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Risk and Return Analysis on Equity Stocks of Selected IT Companies

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ABSTRACT

The Industry's Equity analysis demonstrates that it is connected to the specific IT industry. A detailed review of these values clarifies matters and aids in making decisions on the purchase of stocks. Investments include both risk and return. Return and risk directly affect everything an investor does. In both developed and emerging nations, the IT sector is regarded as having the fastest rate of growth. The inspiration for investing comes from the return, which inspires investors to make the investment. This study compares the risk and return analysis of selected equities from the IT industries. This research involves educating investors about stocks and encouraging them to choose a specific IT business to invest in.

Keywords: Risk and Return, IT, Beta, Standard deviation.

Introduction

The stock market conditions are dynamic in nature in which predictions play a major role in investing for an investor.An investment is impacted by both risk and return, which are two sides of the same coin. To optimise rewards, one must thus comprehend risk. The analysis of return and risk with regards to investment has an impression on the individual's decision-making process.Every investment has some risk, but the best investments are those that offer the highest returns with the lowest amount of risk. Market knowledge is required for risk analysis which helps in making appropriate judgements and to take preventive measures.Risk is calculated using the degree of volatility and the difference between actual and expected returns. The Risk and return analysis determine the amount of risk that an investment includes in connection to its potential rate of returns.

Diversification reduces overall risk for investors' portfolios but also curbs potential returns. Only investing in one market sector may result in higher returns if that sector outperforms the overall market, but if that sector loses attractiveness, your returns may be lower than they would have been from a more broadly diversified portfolio. The benefits of diversification are reduced the more strongly two assets' returns correlate.

Statement of the problem

Risk and return are distinctly correlated. Risk is the possibility that a particular investment will or will not achieve the expected profits. A risk and return analysis look for efficient portfolios or those which create the best return for a given amount of risk. Risk and return analysis are required to analyse investment prospects in terms that are relevant to financial experts. Currently investors have a number of investing options. They are confused on whether to invest in the one that offers greater return with a lesser risk. Using Risk and return analysis, investors may assess their risk in their investment decisions. These analytics can support individuals in selecting which assets to invest depending on risk and return. This study is an attempt to provide investors with the information to help them Considering risk and return while choosing their holdings.

Need for the study

The stock market is unstable, and India has stock exchanges for a long time. The investor has to identify areas with high reward and low risk. As a result, determining the degree of risk associated with securities is challenging. The purpose of this study is to determine the risk and return of the chosen equities stocks as well as the IT firms' maximum returns at the lowest possible risk. The current study's objectives are to assess appropriate investment opportunities and analyse the risk-return profiles of particular Indian IT businesses that are listed on the NSE's IT Index.

Objectives of the study

- 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 IT.

- To suggest the investors' best security before investing in any IT stock.

Review of Literature

Mrs. R. Thirugnanasoundari (2017), "RISK RETURN ANALYSIS OF EQUITY INVESTMENTS IN INDIAN STOCK MARKET (BASED ON NIFTY)".The Study is an attempt to examine the potential for investors in terms of returns and risk when investing in the stock of companies in various sectors of the Indian economy. The objective of the study is to determine the variations in the overall portfolio of a chosen stock index in order to improve investing chances. The Infosys company's share price is (.3283) the highest in comparison to all other businesses in this sector throughout the study period, according to the Information Technology sector share price research. Rather from making poor investing selections, it is recommended that investors seek the advice of a financial planner.

Abhishek.V (2018) **"**A STUDY ON RISK AND RETURN ANALYSIS OF SELECTED STOCKS IN BSE SENSEX". The objective of this research is to analyse the risk and return related with selected stocks and to find which of the following stocks are best for investment. This study measures the risk of the selected stocks in Sensex using standard deviation and beta values. The research suggests that another way to avoid the risk is to have an investment in short term security than having in long term investment. The Sharpe's index model, created by William Sharpe, has shown to be the finest investing approach. As a result, by investing in a set of securities, investors may diversify their risk.

Dr. P. Subramanyam, Dr.NallaBala Kalyan (2018), "A STUDY ON RISK & RETURN ANALYSIS OF SELECTED SECURITIES IN INDIA".This research's major goal is to teach investors a basic understanding of mutual fund investing and to encourage them to invest in areas where they may get the best return on their money. This research aids us in understanding how businesses diversify their operations across industries and enterprises in order to maximise revenues while limiting the risk. Although it is difficult to establish a pattern for price swings, this research focuses on market volatility and their relationship to Scrip pricing.

Mrs. Rahul Moolbharathi and Mrs. Tukaram Sugandi (2021) **"**A COMPARISON STUDY ON RISK AND RETURN ANALYSIS OF SELECTED COMPANIES WITH BENCHMARK INDEX IN NSE".The research assists the investor in obtaining a snapshot of numerous statistical methodologies that may be used to evaluate stock risk and return and is focused on Index performance vs. Benchmark index as well as to identify which sector is best for risk and return investing. The main objective is to measure the Statistical variation of Stocks and Indices with help Regression Analysis. It is observed that HDFC Bank's risk and returns are higher than any other stock. All of the equities in the portfolio have a beta of one. As a result, the market stocks chosen are efficient in terms of risk and return.

Mr. S. Sathish, Ms. A. Nagarathinam (2021) "A STUDY ON RISK AND RETURN ANALYSIS OF FMCG COMPANIES IN INDIAN STOCK MARKET". This article was undertaken to analyse the risk and return of the selected NIFTY FMCG sectors. This research examines the optimal security for an investor seeking a high return with minimal risk. Descriptive research is been adopted and based on this it is highlighted that ITC Ltd. has the lowest return among FMCG companies. They suggest that if an investor expects high returns then he has to face high risk. A stock with a higher beta value is not suggested since it has a significant market risk that cannot be diversified.

Sources of data collection

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.

Sample size

The study consists of NIFTY IT companies which are listed on NSE.

Statistical tools and techniques

1. Returns

A company's share price may increase or decrease based on multiple factors. A market return is the profit earned over the period of time. The returns can resemble as positive or negative outcomes. Profit can be considered as positive and loss can be considered as negative.

Return = (Closing price – Opening price) / Opening price * 100

2. Beta

A measure of how an individual asset moves (on average) when the stock market as a whole rises or falls is called the beta. Beta becomes an useful indicator of an asset's contribution to the risk of a market portfolio when a little quantity of the asset is included.

Beta = Covariance/ Variance

3. Standard deviation

The standard deviation of a dataset is a measure of its dispersion in respect to its mean. The square root of the variance is used to determine the standard deviation. A volatile stock has a high standard deviation, whereas a stable blue-chip stock has a low standard deviation.

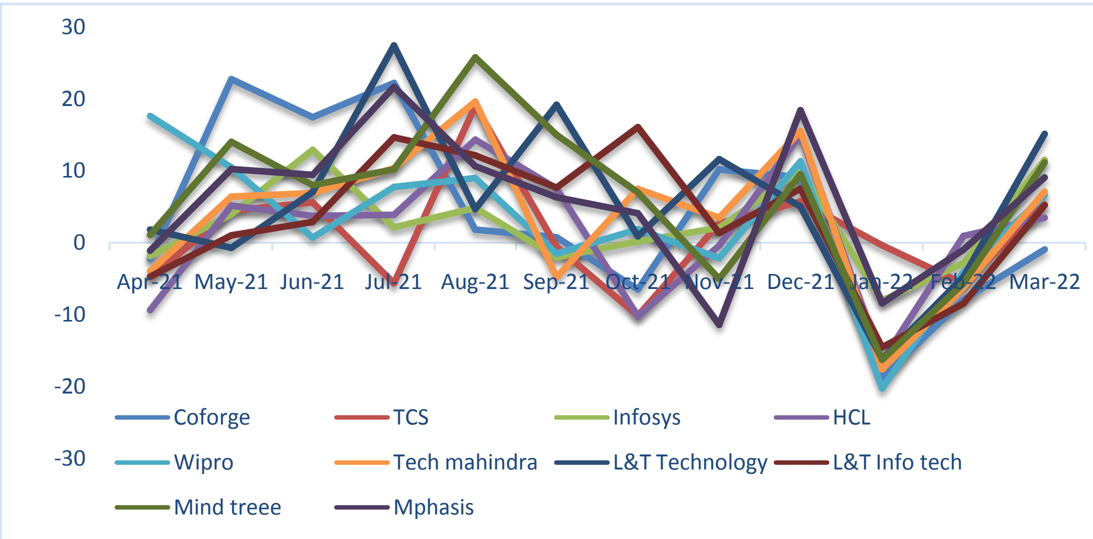
Standard deviation = $\sqrt{\text{variance}}$

Variance (σ^2) = $\Sigma(\text{Ri} - \text{RJ})^2$ / n-1

Data Analysis and Interpretation

Table showing the Monthly Returns of Nifty IT companies

Date	Coforge	TCS	Infosys	HCL	Wipro	Tech mahindra	L&T Technology	L&T Info tech	Mind treee	Mphasis
Mar-22	-0.94	5.28	11.51	3.48	6.65	7.10	15.11	5.22	11.19	9.07
Feb-22	-7.91	-5.72	-2.86	0.92	-4.15	-6.25	-4.77	-8.45	-5.66	-0.99
Jan-22	-18.69	-0.37	-8.03	-16.48	-20.25	-17.61	-16.21	-14.55	-16.27	-8.42
Dec-21	9.09	5.75	10.07	15.10	11.32	15.52	5.05	7.51	9.53	18.44
Nov-21	10.17	2.65	2.09	-0.42	-2.13	3.45	11.62	1.33	-5.05	-11.41
Oct-21	-6.50	-10.15	0.16	-10.22	1.88	7.48	0.88	16.05	6.97	4.08
Sep-21	0.77	-0.54	-2.07	7.52	-1.51	-4.79	19.17	7.64	15.01	6.31
Aug-21	1.84	19.07	4.85	14.34	8.97	19.64	4.69	12.15	25.75	10.63
Jul-21	22.21	-5.67	2.13	3.85	7.73	10.36	27.40	14.66	10.2	21.66
Jun-21	17.44	5.59	12.91	3.74	0.69	6.91	7.05	2.91	8.02	9.45
May-21	22.72	4.44	3.95	5.17	10.47	6.42	-0.70	1.01	14.02	10.22
Apr-21	-2.28	-4.87	-1.86	-9.38	17.64	-3.96	1.83	-4.70	1.05	-1.13

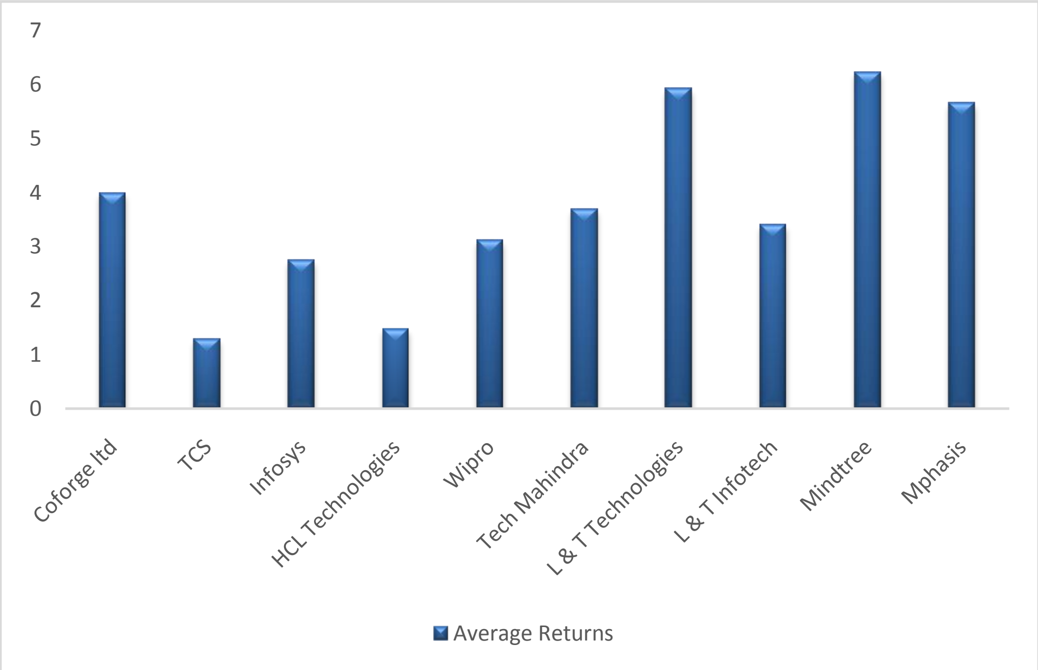


Interpretation:

The above table and Graph shows the monthly returns earned by the IT companies for the period 2021-22. All the companies earns a negative returns in the month of January 2022 and earns positive returns in June, August and December in the year 2021.

Table showing the Average Returns of IT companies

COMPANY	AVG RETURNS
Coforge ltd	3.99
TCS	1.29
Infosys	2.74
HCL Technologies	1.47
Wipro	3.11
Tech Mahindra	3.69
L & T Technologies	5.92
L & T Infotech	3.40
Mindtree	6.23
Mphasis	5.66

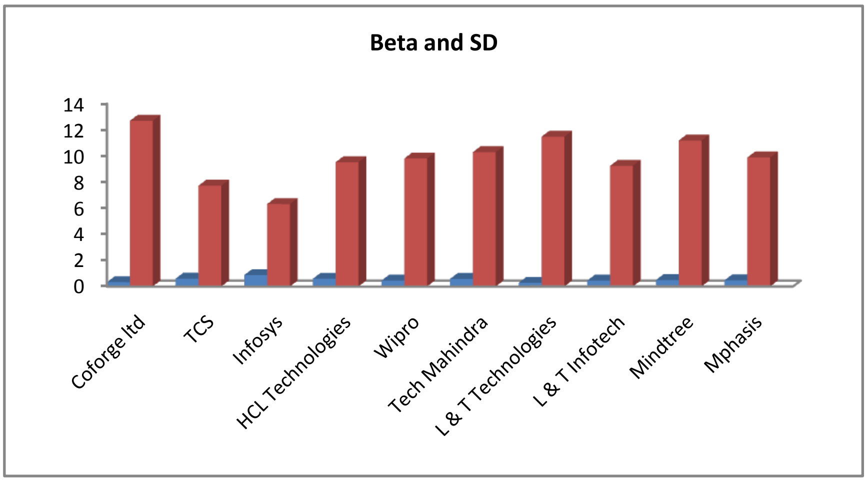


Interpretation

From the above table, the Average returns or Mean of IT companies is evaluated. The highest average returns earned during the year 2021-2022 is by Mindtree company and the lowest returns is by TCS. Among these, the companies that comes under top 5 companies to gain more average returns are Mindtree, L &T Technologies, Mphasis, Coforge ltd and Tech Mahindra and the rest of the companies earns lowest returns for the year 2021-22.

Table showing Beta and Standard dation of IT Companies

COMPANY	BETA	STANDARD DEVIATION
Coforge ltd	0.33	12.69
TCS	0.60	7.72
Infosys	0.87	6.31
HCL Technologies	0.59	9.52
Wipro	0.45	9.80
Tech Mahindra	0.58	10.29
L & T Technologies	0.28	11.47
L & T Infotech	0.45	9.24
Mindtree	0.49	11.18
Mphasis	0.47	9.88



Interpretation

The above graph depicts the total risks beared by the different IT companies from NIFTY IT. The Beta value for all the companies is less than 1 which indicates that the risk is less. The company that has high risk compared to other companies is Infosys with 0.87 and the company which has lowest risk among all the companies is L&T Technologies with 0.28. The highest standard deviation is of Coforge ltd. The standard deviation is a measure of risk and market volatility. The investment is less risky where there is low standard deviation. Infosys has the lowest Standard deviation.

Findings

- It is depicted that Mindtree company provides the highest average returns among all the 10 companies with moderate risk of 0.49.
- The company that has provided a highest value of Beta that is 0.87 by Infosys ltd with a standard deviation of 6.31 which indicates that this stock has high risk..
- The company with the lowest Beta value is L & T technology with 0.28 which indicates that it has less risk compared to other companies.
- TCS and HCL Technologies provides the lowest returns among all the IT companies.

Suggestions

- The investors who are expecting highest returns are suggested to invest in Mindtree ltd as it earns the highest returns among the other companies.
- If the investors have an aspiration of bearing high risk then he can invest in the companies with highest beta values, he can invest in Infosys.

- If an investor is not willing to bear risk, he can invest in L & T Technologies as it has less Beta value and yields high returns.
- The study suggests an investor not to invest in TCS as it earns the lowest returns with moderate risk.

Conclusions

This study is focused on an examination of the IT Nifty Stock. Investors are advised to select their securities based on their risk and return. A stock with a higher beta value is not recommended, thus it is exposed to a higher market risk and cannot be diversified. The beta ratio is most useful to investors when making short-term decisions where price volatility is significant. From this study it is found that Mindtree has a highest return with normal risk. This study will give investors the perception that if the market recovers, the scrip returns would undoubtedly increase. The stocks may not be a safe investment, but for a risk-taker and a risk-averse investor, the rewards may be greater in short-term than in the long-term.

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