same. Based on this f-test, the independent sample t-test was tested by using the equal variance assumed (assumed both variants are the same).

#### **4.3.2. Jensen Index**

This hypothesis testing aims to determine the differences in the performance of Conventional and Sharia equity mutual funds performance based on the Treynor index. The testing used the independent t-test sample, and the results of the hypothesis are as follows:

**Table 4.5.**

**Hypothesis Testing Jensen Index**

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Treynor	,393	,534	1,865	42	,069	,10057	,05392	-,00825	,20939
Equal variances not assumed			2,648	40,534	,011	,10057	,03798	,02384	,17730

Source: Data processed, 2016

The average means of Jensen index from the Table 4.2 and 4.3 are -0,0045 for Sharia and -0,1051 for Conventional with the mean difference of 0,10057. By using t-test, it can be seen from the Table 4.5 above that the test value of independent samples based on the equal variance assumed is 1,865 with the significance value of 0,069. This is smaller than the standard probability of 0.1 so that it can be concluded that there is a significant difference between the performance of conventional and sharia equity mutual funds based on Jensen index.

the similarity variant (homogeneity) with f test (Levene's test) was conducted first. From the above data, it can be seen that the probability value (significance) in this research is 0.534. The probability is larger than a standard probability of 0.1 so that it

can be concluded that both variants of this research are the same. Based on the f-test, the independent sample t-test was tested by using the equal variance assumed (assumed both variants are the same).

### 4.3.3. Treynor Index

This hypothesis testing aims to determine the differences between the performance of conventional and sharia equity mutual funds based on the Jensen index. Testing using the independent t-test sample. The results of the hypothesis are as follows:

**Table 4.6.**  
**Hypothesis Testing Treynor Index**

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Treynor	Equal variances assumed	2,788	,102	1,346	42	,186	,25363	,18844	-,12666	,63391
	Equal variances not assumed			1,000	13,924	,334	,25363	,25362	-,29062	,79787

Source: Data processed, 2016

The average means of Treynor index from the Table 4.2 and 4.3 are 0,1097 for Sharia and -0,1439 for Conventional with the mean difference of 0,25363. By using t-

test, it can be seen from the Table 4.6 above that the test value of independent samples based on the equal variance assumed is 1,346 with the significance value of 0,186 which is larger than the standard probability of 0.1. Thus, it can be concluded that there is no significant difference between the performance of conventional and sharia equity mutual funds based on Treynor index.

the similarity variant (homogeneity) with f test (levene's test) was conducted in advance. From the above data, it can be seen that the probability value (significance) in this research is 0,102. The probability is larger than the standard probability of 0.1 so that it can be concluded that both variants of this research are the same. Based on this f-test, the independent sample t-test was tested by using the equal variance assumed (assumed both variants are the same).

#### **4.3.4 M<sup>2</sup>**

This hypothesis testing aims to determine the differences between the performance of conventional and sharia equity mutual funds based on the M<sup>2</sup>. The testing used the independent t-test sample. The results of the hypothesis are as follows:

**Table 4.7**  
**Hypothesis Testing M<sup>2</sup>**

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
M2	Equal variances assumed	4,082	,050	-1,444	42	,156	-,00881	,00610	-,02111	,00350
	Equal variances not assumed			-1,152	15,212	,267	-,00881	,00764	-,02508	,00746

Source: Data processed, 2016

The average mean of M<sup>2</sup> index from the Table 4.2 and 4.3 are 0,0419 for Sharia and -0,0508 for Conventional with the mean difference of -0,00881. By using t-test, it can be seen from the Table 4.7 above that the test value of independent samples based on the equal variance assumed is -1,444 with the significance value is 0,156 which is larger than the standard probability of 0.1 Thus, it can be concluded that there is no significant difference between the performance of conventional and sharia equity mutual funds based on M<sup>2</sup> index.

the similarity variant (homogeneity) with f test (levene's test) was conducted first. From the above data, it can be seen that the probability value (significance) in this research is 0,050. The probability is smaller than the standard probability of 0.1 so that

it can be concluded that both variants of this research are the same. Based on this f-test, the independent sample t-test was tested by using the equal variance assumed (assumed both variants are the same).

#### 4.3.5 Miller Method

This hypothesis testing aims to determine the differences between the performance of conventional and sharia equity mutual funds based on the Miller method. By testing it using the independent t-test sample, the results of the hypothesis are as follows:

**Table 4.8**  
**Hypothesis Testing Miller Method**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Miller	Equal variances assumed	1,546	,221	-,146	42	,885	-12,27601	84,05119	-181,89818	157,34615
	Equal variances not assumed			-,227	30,090	,822	-12,27601	54,09098	-122,73065	98,17862

Source: Data processed, 2016

The average mean of Miller index from the Table 4.2 and 4.3 are -3,0997 for Sharia and 9,1763 for Conventional with the mean difference of -12,27601. By using



the t-test, it can be seen from Table 4.8 above that the test value of independent samples based on the equal variance assumed is -0,146 with the significance value is 0,885 which is larger than the standard probability of 0.1 Thus, it can be concluded that there is no significant difference between the performance of conventional and sharia equity mutual funds based on Miller index.

the similarity variant (homogeneity) with f test (levene's test) was conducted first. From the above data, it can be seen that the probability value (significance) in this research is 0,221. The probability is larger than the standard probability of 0.1 so that it can be concluded that both variants of this research are the same. Based on this f-test, the independent sample t-test was tested by using the equal variance assumed (assumed both variants are the same).

#### **4.4. Comparison between Miller Method and Other Methods of Mutual Funds Performance**

The results of the comparison ranking between Miller method and the other methods are as follows:

**Table 4.9.**

#### **Comparison Ranking of Overall Mutual Fund Performance**

Mutual Funds	Model Miller	Sharpe	Jensen	Teynor	M2
Manuliffe Dana Saham	1	35	23	43	29
Emco Growth Fund	2	34	29	41	28
Dana Ekuitas Prima	3	20	15	2	17
Syailendra Equity Opportunity Fund	4	39	35	36	37

GAP Equity Fund	5	19	16	3	9
Simas Danamas saham	6	26	27	39	26
Eastspring investments alpha navigator	7	21	33	32	18
First state indoequity value select fund	8	27	41	27	22
MNC-Dana Ekuitas	9	36	43	22	24
BNP Paribas Ekuitas	10	33	32	30	33
Maybank dana ekuitas	11	42	37	25	41
Dana Reksa Mawar	12	38	34	24	40
Panin Dana Maksima	13	37	40	21	39
Mandiri Investa Atrakti Syariah	14	18	5	17	16
TRIM Syariah Saham	15	7	4	8	2
Panin Dana Syariah Saham	16	17	2	12	12
Avrist Equity-Cross Sectoral	17	41	38	19	3
Cipta Syariah Security	18	23	14	42	25
SAM Sharia Equity Fund	19	14	3	15	10
Mandiri Investa Ekuitas Syariah	20	1	6	29	1
OSO Syariah Equity Fund	21	29	13	40	31
Manulife Syariah Equity Amanah	22	28	12	38	30
Sucorinvest Sharia Equity Fund	23	32	9	23	35
Pacific Equit Fund	24	3	1	11	4
MNC Dana syariah ekuitas	25	31	26	1	32
Millenium Equity	26	6	44	7	7
Archipelago Equity Growth	27	15	39	14	19
Jisawi Progresif	28	4	42	5	5
Avrist Equity-Amar Syariah	29	40	7	20	42
CIMB-Principal Equity Aggressive	30	9	36	10	14
Batavia dana saham	31	25	30	18	34
Pratama Equity	32	8	31	9	13
BNP Paribas Pesona Syariah	33	44	11	35	44
PNM Ekuitas Syariah	34	43	10	28	43
Rencana Cerdas	35	12	28	13	23
Ashmore dana ekuitas nusantara	36	5	25	6	21
Grow 2 Prosper	37	10	22	34	8
Tram consumption plus	38	11	24	16	15
TRIM kapital	39	22	21	26	27
Sucorinvest Equity und	40	13	20	33	11

Mandiri Investa cerdas bangsa	41	2	8	4	6
Bahana dana prima	42	16	19	37	20
Mega Asset greater infrastruktur	43	24	18	31	38
Abeerden Indonesia Equit Fund	44	30	17	44	36

From the 44 Sharia and Conventional Equity mutual funds, there are only 2 mutual funds from Miller that are the same as the other method ranks. Sucorinvest Sharia Equity Fund (23) is the same as Treynor rank, and Abeerden Indonesia Equit Fund (44) is the same as Treynor rank. While 42 mutual fund rankings between Miller and the other method ranks are totally different.

The comparison between the Miller method and the other performance calculation methods. The second hypothesis testing results can be summarized as follows:

**Table 4.10.**

**Correlation Coefficient of the Performance Method**

Method	Sharpe	Jensen	Treynor	M2	Miller
Sharpe	1	,221	,029	,847	-,082
Jensen	,221	1	,273	,141	-,032
Treynor	,029	,273	1	-,009	-,013
M2	,847	,141	-,009	1	,009
Miller	-,082	-,032	-,013	,009	1

Source: Data processed, 2016

From the test results of the comparison between Miller method and the other methods, the first rank is the comparison of Miller -M2 with the correlation value of

0,009. The second rank is the comparison between Miller -Treynor with the correlation value of 0.013. The third rank is the comparison between Miller –Jensen, the correlation value of -0.032. And, the last rank is the comparison between Miller - Sharpe with the correlation value of -0.083.

#### **4.5. Discussion**

##### **Comparison between Conventional and Sharia Mutual Fund**

The results of this research proved that the overall performances of Sharia and Conventional Equity Mutual Funds are not significantly different. by using Treynor, Sharpe, Miller and  $M^2$ . It can be seen from the hypothesis testing that tested do not have any significant difference in the performance of mutual funds. And for Jensen there is a significant difference in the performance of mutual funds.

In the Table 4.4 for the hypothesis testing of Sharpe index, the equal variance assumed is -1,083 with the significance value is  $0,285 > 0,1$  so that there is no significant different in Sharpe method.

In the Table 4.5, for the hypothesis testing of Jensen index, the equal variance assumed is 1,865 with the significance value is  $0,069 < 0,1$  so that there is significant different in Jensen method.

In the Table 4.6, for the hypothesis testing of Treynor index, the equal variance assumed is 1,346 with the significance value of  $0,186 > 0,1$  so that there is no significant different in Treynor method.

In the Table 4.7, for the hypothesis testing of  $M^2$ , the equal variance assumed is -1,444 with the significance value is  $0,156 > 0,1$  so that there is no significant different in  $M^2$  method.

In the table 4.8, for the hypothesis testing of Miller, the equal variance assumed is -0,146 with the significance value is  $0,885 > 0,1$  so that there is no significant different in Miller method.

### **Comparison between Miller and Other Methods**

The ranking of Miller method and the other methods is different. In the Table 4.9, all the sharia and conventional equity mutual funds, comparing between Miller with Sharpe, Jensen, Treynor, and M2 were ranked by using excel, and the results are presented in the table. From the 44 sharia and conventional equity mutual funds, only 2 of Miller rank which are the same as the other method ranks.

The results of this research happened because many investors chose equity mutual funds, but not accompanied by investors' ability to analyse the equity mutual funds which have good potentials. Combined with the lack of the information circulating on the analysis of the performance of equity mutual funds that exist today, the movement of the stock market which is not stable is also an obstacle for investors to choose the best equity mutual funds especially in 2014 because Indonesia's stock

market experienced various large turbulence at that time due to the change of the government that made many investors hesitate to invest.

