

A Study on Risk & Return on Selected It Companies

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Abstract- The Indian stock market, represented by NSE and BSE, serves as a major platform for channelizing investments into productive sectors, with IT companies playing a crucial role in economic growth. This study analyses the risk-return dynamics of selected IT firms—TCS, Infosys, Wipro, and Reliance Industries—by examining average returns, beta, and standard deviation. Findings indicate that while Wipro offers the highest average returns, its volatility is also comparatively high, whereas TCS and Infosys demonstrate relatively stable performance. Reliance, with its diversified portfolio, reflects distinct market behaviour compared to pure IT firms. Overall, the results emphasize that understanding risk-return trade-offs in IT companies aids investors, policymakers, and analysts in strategic decision-making.

Keywords- Risk-Return Analysis, IT Companies, Stock Market, NSE-BSE, Investment Strategies

INTRODUCTION

The Indian stock market, represented mainly by the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE), plays a vital role in mobilizing savings and channelizing them into productive investments. With NSE being the world's largest derivatives exchange and BSE one of the oldest exchanges in Asia, both serve as key pillars of financial growth. Major companies like Wipro, TCS, Reliance, and Infosys dominate market capitalization and represent India's global competitiveness in the IT and diversified sectors. The IT industry, in particular, has emerged as a backbone of the Indian economy, contributing significantly to GDP, exports, and employment. Globally valued at USD 4.5 trillion in 2025, the IT sector is driven by advancements in cloud computing, artificial intelligence, and IoT integration. Despite rapid growth, the industry faces challenges such as cybersecurity threats, regulatory hurdles, and skill shortages. In investment decisions, risk and return form the core considerations for both institutions and individuals. Risk represents the uncertainty and potential loss arising from market, credit, liquidity, or operational factors, while return

denotes the expected or realized gain from investment activities. The trade-off between risk and return shapes investor behaviour and portfolio construction, making their analysis crucial for financial decision-making. Thus, studying the risk-return dynamics of IT companies within India's capital markets provides valuable insights into investor strategies, policy formulation, and economic development.

LITERATURE REVIEW

- 1) Chorna Latha S (2025) It evaluates the historical performance of selected stocks to understand the risk and return and it also provides insights for investors and policy makers. Key a better balance between risk and return, while Bajaj Finance and Bajaj Finserv show higher growth potential coupled with significant volatility. The analysis highlights State Bank of India as a stronger performer with substantial annual returns, although with higher risk. These insights aim to guide investment strategies in the dynamic financial service sector of the Indian Stock Market.
- 2) Madhavi Surpurkar (2024) The risk and return profiles of information technology (IT) enterprises are thoroughly examined in this study during a five-year period, from 2019 to 2023. Although the IT industry is known for its creativity and vitality, it is also vulnerable to risk factors and high market volatility. help policymakers, analysts, and investors make well-informed decisions by offering insightful information IT firms.
- 3) Arpita S (2024) The study focuses on evaluating the historical IT companies risk adjusted returns, utilizing both quantitative and qualitative research methods. Various financial metrics, including stock price volatility, beta coefficients, and ROI, are examined to assess profiles of IT companies.
- 4) Subroto Das (2024) The Information Technology (IT) growth, contributing significantly to its GDP and export revenues.

The sector, valued at approximately USD 227 billion in 2022, is projected 2026 (NASSCOM). This paper aims major IT companies past decade, focusing specifically on the period from April 2014 to March 2024. The study analyzes three leading IT companies - Tata Consultancy Services (TCS), Infosys, and HCL Technologies - comparing their performance against the NIFTY 50 index. Using exploratory and descriptive statistics, the paper examines annual and quarterly returns to establish relationships between individual stock performance and the broader market index.

- 5) Shashwata Kulkarni (2024) The intricate in stock markets research paper, "Exploring Risk and Return Dynamics in Equity Stocks of Chosen 10 Companies: A Five-Year Investigation (2019-2023)". The study carefully analyzes the performance of equities stocks from 10 chosen firms over a five-year period, providing insightful information.
- 6) Sudhakar Madhavedi (2024) Rising domestic demand, urbanization, considerable rise of the Indian car industry, which has established India as a major worldwide manufacturing base. Encouraged by government programs like as the Production Linked Incentive (PLI) schemes and the Faster Adoption of Manufacturing of Electric Vehicles in India (FAME), the industry has also welcomed the move towards electric vehicles (EVs), especially in the two-wheeler and three-wheeler categories.
- 7) Willem Schramade (2023) A key component of financial decision-making is risk-return analysis. The fundamental tenet is that risk-averse investors demand a risk premium on riskier assets as payment for increased risk. Portfolio theory's fundamental finding is that a company's risk may be divided into two categories: idiosyncratic risk and systematic or market-wide risk, as shown by the distribution of its historical stock returns.
- 8) Awalakki M. (2023). In order to understand how neurotransmitters (dopamine, serotonin, and norepinephrine), emotions, and investment outcomes interact to influence investor behavior and decision-making, this article examines these relationships. It highlights the importance of education for cognitive function and bias reduction in controlling investor behavior in the financial arena by addressing biases and highlighting the neurological mechanisms behind choice diversification.
- 9) Manoj (2023) To lower total risk, investors frequently own a variety of assets. Examining how the addition of IT and auto stocks affects a portfolio's risk and return characteristics is essential to comprehending the wider ramifications for investing strategy. assess and contrast the investment potential of businesses in the Indian Stock Market that operate in the two different industries of automobiles and information technology. A representative sample of the industry is chosen by taking into account factors including market size, liquidity, and past performance.
- 10) S. Baskaran (2022) It is related to the particular IT industry, as the Industry's Equity study shows. A thorough analysis of these metrics helps to make sense of the situation and facilitates decision-making when buying stocks. Risk and reward are both factors in investments. Every action an investor does is immediately impacted by return and risk. The IT industry is thought to be growing at the quickest rate in both established and emerging countries. The return serves as the driving force behind investment decisions, motivating investors to make the investment.
- 11) Adhi Widyakto (2022) Banks have a major impact on the country's economy. For both state and private lending, banks are essential. The role of the bank as an intermediary. advantageous for the bank to serve as a go-between to satisfy the demands of all parties.
- 12) Heliani (2022) The population of secondary data collected from the Indonesia Stock Exchange (IDX)'s official website consisted of five tobacco industry companies listed on the IDX. A sample of four companies was gathered using the non-probability sampling method known as purposeful sampling.
- 13) Yash Chakole (2022) "Investment" is defined as using funds with the goal of turning a profit. The process of spending money with the goal of earning more money is generally referred to as investing. An investment in finance is the purchase of a financial instrument or other valued asset with the expectation of future profits.
- 14) Sonia Lobo (2021) Financial resources are being channeled through Indian stock markets to support the nation's economic development.

One segment of the Indian stock market that is crucial to stock trading is the financial services industry. The Indian financial services sector is diverse and expanding quickly, both in terms of the strong expansion of already-established businesses and the arrival of new companies who are playing outstanding roles. Many investors shifted their investments to the financial services segment financial services sector's explosive expansion.

- 15) Pradeep Kumar Rangi (2021) Several retail investors rush straight to the secondary shares market, triggering massive purchases, despite the financial recession and the severity of the coronavirus pandemic in 2021. According to an analysis of SEBI data, there were approximately 6 million new dematerialization accounts opened between April and September 2020, representing an annual rise of almost 125%. Meanwhile, data from AMFI indicates that individual investors are withdrawing money from equities funds on a net basis. These data points suggest that rather than depending on the equity mutual fund management, individual investors may have chosen to invest directly in stocks.
- 16) Dr. Deepa Joshi (2020) A risk-return study looks for "efficient portfolios," or those that, on average, yield the highest return for a given amount of portfolio risk. The Indian capital market, which is regarded as one of the most vibrant in the world, has captured the interest of both foreign and local investors. An investor's decision among the many equities is determined by their level of risk tolerance and desired rate of return.
- 17) Jayashree Bhattacharjee (2020) The purpose of this work is to present a thorough analysis of the literature on the many aspects of risk perception with regard to equity investing. It also aims to raise some questions for additional research. A comprehensive and systematic literature analysis is gain a grasp of the body The objective is that impact how risk is perceived in relation to equity shares and how these variables impact equity investors' actions.
- 18) Kent Daniel (2020) Sorting portfolios according to attributes linked to average returns is a popular technique in the finance literature. We demonstrate that the resulting portfolios are likely to have both priced and unpriced risk related to the feature. Using covariance data

calculated from historical returns, we create a process to eliminate this unpriced risk. We use the five Fama-French characteristic portfolios to test our methods. In contrast to the initial characteristic portfolios, which had a squared Sharpe ratio of 1.17, the best combination of the resulting characteristic-efficient portfolios had a value of 2.13.

- 19) Charles W (2019) Future country-level returns, volatilities, and drawdowns are predicted by a concise synopsis of news that takes into account topic-specific mood, frequency, and unusualness (entropy) of word flow. The year-ahead forecasts have greater statistical and economic relevance than the monthly forecasts. The impact of news measures on market outcomes varies with time and by kind of nation. There is more incremental information in news reports regarding emerging markets. The economic usefulness of our method for predicting market outcomes at the national level is validated by out-of-sample testing.
- 20) Vishal (2024) The study "Risk and Return Analysis on Selected 10 Companies: A Five-Year Study (2018-2022)" explores the complex relationships between risk and return across a sizable time frame in the equities market environment. This research intends to disentangle the performance parameters of 10 carefully selected firms through a rigorous five-year assessment, offering investors and financial analysts' priceless insights for refining portfolio strategies and maximizing profits.

OBJECTIVES OF THE PROBLEM

- To analyse the average returns of selected companies' securities in IT industry.
- To determine the risk associated with selected companies' securities in IT industry.
- To evaluate and compare the performance of IT Companies under Nifty.

SCOPE OF THE STUDY

The study's scope includes a theoretical examination of the link between risk and return in the context of Wipro Ltd., TCS, Reliance Industries, and Infosys. This research attempts to give a better understanding of the intricate link between risk and return and its consequences for investors and company management by looking at the theoretical underpinnings of risk and return analysis.

RESEARCH METHODOLOGY

The study was conducted using secondary data. The information was gathered from a number of sources, including the NSE website, publications, and journals, among others. This study's research design is a descriptive one. Returns, Beta and Standard deviation are calculated for the analysis.

DATA ANALYSIS AND INTERPRETATION

The IT sector, represented by TCS, Infosys, and Wipro, displays volatility, with stock prices global demand, technological advancements, and competition. TCS and Infosys, being large-cap IT companies, demonstrate relatively stable performance, while Wipro's stock price movements are more erratic. In contrast, Reliance Industries, a conglomerate with a diversified business portfolio, shows a different trend. Its stock price movements are influenced by a range of factors, including the performance of its various businesses, such as retail, telecom, and refining. The company's ability to navigate complex market dynamics and adapt to changing consumer behavior has contributed to its resilience.

Table 1 showing the Average Returns of IT companies

COMPANY	AVG RETURNS
TCS	1.29
Infosys	2.74
Reliance Industries	1.47
Wipro	3.11

Investors, who aim to maximize profits while lowering risk, are impacted by these companies' average returns. Considering their personal financial objectives and risk tolerance, investors may think about distributing their portfolios according to the risk-return characteristics of these businesses.

Table 2 showing Beta and Standard deviation of IT Companies

COMPANY	BETA	STANDARD DEVIATION
TCS	0.60	7.72
Infosys	0.87	6.31
Reliance Industries	0.59	9.52
Wipro	0.45	9.80

A stock's systematic risk or volatility in proportion to the market as a whole is measured by its beta. A stock is less volatile than the market if its beta is less than 1, and more volatile than the market if its beta

is more than 1. In this case, all four companies have beta values less than 1, indicating that they are less volatile than the market. Wipro has the lowest beta value of 0.45, suggesting that it is the least volatile among the four companies, while Infosys has a relatively higher beta value of 0.87.

The stock prices of these companies show significant fluctuations, with TCS surging 19.07% in Aug-24 and plummeting 10.15% in Oct-24. The average returns of these companies indicate that Wipro has the highest average return at 3.11%. The beta values indicate that all four companies have a beta less than 1, suggesting they are less volatile than the market. Wipro has the lowest beta at 0.45, implying it is the least sensitive to market fluctuations.

The stock price movements of TCS, Infosys, Reliance Industries, and Wipro over the given period exhibit distinct patterns, reflecting the diverse nature of their businesses and the sectors they operate in. The average returns of the four companies suggest that Wipro and Infosys have delivered stronger performance, with average returns of 6.23% and 5.92%, respectively. Investors that are interested in short-term investments seek out Wipro firm shares since they yield profits. The beta values can be used by ordinary income-seeking investors to fix and create portfolios.

CONCLUSION

The study of the Indian stock market shows that among different types of risk, the distributional risks—like variance, skewness, and kurtosis—support the idea that higher risk leads to higher returns. It also found that when a stock's returns move closely with the market (high correlation), it tends to have a higher average return. Additionally, there is a link between systematic risk and stock returns in India. The return patterns of both the market and individual stocks appear random, suggesting the market is weakly efficient. Overall, the Indian stock market shows a clear positive relationship between risk and return.

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