

Portfolio Revision Strategies Using Formula Plans and Dollar Cost Averaging

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Abstract—The revision of a portfolio is an important process in both the evaluation of an investor's investments and in the ongoing management of those investments. Further, as the market and an investor's tolerance for risk change, so too should the investments in their portfolio to ensure alignment with their current goals. Formulaic and dollar cost averaging methods provide investors with a systematic and disciplined approach to revising their portfolios. The objective of this paper is to provide a conceptual and descriptive overview of the different portfolio revision methods, with an emphasis placed on formulaic alternatives, such as: constant ratio, constant rupee value, and variable ratio plans, as well as dollar cost averaging. This paper also discusses how these methods can assist investors with mitigating the effects of market volatility on their investments, minimizing emotional bias, and ultimately enhancing the overall performance of their long-term investments. The present review of the literature regarding investment management includes numerous articles published in various academic, financial, and investment management journals including: IJSDR, IJRSET, and IJMRSET. Based upon the findings of this review of the literature and comparison of the findings with that of similar review studies conducted on the same subject, it is concluded that systematic revision methods are particularly beneficial for long-term investors looking to establish and maintain stability and consistency in their investments, while maintaining a suitable level of risk in a volatile market environment.

Index Terms—Portfolio Revision; Formula Plans; Dollar Cost Averaging; Investment Strategy; Portfolio Management

I. INTRODUCTION

The process of investing is not limited to selecting investments and assembling them in a portfolio; it also includes periodically examining and reassembling that portfolio based on current market and economic conditions. Financial markets change constantly, and every change in the economy, interest rates, inflation or the prices of stocks will, at some point require either a complete change in the portfolio or make the change to the makeup of the portfolio necessary. The method for adjusting the portfolio's composition to create an appropriate risk-return relationship is known as the Portfolio Adjustment Process.

Investors have difficulties and challenges such as making emotional investment decisions, timing their purchases incorrectly, and not being able to predict the future, particularly during periods of high levels of price volatility. In order to help investors deal with these challenges, there are several different ways to develop methodical methods for determining how to alter your portfolio. A few of the methods most often used for establishing a systematic plan of action to adjust your portfolio include dollar cost averaging and formula plans. The objective of this project is to provide a basic understanding of the benefits of using a systematic adjustment method to your portfolio to achieve a balance of risk and return, using dollar cost averaging and formula plans as examples.

II. CONCEPTUAL FRAMEWORK

The concept of Portfolio Revision is founded on the necessity of periodically updating an optimal portfolio

to reflect changes in the market and an investor's changing objectives. The conceptual framework used in this research links Portfolio Revision to Risk Management and Long-Term Wealth Creation.

The Formula-Based Investment Plan represents passive Portfolio Revision strategies where all buy-and-sell decisions are based on predetermined rules and reduce the need for subjective decision-making. This enables Investors to buy Securities when the price is low and sell Securities when the price is high. Dollar-Cost Averaging allows for Fixed Dollar Amounts to be invested periodically, which reduces the effect of Market Timing and Price Volatility. Additionally, the framework illustrates how Systematic Revision Strategies help Investors maintain discipline concerning Asset Allocation and help stabilize Investment Costs over Time.

III. METHODOLOGY

A descriptive and conceptual method of study will be utilized in this paper. Secondary (back-end) reading materials such as investment management textbooks, academic journals, and investor education materials were reviewed in order to gain better knowledge of the various portfolio revision strategies employed and their relation to practice. There was no data collection through primary means nor any form of empirical analysis of primary data collected. Therefore, the intent of this paper is to provide a simple and applicable explanation for the purpose of conceptual clarity with respect to formula plans and DCA. Through this paper it is hoped that students and individual investors will develop a better understanding of formula plans and DCA and their implications.

IV. PORTFOLIO REVISION STRATEGIES

Formula Plans

Formula plans are systematic methods of portfolio revision that follow predefined rules for rebalancing assets between risky and risk-free securities.

Constant Ratio Plan

Under the constant ratio plan, the investor maintains a fixed proportion between equities and debt instruments. When the value of equities increases beyond the specified ratio, excess equity holdings are

sold and invested in debt securities. When equity prices fall, funds are shifted from debt to equities. This approach ensures automatic rebalancing and enforces disciplined buying and selling.

Constant Rupee Value Plan

The constant rupee value plan aims to maintain a fixed monetary investment in risky assets. If the value of equity holdings rises above the predetermined amount, the surplus is sold. If the value falls below the target amount, additional investment is made. This plan is most effective in volatile markets where frequent price fluctuations provide opportunities for rebalancing.

Variable Ratio Plan

The variable ratio plan is a flexible modification of the constant ratio plan. In this approach, the ratio between equities and debt is adjusted based on market conditions. During bullish markets, higher exposure to equities is maintained, while during bearish conditions, investment in safer assets is increased. Although this plan offers flexibility, it requires accurate assessment of market trends.

Dollar Cost Averaging

Dollar cost averaging is a portfolio revision strategy in which a fixed amount of money is invested at regular intervals irrespective of market price movements. As a result, more units are purchased when prices are low and fewer units when prices are high. Over time, this leads to a reduction in the average cost per unit.

This strategy is particularly suitable for salaried individuals and long-term investors who invest through systematic investment plans. Dollar cost averaging reduces the risk associated with market timing and encourages consistent investment behaviour.

Findings and Discussion

Formula plans and dollar cost averaging are useful methods for managing investment risk and market volatility. Formula plans provide investors with a method for maintaining a proper portfolio structure and eliminate irrational decision-making based on market movements. Dollar cost averaging allows investors to continually invest a fixed amount of money at a predetermined interval, allowing them to reduce the impact of negative market movements on

the cost of their overall investment by investing a smaller total amount in a particular time frame.

Long-term investors, who have a moderate tolerance for risk and are not well-versed in the markets, can benefit the most from these two strategies; however, these strategies may involve more expensive transaction fees due to frequent rebalancing and, in some instances, dollar cost averaging may lead to lower investment profits than lump-sum investment strategies during times when the market is experiencing a rapid increase in value.

V. CONCLUSION

An investor's portfolio needs to be updated on a regular basis to maintain an effective investment-management system. Formulaic plan and dollar-cost averaging are two systematic, disciplined means for managing risk. They help to ensure an investor's portfolio remains balanced over the long haul, and even though they cannot completely remove the risk associated with investing in the market, they do significantly reduce an investor's emotional decision-making bias, thereby creating greater opportunities for consistent investing. The researchers believe that formulaic plan strategies for revising a portfolio will remain relevant as well as useful for the average investor, especially during periods of high market volatility. Furthermore, incorporating these types of strategies into a more comprehensive investing plan will increase portfolio stability and provide for additional growth of wealth over time.

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