CHAPTER 1

INTRODUCTION

1.1 Research Background

Mutual funds represent a pool of investor' money that's managed by an investment professional. That's why thousand Americans choose mutual funds in their investment. According to the Investment Company Institute, an industry trade group, one out of four families invests in mutual funds. There are almost 100 million shareholder accounts in mutual funds. In 1940, there were just 300,000 accounts invested in 68 funds with about $500 million in assets. Today there are more than 3,000 mutual funds on the market with over $ 1.4 trillion in assets and 60 million shareholders. Mutual funds are popular because investing in mutual fund is easy for the all people, even the people that haven't ever invested before. A mutual fund takes an investor's money and buys securities based on the investment objectives of the fund. The funds invest in stocks, bonds, money market instruments such as certificates of deposit (CDs), and other kinds of assets. In mutual fund the minimum investment is low because the mutual fund manager manages many funds. The mutual fund manager may receive income from interest payments and dividends or earn capital gains on the sale of a security. Then the fund distributes earnings to the investors as dividends or capital gains. Or, upon the investor request, the fund will reinvest the earnings and buy the investor more shares. Dividends and capital gains are paid to shareholders in proportion to the number of fund shares that own by the shareholder.

One investment product that developed every year is a mutual fund. According data from the BAPEPAM (Badan Pengawas Pasar Modal) in January

1998 only 77 mutual funds with net asset value (NAV) reached 74 trillion rupiah, even at the end of 2009 the number had reached 610 mutual funds with net asset value reached 113 billion. Mutual fund is an investment that is very flexible, because it is managed by the investment manager, so that investors pay sufficient attention to its net asset value. Mutual fund investment is suitable for investors who do not have enough time, have limited investment capacity and knowledge, and lack of funding. Mutual fund is suitable for investors who are new to the world of investing. Asosiasi Pengelola Reksa Dana Indonesia (APRDI) recorded total AUM (assets under management) of mutual funds reached Rp170, 26 trillion up to May 2012 period. That number increase up to 1.20% in year to date of acquisition in 2011 amounting to Rp168, 23 trillion. See from the total AUM, equity funds are still the favorite choice for investors, although it recorded fall with total funds under management reached Rp58, 39 trillion.

Grinblatt and Titman (1992) find evidence that differences in performance between funds persist over time and that this persistence is consistent with the ability of fund mangers to earn abnormal returns. Hendricks (1993) find that the relative performance of no-load, growth-oriented mutual funds persists in the near term, with the strongest evidence for a one year time horizon. Goetzmann and Ibbotson (1994) find strong evidence that past mutual fund performance predicts future performance.

Christoffersen and Musto (2002) propose that mutual funds' fees are set taking into account the elasticity of the demand for their shares, so that funds that have less elastic demand charge higher fees. These authors argue that funds with worse past performance faced less elastic demand because of performance sensitive investors tend to leave the investment due to the bad performance. If performance is persistent for at least the worse performing funds (as indicated by Carhart (1997), Christoffersen and Musto's hypothesis could explain the finding of a negative relation between fees and before-fee performance. Gil-Bazo and Ruiz-Verd´u (2008) provide a related explanation about price of performance in the mutual fund industry.

The Fama French model is one of the most popular three factor model that now dominate empirical research. In 1993, Fama and French presents the model and in 1996 they give an excellent summary. They show how the three factor model performs in evaluating expected return beyond the size and value effects."Value" stocks have market values that are small relative to the accountants book value. Thats because book values essentially track past investment expenditures.

A momentum factor is more palatable as a performance attribution factor. If the investor get returns on factors including momentum, they may be able to say that a fund did well by following a mechanical momentum strategy rather than by stock picking ability. Leaving aside why a momentum strategy should work, Carhart (1997) uses it in this way. Carhart is the modification model from a Fama French three factor model plus momentum, so Carhart method is using four factor model. Momentum (umd fourth factor) is really a new way of looking at an old phenomenon, the small apparent predictability of monthly individual stock returns.

Carhart (1997) explicitly tests whether persistence in performance can be explained by common factors in stock returns. He finds a strong positive (negative) relation between the 1 year momentum factor and the returns on the best (worst) performing decile of funds. This indicates that the portfolios of the best funds are tilted towards previously winning stocks and consequently capture the premium earned on past winning stocks. Similarly, the top decile of funds seems to tilt their portfolios to capture the premium on small stocks.

Nowadays there are many people who invest in the mutual fund. To determine whether the mutual fund is good or not we could see from the return that the investor received. The question is "What mutual funds which can provide the level of yield is maximized, especially in global economic conditions that are uncertain as it is today?" The answer is depending on the characteristics of the investor, investors investing goals, investment horizon, and the ability of investors to tolerate risk, because there is no investment without risk.

One of the efforts to attract domestic investors in capital markets, among others, can be done by developing the mutual fund industry. According to Law No.8, 1995. Mutual funds are the containers used to collect funds from public investors to be invested in portfolio securities by the Investment Manager. Funds collected from the community in a mutual fund, will be managed by investment managers (fund managers) into a variety of investment instruments available, such as bonds, foreign exchange, as well as deposits and other securities.

As an instrument of investment, mutual funds have a comparative advantage compared to non-banking products and other banking capital markets. Some of the things that the advantages include:

1. Obtaining a tax benefit based on the PP. 6/2002 for a mutual fund that is less than 5 years old.

2. Getting the return derived from the coupon / interest on the bonds, dividends, and capital gains in case of resale of units.
3. Diversified so it decreases the risks, and well controlled.
4. Wider investments access to easier the allocation of assets.
5. Very liquid because it can be withdrawn at any time.
6. Potential to have higher returns than deposit rates.
7. Managed professionally and inexpensive because the management costs are relatively low.
8. Easy, flexible and free of administrative jobs and investment analysis. Information is transparent and reported regularly.
9. Legal, secure and strictly regulated by BAPEPAM LK (Badan Pengawas Pasar Modal dan Laporan Keuangan).

The advantages of mutual funds above make mutual fund products interested by many people. In the midst of low interest rates, people seeking a better return in investment and mutual funds could answer it. By investing in mutual funds, the Indonesian people who not used to invest in capital markets such as stocks and bonds have benefitted indirectly, so that Indonesia's capital markets more liquid. In the mutual fund investors can choose mutual funds as needed with the own risk. There are large selections of types of mutual funds that offer a certain level of risk and return, such as money market funds, fixed income mutual fund and equity funds.

Returns evaluation can be seen from the rate of return and its risks. The mutual fund performance is affected by the policy and the performance is the reflection of the performance of investment managers. Investors should carefully assess fixed income mutual funds, especially the portfolio policy of investment managers. Portfolio of fixed income mutual funds has a variation in rates of return and the accompanying risks. Risk and return information shall be considered as an absolute consideration for investment.

Blurred portrait of the mutual fund market happened after Net Asset Value (NAV) reached the highest peak, at $ 113.6 trillion in February 2005. However, a wave of redemption that occurred in the following months has been flung NAV at the lowest level. In late January 2006, the NAV was in the position of Rp 28.56 trillion, plummeted 75% from February 2005 (www.bapepam.go.id/e-monitoring)

There are several factors that cause deterioration of the mutual fund industry in 2005. The first is financial crisis that triggered the rise in interest rates. Second, the application of market to market, illiquid bond market and the attitude of most investment managers that isn't transparent. Third, the error in the sale, which makes so many investors not willing to take higher, risks (Darmawan, 2006)

In the mutual fund industry knowing the movement of the price will help the investor to know the condition of the mutual fund that they invested in. In a well functioning mutual fund market, mutual fund fees should be positively correlated with expected before-fee risk adjusted returns. Further, in the absence of market frictions, all funds should earn zero expected after-fee risk adjusted returns in equilibrium since, otherwise, there would be excess demand (supply) for funds with positive (negative) expected after-fee risk-adjusted returns (Berk and Green, 2004).

This study aims to examine the impact of the beta, firm size, book to market, and momentum factor to the return in the fixed income mutual funds in Indonesia using Carhart Four Factor Model. With knowing the the impact both of the investor and the investor manager could choose the right portfolio in the future. This study will observe in the fixed income mutual fund in Indonesia on the Bapepam LK. Besides knowing the impact of the beta, firm size, book to market, and momentum to the return, this study will help the reader to understand more about the mutual fund in Indonesia.

After doing this study hopefully it will help the reader to know the relationship between price and performance in the Indonesia fixed income mutual funds market. There are many journals that discuss about this topic. With studying this topic it will help the reader to understand more about the relation between price and performance of the fixed income mutual funds, and the mutual fund itself. This study will examine the relationship between the price and performance in the fixed income mutual fund. With this basic this research will be titled as "Impact of Carhart Four Factor Model to Return of a Company In Indonesia Fixed Income Mutual Fund 2005-2011"

1.2 Problem Statement

To examine the relation between beta, firm size, book to market, and momentum factor to the return is very important in taking the right investment decision. Seeing from the research background that there is research gap between one study and the other. This study try to help the reader to examine the impact of the beta, firm size, book to market, and momentum factor to the fixed income in

Indonesia using four factor model. Formulation of the problem statement in this research are :

a. Are beta, firm size, book to market, and momentum factor give impact to the stock return in the fixed income mutual fund using Carhart Four Factor Model?
b. What kind of relation between the beta, firm size, book to market, and momentum factor to the stock return in Indonesia fixed income mutual fund using Carhart Four Factor Model?

1.3 Scope of the Problem

In order to limit the scope of the discussion on the issue and to obtain a clearer direction in discussing this problem so in this research there is a limitation:

a) This research will only be conducted on the fixed income mutual funds in Indonesia from 2005-2011
b) A tool to help this forecasting in this study is Risk Adjusted Return and Carhart Four Factor Model. In addition, it is represented by the use of monthly return, risk free rate (Rf), monthly premium of the book to market, and also monthly premium in the size factor.

1.4 Originality of the Research

This research identifies the same study with Martin C Lozano in the 2006 that he evaluates the mutual funds using Fama and French Three Factor Model, and also using Carhart Four Factor Model. He describes the tests portfolios that were used for estimating and evaluating both models. He uses the monthly returns on the 25 Fama and French (1992) portfolios and construct excess returns as these return on a three-month Treasury bill. In his research also use Risk Adjusted Return and also Carhart Four Factor model to identify the relation. There are some studies in Indonesia that try to identify the relationship between price and performance in mutual funds using Fama and French model, this research will using Carhart four factor model. The Original Research taking the sample using all of mutual funds in US, different with this research that will taking the sample from fixed income mutual funds in Indonesia.

1.5 Objectives of the Research

This study is designing to help us to examine mutual fund and identify the impact of the Carhart Four Factor model to the performance of Indonesia fixed income mutual funds. Before this research, there are many research that study the impact to the return using CAPM, multifactor model (APT), Fama and French, and also Carhart model and get the different result that make the research gap between one and another. This study will use Carhart four factor model that specifically focus on the fixed income mutual fund in Indonesia. With this study hopefully that the reader could gain more knowledge about the fixed income mutual fund. Know the implementation of the carhart four factor model, the impact of beta, firm size, book to market, and momentum factor to the return in Indonesia fixed income mutual fund. With this knowledge hopefully the reader could choose the right decision in investing in the fixed income mutual fund.

1.6 Benefits of the Research

The benefits of this research study hopefully will be able to:

A. For the writer

This study is important to make a better understanding about the mutual fund itself, and the price and performance in the mutual fund that is expected to sharpen the power of scientific thought and to increase scientific competence in the discipline served.

B. For reader and investor

This research is expected to provide a broader knowledge of the community who involved in the financial business world. With this knowledge both of the reader and investor could be help in their trading decision. This research expected to identify the relationship between price and performance of mutual funds in Indonesia.

1.7 Research Report Outline

The writing is divided into five chapters, which are:

Chapter I Introduction

This chapter will discuss the introduction about the research. The introduction consists of research background, problem statement, scope of there search, objective of the research, benefit of the research, and research report outline.

Chapter II Theoretical Background and Previous Research

This chapter contains the related theoretical background, and previous research from this topic.

Chapter III Research Methodology

This chapter describes the population and sample used in this research, data and data gathering, variable and variable measurement, method of analysis and hypothesis testing.

Chapter IV Data Analysis

This chapter provides and presents the data analysis and discusses the result obtained in this study.

Chapter V Conclusion and Suggestion

This chapter consists of conclusion, limitation of the research, and suggestion for further research.