Security Analysis of Selected Stocks at BSE

M. Abdul Basid[1], C. Bhanu Prakash[2]

[1]Asst Prof, Dept of MBA, Santhiram Engineering College, Nandyal, India.

[2]Student of MBA, Santhiram Engineering College, Nandyal, India.

ABSTRACT

The Indian stock market has emerged as a significant platform for wealth creation and investment, with the Bombay Stock Exchange (BSE) being one of the oldest and most influential stock exchanges in Asia. This research project titled *"Security Analysis of Selected Stocks at BSE"* aims to evaluate the financial performance, risk-return characteristics, and market trends of selected companies listed on the BSE through a systematic and analytical approach. The study employs both fundamental analysis and technical analysis to provide a comprehensive understanding of each stock's intrinsic value and market behavior.

Fundamental analysis is conducted using key financial metrics such as Earnings Per Share (EPS), Price-to-Earnings (P/E) Ratio, Price-to-Book (P/B) Ratio, Return on Equity (ROE), and Debt-to-Equity Ratio. These indicators help assess the financial strength, profitability, valuation, and leverage position of the selected companies. In addition, technical analysis is performed using tools such as moving averages, Relative Strength Index (RSI), Bollinger Bands, and MACD (Moving Average Convergence Divergence) to understand short-term price movements, trading volume patterns, and investor sentiment.

The study includes a diversified sample of stocks from various sectors such as Information Technology, Banking, Pharmaceuticals, FMCG, and Automobile, with the objective of comparing sector-wise performance and risk exposure. Historical data is analyzed over a defined time frame to identify trends, volatility, and potential entry/exit points. The beta coefficient is used to assess the systematic risk of each stock relative to the overall market, which helps in constructing a balanced and diversified investment portfolio.

Moreover, the study emphasizes the importance of portfolio diversification, investment planning, and risk management in the context of the Indian equity market. The findings highlight the role of analytical tools in making informed investment decisions and achieving long-term financial goals. The study also reflects on the impact of macroeconomic factors, market news, and investor psychology on stock prices.

This research is valuable for individual investors, financial analysts, portfolio managers, and academicians interested in the Indian stock market. It provides actionable insights and practical guidance for evaluating stocks, optimizing investment strategies, and minimizing risks. Ultimately, the study underlines that a disciplined and analytical approach to security analysis is essential for success in the dynamic environment of the BSE.

Keywords: Security Analysis, Bombay Stock Exchange (BSE), Fundamental Analysis, Technical Analysis, Stock Valuation, Investment Decision, Risk and Return, Portfolio Diversification, Beta Value, EPS, P/E Ratio, Financial Performance, Equity Market, Investor Behavior, Indian Stock Market.

1. INTRODUCTION

Securities analysis refers to study of tradable financial instruments. It is focused deciding the accurate value of specific instruments, including bonds and stocks. Security analysis is the process of determining the overall worth of a firm by examining value of securities like shares and other instruments. This knowledge is critical for investors since it assists them in making judgements.Security analysis is the process of determining the

merits and potential risks of a certain investment. It is main step in the investing decision-making process that comprises examining many factors that might impacton investment performance.

The two major goals of security analysis in finance are to determine a security's acceptability as an investment and its likely return on investment. This research frequently includes an examination of the financial statements and market, industry, & other relevant happenings thatmight have an impact to the investments performance.

In finance, Security analysis is the evaluation and assessment of stocks or securities to determine their investment potential. It involves analyzing various factors, such as financial statements, industry trends, market conditions, and company-specific information, to make informed investment decisions. There are two primary approaches to security analysis, fundamental Analysis and technical Analysis.

Security analysis deals with finding the proper value of individual securities (i.e., stocks, bonds and derivatives). These are usually classified into debt securities, equities, or some hybrid of the two. They can also include derivatives such as tradeable credit derivatives, commodities, futures contracts and options even if some of these are not technically securities.

The definition of what is and what is not a security varies by analyst but a common definition is the one used by the United States Supreme Court decision in the case of SEC v. W. J. Howey Co. Security analysis for the purpose to state the effective value of an enterprise is typically based on the examination of fundamental business factors such as financial statements, going concern, business strategy and forecasts.

2. RESEARCH METHODOLOGY

The research challenge can be approached methodically using research methodology. Research methodology can be viewed as a science that it studies how scientific research is conducted. In it, we examine the many approaches typically used by a researcher to analyse his research challenge, and the reasoning behind them. To conduct this research, I adopted the analytical research for this project. The study is conducted purely based on secondary data. I have selected the 10 different companies' stocks from 4 industries which includes automobile, pharmaceutical, textile and IT industries.

Sample size:
The project considered 10 different companies' stocks for analysis purpose and this sample is drawn from the BSE website.

Data collection:

Primary Data:

Primary data refers to information gathered by a researcher or a group with a specific objective in mind. It is acquired directly from its original source and this information is not been previously published or manipulated by others. Primary data can be obtained through surveys, interviews, observations, experiments, and direct measurements. This type of data is often closely aligned with the research goal and grants researchers' greater control over the data collection process.

Secondary Data:

Secondary data refers to data that is collected by individuals or organisations for purpose other than the current study or research project. It encompasses the details which are collected before and analysed, and made available by other researchers, organizations, or government bodies. Secondary data can be found in various formats, such as published books, academic journals, reports, databases, websites, and other sources.

3. DATA ANALYSIS

Calculation of CAPM return of Raymond company

Months	Y	X	Y return	X return	X^2	XY
03-Jan	615.15	59183.22				
01-Feb	765.8	58862.57	24.49	-0.5418	0.29355	-13.269
02-Mar	762.3	55468.9	-0.457	-5.7654	33.2398	2.63479
01-Apr	848	59276.69	11.2423	6.8647	47.1241	77.175
02-May	842.3	56975.99	-0.6722	-3.8813	15.0645	2.60901
01-Jun	1062.3	55381.17	26.119	-2.7991	7.83496	-73.11
01-Jul	880.9	52907.93	-17.076	-4.4659	19.9443	76.2606
01-Aug	979.05	58115.5	11.142	9.8427	96.8787	109.667
01-Sep	960.6	58766.59	-1.8845	1.1203	1.25507	-2.1112
03-Oct	1062.75	56788.81	10.634	-3.3655	11.3266	-35.789
01-Nov	1204.8	61121.35	13.3663	7.6292	58.2047	101.974
01-Dec	1366.8	63284.19	13.4462	3.5386	12.5217	47.5807
			90.3499	8.1765	303.688	293.623

Beta: 0.760943709
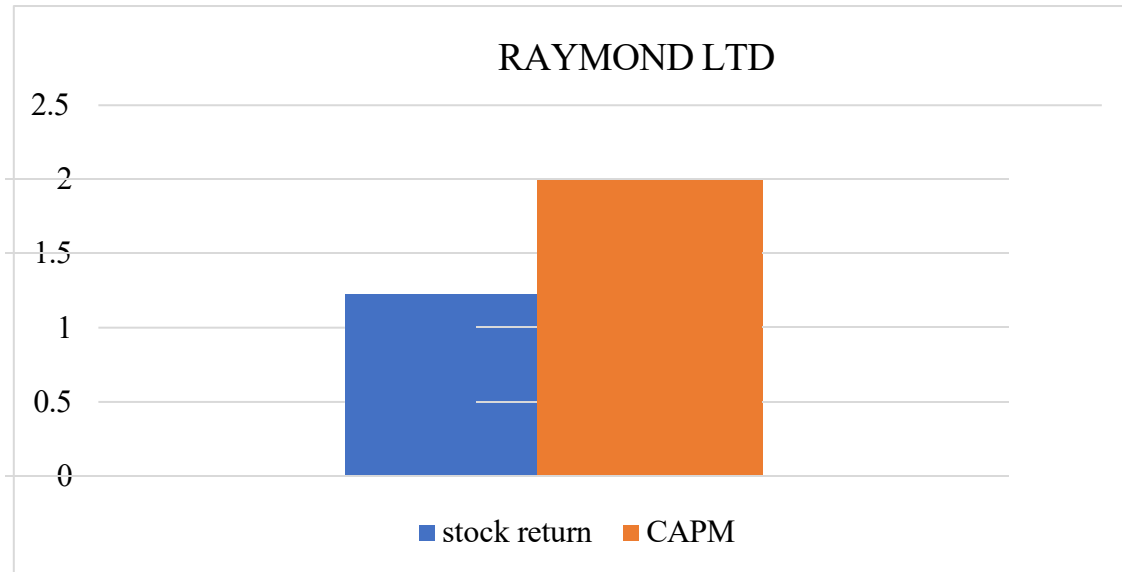
Market return: 0.743318182

Risk free: 5.85

CAPM: 1.964102598

Stock return: 1.221897098

Table 3.1: Table show STOCK return and CAPM return of Raymond company.

stock return	1.221897098
CAPM	1.9641026

Graph 3.1: Graph representing the STOCK return and CAPM return of Raymond company.

Interpretation:

Based on the provided table and graph, it is evident that the stock return is relatively lower when compared to the CAPM return. This observation is clearly depicted in the graph, where both the stock return and CAPM return exhibit an upward trend.

Calculation of CAPM return of Arvind company

Months	Y	X	Y return	X return	X^2	XY
03-Jan	273.2	59183.22				
01-Feb	302.4	58862.57	10.6881	-0.5418	0.29355	-5.7908
02-Mar	269.3	55468.9	-10.946	-5.7654	33.2398	63.1069
01-Apr	285.1	59276.69	5.8671	6.8647	47.1241	40.2759
02-May	279.9	56975.99	-1.8239	-3.8813	15.0645	7.0791
01-Jun	264.7	55381.17	-5.4305	-2.7991	7.83496	15.2005
01-Jul	260.2	52907.93	-1.7	-4.4659	19.9443	7.59203
01-Aug	292.9	58115.5	12.5673	9.8427	96.8787	123.696
01-Sep	277.65	58766.59	-5.2066	1.1203	1.25507	-5.833
03-Oct	314.7	56788.81	13.3441	-3.3655	11.3266	-44.91
01-Nov	374.75	61121.35	19.0817	7.6292	58.2047	145.578
01-Dec	327.15	63284.19	-12.702	3.5386	12.5217	-44.947
			23.7397	8.1765	303.688	301.049

Beta: 0.952261004

Market return: 0.743318182
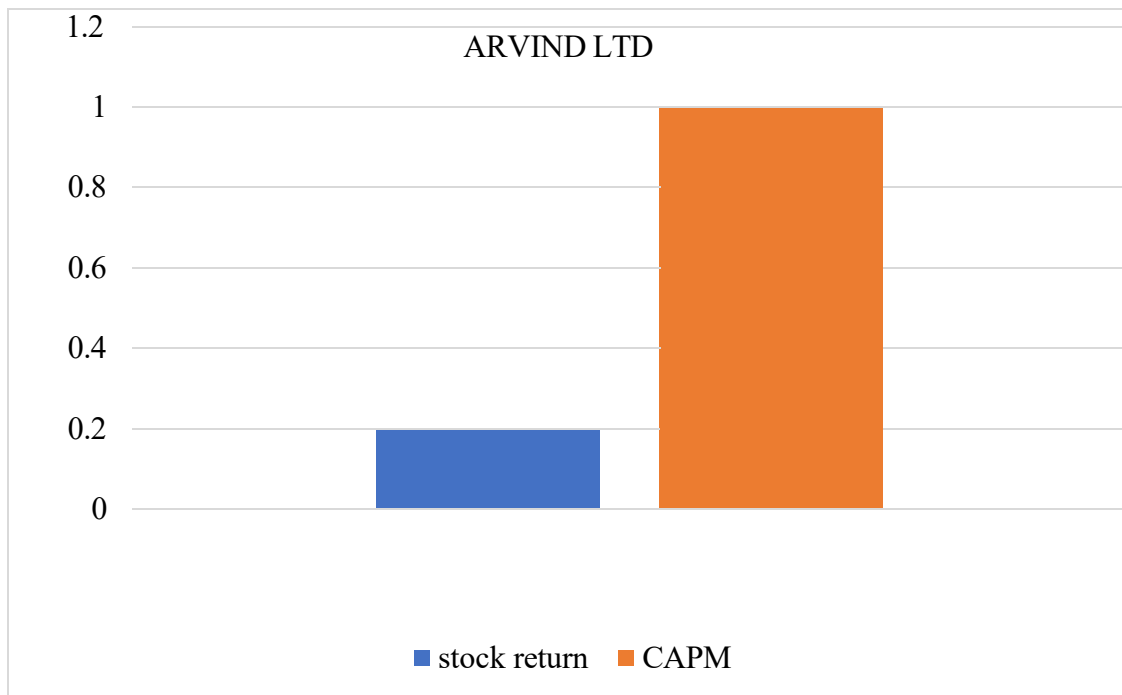
Risk free: 5.85

CAPM: 0.987106043

Stock return: 0.197474378

Table 3.2: Table represent STOCK return and CAPM return of Arvind company.

stock return	0.197474378
CAPM	0.987106

Graph 3.2: Graph representing the STOCK return and CAPM return of Arvind company.

Interpretation:

Based on above provided table and graph, it is evident that the stock return is relatively lower when compared to its CAPM return. Which observation is clearly depicted in the graph, where both the stock return and CAPM return exhibit an upward trend.

Calculation of CAPM return of Vardaman company

months	Y	X	Y return	X return	X^2	XY
03-Jan	499.3	59183.22				
01-Feb	479.94	58862.57	-3.8774	-0.5418	0.29355	2.10078
02-Mar	528.76	55468.9	10.1721	-5.7654	33.2398	-58.646
01-Apr	436.08	59276.69	-17.528	6.8647	47.1241	-120.32
02-May	421.15	56975.99	-3.4237	-3.8813	15.0645	13.2884
01-Jun	284.65	55381.17	-32.411	-2.7991	7.83496	90.7225

01-Jul	271.5	52907.93	-4.6197	-4.4659	19.9443	20.6311
01-Aug	308.75	58115.5	13.7201	9.8427	96.8787	135.043
01-Sep	327.25	58766.59	5.9919	1.1203	1.25507	6.71273
03-Oct	335.6	56788.81	2.5516	-3.3655	11.3266	-8.5874
01-Nov	340.35	61121.35	1.4154	7.6292	58.2047	10.7984
01-Dec	347.12	63284.19	1.9891	3.5386	12.5217	7.03863
			-26.02	8.1765	303.688	98.7786

Beta: 0.396893302
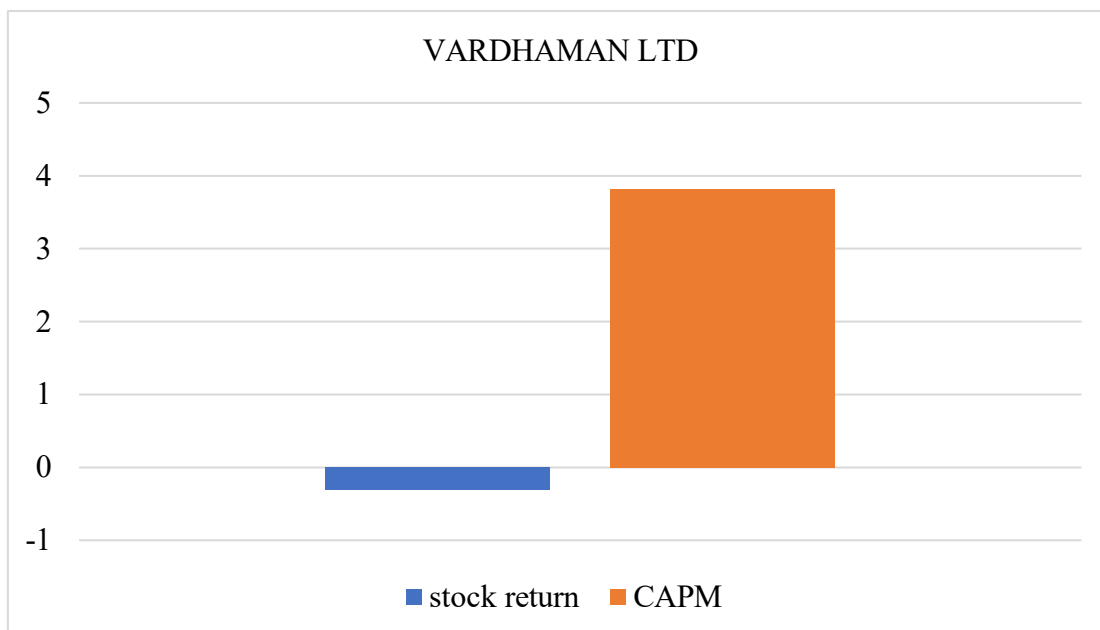
Market return: 0.743318182

Risk free: 5.85

CAPM: 3.82319219

Stock return: -0.304786701

Table 3.3: Table show STOCK return and CAPM return of Vardaman company.

stock return	-0.304786701
CAPM	3.8231992

Graph 3.3: Graph representing the STOCK return and CAPM return of Vardaman company.

Interpretation:

From the above table and graph, it is noticed that stock return is negative whereas CAPM return is positive, which is clearly shown in the above graph where stock return is flowing downwards to the negative point.

4. CONCLUSION

This study aims to evaluate the performance of 10 companies' stocks listed on the Bombay Stock Exchange (BSE) by comparing their actual returns with the returns predicted using the Capital Asset Pricing Model (CAPM). To conduct this analysis, we calculated the beta & expected returns. The study employed the chi-square test to test a hypothesis, and the results indicate that CAPM is not applicable to our Indian stock market. Additionally, the findings of this research provide valuable insights for investors, assisting them in assessing stock performance. The suggestions derived from this study can aid investors in making informed decisions regarding whether to buy or sell shares, while considering the associated risks.

5. REFERENCES

[1] Damodaran, A. (2012). *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* (3rd ed.). Wiley Finance. A comprehensive guide on valuation methods, widely used in fundamental analysis.

[2] Bodie, Z., Kane, A., & Marcus, A. J. (2017). *Investments* (11th ed.). McGraw-Hill Education.
A foundational textbook that explains risk-return analysis, portfolio theory, and security valuation.

[3] NSE India & BSE India. (2023). *Stock Market Data and Financial Reports*. Retrieved from https://www.bseindia.com. Official data source for company stock prices, financial reports, and trading volumes.

[4] Gupta, L. C. (1992). *Stock Price Behaviour in India: A Test of Market Efficiency*. Society for Capital Market Research and Development. A relevant Indian study focusing on the behavior of stock prices and market efficiency.

[5] Singh, Y. P., & Yadav, R. A. (2015). "A Study on Performance Evaluation of Selected Stocks at BSE with Special Reference to Indian Pharmaceutical Sector." *International Journal of Research in Finance and Marketing*, 5(4), 23–35.An empirical research article analyzing sector-specific stocks on BSE.