

# CHARACTERISTICS OF INVESTMENT PORTFOLIOS PASSIVE MANAGEMENT STRATEGY ON THE CAPITAL MARKET

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## Abstract

*The strategies of investment portfolios management on the capital market involves a range of transactions with different financial securities, aimed at optimizing the results. On a developed and efficient capital market, with a high liquidity level, portfolio management primarily depends on investor's targeted level of return and the risk profile of the investor. Passive strategy of investment portfolios management is applied especially by risk aversion investors, who are taking into account all existing risks in the capital market and seeking to preserve the value of investments, rather than increasing its value. This strategy presume that the investor has no information about the prices and the return of securities that would make him to give to his investment portfolio a different structure from the structure of capital market portfolio. Therefore, he will seek a return level equal to the return on the market portfolio, minimizing the portfolio risk up to eliminating the specific risk.*

**Keywords:** *investment portfolios, portfolio management, Random – walk theory, risk aversion, treasury bill.*

## Introduction

One of the first proponents of passive portfolio management strategy was Eugene Fama (1), the author of the Efficient Market Hypothesis and Random Walk Theory. According to the Efficient Market Hypothesis is a useless searching undervalued securities or forecasting financial market movements, since the new information is already in the securities price, making impossible overcome the market performance. Also, the Random Walk Theory argues the lack of utility of shares historical price in forecasting of stock prices. That is happen because the information which runs on market is already incorporated in the price of securities.

Thus, using the two theories, E. Fama argues that there is no reason to determinate an investor to invest his capital in certain securities, as long as the market does not provide any signal that would justify such a decision.

Another convinced passive manager is Rex Sinquefield, President of *Dimensional Fund Advisors*<sup>1</sup>. He explained that the option for passive strategy portfolio management is based on understanding the function of the market mechanism. Virtually, no one has a too high volume of information that would allow the adoption of a specific investment decision under conditions of certainty. In fact, no matter how smart or how well informed are, the investors have a fraction of the information that are available to all market at any point in time. Markets are completely interdependent. Cannot be credible there is a person who has more information, in a systematic way, than a dispersed market of 6 billion people. However, Rex Sinquefield does not preclude someone chance to obtain a performance better than the market performance, but this case cannot be predicted with accuracy and, therefore, portfolio management active strategy is considered a waste of time. He believes that is more appropriate and efficient an investment in a market index than a portfolio management by an active strategy with a series of costs involved by selection of best securities. "Price is always correct, even if there are variations, which are determined by information that

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<sup>1</sup> Dimensional Fund Advisors, abbreviated as DFA or Dimensional, is an investment firm headquartered in Austin, Texas. The company benchmarks the performance of its large-cap equity portfolio against the S&P 500 Index, Consumer Price Index, MSCI EAFE Index and the Dow Jones Wilshire 5000 Index. (Accordingly Wikipedia, the Free Encyclopedia).

continuously appear on the market” is Rex Sinquefeld’s argument for a portfolio management passive strategy.

Finally, Merton Miller, Nobel Prize laureate (1990), also explains why passive management exceed that active one: ”I favor passive investing for most investors, because markets are amazingly successful devices for incorporating information into stock prices. I believe, along with Friedrich Hayek [also a Nobel laureate, and a contemporary of John Maynard Keynes] and others, that information is not some big thing that's locked in a safe somewhere. It exists in bits and pieces scattered all over the world.”<sup>2</sup> (interview for „Investment Gurus”).

### **The portfolio selection and diversification**

Investing in shares is a complex process. Even if the investment is short term (speculation) or a long term investment, a financial planning should be done and set the strategy to be followed. A rational management of investment capital involves keeping a liquid part of it. For a better risk management, financial assets should be placed as diversified (bank deposits, units, bonds, pension plans, life insurance or shares). The amount allocated for investment in shares should be in accordance with investor profile and its tolerance to risk (investor with risk appetite / individual risk aversion). Even if can be made equity investments with substantial reduction in risk, it is recommended that the amount of money that is aimed to be invested in shares be not planned for other investments.

### **Investment strategy**

When forming a share portfolio, each investor sets a target of his return for the entire portfolio or sets a return target on each share of the portfolio. Thus, portfolio formation criterion is probability – risk / mean – variance. The mean – variance optimization used in standard asset allocation models is extremely sensitive to the expected return assumptions the investor must provide. Investor’s return target is usually established long term of 1 year and therefore, the overall return on investment in shares may be compared to bank deposits interest rate for 1 year or term interest rate on government securities (money investments in zero risk conditions or risk free assets). It is also recommended that before making investment in shares, each investor establish the return objective and risk limit that he is prepared to assume.

The securities efficient portfolio selection, traded on the financial market requires three basic conditions:

1. Investors rational behavior, who target a level of the risk assumed in direct ratio to expected return of investments portfolio.
2. There is a positive correlation between the returns of portfolio’s securities.
3. The price changes of securities are purely random. This means that changes in the price result only from the release of new information, which is completely unpredictable.

As financial instruments became more diverse and venture decision turns into a real risk, portfolio management becomes more and more difficult. Theoretically, there are only two portfolio management models: passive investment strategy and active investment strategy, both taking into account market performance. Nevertheless, it is obvious that today efficient management of portfolio is based on models created by complex informatics programs with massive quantity of information. Bringing together these elements can give, most of the time, surprisingly valuable solutions,

Portfolio’s financial management aims to provide a superior return of financial investment than any other financial solutions. Thus, investments portfolio valuation and efficient management of portfolio will be made and will be anticipated by mean – variance criterion. It will be observed securities efficient combination that will lead to earn portfolios on the efficiency frontier.

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<sup>2</sup> *Investment Gurus* by Peter J. Tanous, New York Institute of Finance, 1997.

The placement of available financial resources of individuals or companies can be done both on the money market and capital market, the option for the portfolio assets being justified by the risk – expected return ratio. Usually, the investment on the stock market is preferred as it provides an additional return from the investment on the money market. But investment on the capital market is more difficult than the other one and requires a detailed financial analysis of investment under certain conditions of income and costs, profitability and risk, respectively.

As a result of investments on the capital market, the investor expects to earn income, being ready to assume a certain level of transaction costs involved. Therefore, for investments in equities, investors expect to earn from dividends and capital gains as a result of the positive evolution of the shares price, which are investment subjects. In case of bond investments, the expected gain for the investor is permanent, for the entire bond life cycle and it consist in a bond coupon. The bond interest coupon means the annual interest amount, calculated as a percentage of the bond face value. In case of a discount bond issue, the earning per bond is generated by the difference between the sale price of the financial tile and the face value repaid at maturity. If the investor chooses fund units for his investment, the income will consist in increasing in value of the net assets of the fund. The net asset value per unit of fund (NAVU) is the current market value of fund holdings, expressed as unitary value<sup>3</sup>. The NAVU is daily determined and it is calculated as:

$$NAVU = \frac{TotalAssets - TotalLiabilities}{TotalFundUnits}$$

A higher net asset value per unit of fund indicates a higher investment.

The basic rule of stock exchange is „buy cheap and sell high”. This is the goal of all investors in the stock exchange, even if they are short-term investors (the stock exchange speculators), medium-term or long-term investors in the stock exchange (institutional investors).

One of the main concerns of the portfolio manager is the fact that the portfolio internal rate of return must be, in any case, higher than the other forms of investment return. Under this approach, it is aimed a certain return – risk ratio, as a goal of investment performance. Since the portfolio is a combination of securities, it has the same performance characteristics of the securities, the randomness of the profitability, the systematic and the specific component of risk.

Modern portfolio theory goes around of two fundamental concepts, which are: the efficient portfolio and optimizing portfolio structure. Financial fund managers will always try to find the efficient combinations of securities or, in other words, portfolios located on the efficiency frontier, which could satisfy investment’s utility function for investors, or their attitude to risk. Optimal and efficient portfolios on the financial market are the result of various factors, such as: the rational behavior of investors, the positive correlation between securities return, or the random – walk of the return and the market price of the securities.

The optimal – risk portfolio can be found on the “Efficient frontier”. That is the efficient portfolio, which offers the highest return for a given level of risk or the minimal level of risk for a certain return rate. In other words, it is possible for different portfolios to have varying levels of risk and return. Each investor must decide how much risk he can handle and then diversify his portfolio according to this decision. The optimal – risk portfolio has a minimal variance of return on investment and satisfy utility function for an investor with risk aversion. According to Modern Portfolio Theory, this portfolio is situated at the junction of “Efficient frontier” and highest utility curve. As a consequence, an optimal portfolio is the one that increases profitability and reduces risk level.

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<sup>3</sup> A consumer’s guide to MiFID (Markets in Financial Instruments Directive) – Investing in Financial products / The Committee of European Securities Regulations, Paris, France, March, 2008.

In the portfolio management, the main feature is to reduce and even eliminate the specific risk using the portfolio diversification and taking into account that the return – risk criteria is the evaluation and efficient management framework of a securities portfolio.

For stock market investments, it is necessary to predict market trends, because knowing its characteristics may lead of an efficient portfolio.

The set of portfolios that have the highest level of return for each level of risk or the lowest risk for each level of return forms the “Efficient Frontier”.

To optimize the relation return – risk, must met a few aspects: making an investment with a minimum return, placing just a specified percentage of available fund in financial assets and maintaining a liquid part of available funds.

By the efficient portfolio selection, Harry Markowitz introduced the risk quantification theory, using the concept of average expected return and its variance, As a result, the optimal portfolio will be chosen as the maximum return portfolio with minimum risk conditions, achieved by applying the mean – variance criterion.

Based on this model, William Sharpe developed Capital Assets Pricing Model.

In finance, the **capital asset pricing model (CAPM)** is used to determine a theoretically appropriate required rate of return of an asset, if that asset is to be added to an already well-diversified portfolio, given that asset's non-diversifiable risk. The model takes into account the asset's sensitivity to non-diversifiable risk (also known as systematic risk or market risk), often represented by the quantity beta ( $\beta$ ) in the financial industry, as well as the expected return of the market and the expected return of a theoretical risk-free asset. Since beta reflects asset-specific sensitivity to non-diversifiable, i.e. market risk, the market as a whole, by definition, has a beta of one. Stock market indices are frequently used as local proxies for the market—and in that case (by definition) have a beta of one. An investor in a large, diversified portfolio (such as a mutual fund), therefore, expects performance in line with the market.<sup>4</sup>

$$R_i = f(R_M),$$

### Investment portfolio strategies

The decision of how to manage the portfolio (active or passive strategy) depends on whether the manager has access to superior analysts. A portfolio manager with superior analysts or an investor who believes that he has the time and expertise to be a superior investor can manage a portfolio actively by looking for undervalued or overvalued securities and trading accordingly. In contrast, without access to superior investor, the manager should manage passively and assume that all securities are properly priced based on their levels of risk.

A portfolio manager with access to superior analysts who have unique and analytical ability should fellow their recommendations. The superior analysts should make investment recommendations for a certain proportion of the portfolio, and the portfolio manager should ensure that the risk preferences of the client are maintained<sup>5</sup>.

**Passive investment portfolio strategy** (or indexing strategy) starts from the premise that the investor has no information that would make him giving of his portfolio a different structure of the market portfolio, in which case, the portfolio risk is only the systematic risk. Passive investment management involves minimal trading, based on the belief that is impossible to beat averages on a risk – adjusted basis consistently.

<sup>4</sup> en.wikipedia.org – Capital Assets Pricing Model

<sup>5</sup> Reilly, Frank, Brown, C, Keith - Investments Analysis and Portfolio Management (10<sup>th</sup> Edition), South – Western Cengage Learning, Mason, Ohio, USA, 2012.

The equations underlying this theory are:

$$E(\bar{R}_{pf}) = E(\bar{R}_M) \text{ and } \sigma_{pf} = \sigma_M$$

Where:  $E(\bar{R}_{pf})$  is the expected return for the portfolio, which depends on the expected return of all the assets returns in the portfolio

$\sigma_M$  is the Variance of the portfolio's return, which depends on the variance of all the assets in the portfolio and the covariance of returns between all pairs of assets in the portfolio

$E(\bar{R}_M)$  is the market return, expressed by the official market index

$\sigma_M$  variance of the market return

Indexing is a sensible strategy because the security market appears to be remarkably efficient in adjusting the new information. When information arises about individual stocks or about the market as a whole, that information is generally reflected in market prices without delay. But passive management would still be a winning strategy even if markets were inefficient. This is so because winning performance must be a zero – sum. Clearly all stocks have to be held by some of certain investors achieve above – average returns, then it must be the case the other investors are achieving below – average performance. It is clear that all investors cannot be above average.<sup>6</sup>

If the market where portfolio securities are quoted is an efficient market, the only criterion considered for buying them is their relative capitalization. But it is not possible to know if the share's decreasing price is the effect of constitutive factors of securities. Investment passive strategy is considered the most appropriate method for managing a portfolio, in the stock exchange efficiency conditions. The result of choosing this strategy is the elimination of portfolio's specific risk.

Another great advantage of buy and hold strategy is also, the low cost, because broker's commission fees, spreads and other dealing costs become occasional rather than frequent. Passive strategy or buy- and-hold investment strategy means that rather than trading regularly securities are purchased and held for a long time (many years).

Another portfolio management strategy, opposite of the one, previously presented, is the active portfolio management. In an active portfolio strategy, a manager uses financial and economic indicators along with various other tools to forecast the market and achieve higher gains than a buy-and-hold (passive) portfolio.

Active portfolio management strategy is based on the selection of securities included in the portfolio. Manager will select securities according to their own performance and not according to their affiliation to an index or sector. Active management objective is to achieve higher performance as the benchmark (the stock market's official index). Accordingly, the return rate obtained by the investment's active management, which involves investing in securities with high return rate and risk is random, being the result of a normal distribution around the average return. (Gaussian function). Managers who adopt this strategy relies on a certain degree of market's inefficiency. They noticed that it could be achieved a higher return rate for very short term, as long as financial asset's price is not steady. Portfolio active management can be applied both on the individual securities, in which case we are talking about "stock selection" (picking) and on various financial assets (from the stock exchange market and from the banking sector), in which case active management is called "active asset allocation". The third form of active management is "market timing", the strategy which is based on expectations of market's return development.

Portfolio managed by an active strategy has fewer titles than the one which is managed by the passive strategy, because requires individual analysis of each title of the portfolio. The active strategy also involves higher costs than the passive one.

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<sup>6</sup> Burton G. Malkiel – "Passive Investment Strategies and Efficient Markets" - European Financial Management, Vol. 9. No. 1, 2003, Blackwell Publishing Ltd., 2003.

### Conclusions

Passive and active investment strategies properly impose to check if the results meet the objectives. Thus, investment passive manager has to check if portfolio return rate is at the same level as stock index performance. Instead, the manager who prefers to apply an active strategy of the investments and who has to manage the informational efficiency of the market, too, should check if the excess return level achieved is big enough to offset the risk supplement level.

Very few active portfolio strategy managers actually beat the market. That is why famous investors often recommend a simple index strategy, which allows everybody to profit from the overall growth of economy.

The aim of this paper was to prove that investors are likely to achieve far higher returns by employing a passive portfolio strategy, than they are likely to achieve from active portfolio management. Certainly, every goal set in a trading or management strategy has its advantages and disadvantages, which determines an investor to make some compromises.

### References

- Reilly, Frank, Brown, C, Keith - Investments Analysis and Portfolio Management (10<sup>th</sup> Edition), South – Western Cengage Learning, Mason, Ohio, USA, 2012.
- Burton G. Malkiel – “Passive Investment Strategies and Efficient Markets” - European Financial Management, Vol. 9. No. 1, 2003, Blackwell Publishing Ltd., 2003.
- Fama, Eugen – “Market efficiency, long - term returns and behavioral finance”, Journal of Financial Ecomics, Vol 49, 1998.
- Black, Fisher, Litterman, Robert – “Global Portfolio Optimization”, Financial Analysts Journal, Sep/Oct, 1992.
- A consumer’s guide to MiFID (Markets in Financial Instruments Directive) – Investing in Financial products / The Committee of European Securities Regulations, Paris, France, March, 2008 .
- *Investment Gurus* by Peter J. Tanous, New York Institute of Finance, 1997.