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Performance of Sharia Mutual Fund: The Analysis of Asset Allocation in Indonesia

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Abstract

Mutual fund has already existed in Indonesia since 1995 but it has not been socialized. It was due to lack of information to the public about how to invest in stock market, especially in mutual fund. So that, the public have difficulties in assessing and selecting the mutual fund that can provide optimum performance and has benefits affecting the growth of mutual fund. The purpose of this research is to analyze the effect of asset allocation policy (sharia stocks, sharia bonds (sukuk), and mudharabah deposits) on the performance of mixed sharia mutual fund in Indonesia during 2010—2013. The type of this research is descriptive-verification analysis. The samples used are seven mixed sharia mutual funds in each year. So the total number of samples are twenty eight mixed sharia mutual funds during 2010—2013. The result shows that asset allocation policy for sharia stocks, asset allocation policy for sharia bonds (sukuk), and asset allocation policy for mudharabah deposits are simultaneously affecting mixed sharia mutual fund performance. It is simultaneously indicated 0.522 or approximately 52.2%.

Keywords: Sharia Mutual Funds, Asset Allocation Policy, Performance, Mixed Sharia Mutual Fund

1. Introduction

The development of sharia mutual funds in Indonesia has increased significantly. The increasing number of mutual funds includes the issue and the Net Asset Value (NAV) especially in 2012 and keeps growing in 2013.

Mutual fund has already existed in Indonesia since 1995 but it has not been socialized. It was due to lack of information to the public about how to invest in stock market, especially in mutual fund. So that, the public have difficulties in assessing and selecting the mutual fund that can provide optimum performance and has benefits affecting the growth of mutual fund.

The assessment of performance of mutual fund is important. It is due to the assessment of performance of mutual fund can determine the ability of mutual fund to compete to other mutual funds in the market and it can also determine the ability of mutual fund to generate profits.

The amount of NAV of mutual fund is the key to assess the performance of mutual fund.

The mutual fund data issued by PT. Infovesta Utama show a mixture of sharia mutual fund performance recorded having high returns during the year 2013. The number of mutual funds in 2013 are able to beat the stock index recorded to 3.26%. According to an InfovestaUtama analyst, Vilia Wati, the primacy of mixed mutual fund performance is the investment manager's ability in reading the market situation and selecting securities so that the manager can allocate the portfolio to the sectors which are better than IHSG Index. When the stock market performance goes up, mixed mutual fund has capability in producing the return to beat the fixed income fund.

In contrary, when the stock market is down then mixed mutual fund is able to withstand the stock market crash.

Table 1.2: Mixed Syariah Mutual Fund Investing As of October 21, 2013

Mutual Funds	Net Asset Value (NAV)	Investment Results			
		1 Day	30 Days	1 Year	1 Year Real
AAA Amanah Syariah Fund	2.285,97	0,28	1,62	7,03	5,44
BNI-AM Dana Plus Syariah	1.529,49	0,11	0,40	4,13	3,10
Cipta Syariah Balance	1.662,60	0,69	1,71	4,29	4,29
Danareksa Syariah Berimbang	5.331,08	0,60	(0,85)	(3,37)	(4,81)
Insight Syariah Berimbang (I-SHARE)	995,09	0,36	(0,32)	0,00	0,00
IPB Syariah	1.824,72	0,52	(3,91)	(16,35)	(16,35)
Mandiri Investa Syariah Berimbang	2.589,45	0,57	(0,51)	1,98	(0,04)
MNC Dana Syariah Kombinasi	1.000,91	0,40	0,04	0,00	0,00
Panin Dana Syariah Berimbang	1.010,10	1,23	(1,55)	0,77	(1,70)
RD PNM Syariah	3.052,03	0,14	(1,30)	(0,63)	(3,53)
Sam Syariah Berimbang	1.858,36	0,57	(0,52)	17,80	17,80
Schroder Syariah Balanced Fund	1.904,22	0,63	(0,84)	6,95	4,84
TRIM Syariah Berimbang	2.026,16	0,69	(1,49)	1,71	1,71

Source: Investment Result of Mutual Fund (Tempo, 2013)

Based on the data in the table above, it is showed that some mixed sharia mutual funds have positive returns. The top four positions are SAM Syariah Berimbang, AAA Amanah Syariah Fund, Schroder Syariah Balanced Fund, and Cipta Syariah Balanced.

The return of mixed sharia mutual fund can be eminent because the level of investment risk can be minimized by diversifying through the selection of combination of the number of assets and the asset allocation policy. Especially, because the proportion of asset allocation of mixed sharia mutual fund is more flexible in equity effect, debt effect, and sharia money market, it is the creativity of the investment manager to manage the portfolio.

The purpose of this research is to analyze the effect of asset allocation policy (sharia stocks, sharia bonds (*sukuk*), and *mudharabah* deposits) on the performance of mixed sharia mutual fund in Indonesia during 2010—2013.

The results of this research are expected to contribute towards knowledge for scholars on how to evaluate the performance of sharia mutual fund based on its return and the factors that affect the performance of sharia mutual fund. The results of this research are also expected to be a reference for academics to add literatures, study materials, and references for other research in the future related to sharia mutual fund performance.

2. Literature Review

2.1 Asset Allocation Policy

The process of dividing the funds into two portfolios consisting of different asset groups (e.g. a portfolio consisting of shares and the portfolio of bonds and deposits) is referred to asset allocation (Husnan, 1998: 461).

According to Tendelilin (2010: 163), asset allocation decision is a decision regarding to the selection of asset classes that will serve as an investment option and also the proportion of total funds owned by investors to be invested in the asset class. Part of funds invested in each asset class is called fund portion or fund weight. Each fund weight will range between 0%—100%. According to Drobetz and Kohler (2002), asset allocation is usually defined as the establishment of normal asset class weight or passive asset class weight. Asset allocation policy is generally defined as the allocation of investors' portfolio to a number of major asset classes (Sharpe, 1992).

A measuring instrument to measure the impact of asset allocation policy on the performance of portfolio used is regression analysis model where the mathematical model is developed based on *Asset Class Factor Model* (Sharpe, 1992). The model is to determine how effective the investment manager performs his function from asset allocation policy. Asset allocation policy analyzed uses three variables. They are:

$X_1 = b_{11}F_{1t}$ = asset allocation for sharia stocks,

$X_2 = b_{12}F_{2t}$ = asset allocation for sharia bonds (*sukuk*), and

$X_3 = b_{13}F_{3t}$ = asset allocation for *mudharabah* deposits.

The following is asset class factor model (Sharpe, 1992):

$$R_{it} = [b_{1i}F_{1t} + b_{2i}F_{2t} + b_{3i}F_{3t}] + \varepsilon_{it} \text{----- (Formula 2.1)}$$

Sharpe (1992) in his research entitled "Asset Allocation: Management Style and Performance Measurement", analyzed management style, performance measurement, and allocation asset variables. The method used was the asset class factor model. The result shows that asset class factor models can help making order from chaos that often occurs in the investment process. It can provide a consistent view from investors' investment decision in making the flow of information that is economical and gives comparative advantage.

Ibotson and Kaplan (2000) conducted a study of the measurement of asset allocation policy with a model that consisted of the return policy (PR_{it}) and active return (AR_{it}). Return policy is a part of asset allocation policy (R_{it}), while the active return is remaining. Active return depends on the manager's ability to actively determine the weight of asset classes and a set of securities into the policies and market cycle. The period of their study was during ten years started from April 1988 to March 1998. Based on this study, it can be concluded that the mutual fund performance is largely influenced by asset allocation policy. It has not considered the selection of securities included in the portfolio. The sample used was a mixture of ninety eight mutual funds and fifty eight American retire funds, with the result that the asset allocation policy affects the performance of mutual funds by 40%, 90%, and 100% depending on the questions asked.

Drobertz and Köhler (2002) have also conducted a research in this topic entitled "The Contribution of Asset Allocation Policy to Portfolio Performance". The variables used were asset allocation policy and portfolio performance. The result showed that the asset allocation policy is determining asset allocation which involves distributing fund owned to the various classes available. The asset allocation policy positively and significantly affects the performance of mutual fund stocks. It is suggested that the higher the asset allocation policy is, the better the performance gets.

Deden Mulyana (2006) in his research entitled "Effect of Asset Allocation and Selection Policy Securities Mutual Fund Performance Against Open Form Collective Investment Contracts (equity funds, fixed income funds and mixed mutual funds) in 2001-2003." He conducts research on policy influence asset allocation, security selection on the performance of mutual funds open-end collective investment contract. The results showed that the effect of asset allocation policy by 56.22% and 43.78% security selection for the performance of mutual fund shares, amounting to 64% and 36% of the performance of fixed income funds, and amounted to 52.54% and 47.46 % of mutual fund performance.

The conclusion of research is the policy of asset allocation and security selection has positive influence on the performance of mutual funds.

Catur Kuat Purnomo (2007) in his study "The Influence Policy Asset Allocation and Selection of Securities on Syariah Mutual Fund Performance". examine the policy influence of asset allocation and security selection on the performance of Islamic mutual funds in the period January 2005 to December 2006. The results showed five of 10 Islamic mutual funds have a higher performance than the benchmark returns are used. The conclusion of this study is the policy of asset allocation and security selection positive and significant impact on the performance of Islamic mutual funds.

Nurcahya and Bandi (2010) in his study "Indonesia Mutual Funds: Asset Allocation Policy Analysis, Stock Selection and Risk Level", analyzing the policy variable asset allocation, stock selection and risk levels on the performance of stock mutual fund. The conclusion is asset allocation policy, stock selection, and the level of risk positive have significant impact on the performance of stock mutual fund.

Anindita Putri Nuralita Sari, Agus Purwanto. (2012). in "Asset Allocation Policy Analysis, Performance and Risk Level Investment Manager on the Performance of Stock Mutual Fund in Indonesia" indicates that the asset allocation policy has a positive effect and no significant effect on the performance of equity mutual funds in Indonesia.

The ability of investment managers have a positive and significant impact on the performance of stock mutual funds in Indonesia. The risk level has a negative and significant impact on the performance of mutual funds.

Figure 1. Framework

2.2 Research Methods

This research is conducted to analyze the effect of asset allocation policy and security selection on the performance of mixed sharia mutual funds in Indonesia.

2.3 Type of Research

The type of this research is descriptive-verification analysis.

2.4 Type and Sources of Data

All the data used in this research are secondary data compiled from the Mutual Fund Information Center, Bapepam LK, Bank Indonesia, the prospectus of each mutual fund, and Indonesia Stock Exchange.

2.5 Population and Sample

The population in this research are mixed sharia mutual funds in Indonesia registered in BapepamLK in period from 2010 to 2013 (thirteen mutual funds). Based on the selection of mixed sharia mutual fund samples, it is obtained seven mixed sharia mutual funds each year. So, the number of samples are twenty eight mixed sharia mutual funds.

2.6 Data collection technique

Data collection technique is by reading reference books, research journals, and articles. The aim of the research is to examine studies related to this topic that can be used as an initial study, as a comparison, as well as references for the writer.

2.7 Panel Data Analysis

This research uses combination data from time series and cross section. A quantitative analysis uses an econometric model (data panel regression) using the software E-Views 6.0.

3. Results

The asset allocation policy to sharia stocks indicates the amount of fund allocated by investment manager to sharia stock assets. The following tables are the proportion of asset allocation and actual asset allocation for sharia stocks on mixed sharia mutual funds period 2010—2013.

Table 1. Asset Allocation Proportion of Sharia Stocks on Mixed Sharia Mutual Funds

No	Mutual Fund Brands	Proportion
1	Mandiri Investa Syariah Berimbang	5% - 78%
2	Schroder Syariah Balanced Fund	5% - 79%
3	Trim Syariah Berimbang	5% - 75%
4	Cipta Syariah Balanced	5% - 75%
5	Danareksa Syariah Berimbang	25% - 75%
6	SAM Syariah Berimbang	5% - 75%
7	PNM Syariah	30% - 70%

Source: Prospectus of each mutual fund

Table 2. Actual Asset Allocation for Sharia Stocks on Mixed Sharia Mutual Funds (period 2010—2013)

No	Mutual Fund Brands	Actual Asset Allocation for Sharia Stocks (%)			
		2010	2011	2012	2013
1	Mandiri Investa Syariah Berimbang	65.07	71.15	69.49	59.44
2	Schroder Syariah Balanced Fund	59.06	69.74	62.18	52.32
3	Trim Syariah Berimbang	76.65	73.2	72.42	73.68
4	Cipta Syariah Balanced	59.65	61.92	54.23	70
5	Danareksa Syariah Berimbang	69.19	63.55	70.13	64.78
6	SAM Syariah Berimbang	96.17	75.34	62.9	71.98
7	PNM Syariah	61.79	63.86	47.59	30.26

Source: Prospectus of each mutual fund

Based on tables 1 and 2 above, it can be seen that most of the mixed sharia mutual fund has actual asset allocation which is consistent with that specified in the prospectus. There are only a few mutual funds that are not consistent among of them such as Trim Syariah Berimbang and SAM Syariah Berimbang.

Asset allocation policy for mudharabah deposits indicates the amount of fund performed by the investment manager. The following tables are the proportion of asset allocation and actual asset allocation for mudharabah deposits on mixed sharia mutual funds period 2010-2013.

Table 3. Asset Allocation Proportion of Mudharabah Deposits on Mixed Sharia Mutual Funds

No	Mutual Fund Brands	Proportion
1	Mandiri Investa Syariah Berimbang	2% - 75%
2	Schroder Syariah Balanced Fund	5% - 79%
3	Trim Syariah Berimbang	5% - 75%
4	Cipta Syariah Balanced	5% - 75%
5	Danareksa Syariah Berimbang	-
6	SAM Syariah Berimbang	2% - 75%
7	PNM Syariah	0% - 20%

Source: Prospectus of each mutual fund

Table 4. Actual Asset Allocation for Mudharabah Deposits on Mixed Sharia Mutual Funds (period 2010-2013)

No	Mutual Fund Brands	Actual Asset Allocation for Mudharabah Deposits (%)			
		2010	2011	2012	2013
1	Mandiri Investa Syariah Berimbang	2.53	3	5.26	12.93
2	Schroder Syariah Balanced Fund	13.64	17.85	29.77	39.73
3	Trim Syariah Berimbang	8.87	18.17	20.9	7.59
4	Cipta Syariah Balanced	26.2	26.2	26.5	2
5	Danareksa Syariah Berimbang	0	0	0	0
6	SAM Syariah Berimbang	0	15.59	24.08	16.24
7	PNM Syariah	5.23	3.46	0	9

Source: Prospectus of each mutual fund

3.1 Data Panel Testing

At this stage, it is conducted the analysis of data and model test in research. Model testing on panel data can be performed by three approaches, namely pool least square, fixed effect model, and random effect model. In determining the model, the writer uses the Hausmann test. This is performed to choose between fixed effect model and random effect model.

Based on the calculation from the table above, it is obtained the form of a simple linear regression equation as

follow:

$$Y = -0,988697 + 63,78061 X_1 + 461,3210 X_2 + 53,90187 X_3 + e$$

The value of the regression coefficient on free variables describes the prediction that if free variables increase one unit and the value of other free variables are constant or equal to zero then the value of bound variables can be predicted to go up or down based on the regression coefficient mark on free variables.

Overall, the result of research is significantly influenced because in this research, four of seven mixed sharia mutual funds have higher performance than the performance of level of mixed return as a benchmark. They are Trim Syariah Berimbang, Cipta Syariah Balanced, Danareksa Syariah Berimbang, and SAM Syariah Berimbang, where with the performance that is higher than the level of mixed return, the mixed sharia mutual funds are able to provide superior returns for investors. Eminent performance with superior returns in a portfolio will make investors interested and eventually buy or invest at the portfolio.

Investors tend to choose a portfolio that offers maximum return with a certain risk level or a portfolio which offers the lowest risk with a certain level of return. With superior returns and a certain level of risk, the four samples in this research are able to attract attention to investors to invest. A proper asset allocation policy is able to reduce the risk at a certain level of expected return. Asset allocation policy conducted by investment managers actively determines the weight of asset classes and a set of securities into policies and selection of market cycles. Asset classes selected by investment managers are described in the prospectus of mutual funds.

A mutual fund prospectus, particularly the mixed sharia mutual fund covers a variety of information, including asset allocation and portfolio composition, in which generally consist of sharia stocks, sharia bonds (*sukuk*), and sharia money market (*mudharabah* deposits). Observant investment managers who can read the market situation are able to allocate portfolios properly on any asset class considered to be improving better than the index of asset classes in the future so as to generate maximum return.

In 2010—2013, the value of asset allocation policy for sharia stocks has both increased and decreased fluctuantly every year in which it was describing the condition of Indonesian capital market during the research period. In 2010, the value of asset allocation policy for sharia stocks in mixed sharia mutual funds showed high values; even some mutual funds generated the highest value for that year. This shows that the condition of Indonesian capital market is in excellent condition so it can provide high returns; even JCI had the highest record at the time. The spectacular achievement is because of the adversity of European countries and the United States so that the flow of foreign funds flowed and flooded the emerging market countries including Indonesia. In 2011, the positive sentiment of foreign investors began to subside which was not as extensive as in 2010 so it made the capital market performance decrease. Then it increased again in 2012. However, the opposite occurred in the subsequent year. In 2013, it was the peak of instability of Indonesian economy during the research period where there was a reduction of The Fed (tapering off quantitative easing) economic stimulus, inflation, and the increase of BI Rate. The Fed's economic stimulus reduction made slowing growth and decreasing of Indonesian capital market performance shown by the drop in JCI that fell 4.1%. That was what made the value of asset allocation policy for sharia stocks also decreased during 2013 because the average proportion of asset allocation for sharia stocks in most of mixed sharia mutual funds was the biggest compared to the other asset classes thereby affecting the decline of performance of mixed sharia mutual funds.

4. Conclusion

Based on the data which have been analyzed, it can be seen that the three free variables studied were asset allocation policy for sharia stocks, asset allocation policy for sharia bonds (*sukuk*), and asset allocation policy for *mudharabah* deposits that simultaneously affected mixed sharia mutual fund performance. A joint influence indicated a value of 0.522 or approximately 52.2%. It shows that the asset allocation policy for sharia stocks, asset allocation policy for sharia bonds (*sukuk*) and asset allocation policy for *mudharabah* deposits contribute to mixed sharia mutual fund performance at the amount of 52.2% while the remaining 47.8% is contributed by other variables besides free variables.

Based on the data which have been studied, it can be seen that the asset allocation policy for sharia stocks, asset allocation policy for sharia bonds (*sukuk*), and asset allocation policy for *mudharabah* deposits have partially significant positive effect on mixed sharia mutual fund performance. These results indicate a positive value (unidirectional relationship) and significancy in the asset allocation policy for sharia stocks, asset allocation policy for sharia bonds (*sukuk*) and asset allocation policy for *mudharabah* deposits towards mixed sharia mutual fund performance.

5. Suggestions

This research only examines how the effect of asset allocation influences the performance of mutual funds. It is suggested for further research to investigate the effect of variable security selection, market timing, and the level of risk in order to explain more about the ability of investment managers to improve mutual fund performance thereby increasing the return of mutual funds.

The number of samples of mixed sharia mutual fund that are still relatively little due to the number of mixed sharia mutual funds in Indonesia are limited by their availability of existing data. In order not to obtain biased results, it is necessary to increase the number of samples with a longer period of research or to change the type of mutual fund research, such as sharia mutual fund stocks or other sharia mutual funds.

Reference

- Anindita Putri Nuralita Sari, Agus Purwanto. (2012). Analysis of Asset Allocation Policy, Performance and Risk Level Investment Manager on the Performance of Mutual Fund Shares in Indonesia. *Diponegoro Journal Of Accounting* Vol.1 No.1.
- Deden Mulyana. 2006. Influence Policy Asset Allocation and Selection Securities Investment Fund Performance Against Open Form Collective Investment Contracts (Fixed Income Fund and Balanced Fund), *Journal of Economics and Business* Vol.XII, 2. September.
- Drobetz, Wolfgang; and Friederike Kohler. 2002. The Contribution of Asset Allocation Policy to Portfolio Performance. Working Paper. No. 2/02, Basel: WWZ / Department of Finance University of Basel.
- Eduardus Tendelilin. 2010. Portfolio and Investment. Yogyakarta: Canisius.
- Gujarati, Damodar N. 2010. Fundamentals Econometrics (Book 1, 5th ed). Jakarta: Salemba Empat.
- Ibbotson, Roger G; and Paul D. Kaplan. 2000. Does Asset Allocation Policy Explain 40, 90, or 100 Percent of Performance ?. *Financial Analysts Journal*, Vol. 56, No. 01, pp. 26-33.
- Jogiyanto. 2000. Portfolio Theory and Investment Analysis. Yogyakarta: BPFE-YOGYAKARTA
- Nurchaya, Bandi. 2010. Mutual Funds in Indonesia: Asset Allocation Policy Analysis, Stock Selection and Risk Level. Accounting National Symposium XIII Purwokerto. University of General Sudirman.
- Nurul Huda and Mustafa Edwin Nasution. 2008. Investment in Islamic Capital Markets. Jakarta: Kencana Prenada Media Group.
- Purnomo, Catur Kuart. 2007. Effect of Policy Asset Allocation and Selection Securities Investment Fund Performance Against Sharia. The PPM 1st National Conference on Management Research Management in the Era of Globalization. Vol. 1, p. 1. PPM School of Management. 7 November 2007.
- Sharpe, William; Gordon J Alexander and Jeffery V. Bailey. Investment 1997. Volume 2. Translation Henry Njooliangtik and Agustiono. Jakarta: Prenhallindo.
- Suad Husnan. 1998. Basics Securities Portfolio Theory and Analysis Third Edition. Yogyakarta: Publishing and Printing Unit (UPP) AMP YKPN.
- Sugiono. 2013. Business Research Methods. Bandung: CV. Alfabeta.
- Sharpe. 1992. Asset Allocation: Management Style And Performance Measurement, *Journal of Portfolio Management*, Winter 1992, pp. 7-19.

Website

- Bank Indonesia. 2013. Results of Auction of Bank Indonesia Certificates (SBI) and Bank Indonesia Certificates Sharia (SBIS). <http://www.bi.go.id/id/moneter/lelang-sbi/Default.aspx> [11/07/13]
- Bank Indonesia. 2013. Islamic Banking Statistics. <http://www.bi.go.id/id/statistik/perbankan/syariah/Default.aspx>. [07/11/13]
- Bapepam. 2013. Statistics Syariah Mutual Fund. http://www.bapepam.go.id/syariah/statistik/reksa_dana.html [09/22/13]
- Bapepam. Statistics Development of NAV per Fund. <http://aria.bapepam.go.id/reksadana/statistik.asp?page=statistik-nab-rd> [10/01/14]
- Indonesia Stock Exchange. 2013. Publication of Statistics. <http://www.idx.co.id/id-id/beranda/publikasi/statistik.aspx> [11/07/13]
- Infovesta. 2013. Bond Index-ISBI. <http://www.infovesta.com/> [03/12/13]
- Tempo, Jakarta. 2013. Investment Balanced Fund. <http://www.tempo.co/read/news/2013/10/18/212522856/Hasil-Investasi-Reksa-Dana-Campuran> [03/12/13]