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Original Article

A Study on Portfolio Diversification and Risk–Return Analysis of Selected Financial Assets in India

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ABSTRACT

The present study focuses on portfolio diversification and the risk–return performance of selected financial assets in India. The study aims to understand how different investment options such as stocks, mutual funds, Gold ETF, and bonds perform under varying market conditions. Diversification is considered an important investment strategy that helps investors reduce overall portfolio risk by allocating investments across different asset categories. The research is descriptive and analytical in nature and is completely based on secondary data. Monthly historical data for the period from 2021 to 2025 were collected from financial websites, investment platforms, and published financial reports. The collected data were analyzed using tools such as return calculation, average return, standard deviation, comparative analysis, and graphical representation. The study compares the performance and volatility of selected assets to identify the relationship between risk and return. The analysis shows that equity investments generally provide higher returns with greater fluctuations, while bonds and Gold ETF offer more stable performance with lower risk. Mutual funds provide balanced investment opportunities through diversification benefits. The study highlights the importance of diversification in investment decision-making and concludes that a properly diversified portfolio can help investors manage risk while improving long-term financial stability.

KEYWORDS

Portfolio Diversification, Risk–Return Analysis, Stocks, Mutual Funds, Gold ETF, Bonds, Average Return, Standard Deviation, Asset Allocation, Investment Performance.

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1. INTRODUCTION

Investment plays a significant role in achieving financial growth and wealth creation. Investors have various investment options such as stocks, mutual funds, Gold ETFs, and bonds, each offering different levels of risk and return. Since market conditions constantly change, investors need to make informed decisions to balance risk and maximize returns. Portfolio diversification is an important investment strategy that involves spreading investments across different asset classes to reduce overall risk. A well-diversified portfolio helps investors manage market fluctuations and improve long-term financial stability. This study analyzes the risk and returns performance of selected financial assets during the period 2021–2025 and highlights the importance of diversification in effective investment decision-making.

2. OBJECTIVES

- To analyze the concept and importance of portfolio diversification in reducing investment risk.
- To examine the risk and return characteristics of different financial assets such as equities, bonds, mutual funds, and gold in India.
- To study the relationship between risk and return among selected financial instruments.
- To evaluate the performance of diversified portfolios compared to non-diversified portfolios.
- To provide suggestions for investors to optimize their portfolio for better returns with minimum risk.

3. SCOPE OF THE STUDY

- The study focuses on analyzing both portfolio diversification and the risk–return relationship of selected financial assets in the Indian financial market.
- It examines how combining different financial instruments helps in optimizing returns while reducing overall investment risk.
- The study is based on secondary data sources such as stock market reports, financial databases, and published materials.
- The scope is limited to selected financial assets and does not include a comprehensive analysis of all available investment options or international markets.
- The study aims to provide practical insights for investors on building diversified portfolios that achieve an optimal balance between risk and return.

4. NEED OF THE STUDY

- To analyze the risk and return performance of selected financial assets such as stocks, mutual funds, Gold ETF, and bonds.
- To understand the importance of portfolio diversification in reducing overall investment risk.
- To compare different financial assets based on return, risk, and stability.
- To help investors make informed investment decisions according to their financial goals and risk tolerance.

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- To study how diversification improves portfolio performance and long-term financial stability.

5. REVIEW OF LITERATURE

- Eugene Fama and Kenneth French (2004) - Fama and French analyzed factors affecting stock returns beyond market risk. They introduced size and value factors in asset pricing. Their study supports diversified portfolio construction. It highlights the importance of multi-factor analysis in investments.
- John Campbell (2003) - Campbell focused on long-term investment risks and return behavior. He emphasized considering time horizon in investment decisions. His study shows diversification reduces long-term risk. It supports strategic portfolio planning.
- Burton Malkiel (2003) - Malkiel explained that markets are efficient and prices reflect information. He argued that consistent outperformance is difficult. Diversification is therefore essential for investors. His work supports passive investment strategies.
- Zvi Bodie et al. (2005) - Bodie emphasized the role of asset allocation in portfolio returns. He stated allocation is more important than stock selection. The study supports balancing risk and return. It highlights diversification benefits.
- William Sharpe (2006) - Sharpe discussed risk-adjusted performance measures. He emphasized evaluating both risk and return together. His study is useful in portfolio evaluation. It supports systematic investment analysis.

6. RESEARCH METHODOLGY

The present study is descriptive and analytical in nature and focuses on the risk–return analysis of selected financial assets such as stocks, mutual funds, Gold ETFs, and bonds. The study is based entirely on secondary data collected from financial websites, investment reports, and published sources for the period 2021–2025. Tools such as monthly return calculation, average return, standard deviation, comparative analysis, tables, and charts were used to analyze the performance of the selected investment avenues.

7. TOOLS FOR ANALYSIS

The following financial and statistical tools were used for analysis:

7.1. Return Calculation

Used to measure percentage change in asset prices over time.

$$R = \frac{p_t - p_{t-1}}{P_{t-1}} \times 100$$

7.2. Average Return

Used to measure overall investment performance.

$$\bar{R} = \frac{\sum R}{n}$$

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7.3. Standard Deviation

Used to measure risk and volatility of returns.

$$\sigma = \sqrt{\frac{\sum(R_i - \bar{R})^2}{n-1}}$$

8. FINDINGS

- The selected stocks showed positive long-term growth during the period 2021–2025 despite market fluctuations.
- Among the selected stocks, ITC Limited recorded the highest average return (1.68%), while HDFC Bank showed the lowest risk with a standard deviation of 4.94.
- Infosys and TCS exhibited higher volatility with standard deviations of 6.86 and 6.15 respectively, indicating greater investment risk.
- The selected mutual funds recorded gradual growth in NAV and demonstrated stable long-term performance during the study period.
- Among the mutual funds, HDFC Mid Cap Fund generated the highest average return (1.99%) but also recorded the highest risk (standard deviation 4.05).
- ICICI Prudential Balanced Advantage Fund showed the lowest volatility with a standard deviation of 1.52, indicating comparatively stable performance.
- Gold ETF prices showed a consistent upward trend from 2021 to 2025 with moderate fluctuations.
- Gold ETF generated an average return of 1.62% with a standard deviation of 3.77, providing moderate returns with manageable risk.
- Bond yields remained relatively stable throughout the study period, reflecting lower volatility compared to other financial assets.
- Bonds generated the highest average return (6.81%) with the lowest standard deviation (0.44), indicating stable and consistent performance.
- The comparative analysis revealed that mutual funds produced an average return of 1.56% with a standard deviation of 1.38, offering balanced risk and return.
- The study confirms that portfolio diversification across stocks, mutual funds, Gold ETF, and bonds help reduce overall investment risk while improving portfolio stability.
- Different financial assets exhibited different risk–return characteristics, highlighting the importance of selecting a diversified portfolio based on investor objectives and risk tolerance.

9. SUGGESTIONS

- Investors should diversify their investments across stocks, mutual funds, Gold ETFs, and bonds to achieve a balanced risk–return portfolio.
- Risk-averse investors may allocate a larger portion of their investments to bonds, as they provided stable returns with the lowest volatility in the study.

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- Investors seeking higher returns may consider mutual funds such as HDFC Mid Cap Fund, while being aware of the associated risk.
- Gold ETFs can be included in portfolios to provide diversification benefits and protection during periods of market uncertainty.
- Equity investments should be selected carefully, considering both return potential and risk characteristics.
- Investors should periodically review and rebalance their portfolios to maintain the desired asset allocation.
- Mutual funds can be preferred by investors who lack the expertise or time to manage individual stocks.
- Investment decisions should be based on individual risk tolerance, financial goals, and investment horizon.
- A combination of high-return assets and low-risk assets should be maintained to improve portfolio stability.
- Investors should continuously monitor market conditions and economic developments before making investment decisions.
- Long-term investors should focus on diversified portfolios rather than relying on a single asset class.
- Proper asset allocation among stocks, mutual funds, Gold ETFs, and bonds can help maximize returns while minimizing overall portfolio risk.

10. CONCLUSION

The present study analyzed the risk and return characteristics of selected financial assets such as stocks, mutual funds, Gold ETF, and bonds in India during the period 2021–2025. The study found that different financial assets provide different levels of return, risk, and stability based on market conditions and investment nature.

The analysis showed that stocks generated comparatively higher returns along with higher volatility and investment risk. Mutual funds provided balanced risk and return due to diversification benefits and professional fund management. Gold ETF demonstrated stable performance with moderate fluctuations and acted as a comparatively safer investment option during uncertain market conditions. Bonds generated stable and consistent returns with lower volatility compared to other financial assets.

The study also highlighted the importance of portfolio diversification in reducing overall investment risk and improving portfolio stability. Diversification across different financial assets helps investors manage market fluctuations and achieve balanced returns over the long term.

Overall, the study concludes that proper analysis of risk and return is essential for making effective investment decisions. A diversified portfolio consisting of stocks, mutual funds, Gold ETF, and bonds can help investors achieve long-term financial growth, stability, and financial security.

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