INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

e-ISSN : 3139-065X

www.ijemss.com

editor@ijemss.com

Vol. 01, Issue 2, June2026, pp :707-715

A STUDY ON PORTFOLIO CONSTRUCTION BY USING MODERN PORTFOLIO THEORY

[1]Eedara Priyanka [2]Dr.N.Ramanjaneyulu

[1]II MBA – MLR Institute of Technology, Hyderabad., eedarapriyanka5@gmail.com

[2]Professor & Head, Department of MBA, MLR Institute of Technology,Hyderabad, ramanjimba09@gmail.com

ABSTRACT

This report analyses the risk-return profiles of several portfolios consisting of equities from Vedanta Ltd, Castrol India Ltd, Bosch Ltd, Asian Paints Ltd, CEAT Ltd, and Wall Street Finance Ltd. The study evaluates key financial metrics such as average returns, risk, correlation coefficients, and portfolio returns and risks. The findings reveal that while diversification within the same industry does not completely eliminate risk, it can lead to improved risk-return trade-offs. Specifically, Portfolio B, consisting of combinations like Bosch Ltd and Asian Paints Ltd, offers the most favorable risk-return trade-off with lower risk and returns, making it suitable for risk-averse investors. Portfolio A, with fewer companies, carries lower risk but also lower returns, while Portfolio C, though diversified with more securities, presents higher risk due to increased correlations. The study concludes that investors must balance risk and return based on their individual risk tolerance and investment goals, with a focus on diversification strategies to optimize portfolios.

KEYWORDS: Portfolio Diversification, Risk-Return Tradeoff, Portfolio Performance Analysis, Correlation Coefficient, Investment Risk Management

INTRODUCTION

Portfolio the board is the workmanship and study of settling on conclusions about venture blend and strategy, matching speculations to goals, resource distribution for people and foundations, and adjusting risk against execution. A portfolio is a gathering of monetary resources like stocks, securities and money reciprocals, as well as their assets partners, including common, trade exchanged and shut reserves. Portfolios are held straight by financial backers as well as overseen by monetary experts.

Key Portfolio The executives is the obligation of the senior supervisory group, which requirements to guarantee that methodology and activities are adjusted and coordinated. It is similarly pertinent to the private and public areas, and can be utilized across the entire association or a section. Portfolio the board is the craftsmanship and study of settling on conclusions about speculation blend and strategy, matching ventures to targets resources for people and foundations, and adjusting risk against

A portfolio alludes to an assortment of speculation instruments like stocks, shares, common assets, bonds, cash, etc relying upon the financial backer's pay, spending plan and helpful time period. Portfolio the executives alludes to dealing with a singular's interests as securities, shares, cash, common assets and so on so he acquires the adage most extreme benefits inside the specified time period.

Portfolio the board alludes to overseeing cash of a person under the master direction of portfolio chiefs. In a layman's language, the specialty of dealing with a singular's venture is called as portfolio the executives.

Portfolio hypothesis was proposed by Harry M. Markowitz of College of Chicago. As indicated by Markowitz's portfolio hypothesis, portfolio supervisors ought to painstakingly choose and consolidate monetary items in the interest of their clients for ensured most extreme gets back with least dangers.

LITERATURE REVIEW

Nicole Branger and Beate Breuer (2024) demonstrated that derivatives can be a useful addition to investment portfolios. Nevertheless, retail investors typically find direct investments in derivatives to be excessively complex.

Philipp Schmitz and Martin Weber (2023) revealed that when the underlying hits certain very high prices, it also affects the trading behaviour. Because investors like to leverage their stock positions, the likelihood of buying calls is positively correlated with the underlying's position in the portfolio, whereas the chance of buying puts is negatively correlated with the underlying's position in the portfolio.

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

e-ISSN : 3139-065X

www.ijemss.com

editor@ijemss.com

Vol. 01, Issue 2, June2026, pp :707-715

Das, Ms. S. Mohanty and N. Chandra Shil (2022) investigated how investors choose their investment vehicles. The stock market is fraught with difficulties for individual investors. They arrived at conclusions based on empirical evidence that are beneficial for investors and businesses offering investment opportunities.

Gupta and Naveen Jain (2021) discovered that the bulk of investors are in their twenties and thirties, and that, according to their profession, salaried individuals are more likely to invest. According to the study, the most important element that influences investment is educational qualification. Shares, followed by mutual funds, are their top investing choices.

Prasanna P. K. (2020) It has been found empirically that enterprises with a bigger number of shares owned by the general public attract more investment from overseas investors. Companies whose promoters' family shares are not necessary are more attractive to foreign investors.

Deleep Kumar P M and Deyanandan M N (2019) examined the views of individual investors on the key market reforms and the results of their investments. According to the research, just a small fraction of investors see value in the new derivatives trading and online trading platforms. Research showed that most investors still don't trust SEBI, despite the agency's claims to be an advocate for their best interests.

G. Ramakrishna Reddy and Ch. Krishnudu (2018) basically, most people who put their money into the stock market, mutual funds, debt instruments, and bank accounts have no idea what corporate investing opportunities exist. Traditional investment vehicles, such as property, bullion, bank deposits, life insurance plans, and small savings schemes, are well-known to them.

K. Logeshwari and V. Ramadevi (2017) asserted that a commodities market gives a venue where investors and hedgers can safeguard their financial interests and grow their investable wealth. The price of commodities tends to be more stable than stock values. Trading commodities is thus comparatively risk-free. Contrarily to the stock market, commodities trade at a far lower volume.

Nidhi Walia and Ravi Kiran (2016) discovered that mutual funds are creating more profitable and inventive solutions to meet the demands of investors, taking into account the risk tolerance of individual investors. An investor who consistently aims for a rate of return commensurate with the risk they take on is considered to be successful. Based on 15 survey responses from individual investors, it is evident that capital market instruments are the top choice among investors. However, the level of preference varies across income categories. Additionally, there is a correlation between investors' income status and their preference for capital market instruments with return as their objective.

Vinay Mishra and Harshita Bhatnagar (2015) it has been proven that derivatives are great tools for diversifying portfolios, managing risks, reducing funding costs, and increasing yields. They say that derivatives have "changed the face of finance" because of how much of an impact they have had. Capital markets in both developed and developing market economies include derivatives markets. These tools improve the efficiency of the cash and derivatives markets and aid in company expansion by transmitting effective price signals pertaining to indexes, reference rates, exchange rates, and other assets.

Ian Shipway (2014) When it comes to building and allocating assets, Ian Shipway outlined the significance of Modern Portfolio Theory (MPT). The importance of diversity and understanding the correlation between risk and return in

building effective portfolios were highlighted in the study. By building an efficient frontier portfolio and combining assets with minimal correlation, investors can reduce unsystematic risk, as noted in the article.

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

e-ISSN : 3139-065X

www.ijemss.com

editor@ijemss.com

Vol. 01, Issue 2, June2026, pp :707-715

Mehdi Beyhaghi and James P. Hawley (2013) When it comes to risk management, the writers dissected Modern Portfolio Theory, looking for its assumptions and unforeseen effects. Overreliance on historical data and assumptions of market efficiency were among the shortcomings of MPT that were reviewed in the research, which also covered the rising adoption of MPT by institutional investors. According to the research, MPT is still useful, but in today's ever-changing marketplace, it needs some tweaks.

Murphy Choy (2012) The use of quantitative models in portfolio management was Murphy Choy's primary area of expertise in Modern Portfolio Theory. The research proved that by balancing risk and projected return, portfolio optimization methods enhance investment choices. Statistical tools for building diverse portfolios were also highlighted.

Kachi Mohideen and R. Subathra (review of past studies, 2011) Theoretical advancements in portfolio management during the last several decades were surveyed by the writers. In order to properly assess a portfolio, the article stressed the significance of the Sharpe ratio, beta, and risk-adjusted return metrics. According to the results, statistical and quantitative methods outperform more conventional approaches to investing in terms of portfolio performance **Harry Markowitz (cited in research conducted in 2010)** Harry Markowitz's contribution to portfolio optimization was constantly acknowledged in the research conducted during this period. The research highlighted the importance of investors considering the overall performance of their portfolios rather than focusing on specific assets. Important ideas for reducing portfolio risk include asset diversification and covariance**.**

William Sharpe (2009) During this time, a number of research built on CAPM to expand Modern Portfolio Theory. Investors benefited from Sharpe's work because it clarified the connections between systematic risk and predicted return. The Sharpe ratio was determined to be a useful metric for assessing the efficacy of investment portfolios and their performance**.**

Qiji Jim Zhu and Stanislaus Maier-Paape (2008) While discussing the extension of conventional MPT models, the paper also put out a more generalized framework for portfolio theory. Portfolio optimization methods based on utility and risk were also investigated by the writers. Decisions made using generalized portfolio frameworks perform better in different market situations, according to the study's authors**.**

Amir Khan, Muhammad Kamran Khan, and Yasir Bin Tariq (2007) Both CAPM and Modern Portfolio Theory were discussed in terms of their development and their practical applicability. The research concluded that MPT provides a solid theoretical basis for evaluating diversification advantages and risk and return. On the other hand, the article pointed out problems with market efficiency notions and unrealistic assumptions**.**

Harry Markowitz (References to his work from 2005) During this time, Markowitz's efficient frontier notion was the main focus of academic articles. According to the research, investors can maximize their expected return while maintaining a constant level of risk by allocating their assets correctly. In the field of investment management and portfolio development, efficient frontier analysis quickly rose to the top of the heap**.**

Brzeszczyński, Janusz (2004) Behavioral portfolio strategies and more conventional Modern Portfolio Theory were both compared in the research. It went over the importance of investors' psychological profiles and Maslow's hierarchy of wants in making financial judgements. According to the findings, classic MPT methodologies should be supplemented with behavioral elements for more realistic portfolio construction.

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

e-ISSN : 3139-065X

www.ijemss.com

editor@ijemss.com

Vol. 01, Issue 2, June2026, pp :707-715

RESEARCH GAP

Although Modern Portfolio Theory (MPT), developed by Harry Markowitz, has been widely applied in portfolio construction and investment decision-making, several research gaps remain. Many existing studies focus primarily on developed markets and rely on historical return and risk data, often overlooking the dynamic nature of emerging markets such as India. Furthermore, traditional MPT assumes that investors are rational and that asset returns follow a normal distribution, assumptions that may not accurately reflect real-world market behavior. Limited research has examined the effectiveness of MPT during periods of high market volatility, economic uncertainty, and changing macroeconomic conditions. In addition, many studies concentrate on large-cap stocks while giving less attention to sector-specific portfolios and diversified portfolios comprising companies from different industries. Therefore, there is a need for updated research that evaluates portfolio construction using Modern Portfolio Theory with recent market data, considers changing market conditions, and assesses whether MPT-based portfolios continue to provide optimal risk-return trade-offs for contemporary investors.

CONCEPTUAL FRAMEWORKS

Modern Portfolio Theory (MPT), developed by Harry Markowitz in 1952, serves as one of the most influential frameworks in investment management and portfolio construction. The theory is based on the principle that investors are rational and seek to maximize returns while minimizing risk. Rather than evaluating individual securities in isolation, MPT emphasizes the importance of considering how different assets interact within a portfolio. This approach demonstrates that the overall risk and return of a portfolio depend not only on the characteristics of individual investments but also on the relationships among them.

The central concept of Modern Portfolio Theory is diversification. Diversification involves combining assets with varying risk and return characteristics so that the overall portfolio risk can be reduced without significantly sacrificing expected returns. MPT suggests that investors can achieve an optimal balance between risk and return by selecting assets that are not perfectly correlated. When assets respond differently to market conditions, losses in one investment may be offset by gains in another, leading to greater portfolio stability.

Risk in Modern Portfolio Theory is measured using the statistical concept of variance or standard deviation of returns. A higher standard deviation indicates greater volatility and, therefore, higher risk. Expected return represents the average return an investor anticipates receiving from an investment over a specific period. MPT proposes that investors should evaluate investment opportunities by considering both expected return and risk rather than focusing solely on potential profits.

Another important component of MPT is the concept of correlation among assets. Correlation measures the degree to which the returns of two assets move together. A positive correlation indicates that assets tend to move in the same direction, while a negative correlation suggests they move in opposite directions. By combining assets with low or negative correlations, investors can reduce portfolio volatility and enhance risk-adjusted returns. Therefore, correlation plays a crucial role in determining the effectiveness of diversification strategies.

The theory introduces the concept of the Efficient Frontier, which represents a set of optimal portfolios that offer the highest expected return for a given level of risk or the lowest risk for a given level of expected return. Portfolios that lie on the Efficient Frontier are considered efficient because no other portfolio can provide better returns without increasing risk. Investors select portfolios along this frontier based on their individual risk preferences and investment objectives.

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

e-ISSN : 3139-065X

www.ijemss.com

editor@ijemss.com

Vol. 01, Issue 2, June2026, pp :707-715

OBJECTIVES OF THE STUDY

1. To analysis the risk returns of the individual securities.
2. To calculate the correlation and coefficient of selected securities.
3. To construct an effective portfolio this offers maximum return, minimum risks.

ANALYSIS AND DISCUSSION

CALCULATION OF RISK AND RETURNS OF VEDANTA LTD

Date	Open Price	Close Price	Returns	Avg Returns	difference	D*D
30-Jun-25	232.7	252.95	-4.3732	-1.0282	-3.345	11.1887
29-Jun-25	232.05	232.1	0.02154	-1.0282	1.04977	1.10201
28-Jun-25	256.95	234.9	3.38442	-1.0282	4.41264	19.4714
27-Jun-25	257.65	257.85	0.08778	-1.0282	1.116	1.25546
25-Jun-25	250.6	251.4	0.36134	-1.0282	1.38956	1.93088
23-Jun-25	251	219.45	-0.7063	-1.0282	0.32191	0.10363
25-Jun-25	235.95	252.2	-6.1881	-1.0282	-5.1599	26.6255
21-Jun-25	236.4	236	-0.1695	-1.0282	0.85873	0.73742
20-Jun-25	263.65	230.25	-14.506	-1.0282	-13.478	181.65
17-Jun-25	267.65	263.65	-1.5172	-1.0282	-0.4889	0.23906
16-Jun-25	295.8	267.65	-10.517	-1.0282	-9.4892	90.0457
15-Jun-25	292	291.4	-0.2059	-1.0282	0.82532	0.67621
14-Jun-25	289.9	291.25	0.46352	-1.0282	1.49174	2.2553
13-Jun-25	295.85	289.7	-2.1259	-1.0282	-1.0947	1.19828
10-Jun-25	300	301.2	0.39841	-1.0282	1.42663	2.03528
9-Jun-25	312.15	302.85	-3.0708	-1.0282	-2.0426	4.17252
8-Jun-25	317.3	313.25	-1.2929	-1.0282	-0.2647	0.07005
7-Jun-25	317.2	314.8	-0.7625	-1.0282	0.26584	0.07067
6-Jun-25	310.5	320.75	3.19564	-1.0282	4.25386	17.841
3-Jun-25	323	316.75	-1.9732	-1.0282	-0.9449	0.89291
2-Jun-25	316.1	321.55	1.69492	-1.0282	2.72314	7.41549
1-Jun-25	320	315.9	-1.2979	-1.0282	-0.2697	0.07271
31-May-25	310.5	321	3.27103	-1.0282	4.29925	18.4836
30-May-25	308.6	313.15	1.45298	-1.0282	2.4812	6.15637
27-May-25	316.7	307.85	-2.8748	-1.0282	-1.8466	3.40975
26-May-25	307.65	313	1.70927	-1.0282	2.73749	7.49385
25-May-25	307	302.85	-1.3703	-1.0282	-0.3421	0.11703
25-May-25	307.1	305.55	-0.5073	-1.0282	0.52094	0.27138
23-May-25	310.6	305.7	-1.6029	-1.0282	-0.5747	0.33023
20-May-25	316.85	314.4	-0.7793	-1.0282	0.25896	0.06198
19-May-25	309.8	303.45	-2.0926	-1.0282	-1.0644	1.1329

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

e-ISSN : 3139-065X

www.ijemss.com

editor@ijemss.com

Vol. 01, Issue 2, June2026, pp :707-715

18-May-25	325.5	319.75	-0.86	-1.0282	0.16818	0.02828
17-May-25	293	321.15	8.76537	-1.0282	9.7936	95.9146
16-May-25	293.4	287.15	-2.1766	-1.0282	-1.1483	1.31868
13-May-25	318.45	292.65	-8.816	-1.0282	-7.7878	60.6493
12-May-25	323	312.35	-3.4096	-1.0282	-2.3814	5.67112
11-May-25	332	325.6	-1.9656	-1.0282	-0.9374	0.87868
10-May-25	343.15	330.15	-3.9376	-1.0282	-2.9094	8.46449
9-May-25	356.9	350.2	-1.9132	-1.0282	-0.885	0.78317
6-May-25	367.7	360.6	-1.9689	-1.0282	-0.9407	0.88495
5-May-25	403.45	405.05	0.39501	-1.0282	1.42325	2.02561
4-May-25	411	395.05	-4.0375	-1.0282	-3.0092	9.05552
2-May-25	408.4	407.95	-0.1103	-1.0282	0.91792	0.84257
29-Apr-25	414.8	408.4	-1.5671	-1.0282	-0.5389	0.29038
28-Apr-25	418	411.65	-1.5426	-1.0282	-0.5143	0.26455
27-Apr-25	410.25	412.55	0.55751	-1.0282	1.58573	2.51455
26-Apr-25	403.5	411.65	1.97984	-1.0282	3.00806	9.04844
25-Apr-25	408	401.9	-1.5178	-1.0282	-0.4896	0.23967
25-Apr-25	425	415.95	-1.4545	-1.0282	-0.4263	0.18171
21-Apr-25	423	425.7	0.40028	-1.0282	1.42851	2.04063
20-Apr-25	428	421.85	-1.4579	-1.0282	-0.4296	0.18459
19-Apr-25	428.4	428.2	-0.0467	-1.0282	0.98152	0.96338
18-Apr-25	426.95	425	-0.6958	-1.0282	0.33257	0.11054
13-Apr-25	421.5	425.75	0.99825	-1.0282	2.02646	4.10655
12-Apr-25	433.8	417.3	-3.954	-1.0282	-2.9258	8.5601
11-Apr-25	432	437.5	1.25714	-1.0282	2.28537	5.25291
8-Apr-25	429	430.25	0.29053	-1.0282	1.31875	1.73911
7-Apr-25	433.1	425.45	-1.7981	-1.0282	-0.7699	0.5927
6-Apr-25	415.65	432.65	3.92927	-1.0282	4.9575	25.5768
5-Apr-25	425	418.8	-1.4804	-1.0282	-0.4525	0.20448
4-Apr-25	404.2	421.5	4.10439	-1.0282	5.13261	26.3437
1-Apr-25	405	405.7	0.17254	-1.0282	1.20077	1.44184
			-1.0282			683.609

Average returns= -1.0282

Risk= $\sqrt{\sum D^2/(n-1)}$

=3.3205

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

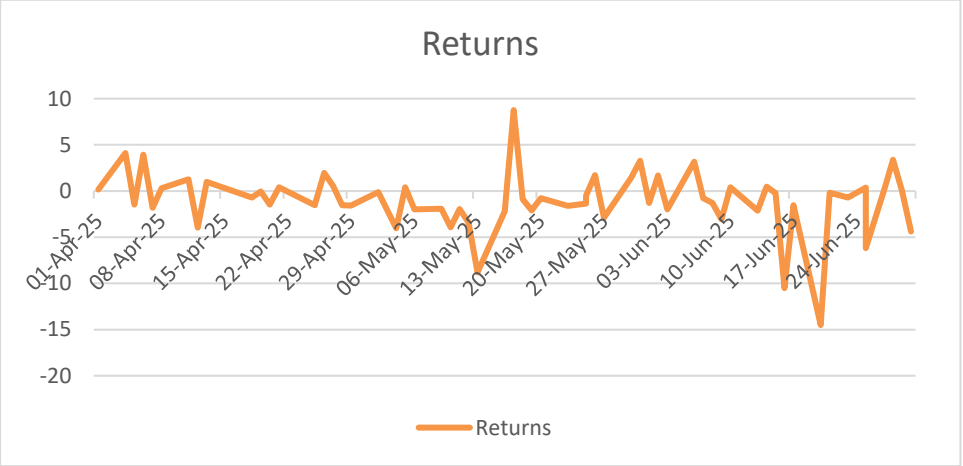
e-ISSN : 3139-065X

www.ijemss.com

editor@ijemss.com

Vol. 01, Issue 2, June2026, pp :707-715

Graphical Representation:



INTERPRETATION:

The above graph it is shows that the VEDANTA LTD is having the average returns of -1.0282 and risk is 3.3205.

FINDINGS

- VEDANTA LTD is having the average returns of -1.0282 and risk is 3.3205. Castrol India Limited is having the average returns of -0.2753 and risk is 1.178897. Correlation Coefficient of Vedanta Ltd and Castrol India Limited is 0.239535 Portfolio returns of Vedanta and castor India is -0.6518 and Portfolio risk of Vedanta and castor India is 3.076951
- BOSCH LTD is having the average returns of -0.2644 and risk is 1.750827. ASIAN PAINTS LTD is having the average returns of -0.2813 and risk is 1.730632. Correlation Coefficient of Bosch Ltd and Asian Paints Ltd is 0.27826. Portfolio returns of Bosch Ltd and Asian Paints Ltd -0.27285 and Portfolio risk of Bosch Ltd and Asian Paints Ltd 2.717441
- CEAT LTD is having the average returns of -0.452 and risk is 2.665474. Wall Street Finance Ltd is having the average returns of -0.5882 and risk is 5.480125. Correlation Coefficient of Ceat Ltd and Wall Street Finance Ltd is 0.025596. Portfolio returns of Ceat Ltd and Wall Street Finance Ltd is -0.5201 and Portfolio risk of Ceat Ltd and Wall Street Finance Ltd is 4.056628

SUGGESTIONS

- Investors should diversify their investments across different sectors and asset classes to reduce unsystematic risk and improve portfolio stability.
- Portfolio construction should be based on the risk-return relationship so that investors can achieve maximum returns with minimum possible risk.
- Regular portfolio revision and rebalancing are necessary to maintain the desired asset allocation according to changing market conditions.
- Investors should consider both historical performance and future market expectations before selecting securities for portfolio construction.
- The use of correlation analysis among securities can help in selecting assets that reduce overall portfolio risk.
- Modern Portfolio Theory should be combined with fundamental and technical analysis for better investment decision-making.
- Risk tolerance, investment objectives, and investment horizon of investors should be clearly identified before constructing a portfolio.
- Investors are advised to include a mix of equity, debt, and other financial instruments to achieve balanced portfolio performance.

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

e-ISSN : 3139-065X

www.ijemss.com

editor@ijemss.com

Vol. 01, Issue 2, June2026, pp :707-715

- Continuous monitoring of macroeconomic factors such as inflation, interest rates, and economic growth is important for effective portfolio management.
- Financial literacy and awareness regarding portfolio management techniques should be improved among investors to make informed investment decisions.

CONCLUSION

The science of portfolio management still does not provide definitive answers on the creation of a portfolio. It appears to be more of an art than a science to put together a portfolio that would produce an extra return on the assets. The findings demonstrate that as we switch from Portfolio A to Portfolio B, the number of companies increases lowering the risk level. Contrarily, the risk level increases when we switch from Portfolio B to Portfolio C. Despite Portfolio C having more securities, the average correlation coefficient increased. Conclusion: Compared to Portfolio C, which has higher risk, investing in Portfolio A carries lower risk. Depending on their risk tolerance, investors would select different portfolios. The portfolio with the highest risk-return trade-off is Portfolio B, which also has the lowest risk and returns.

The findings show that investments in the same industry cannot completely diversify risk, but there is evidence that it is possible to look for improving risk-return trade-offs while constructing various portfolios.

REFERENCES

References

1. Branger, N., & Breuer, B. (2024). Derivatives as investment instruments for retail investors. Journal of Financial Markets, 68, 100845.
2. Schmitz, P., & Weber, M. (2023). Investor behavior and derivative trading decisions in retail portfolios. Review of Finance, 27(4), 1281–1305.
3. Das, S., Mohanty, S., & Shil, N. C. (2022). Investment preferences and decision-making behavior of individual investors. International Journal of Economics and Financial Issues, 12(3), 45–53.
4. Gupta, A., & Jain, N. (2021). Factors influencing investment behavior among retail investors in India. Indian Journal of Finance, 15(8), 28–41.
5. Prasanna, P. K. (2020). Foreign institutional investment and ownership structure: Evidence from Indian companies. Global Business Review, 21(5), 1228–1242.
6. Kumar, P. M. D., & Deyanandan, M. N. (2019). Investor perception towards market reforms and investment outcomes in India. International Journal of Management Studies, 6(2), 74–83.
7. Reddy, G. R., & Krishnudu, C. (2018). Awareness of investment avenues among retail investors in India. International Journal of Commerce and Management Research, 4(6), 35–42.
8. Logeshwari, K., & Ramadevi, V. (2017). Commodity market as an investment avenue: Opportunities and challenges. International Journal of Applied Research, 3(7), 592–596.
9. Walia, N., & Kiran, R. (2016). Investor perception towards mutual funds as an investment option. International Journal of Business and Management, 11(6), 52–61.
10. Mishra, V., & Bhatnagar, H. (2015). Derivatives and their role in modern financial markets. International Journal of Financial Management, 5(1), 15–24.
11. Shipway, I. (2014). A Practical History of Financial Markets: From Ancient Babylon to Wall Street. Palgrave Macmillan.
12. Beyhaghi, M., & Hawley, J. P. (2013). Modern portfolio theory and risk management: Applications and limitations. Journal of Investment Management, 11(3), 35–48.
13. Choy, M. (2012). Quantitative portfolio management and modern portfolio theory. Journal of Asset Management, 13(5), 327–339.
14. Mohideen, K., & Subathra, R. (2011). Review of theoretical developments in portfolio management. International Journal of Research in Commerce and Management, 2(8), 115–120.

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

e-ISSN : 3139-065X

www.ijemss.com

editor@ijemss.com

Vol. 01, Issue 2, June2026, pp :707-715

15. Markowitz, H. M. (2010). Portfolio selection and diversification principles. Journal of Portfolio Management, 36(4), 7–15.
16. Sharpe, W. F. (2009). Capital asset pricing model and portfolio performance evaluation. Financial Analysts Journal, 65(6), 20–34.
17. Zhu, Q. J., & Maier-Paape, S. (2008). Generalized portfolio theory and portfolio optimization. Applied Mathematics and Computation, 201(1–2), 469–481.
18. Khan, A., Khan, M. K., & Tariq, Y. B. (2007). Modern portfolio theory and CAPM: A review of applications and limitations. Pakistan Economic and Social Review, 45(1), 89–106.
19. Markowitz, H. M. (2005). Market efficiency and portfolio optimization: Efficient frontier analysis. Journal of Portfolio Management, 31(3), 60–70.
20. Brzeszczyński, J. (2004). Behavioral finance and portfolio construction: Beyond modern portfolio theory. Applied Financial Economics, 14(10), 713–726.
21. Nimmakanti Abhinay, Dr. N. Ramanjaneyulu (2022), ANALYSIS OF PORTFOLIO MANAGEMENT AT INDIA INFOLINE PVT. LTD (IIFL), EPRA International Journal of Research and Development (IJRD) 7(7), 238-242