## **CHAPTER II**

# THEORETICAL BACKGROUND AND PREVIOUS RESEARCH

## A. Theoretical Background

## 1. Indonesia Mutual Fund

The first *reksa dana* introduced in Indonesia was "Sertifikat Danareksa" at 1978 that was issued by the PT.Danareksa which was established at December 28th, 1976. The company was once announced as the best local issuer by the ASIAMONEY. The company has the research division which called the Danareksa Research Institute (DRI) that given a routine result of the fundamental analysis, technical analysis, and also sectored analysis.

Today, Danareksa is the only local company to offer direct market access services to clients worldwide and has grown to become the company that has underwritten the most equity and debt placements in Indonesia. By the year of 1995, the Government of Indonesia announces a new regulation related to the mutual fund whereas it covers the regulation of mutual fund. The regulation was UU No. 8 Year 1995. This new regulation becomes the starting point of the increasing numbers of mutual funds in Indonesia as the announcement of the first closed-mutual fund issued by the PT.BDNI Reksa Dana.

At the year of 2006 according to the data from Bapepam for December 2006 (Bapepam, 2006) total fund collected from the mutual fund was Rp 52.28 billion and 16% or Rp 8.36 billion was the equity mutual fund. And for the year of 2011, the equity mutual fund was collected for 36.27% or Rp54.88 billion from total Rp151.33 billion fund raised up to May 2011 (Bisnis, 2011). From this data the writer can take conclusion that the equity mutual funds which serve at high risk and high income are still the most favorable investments in Indonesia as the investors in indonesia are the type of risk seeking.

According to invovesta (invovesta.com, 2011) and bapepam (bapepam.go.id, 2011) in Indonesia there are various types of the Mutual Fund:

## a. Fixed Income Fund

Income funds are named appropriately: their purpose is to provide current income on a steady basis. When referring to mutual funds, the terms "fixed-income," "bond," and "income" are synonymous. These terms denote funds that invest primarily in government and corporate debt. While fund holdings may appreciate in value, the primary objective of these funds is to provide a steady cash flow to investors. As such, the audience for these funds consists of conservative investors and retirees. Bond funds are likely to pay higher returns than certificates of deposit and money market investments, but bond funds aren't without risk. Because there are many different types of bonds,

bond funds can vary dramatically depending on where they invest. For example, a fund specializing in high-yield junk bonds is much more risky than a fund that invests in government securities. Furthermore, nearly all bond funds are subject to interest rate risk, which means that if rates go up the value of the fund goes down.

# b. Money Market Fund

The money market consists of short-term debt instruments, mostly Treasury bills. This is a safe place to park your money. You won't get great returns, but you won't have to worry about losing your principal. A typical return is twice the amount you would earn in a regular checking/savings account and a little less than the average certificate of deposit (CD).

This type of investment is really suitable for the investment with length of time less than one year, in where this investment will act as a complementary of investment beside the deposit or saving. The purpose of investing in money market fund is to have a capital insurance and to provide a high liquidity of money. So when we need money immediatly we can cash out the investment as soon as possible with almost no deduction of the investment.

## c. Equity Fund

Funds that invest in stocks represent the largest category of mutual funds. Generally, the investment objective of this class of funds is long-term capital growth with some income. This equity funds represent the high risk high return theory since it is based on the stocks portfolios. There are, however, many different types of equity funds because there are many different types of equities.

The performance of the equity mutual fund in the October 2008 has the decrease pattern as the Global Crisis. Along with the decreasing of the Indonesia Capital Market Index (IHSG) the price of stock hitted the lowest point for 1,111 which resulted in the NAV for the year 2008 has a lower point that the other years. For the year 2009, as the growth of IHSG to the 2,530 point, the NAV were increased along with it. In December 2009, the total NAB Equity Fund is Rp 35,51 billion (Simamora, 2010)

And for the year of 2011, the equity mutual fund was collected for 36, 27% or Rp54, 88 billion from total Rp151; 33 billion fund raised up to May 2011 (Bisnis, 2011). Even though this type of mutual fund has greater risk than the deposit, for the long term this investment is hoped to have a higher value of investment.

## d. Balance Fund

The objective of these funds is to provide a balanced mixture of safety, income and capital appreciation. The strategy of balanced funds is to invest in a combination of fixed income and equities. A typical balanced fund might have a weighting of 60% equity and 40% fixed income. The weighting might also be restricted to a specified maximum or minimum for each asset class.

This type of mutual fund has the best performance in the year 2010 where the combinantion of investing in stock and fixed income give a very great return. When one of the investment is having the loss for certain period, the other investment will give the gain to cover up the loss and sometime give the surplus of gain. For the total of NAV of Balance Fund at the year 2009 is Rp 15.66 billion and decrease for Rp 13.87 billion for January 2010 (Simamora, 2010).

A similar type of fund is known as an asset allocation fund. Objectives are similar to those of a balanced fund, but these kinds of funds typically do not have to hold a specified percentage of any asset class. The portfolio manager is therefore given freedom to switch the ratio of asset classes as the economy moves through the business cycle.

The idea is to classify funds based on both the size of the companies invested in and the investment style of the manager. The term value refers to

a style of investing that looks for high quality companies that are out of favor with the market. These companies are characterized by low P/E and price-to-book ratios and high dividend yields. The opposite of value is growth, which refers to companies that have had (and are expected to continue to have) strong growth in earnings, sales and cash flow.

A compromise between value and growth is blend, which simply refers to companies that are neither value nor growth stocks and are classified as being somewhere in the middle. For example, a mutual fund that invests in large-cap companies that are in strong financial shape but have recently seen their share prices fall would be placed in the upper left quadrant of the style box (large and value). The opposite of this would be a fund that invests in startup technology companies with excellent growth prospects. Such a mutual fund would reside in the bottom right quadrant (small and growth).

According to bisnis.com (2010), in Indonesia the equity fund is still the most favorite one with contribution up to 36, 27% or Rp54.88 Billion from total Rp151.33 Billion fund raised up to May 2011. As the major type of investment which has the most investors, the equity mutual fund performance should have been analyzed by many economist due to the need of trustable information of the performance and the results has been announced in many financial institution or websites.

## 2. Net Asset Value (NAV) or *Nilai Aktiva Bersih (NAB)*

A fund's net asset value or NAV equals the current market value of a fund's holdings minus the fund's liabilities (sometimes referred to as "net assets"). It is usually expressed as a per-share amount, computed by dividing by the number of fund shares outstanding. Funds must compute their net asset value every day. Valuing the securities held in a fund's portfolio is often the most difficult part of calculating net asset value.

## 3. Risk and Return

In finance, risk is the potential that a chosen action or activity (including the choice of inaction) will lead to a loss (an undesirable outcome). The notion implies that a choice having an influence on the outcome exists (or existed). Potential losses themselves may also be called "risks". Almost any human endeavor carries some risk, but some are much more risky than others. Knight (1921) referred the term "risk," as loosely used in everyday speech and in economic discussion, really covers two things which, functionally at least, in their causal relations to the phenomena of economic organization, are categorically different.

The essential fact is that "risk" means in some cases a quantity susceptible of measurement, while at other times it is something distinctly not of this character; and there are far-reaching and crucial differences in the bearings of the phenomenon depending on which of the two is really present and operating. It will appear that a measurable uncertainty, or "risk" proper, as

we shall use the term, is so far different from an immeasurable one that it is not in effect an uncertainty at all.

In finance, risk is the probability that an investment's actual return will be different than expected. This includes the possibility of losing some or all of the original investment. In a view advocated by Damodaran, risk includes not only "downside risk" but also "upside risk" (returns that exceed expectations). Some regard a calculation of the standard deviation of the historical returns or average returns of a specific investment as providing some historical measure of risk; as we can see from the modern portfolio theory.

In finance, risk has no one definition, but some theorists, for example Ron Dembo, have defined quite general methods to assess risk as an expected after-the-fact level of regret (Dembo, 2006). Such methods have been uniquely successful in limiting interest rate risk in financial markets. Financial markets are considered to be a proving ground for general methods of risk assessment. However, these methods are also hard to understand. The mathematical difficulties interfere with other social goods such as disclosure, valuation and transparency. In particular, it is not always obvious if such financial instruments are "hedging" (purchasing/selling a financial instrument specifically to reduce or cancel out the risk in another investment) or "speculation" (increasing measurable risk and exposing the

investor to catastrophic loss in pursuit of very high windfalls that increase expected value).

In financial markets, one may need to measure credit risk, information timing and source risk, probability model risk, and legal risk if there are regulatory or civil actions taken as a result of some "investor's regret". Knowing one's risk appetite in conjunction with one's financial well-being is most crucial. A fundamental idea in finance is the relationship between risk and return. The greater the potential return one might seek, the greater the risk that one generally assumes. A free market reflects this principle in the pricing of an instrument: strong demand for a safer instrument drives its price higher (and its return proportionately lower), while weak demand for a riskier instrument drives its price lower (and its potential return thereby higher).

Market risk is the risk that the value of a portfolio, either an investment portfolio or a trading portfolio, will decrease due to the change in value of the market risk factors. The four standard market risk factors are stock prices, interest rates, foreign exchange rates, and commodity prices:

## a. Equity risk

This is the risk that one's investments will depreciate because of stock market dynamics causing one to lose money. The measure of risk used in the equity markets is typically the standard deviation of a security's price over a number of periods. The standard deviation will delineate

the normal fluctuations one can expect in that particular security above and below the mean, or average. However, since most investors would not consider fluctuations above the average return as "risk", some economists prefer other means of measuring it.

#### b. Interest rate risk

It is the risk (variability in value) borne by an interest-bearing asset, such as a loan or a bond, due to variability of interest rates. In general, as rates rise, the price of a fixed rate bond will fall, and vice versa.

## c. Currency risk

This is a form of financial risk that arises from the potential change in the exchange rate of one currency in relation to another. Investors or businesses face an exchange rate risk when they have assets or operations across national borders or if they have loans or borrowings in a foreign currency.

## d. Commodity risk

This refers to the uncertainties of future market values and of the size of the future income, caused by the fluctuation in the prices of commodities. These commodities may be grains, metals, gas, electricity etc.

While rate of return (ROR), also known as return on investment (ROI), rate of profit or sometimes just return, is the ratio of money gained or lost (whether realized or unrealized) on an investment relative to the amount of money invested. The amount of money gained or lost may be referred to as

interest, profit/loss, gain/loss, or net income/loss. The money invested may be referred to as the asset, capital, principal, or the cost basis of the investment. ROI is usually expressed as a percentage.

## **B.** Previous Research

The snail trail method is relatively simpler since it only applies a combination between risk and return of a mutual fund in 4 plotted quadrants. The horizontal axis of the quadrant represents risk, while the vertical axis denotes return of the mutual fund. Additionally, the risk and return of the mutual fund is plotted to the quadrant from time to time, so that, the mutual fund's movement can be observed at the end. By using this method, both investor and investment managers can monitor the movement of mutual fund's performance, and therefore, they can make any related decisions appropriately. Unlike the traditional risk-return diagram, the snail trail method not only shows results relative to the median or average fund manager, but is a robust tool for comparing fund managers' performance (Keng, 2000). This method is really suitable for evaluating the performance of mutual fund for the long term investment.

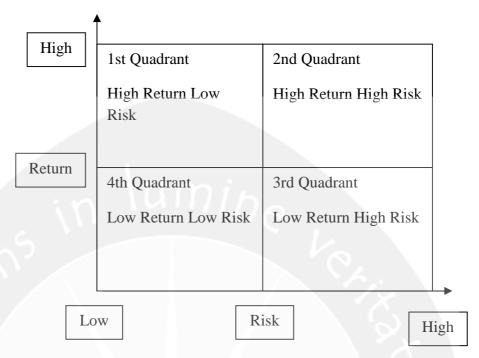


Figure 1. Risk and Return Quadrants (Manurung, 2008)

The rate-return graphic in snail trail method is devided into 4 quadrants, where each of them has a different characteristic to the others (Manurung, 2008), which is:

- 1. The 1st quadrant shows any mutual fund with relatively high return and relatively low risk. Most investors are keen on investing in this type of fund.
- 2. The 2nd quadrant represents any mutual funds with relatively high return and risk. Investors with speculative motive will enjoy investing in this fund.
- 3. The 3rd quadrant exhibits any mutual fund with relatively low return and relatively high risk. Almost no investor prefers to invest in this type of fund.
- 4. The 4th quadrant displays any mutual fund with relatively low return and relatively low risk. In general, golden-age or new investors have high preference to invest in mutual fund located in this quadrant.

According to Mangiring (2009) the research related to the mutual fund performance has not found a fix answer about the market. Maleaki (2001) had written in his thesis that the mutual fund can perform better that the market index as the use of active strategy and passive strategy depend on the calculation of raw performance.

To add some information related to the topic of snail trail method, here are some another thesis. In his master thesis, Susilo (2010) wrote that at the starting of Global Crisis, all of portfolios in Indonesia were in the second quadrant (high return and low risk). This means that the return of the portfolios was higher that the market return (IDX) whereas the risk of portfolios was higher too but the performances of the mutual funds were on the average as on the second quadrant. Therefore the investment managers ought to increase the performance of their mutual funds.

Another example is from Simamora (2010). She wrote "Performance Analysis of Fixed Income Mutual Fund Using the Risk Adjusted Return, Risk Ratio, and Snail Trail" as her master thesis. She wrote that 10 Fixed Mutual Funds which were first in the first quadrant and ended at the second quadrant would be the choice of investors. The investors are the type of risk averse, risk taker, and risk neutral. At the end of period of her research, most of the fixed income mutual funds were in the first quadrant (high return and low risk) which made the investment managers easier in making the decision and policy regarding to

each of the fixed income mutual fund. The investor were willing to give the trust to the investment managers along with giving the money that will be used as investment for certain criteria each investors wanted for the risk and return.

