PORTFOLIO MANAGEMENT SERVICES - INVESTMENT OPTION AT KARVY STOCK BROKING LTD

Rangari Ruchitha [1] **MBA Student**
Dr Mohd Abdul Hafeez [2] **ASSOCIATE PROFESSOR**
[1,2]MASTER OF BUSINESS ADMINISTRATION
[1,2]Megha Institute of Engineering and Technology for Women, Sy. No. 7, Edulabad Road, Edulabad, Ghatkesar, Telangana.

ABSTRACT

The phrase "portfolio analysis" is used in the financial world to describe the process of studying how various portfolios have fared in various situations. Everything done to find the sweet spot between risk tolerance and return is a part of it. Both professionals and individual investors, with the use of specialised software, can analyse a portfolio.

Quantifying the operational and financial impacts of a portfolio is an important part of any portfolio analysis. Efficiently assessing investment performance and timing returns is crucial.

INTRODUCTION

PORTFOLIO:

Securities like equities, bonds, cash equivalents, and other financial instruments including mutual funds, exchange-traded funds, and closed-funds are all part of a portfolio. Investors own their portfolios directly or have them handled by financial experts.

Assessment of Portfolio:

Everything from bonds and stocks to indices and commodities to funds and securities is part of a portfolio's study. Because different asset classes have different risk profiles and potential returns, portfolio analysis is becoming more important. Therefore, the total investment return is impacted by the portfolio's composition.

There are essentially two tiers of analysis performed on each asset in a portfolio:

• Risk aversion: This approach examines the investor's risk tolerance while analysing the portfolio's components. Instead of taking a chance on riskier investments that could potentially yield big returns, some investors might rather play it safe and settle for lower rewards.

• Return analysis: The average and compound return methods are used to compute potential returns while undertaking portfolio analysis. The simple mathematical average of returns from different assets is what we call an average return. On the other hand, the mathematical mean that takes into account the cumulative influence on total returns is known as compound return.

Determining the dispersion of returns is the next stage in analysing a portfolio. The standard deviation of returns is a way to quantify the degree to which an asset's value fluctuates over time. The discrepancy between the computed average return and the real interest rate is what we call dispersion.

NEED FOR THE STUDY:

Investors have multiple obstacles in building ideal investment portfolios that efficiently balance risk and return in today's interconnected and ever-changing financial markets. There is an immediate need for comprehensive portfolio analysis to help investors make educated decisions in light of the complicated and unpredictable investing landscape. Our goal in undertaking this extensive research on portfolio building and analysis is to meet the following requirements:

- Help investors build diversified portfolios by revealing the features and correlations of specific assets.
- Assist investors in comprehending how various asset allocations affect the risk and return profiles of their portfolios.
- Provide investors with strategies and resources to help them reach their financial objectives and maximise the performance of their portfolios.
- Boost investor trust by providing a methodical strategy for building and analysing portfolios, which reduces the dangers of making ill-informed investing choices.
- **SCOPE OF THE STUDY:**

The following domains are within the purview of this investigation:

- evaluation of specific stocks, taking into consideration factors such as typical returns, variations, and dangers.
- analysing the relationship between chosen stock pairs by looking at their correlation.
- To evaluate the characteristics of risk and return, portfolios with different asset allocations are built.
- Various weightage combinations were used to compare the performance of the portfolio.
- Assessing how well diversification reduces portfolio risk.

- Analysis of potential consequences for investors and suggestions for methods of building investment portfolios

OBJECTIVES OF THE STUDY

- Choosing specific equities to study in order to determine their risk and return characteristics.

- This sentence means to evaluate the effect of stock pair correlation on portfolio diversification.
- The goal is to build and evaluate various asset allocation portfolios in order to ascertain the risk-return characteristics of each.
- In order to find the best possible weightage combinations for a portfolio that will maximise return and minimise risk.
- In order to advise investors on efficient methods of building their portfolios, according to the results of the study

RESEARCH METHODOLOGY

"A study on Portfolio Analysis" is the focus of the current investigation. This is done in the following way.Gathering factsExamination of data.

Information Gathering:

There are two places to look for this information.Original sourceAn additional source

The main source is:

"Primary source" refers to data collected directly from an individual.As a matter of fact, this project does not involve any primary data collection. In order to acquire information on the company, we only communicate with employees.

An additional source:

Secondary sources are those that are already in existence and can be used for research purposes. Some examples of secondary sources used in this research include: www.nseindia.com, several textbooks, and periodicals.

Here is an example of a randomly selected list of companies from various sectors:

SAMPLE SIZE: Ten companies were chosen at random from various sectors.

Basic Formulas:

As a general rule, the formula for return is (close price - previous close)/prior close*100.

Risk= $\sqrt{\sum D2/ (n-1)}$.

$\sqrt{\sum D2}$= The sum of all D2 values.

The formula for the portfolio's return is w1 times R1 plus w2 times R2.

LIMITATIONS OF THE STUDY:

- There are a few drawbacks to this study.
- The investigation can only last for three months, from January 1, 2024, to March 31, 2024. There needs to be more.
- Only six samples were used in this study. Its size is quite little.
- All of the information used in the study comes from past records.

REVIEW OF LITERATURE

Depending on the speculator's income, spending plan, and useful time period, a portfolio may consist of a variety of investment tools such as stocks, shares, common subsidies, bonds, and money, among others. To put it simply, it's the process of managing an individual's funds under the supervision of portfolio managers. It means handling a person's interests as money, shares, stocks, common assets, etc., in such a way that they can win the most rewards in the allotted time. Managing a client's investment portfolio entails determining the optimal strategy for their money in terms of both risk and return. The process or demonstration of making investment decisions with the objective of maximising potential profit. Two basic frameworks are required for portfolio administration: dynamic and detached. Use of specialised, key, or other examination to produce exchanges on a really normal basis is a part of dynamic administration.

Portfolio management is the art and science of making decisions regarding investment mix and strategy, planning projects to achieve their goals, allocating resources to individuals and organisations, and balancing risk with performance.

Managing a portfolio with Basket of Stocks is the best option. Portfolio management is the process of expertly overseeing various assets and securities with the goal of meeting specified investment objectives for the benefit of investors.

INDUSTRY PROFILE

One of the primary roles played by the securities market is the reallocation of resources, either from those that are unused to those that may be put to better use. Therefore, savers and investors, in the grand scheme of things, are more concerned with the economy's capacity to save and invest, respectively. The two cornerstones of economic growth—savings and investments—are strengthened by this. Thanks to a robust regulator, the Indian capital market has made great strides in this direction, and a new age of contemporary capital market regulation has begun. There are numerous ways in which the Indian securities market has been exceptional over the last decade. In terms of investor population, market valuation, trading volumes, the number of listed stocks, and market capitalization, it has increased tremendously. There have been major institutional shifts in the market, which have reduced transaction costs and increased efficiency, transparency, and security.

Stock market: A stock exchange is often the first location that comes to mind when people think about the stock market. Actually, trading stocks and the stock exchange are concepts that make up the stock market. Any and all stock sales, whether on stock exchanges or elsewhere, have an effect on the market as a whole. If you want to make smart investment decisions in the stock market, you need follow what the news says about it.

Stock market necessity:

Any marketplace or sector centred on the purchase and sale of shares in publicly and privately traded companies is collectively known as the stock market. The stock market is multi-functional. It is useful for determining stock prices. A stock's value is directly proportional to its trading volume and market demand. Traders and investors can track the performance of individual stocks with greater ease in a global stock market that is linked to other stock markets.

COMPANY PROFILE

In addition to serving more than 16 million individual investors in a variety of capacities, KARVY also offers investor services to more than 300 corporate entities, including the crème de la crème of Corporate India. The company consistently ranks among the top five in India across all of its business segments. Stock broking, depository participation, distribution of financial products (equities, bonds, mutual funds, fixed deposits, etc.), insurance and commodities broking, personal financial advisory services, merchant banking and corporate finance, placement of equity, initial public offerings, and a host of other financial services are all part of KARVY's extensive umbrella.

Stock broking, depository participation, distribution of financial products (equities, bonds, mutual funds, fixed deposits, etc.), insurance and commodities broking, personal financial advisory services, merchant banking and corporate finance, placement of equity, initial public offerings, and a host of other financial services are all part of KARVY's extensive umbrella. Karvy is a top-tier industrial research, operations, and technology firm with an expert management team.

Karvy Consultants Limited, the crown jewel of the Karvy Group, has maintained its position as a leader in organisational affairs, innovative business strategies, work ethic, and avenues of advancement throughout its history. Our company has moved its leading position in the registry sector—the first area of business it dabbled in—into a joint venture with Computer share Limited of Australia, the biggest registrant in the world.

Our connections in the registry industry and the recent arrival of depositories to the Indian capital market led us to conclude that we were in the greatest position to become a Depository Participant in this endeavour.

DATA ANALYSIS AND INTERPRETATION

Analysing the Risk and Return of ACC Limited

DATE	OPEN	CLOSE	RETURN	AVERAGE RETURN	DIFFERENCE	D*D
28-Mar-24	2,478.00	2,491.70	0.5498	-0.0993	0.6491	0.4214
27-Mar-24	2,463.95	2,454.10	-0.4014	-0.0993	-0.3021	0.0913
26-Mar-24	2,430.00	2,450.00	0.8163	-0.0993	0.9156	0.8384
22-Mar-24	2,439.05	2,443.25	0.1719	-0.0993	0.2712	0.0735

21-Mar-24	2,429.00	2,438.85	0.4039	-0.0993	0.5032	0.2532
20-Mar-24	2,409.05	2,397.70	-0.4734	-0.0993	-0.3741	0.1399
19-Mar-24	2,442.80	2,403.40	-1.6393	-0.0993	-1.5401	2.3718
18-Mar-24	2,480.10	2,441.55	-1.5789	-0.0993	-1.4796	2.1893
15-Mar-24	2,482.10	2,502.95	0.833	-0.0993	0.9323	0.8692
14-Mar-24	2,387.00	2,482.10	3.8314	-0.0993	3.9307	15.4506
13-Mar-24	2,565.00	2,389.10	-7.3626	-0.0993	-7.2633	52.7557
12-Mar-24	2,642.00	2,561.60	-3.1387	-0.0993	-3.0394	9.2378
11-Mar-24	2,645.00	2,641.90	-0.1173	-0.0993	-0.018	0.0003
07-Mar-24	2,642.00	2,638.80	-0.1213	-0.0993	-0.022	0.0005
06-Mar-24	2,665.00	2,642.00	-0.8706	-0.0993	-0.7713	0.5948
05-Mar-24	2,705.00	2,668.75	-1.3583	-0.0993	-1.259	1.5851
04-Mar-24	2,710.00	2,695.65	-0.5323	-0.0993	-0.433	0.1875
02-Mar-24	2,700.15	2,702.55	0.0888	-0.0993	0.1881	0.0354
01-Mar-24	2,650.00	2,695.45	1.6862	-0.0993	1.7855	3.1879
29-Feb-24	2,570.00	2,629.30	2.2554	-0.0993	2.3546	5.5444
28-Feb-24	2,669.40	2,573.25	-3.7365	-0.0993	-3.6372	13.2294
27-Feb-24	2,666.65	2,669.40	0.103	-0.0993	0.2023	0.0409
26-Feb-24	2,679.10	2,674.65	-0.1664	-0.0993	-0.0671	0.0045
23-Feb-24	2,677.10	2,679.55	0.0914	-0.0993	0.1907	0.0364
22-Feb-24	2,676.80	2,680.10	0.1231	-0.0993	0.2224	0.0495
21-Feb-24	2,690.00	2,666.75	-0.8718	-0.0993	-0.7726	0.5968
20-Feb-24	2,674.00	2,686.70	0.4727	-0.0993	0.572	0.3272
19-Feb-24	2,744.00	2,670.50	-2.7523	-0.0993	-2.653	7.0384

16-Feb-24	2,649.95	2,720.40	2.5897	-0.0993	2.689	7.2306
15-Feb-24	2,635.05	2,637.65	0.0986	-0.0993	0.1979	0.0392
14-Feb-24	2,599.05	2,619.60	0.7845	-0.0993	0.8838	0.781
13-Feb-24	2,635.55	2,614.60	-0.8013	-0.0993	-0.702	0.4928
12-Feb-24	2,646.00	2,636.35	-0.366	-0.0993	-0.2667	0.0712
09-Feb-24	2,520.00	2,628.05	4.1114	-0.0993	4.2107	17.73
08-Feb-24	2,517.10	2,510.85	-0.2489	-0.0993	-0.1496	0.0224
07-Feb-24	2,535.00	2,505.55	-1.1754	-0.0993	-1.0761	1.158
06-Feb-24	2,485.80	2,528.25	1.679	-0.0993	1.7783	3.1624
05-Feb-24	2,510.00	2,486.20	-0.9573	-0.0993	-0.858	0.7362
02-Feb-24	2,552.80	2,499.45	-2.1345	-0.0993	-2.0352	4.142
01-Feb-24	2,553.40	2,530.00	-0.9249	-0.0993	-0.8256	0.6816
31-Jan-24	2,514.00	2,544.30	1.1909	-0.0993	1.2902	1.6646
30-Jan-24	2,508.00	2,513.15	0.2049	-0.0993	0.3042	0.0925
29-Jan-24	2,520.05	2,492.90	-1.0891	-0.0993	-0.9898	0.9797
25-Jan-24	2,248.70	2,467.65	8.8728	-0.0993	8.9721	80.4987
24-Jan-24	2,206.00	2,240.60	1.5442	-0.0993	1.6435	2.7012
23-Jan-24	2,309.00	2,207.95	-4.5766	-0.0993	-4.4774	20.0467
20-Jan-24	2,279.00	2,290.10	0.4847	-0.0993	0.584	0.341
19-Jan-24	2,273.00	2,277.10	0.1801	-0.0993	0.2793	0.078
18-Jan-24	2,246.00	2,260.10	0.6239	-0.0993	0.7232	0.523
17-Jan-24	2,289.00	2,251.80	-1.652	-0.0993	-1.5527	2.4109
16-Jan-24	2,309.05	2,294.45	-0.6363	-0.0993	-0.537	0.2884
15-Jan-24	2,344.00	2,320.40	-1.0171	-0.0993	-0.9178	0.8423

12-Jan-24	2,335.00	2,332.40	-0.1115	-0.0993	-0.0122	0.0001
11-Jan-24	2,318.90	2,321.75	0.1228	-0.0993	0.222	0.0493
10-Jan-24	2,312.00	2,306.60	-0.2341	-0.0993	-0.1348	0.0182
09-Jan-24	2,371.95	2,309.65	-2.6974	-0.0993	-2.5981	6.7501
08-Jan-24	2,400.05	2,354.75	-1.9238	-0.0993	-1.8245	3.3287
05-Jan-24	2,357.95	2,377.45	0.8202	-0.0993	0.9195	0.8455
04-Jan-24	2,299.80	2,358.20	2.4765	-0.0993	2.5758	6.6345
03-Jan-24	2,283.00	2,280.20	-0.1228	-0.0993	-0.0235	0.0006
02-Jan-24	2,244.00	2,267.30	1.0277	-0.0993	1.1269	1.27
01-Jan-24	2,212.00	2,243.30	1.3953	-0.0993	1.4946	2.2337
			-0.0993			284.996

VARIANCE= $\frac{\sum D^2}{N-1}$

= 4.6721

RISK= $\sqrt[2]{VARIANCE}$

= 2.1615

COEFFICIENT OF VARIANCE= RISK/AVERAGE RETURN

= 2.1615/-0.0993

= -21.7695

INTERPRETATION

Based on the data presented in the table and graph, ACC LIMITED had an average return of -0.0993, a variance of 4.6721, and a risk of 2.1615 over the three months from 01-JAN-2024 to 31-MAR-2024. A maximum of 2,744.00 ACC LIMITED on 19-Feb-24 and a minimum of 2,207.95 ACC LIMITED on 23-Jan-24.

FINDINGS

- The APOLLO TYRES LIMITED has a risk of 1.9985, a variance of 3.9938, and an average return of -0.3035.
- There is a risk of 2.2570, a variance of 5.0940, and an average return of 0.4590 for BHARTI AIRTEL LIMITED.
- APOLLO TYRES LIMITED and BHARTI AIRTEL LIMITED have a correlation coefficient of 0.6437 and a covariance of 0.5699.

- The construction portfolio has a ratio of 50/50, a return of 0.0775, a risk of 1.6437, a weightage of 60/40, a return of 0.154, a risk of 7.1886, a weightage of 70/30, a return of 0.23025, and a risk of 5.5222.
- The average return for ACC LIMITED is -0.0993, the variance is 4.6721, and the risk is 2.1615.
- The AMBICAAGAR LIMITED has a risk of 4.2375, a variance of 17.9561, and an average return of -2.0202.
- ACC LIMITED and AMBICAAGAR LIMITED have a correlation coefficient of -7.39508 and a covariance of 1.5998.
- There is a portfolio return of -1.05975 and a portfolio risk of 10.9985 for the construction portfolio with a weightage of 50:50, a return of -0.86766 and a risk of 10.2433, and a return of -0.67557 and a risk of 9.70037 for the weightage of 70:30.

SUGGESTIONS

- Apollo Tyres Limited's performance is below average, as shown by its negative average return of -0.3035.With an average return of 0.4590, Bharti Airtel Limited is outperforming its peers.The comparatively poor performance of ACC Limited is indicated by its slightly negative average return of -0.0993.A disappointing performance is indicated by AmbicaAgar Limited's extremely negative average return of -2.0202.
- At 2.2570, Bharti Airtel Limited carries the biggest risk of the stocks that were mentioned.Risks of 1.9985 for Apollo Tyres Limited and 2.1615 for ACC Limited are modest in comparison to Bharti Airtel Limited.Among the stocks selected, AmbicaAgar Limited carries the biggest risk at 4.2375.
- For each pair of equities, multiple weightage portfolios have been built.

- There is a low risk of 1.6437 and a positive return of 0.07775 in the portfolio that has a weightage of (50,50) for Apollo Tyres Limited and Bharti Airtel Limited.
- On the other hand, the portfolio that includes ACC Limited and AmbicaAgar Limited, with a weightage of 70:30, has a negative return, suggesting that there is a possibility of loss and relatively significant risk.
- There is a moderate positive link between the stocks of Apollo Tyres Limited and Bharti Airtel Limited, as indicated by the positive correlation coefficient of 0.6437.
- It appears unusual that the correlation coefficient between AmbicaAgar Limited and ACC Limited is negative (-7.39508). Such a huge negative value is unusual for correlation coefficients, which usually range from -1 to 1, and could suggest a mistake in computation or data input.
- In terms of average return, Bharti Airtel Limited appears to be the most promising investment, whilst AmbicaAgar Limited represents the greatest risk. To make sure diversification tactics work, it's important to carefully evaluate correlation coefficients while building a portfolio. This will assist control risk.

CONCLUSION

In conclusion, there are a number of important takeaways from the stock data analysis that have been provided:

Some of the stocks have shown positive average returns (like Bharti Airtel Limited) while others have shown negative returns (like AmbicaAgar Limited), demonstrating a large range of performance. Although all equities have some degree of risk, two that stand out as extremely risky are AmbicaAgar Limited and Bharti Airtel Limited. To minimise loss and maximise gain, build your portfolio with diversified weightings. To guarantee successful diversification, however, correlation coefficients must be carefully considered. Although companies with positive correlation coefficients tend to move in tandem, the suspiciously high negative connection between ACC Limited and AmbicaAgar Limited calls for additional research. To get favourable investment results, it is essential to diversify holdings, manage risks, and review performance regularly. You can optimise your portfolio performance and reduce risks by consulting with financial experts, reevaluating high-risk equities, and adjusting the weightages of your investments.In conclusion, knowing the ins and outs of each stock, how to diversify your portfolio, and keeping tabs on market trends are all necessary for sound investing selections. Investors can achieve long-term financial success by applying these ideas and navigating market uncertainties..