

***Selection of Stock Asset Portfolio Based on Risk and Return of Asset
Portfolio: The Case Study of Tehran Stock Market***

Extended Abstract

Purpose

Objective: Choosing a stock portfolio in investment discussions is a difficult and difficult task, deciding which stock is in a better condition compared to other stocks and deserves to be selected and placed in one's investment portfolio, and how to allocate capital between these stocks It is packed. The main purpose of this article is to choose a stock portfolio based on risk and portfolio returns: the case study of the Tehran stock market.

Methodology

The research method of the current research is based on the purpose of the research (assessing the performance of risk and portfolio returns in the selection of asset portfolios in the Tehran Stock Exchange market) of an applied type, which is through mean-variance designed by Markowitz, the average expected return and variance It shows the portfolio risk. Collecting information and data in conventional methods (risk and return of asset portfolio) in order to test the hypotheses, in order to fulfill the goals and finally answer the questions raised and faced by this research, according to the developed models and the studied variables from the audited financial statements of the companies. Tehran Stock Exchange and in some cases using "Rehvard Naveen" information software and websites related to Tehran Stock Exchange which contain data of Tehran capital market, it has been compiled in the period of 1391 to 1402. From the mean-variance model and to obtain the optimal capital portfolio selection in the Markowitz method, which has the minimum variance, the linear programming model is used.

Finding

Strategy one shows; The investor should allocate 0.041% of his chosen portfolio to Khark Petrochemical shares; Allocate 0.065 to the share of Finavaran Petrochemical, 0.2030 to the share of Rohtargar, 0.0357 to the share of Pars Industrial Carbon Black, 0.407 to the mineral processing and 0.2477 to the share of Amir Kabir Kashan Steel. The second strategy shows; The investor should allocate 0.072 to the shares of Fanavaran Petrochemical, 0.1422 to the shares of Rohtargar, 0.0448 to the shares of Pars Industrial Carbon Black, 0.4058 to the mineral processing, 0.275 to the shares of Amir Kabir Kashan Steel and allocate 0.0592 to the share of pharmaceutical factories. The third strategy shows; The investor should invest 0.098/098 in the share of Finavaran Petrochemical, 0.0161/0 in the share of Rotagar, 0.0436/0 in the share of Pars Industrial Carbon Black, 0.3770/0 in the processing of minerals, 00/3216 in the share of Amir Kabir Kashan Steel and 1626/0. allocate 0/0 to the share of pharmaceutical factories. The fourth strategy shows; The investor should allocate 0.1159/0 to Fanavaran petrochemical shares, 0.011/0 to Pars industrial carbon black shares, 0.3468/0 to mineral processing shares, 0.4174/0 to Amir Kabir Kashan steel shares and 0.1260/0 to Daropaksh factories. The fifth strategy shows; The investor must allocate its selected portfolio of 0.1159 to the Fernavaran Petrochemical

Company, 0.3051 to the share of mineral processing, 0.0875 to Amir Kabir Kashan Steel and 0.0704 to the share of pharmaceutical factories. The sixth strategy shows; The investor should allocate 0.1311 to the petrochemical share of Fanavaran, 0.2585 to the share of mineral processing, 0.5950 to the share of Amir Kabir Kashan Steel and 0.0115 to the share of Daropakshsh factories. The seventh strategy shows; The investor should allocate 0.1377 to the share of Fan-Avaran Petrochemical, 0.6749 to the share of mineral processing and 0.6749 to the share of Amir Kabir Kashan Steel. The eighth strategy shows; The investor should allocate 0.1410 to the share of Fan-Avaran Petrochemical, 0.0660 to the share of mineral processing and 0.7523 to the share of Amir Kabir Kashan Steel. The ninth strategy shows; The investor should allocate 0.1443 to the share of Fan-Avaran petrochemicals, 0.259 to the share of mineral processing and 0.8298 to the share of Amir Kabir Kashan Steel. The tenth strategy shows; The investor should allocate 100% of his chosen portfolio to Amir Kabir Kashan Steel. The eleventh strategy shows; It is better for an investor to leave the stocks of Alborzdar, Iran Khodro, Iran Daru, Shazand Petrochemical, Tractorsazi, Chadormelo, Shimi Darupakhsh, Fars Chemical, Sepahan Industrial, Khuzestan Steel, Mobarake Isfahan Steel, Khorasan Steel, and automobile parts in their selected portfolio. Based on the performance efficiency frontier diagram, the latest stock price of the companies shows based on return and risk, for example, Amir Kabir Kashan Steel has less risk and more return than all the items. Pars industrial carbon black is less risky than Fan Avaran Petrochemicals, Chem Daro Pars. However, it is less efficient compared to Techno-Avaran petrochemicals, but it is more efficient compared to Dorofos chemical. Khuzestan Steel has more risk and zero return than all items and should not be chosen. Chader Melo, Khark Petrochemical, Mobarakeh Steel have more risk and very very little return. And should not be chosen. Choosing a stock portfolio in investment discussions is a difficult and difficult task. Deciding which stock is in a better position compared to other stocks and deserves to be selected and placed in one's investment portfolio, and how to allocate capital between these stocks, is a complex issue. Theoretically, the issue of stock portfolio selection in the case of risk minimization in the case of fixed returns can be solved by using mathematical formulas and through a quadratic equation, but in practice and in the real world, according to the number of choices Much like in capital markets, the mathematical approach used to solve this model requires extensive calculations and planning.

Conclusion

The results and analysis show that the selection of the efficient portfolio is based on the efficiency frontier diagram of the latest stock price of the companies based on yield and risk, for example; Amir Kabir Kashan steel has less risk and more yield than all the items. Pars Industrial Carbon Black is less risky than Fan Avran Petrochemical, Chemical Daro Pars. However, it is less efficient compared to Techno-Avaran petrochemicals, but it is more efficient compared to Dorofos chemical. Khuzestan steel has the highest risk and zero return of all items and should not be chosen. Chador Melo, Khark

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