

# PERFORMANCE OPTIMIZATION MODEL OF STOCK MUTUAL FUNDS BASED FINANCIAL INFORMATION SYSTEM

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## ABSTRACT

The lack of public information on how to invest to be a major cause of the lack of public interest on capital market investment. Besides of that, for the certain instrument such as mutual funds of society will get difficulty in judging and choosing the mutual funds which be able to give optimal performance and benefit influences the slowness of mutual funds development.

Result from this research activity is for finding the measurement of the performance mutual funds stock by using stage of stock rotation and stage of stock mutual fund which is made to be a accounting management information system and financial. With this stock mutual fund performance measurement model so that can be tool of important information for investor, society about the investment will have good potency of financial and the major elements cause of the performance of that mutual funds in capital market. Therefore, society can value and choose mutual fund which be able to give performance and optimalization in benefit especially in capital market. *Explanatory research*, this research has the goal to explain the relationship between the research variable through the hypotheses based on the data, such as: rotation stage and risk stage concerning the stock of mutual fund performance. Multiple regression analysis will be used to test the effect of two or more independent variables on the dependent variable. independent variable in this research is rotation stage and risk stage. Meanwhile in independent variable is the stock mutual fund performance. The research result for the simulation of measuring stock of mutual funds model, to measure the stock mutual funds performance.

**KEY WORDS:** performance, mutual funds, stock risk.

## 1. INTRODUCTION

Before investing in mutual funds, we need to know the kinds of mutual fund that is suitable with the goal and the investment necessity. There are 4 kinds of mutual fund that is served in Indonesia based on instrument category in investment, characteristic of benefit potencial and the risk, such as: money market mutual funds, fixed income funds, stock funds and mixed funds. the first mutual funds, money market mutual funds is the mutual funds that invest 100% on the money market securities such as debt securities with a maturity of less than one year. The second, fixed income funds is the mutual funds that invest atleast 80% from manages portfolios into debt securities such as bonds. The third, stock funds is the mutual funds that invest atleast 80% from portfolios that is managed in the equity effect (stock). The last, mixed funds is the mutual funds that invest in the equity effect and debt effect that its located do not include in the category of fixed income and stock funds.

In 2009 based on the Bapepam data on December 2011 (Bapepam 2011), the amount of managing all of mutual funds kinds Rp 116 billion. With condition of stock market which is better, managing funds of mutual funds will increase. Data of Badan Pengawas Modal dan Lembaga Keuangan (Capital Supervisory Agency and Financial Institution)/(Bapepam-LK) show per December 2011 the total value *aktiva bersih* (NAB) Rp 193 billion. Panjaitan(2011), said that since the introduction the mutual funds in Indonesia in 1996 until now, mutual fund has increased well, even in the crisis economics the mutual funds got the decreasing. Based on the BAPEPAM data (2011), on the last December 2011 has been noted there are 646 the mutual funds. Whereas in 1996 only there are 25

mutual funds. The mutual funds has existed in Indonesia since 1995 but the mutual funds has not been published in society. The lack of people information about how to invest to be a major cause of the people interest to invest in market capital. Besides of that to do the certain instrument such as society mutual funds gets difficulties in measuring and choosing the mutual funds which be able to give the performance and the ptimal benefit influences the slowness of mutual funds development.

## 2. LITERATURE REVIEW

### 2.1 Investment

Eduardus Tandelilin (2010 : 2) Investment is the commitment for the amount of funds or the other resource that is done right now, with the goal to get amount of benefit in the future. An investor buys stock righ now with the hoping will get benefit from the incresing of the stock or the amount of deviden in the future, as the benefit for the time and the risk which is related to that investment. Based on Eduardus Tandelilin (2010 : 12) the process of decision in investing will be 5 steps until getting the best investment decision.

### 2.2 Mutual funds

The first mutual funds is *Massachusetts Investors Trust* that is applied in 21 March 1924, that was only 1 year had 200 mutual funds investor with the asset US\$ 392.000. In 1929 when the stock exchange got decreasing so the industry of this mutual funds development to be slow. Pozen (1998) said that ““*Amutual funds is an investment company that pools money from share holders and invest in a diversified of securities.*” Investments in mutual funds attractive to investors because the investors do not require the investment analysis and monitoring market conditions on an ongoing basis and does not require a relatively large funds , investments are made through

intermediaries other parties, namely the investment manager.

### 2.3 Investment risk

According to Harry Markowitz 's theory in the book ( Zalmi Zubir , 2011: 19) defines risk as the difference between the expected results ( expected return ) and its realization . The bigger the return , the greater the level of risk . Investors in making any investment decision always trying to minimize the risks that arise , both the risk of long-term and short-term risks . Any changes in economic conditions will also encourage the formation of a variety of conditions requiring an investor to decide what to do and what strategies are applied in order to obtain the return arrives investors expected . With so investment risk can be defined as the likelihood of the difference between the actual return and expected return ( E ( R )

## 3. STATEMENT OF RESEARCH HYPOTHESIS

- $H_1$  : rotation stage influences to the stock of mutual funds performance
- $Ha_1$  : rotation stage influences to the stock of mutual funds performance
- $H_2$  : risk stage influences that mutual funds stock
- $Ha_2$  : risk stage influences that mutual funds stock

## 4. RESEARCH METHOD

In this researchh method appies *explanatory research* that is research that explain the correlation kausal and korelasional among the variables through hyphoteses test. This Explanatory research has the goal to explain the correlation among the research variables through the hypotheses test based on the field data, such as: rotation stage and risk stage with the stock mutual funds performance. Mutual linear regression analysis is done to

know the linear similarity. Like this one, will be shown the result of calculating mutual regression analysis.

#### 4.1 Data Collection

The data used in this research is secondary data sources, because in this study the researchers did not conduct direct observation to the Indonesia Stock Exchange, but through the medium of an intermediary such as literature related to the research. Source of data in this study can be obtained from the Indonesia Stock Exchange (IDX) through [www.idx.co.id](http://www.idx.co.id), Bapepam - LK through [www.bapepam.go.id/reksadana/](http://www.bapepam.go.id/reksadana/), Bank Indonesia through

[www.bi.go.id](http://www.bi.go.id). The sample in this study is a mutual fund shares listed on the Indonesia Stock Exchange period 2009 to the period 2011.

#### 4.2 Methodology

The linear regression similarity between the rotation stage and the risk stage to the stock of mutual funds performance is:

$$KR = \alpha + TP + TR + e$$

In this research model used estimation model that used to form multiple linear regression similarity with the *ordinary least square* metode (OLS):

**Tabel 4.1 Hasil Estimasi OLS (Ordinary Least Square)**

Variabel	Coefficient	Std. Error	t-Statistic	Prob.
C	-.224	.036	-6.256	.000
TP	-.095	.016	-6.065	.000
TR	.831	.811	1.024	.316

From the estimation result by using OLS method, on the table 4.11 will get the similarity such as:

$$KR = -0.224 - 0.095TP + 0.831 TR + e$$

## 5. CONCLUSION AND RECOMMENDATIONS

### 5.1 Conclusion

#### 1). The influence analysis of rotation stage trough the stock of mutual funds performance

*Turnover* has big influence to the success of mutual funds. Total turnover refers to how often the buying and selling securities. A high turnover ratio means that these funds are very active and frequent buying and selling. Mutual funds that have a very high turnover ratios, indicate that the investment manager buying and selling activity with high frequency. Good performance of mutual funds occurs in mutual funds with high activity Trading. The higher the turnover rate, the greater the return that may be obtained.

From the test result is got value R or correlation coefficient that show the correlation among the variable

0.800 determination coefficient ( $R^2$ ) is got 0.639, it means around 63.9% the stock mutual funds performance will be influenced of the rotation stage and risk stage factor that can measure the stock of mutual funds performance from (table 4.8) and the rest will be influenced of another variable. That thing will be matched with the criteria of decision taking, it can be seen from the value Sig 0.000 < from alpha value 0.05 on the table before (table 4,8), so  $H_0$  is rejected and receive  $H_1$ , In another word the decision that is taken shows that the rotation stage influence the stock of mutual funds performance.

The high of *turnover ratio* means that investment manager does not anticipate the change of the market like many kinds of issue that exist, with the economics condition that influences the asset price then. *Trading Activity* which is high shows that investment of manager effort in applying maximal return in doing the trade. This result suitable with the explanation of Erich A Helfert (1997), he said that the rotation stage which is higher. For

that to reveal that the rotation stage (turnover) related to the mutual funds performance.

## 2). The risk stage with the stock of mutual funds performance

Every changes of economical condition will push the form of many kinds condition that must an investor to decide what should be done and what strategy that should be applied in order the investor gets the return that is hoped. The highest return on the stock of mutual funds shows the mutual funds is optimal, higher the risk of certain mutual funds so it will be highest for the result (return), that is got, so that it will be better the mutual funds performance. The risk stage of mutual funds on the wisdom of asset allocation, it means how investment manager allocates the funds on the asset classes that exists and how many funds for its distribution.

. from the result test will get R value or correlation coefficient that shows the correlation between variable 0.882 determination coefficient  $R^2$  around 0.675 that shows the stock of mutual funds performance will be influenced the risk stage around 67.5% on the table before (table 4.10) and the rest is influenced by another variable. That is matched with the criteria of decision taking, it can be seen that the value of Sig 0.000 < Alpha value 0.05 on the table before (table 4.8), so  $H_0$  is rejected and receive  $H_1$ , with another word the decision taking shows that the risk stage influences to the stock of mutual funds performance. The risk stage is the possible stage actual return will not be as hope as because of the factors that is followed. The higher of the the return so it will be better of the mutual funds performance. This result is suitable with Harry Markowitz explanation that the risk is the difference between the expected return and its realization. The higher return, so the higher for its risk stage.

## 5.2 Recommendations

- 1) Indonesia government must increase the relationship in investment with the other countries, especially US, Singapore and the other developed countries. This thing will increase the capital inflows to Indonesia.
- 2) Investor should attend how the movement of US dollar exchange rate and Straits times index that can influence the Indonesia capital market performance, this thing will give the benefit for the investor to determine the ideal position, should buy, sell or save the stock that is had of Indonesia capital market. Then, investor does not have to worry with the inflation movement, because inflation will not influence the capital market performance as long as the movement of inflation still low (less than 10% per year). As well as *Dow Jones Industrial Average*, investor does not have to worry with up and down of the index as long as US economic condition is still good, it will not influence the others economic countries.

## REFERENCES

- Elviandari Laily, 2007. *Analisis Variabel-Variabel yang Berpengaruh Pada Kinerja Reksadana Di Indonesia*. Jurusan Akuntansi Fakultas Ekonomi Universitas Brawijaya.
- Fahmi, Irham. 2012. *Pengantar Pasar Modal*. Alfa Beta. Bandung
- Ghozali, Imam. 2009. *Ekonometrika Teori: Konsep Dan Aplikasi Dengan SPSS 17*. Universitas Diponegoro. Semarang.
- Hasyi, 2010. *Penilaian Kinerja Saham: Pendekatan Model Treynor*. Jurnal Akuntansi Politeknik Negeri Ujung Pandang.
- Jogiyanto, 2007. *Teori Portopolio dan Analisis Investasi*, Edisi 3. Yogya.
- Mardalis, 2010. *Metode Penelitian Suatu Pendekatan Proposal*. PT. Bumi Aksara. Jakarta.
- Nurchahya, 2010. *Analisis Pengaruh Kebijakan Alokasi Aset, Pemilihan Saham, dan Tingkat Risiko Terhadap Kinerja Reksadana Saham di Indonesia*.

Fakultas Ekonomi Universitas Sebelas Maret.  
Surakarta.

- Panjaitan Osin, 2011. *Analisis Faktor-Faktor Yang Mempengaruhi Kinerja Reksa Dana Saham*. Fakultas Ekonomi Universitas Sumatera Utara. Medan
- Reilly, Frank K. dan Edgar A Norton, 1995. *Investment*. The Dryden Press. Florida.
- Rusman, Teddy. 2008. *Statistik Penelitian dengan SPSS*. Bandar Lampung.
- Samsul, Mohamad. 2006. *Pasar Modal Dan Manajemen Portofolio*. Erlangga. Jakarta.
- Sari, 2012. *Analisis Kinerja Manajer Investasi dan Tingkat Risiko Terhadap Kinerja Reksadana Saham*. Fakultas Ekonomika dan Bisnis Universitas Diponegoro. Semarang.
- Simatupang, Mangasa. 2010. *Pengetahuan Praktis Investasi Saham Dan Reksadana*. Mitra Wacana Media. Jakarta.
- Sugiyono. 2009. *Metode Penelitian Bisnis*. CV. Alfabeta. Bandung
- Waelan, 2008. *Kemampuan Memilih Saham dan Market Timing Manajer Investasi Reksadana Saham Di Bursa Efek Indonesia*. Jurnal Akuntansi dan Auditing Indonesia, Vol 12, No 2, pp 167-176.
- Zalmi Zubir, 2011. *Manajemen Portofolio*. Salemba Empat. Jakarta.