

A Study on Portfolio Management WRT Textile Industry

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Abstract: Changing global financial environment and emergence of new economic powers in recent decades, diversification of investment portfolios at country and sector levels assumed additional significance. Optimum portfolio selection within a capital market is primarily based on the best risk-return trade-off among the industry sectors. Literature suggests that much of market volatility can be attributed to substantial increase in sector specific and sub-sector specific risks. This research has estimated the dynamics of correlations of stock market returns between Industry sectors in India. Analysis of monthly market data for the period 09-DEC 2020 to 05-FEB 2021 on a sample of 4 industry sectors selected randomly indicates that investors can substantially improve their reward to risk as compared with the market returns.

Keywords: Portfolio, Risk, Return

1. Introduction

Portfolio Investment in equity stocks has been done managers for capital appreciation and/or dividend income. The investors aim at maximizing the return, with differing attitudes towards risk. Overall, the general objective is to invest in an optimal portfolio, adopting differing approaches. The relevant literature has been reviewed, and the methodology of the study has been framed accordingly. In this study, the optimum portfolio of economic sectors in India has been constructed so that the investors could take decisions for investments in stocks belonging to the chosen sectors. For this, the Introduction Investment in equity stocks has been done by individuals or portfolio managers for capital appreciation and/or dividend income. The investors aim at maximizing the return, with differing attitudes towards risk. Overall, the general objective is to invest in an optimal portfolio, adopting differing approaches.

In this study, the optimum portfolio of economic sectors in India has been constructed so that the investors could take decisions for investments in stocks belonging to the chosen sectors. The selection of specific stocks depends upon the risk-return perceptions of the investors. The study is based on the CNX Nifty and the indices for the individual sectors numbering eleven, of the National Stock Exchange of India. Daily indices, for the period 09 November 2020 - 05 February 2021, formed the data. It is felt that one year period gives scope for adequately capturing the movements in the stock indices.

Thus, no attempt has been made to distinguish between the short run and long run factors for investment in stocks. The CNX Nifty covers 50 stocks accounting for a significant part of the market, and hence it is taken as the market performance index. The sectors for inclusion in the optimum set have been identified on the basis of a unique cut-off value in terms of returns. For the analysis of data, valid statistical and analytical techniques have been used. Based on the results, the conclusions have been arrived at.

Model and Treynor's index have been used. The selection of specific stocks depends upon the risk-return perceptions of the investors.

1.1 Research Methodology

For the study, data have been collected on daily indices of CNX Nifty and of the relative sub-groups numbering five, for the period 09 NOVEMBER 2020 to 05 FEBRUARY 2021 (www.nseindia.com). The CNX Nifty has been taken as the market performance index. From the 5 sub-groups, the optimal portfolio of sub-groups has been identified, based on the values of return, variance of market index, variance of each sub-group, beta (β), systematic risk and unsystematic risk related to each sub-group. The sub-groups are ranked according to their "Excess return to Beta ratio" starting from the highest to the lowest. For each sub-group, the cut off value (C_i) is found. Then, the sub-groups for which the 'Excess return to β ratio' exceeds C_i are selected to be included in the optimal portfolio. Finally, the proportion of investments in each of the selected sub-groups in the optimal portfolio is computed. Valid statistical and financial techniques have been used to analysis and interpret the data, and arrive at the results.

2. Literature Review

The portfolio optimization model of Markowitz (1952), under assumptions of rational investor behavior, finds out the weightings of the assets that minimize the variance of a portfolio and provides the portfolio to have a

return equal or bigger than the expected return. The model requires calculation of expected return rates and variance or standard deviation (risk) for each stock of the portfolio, and the covariance or correlation coefficients for all stocks, treating them as pairs. It finds out the optimum weights or the proportion of investment in each asset in a portfolio, enabling the investor to maximum returns at a minimum risk. Changes in weights change the returns and risks for the portfolios and alter the investments as per the risk- aversion level of the investor. Thus, a multiple number of portfolios can be constructed for two or more assets, and for different proportions of assets. All the possible portfolios comprise the opportunity set. From this set, the feasible portfolios are filtered which constitute the efficient portfolios which includes the optimal portfolio providing the maximum return for a given level of risk. But, the procedure involved is tedious and practically difficult to apply.

A modification of the mean-variance portfolio model is the market model or the single index model which does not require the covariance between returns of the securities taken in pairs (Sharpe, 1964; Linter, 1965). As per the single index model, called Shape's model, the returns of securities depend only on a market index, to arrive at an optimal portfolio. It is an improvisation over the Markowitz model. It estimates the return on stock by relating the stock prices to the market index.

2.1 Objectives of the study

The objectives of the study are as follows:

1. To give a comparative analysis of the methods to select an optimal portfolio.
2. To construct an optimal portfolio for investment of funds based on the CNX Nifty and the indices of the relative sub-groups.
3. To find out the proportion of investments to be made in each of the identified sub-groups.
4. To discuss the pros and cons of the investment in the selected optimal portfolio.

2.2 Industry and Company Profile

1. Arvind Ltd

Arvind Ltd is one of the largest Textile Companies in India. Today, the fabric made by Arvind can go around the earth 6 times over. 2 pieces of apparel are sold by an Arvind managed brand, every second in India. The Company is headquartered in Ahmedabad, Gujarat. It is Largest among the top 10 textile companies in India. Arvind owns 22 global patents for environmental solutions, and is the largest fire protection fabric producer in the country; Also managing 15 global apparel brands of the likes of Tommy Hilfiger, US Polo, CK, GAP, Nautica, and Sephora. 42,000 employees across verticals ranging from retail to advanced materials, environmental and social solutions to real estate, apparel to agriculture. It is No 1 among the top 10 textile companies in India based on turnover. NNNOW.com is owned by Arvind ltd.

2. Vardhman Textiles Ltd

Vardhaman Textiles is the Second largest Textile Companies in India With more than five decades of presence, Vardhman is today among the leading textile conglomerates in the country. Beginning humbly in the year 1965, Vardhman Group has evolved over the years into a modern-day textile major under the dynamic leadership of its chairman, Mr. S. P. Oswal. Vardhman Textiles Limited today stands as an epitome of perpetual business growth and rich industry experience. Engaged in the business of manufacturing of Yarn, Fabric, Acrylic Fibre, Garments, Sewing Threads and Alloy Steel, the Group has over the years developed as a business conglomerate with presence in India and in 75 countries across the globe. Vardhman is one of India's largest textile manufacturers, with leading market share and a sustainable business model. It is Second among the top 10 textile companies in India

3. Raymond Ltd

Raymond is a diversified group with majority business interests in Textile & Apparel sectors as well as presence across diverse segments such as FMCG, Engineering, and Prophylactics in national and international markets. It is the Fourth-largest among top 10 textile companies in India Being a vertically and horizontally integrated manufacturer of Textiles, Raymond produces 'The finest fabric in the world'. With over 1100 exclusive stores spread across 380+ cities and an expansive network of over 20,000 points-of-sale in India, Raymond and its brands are also available in tier IV & V cities. Raymond has also been a leading player in Shirting fabrics and is the No.1 brand in the OTC space. A formidable player in the Denim space, Raymond is also the top producer & preferred supplier of high-quality Ring Denim to world's leading Jeanswear brands.

4. Page Industries Ltd

Page Industries Limited located in Bangalore, India is the exclusive licensee of JOCKEY International Inc. (USA) for manufacture, distribution, and marketing of the JOCKEY® brand in India, Sri Lanka, Bangladesh, Nepal, and the UAE. Page Industries is also the exclusive licensee of Speedo International Ltd. for the manufacture, marketing, and distribution of the Speedo brand in India. JOCKEY is the company's flagship brand and a market leader in the innerwear category. Page Industries and Brand Jockey have pioneered the innerwear industry on many fronts. As of September 2017, the brand has 384 Exclusive Brand Outlets across India with 286

stores on high streets and 98 stores in shopping malls with heavy footfalls. These stores reinforce the legacy of brand Jockey and allow us to showcase our complete range of products in Innerwear, Athleisure and Sportswear for men, women and kids. Within just six years of its operations, the brand is present in over 1286 stores in 86 cities and towns across the country. With 18 Exclusive Brand Stores in Delhi, Gurgaon, Noida, Mumbai, Bangalore, Chennai, Pune and Ahmedabad, Page Industries is geared to take brand Speedo to the next level of consumer connect and make it the most sought-after swimwear brand in the country.

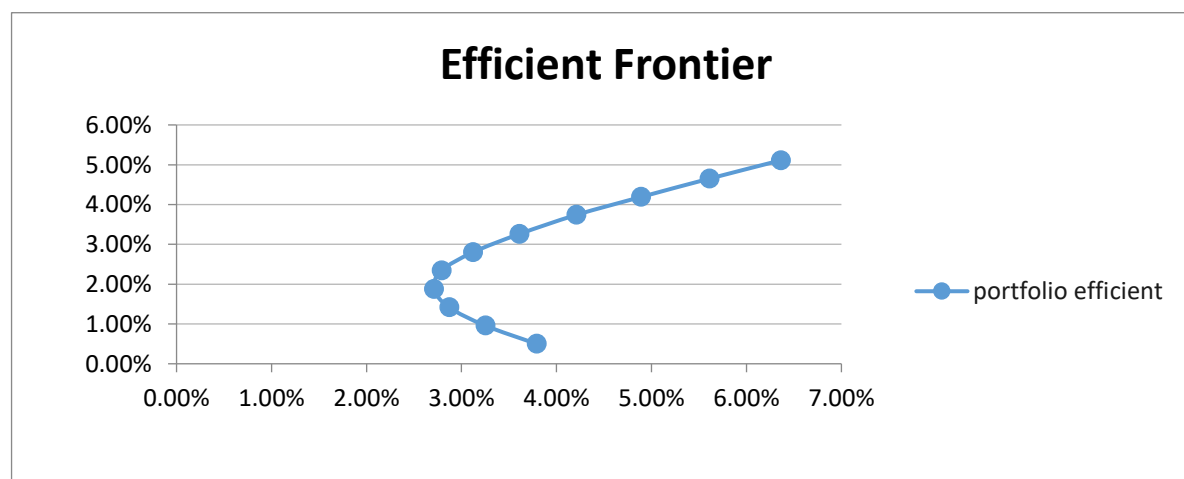
5. Welspun India Ltd

Welspun India is the third Largest Textile Companies in India in terms of sales. Part of USD 2.7 billion Welspun Group, Welspun India Ltd. is a global leader in home textiles, supplying to 17 of the top 30 global retailers. The Companies manufacturing facilities, located in India, are equipped to deliver high-quality products, benchmarked to international standards.

Presently over 70% of the business for advanced textiles comes from exports. So it third among the top 10 textile companies India based on turnover.

2.3 Data Analysis And Interpretation

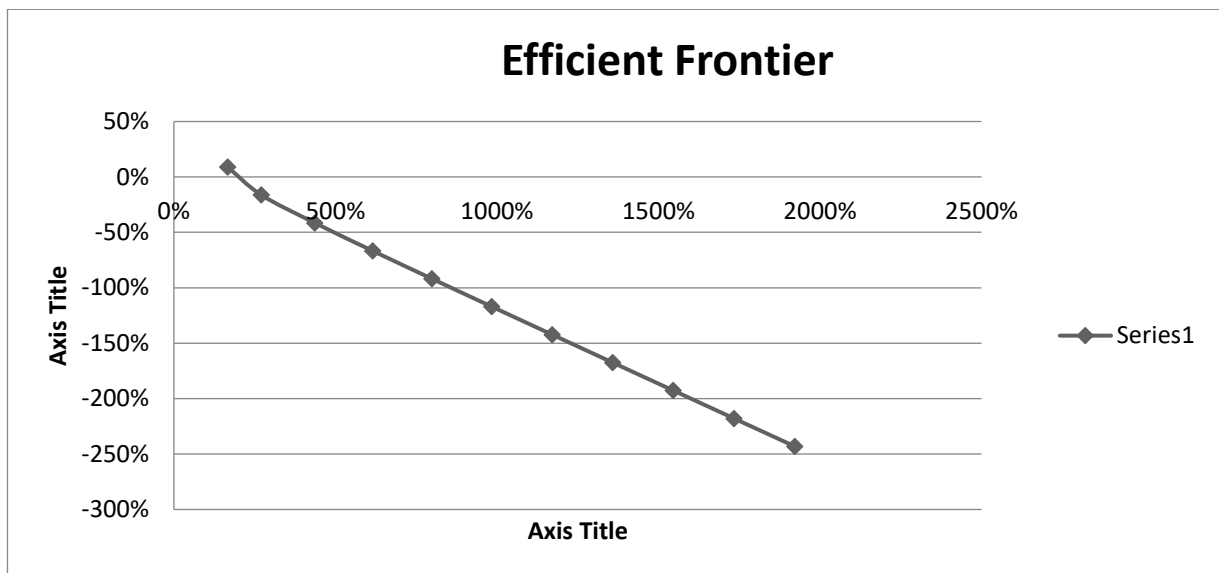
Raymond	Page Ind	Mean	Variance	SD
0%	100%	5.11%	0.40400%	6.36%
10%	90%	4.65%	0.31500%	5.61%
20%	80%	4.19%	0.00239%	4.89%
30%	70%	3.74%	0.00018%	4.21%
40%	60%	3.26%	0.00130%	3.61%
50%	50%	2.80%	0.00078%	3.12%
60%	40%	2.34%	0.00073%	2.79%
70%	30%	1.88%	0.00082%	2.71%
80%	20%	1.42%	0.00106%	2.87%
90%	10%	0.96%	0.00143%	3.25%
100%	0%	0.50%	0.00144%	3.79%



From above graph show that calculation is achieve the lowest risk level within our portfolio variants at a 40%-60% split. However, I analysed 3 months data. If we head over to Portfolio and run their Efficient Frontier for Raymond and page Industries .

Arvind	Vardhm an	mean	variance	SD
0%	100%	-2.43	369.07	19.21
10%	90%	-2.18	300.34	17.33
20%	80%	-1.93	238.75	15.45
30%	70%	-1.67	184.28	13.58
40%	60%	-1.42	136.95	11.70
50%	50%	-1.17	96.76	9.84
60%	40%	-0.92	63.69	7.98
70%	30%	-0.67	37.76	6.14
80%	20%	-0.41	18.96	4.35
90%	10%	-0.16	7.29	2.70
100%	0%	0.09	2.76	1.66

TABLE 2



From above graph shows that calculations is achieve the lowest risk level within our portfolio variants at a 40%-60% split. However, we only analyzed 3 months data. If we head over to Portfolio and run their Efficient Frontier tool for Arvind ltd and Vardhman.

3. Conclusion

Investment of funds in a portfolio of stocks enables investors to spread risk by diversification. Sharpe single index model has simplified the process of constructing the optimal portfolio by relating the return in a security to a single market index. Out of the 5 sectors, five are included in the optimal portfolio, with a major proportion of investment in textile sector stocks.

This approach of selecting an optimal portfolio takes into account the risk and return factors for the individual sectors in comparison to the risk and return associated with the market. The empirical nature of the study, applying the latest data relating to the stock market and Sectorial indices, may be considered as contributing to the existing literature on the subject. It has practical significance in terms of the methodology used and calculations made. With this approach, an optimum portfolio of sectors can be constructed for investment in the related equity stocks.

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