A Sector-Wise Risk-Adjusted Return Analysis of Selected Indian Stocks

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Abstract

This study analyses the return, risk, and Sharpe Ratio of selected stocks from three major sectors of the Indian economy — Information Technology (IT), Pharmaceuticals, and Oil & Gas — over the period 2015 to 2024. Using annual data, the research evaluates the performance of Infosys, TCS, Nifty IT; Dr. Reddy, Sun Pharma, Nifty Pharma; and Reliance Ltd, Indian Oil, Nifty Oil & Gas. The Sharpe Ratio is employed to measure risk-adjusted returns, considering a risk-free rate of 6%. Among IT stocks, TCS showed the highest Sharpe Ratio (0.53), indicating better efficiency. In the pharmaceutical sector, Sun Pharma outperformed others with a Sharpe Ratio of 0.28. Reliance Ltd led the Oil & Gas sector with the highest Sharpe Ratio (0.99), highlighting its strong return for the level of risk taken. The findings suggest sectoral differences in return-risk efficiency. This analysis aids investors in identifying stocks that offer optimal returns per unit of risk.

Keyword:

Sharpe Ratio, Risk-Adjusted Return, Sectoral Analysis, IT Sector, Pharmaceutical Sector, Oil & Gas Sector, Stock Market Performance, Return and Risk Evaluation, Investment Efficiency, Indian Equity Market

Introduction

Investment decisions in the stock market require careful evaluation of both returns and associated risks. In a volatile and dynamic financial environment like India, sector-wise performance analysis helps investors allocate their portfolios more efficiently. The Information Technology (IT), Pharmaceutical, and Oil & Gas sectors form the backbone of the Indian economy, each with distinct market behaviour, risk profiles, and growth potential. Understanding how individual stocks from these sectors have performed over time in terms of return and risk is crucial for effective investment planning.

This study focuses on analysing selected stocks from the IT (Infosys, TCS, Nifty IT), Pharmaceutical (Dr. Reddy, Sun Pharma, Nifty Pharma), and Oil & Gas (Reliance Ltd, Indian Oil, Nifty Oil & Gas) sectors during the ten-year period from 2015 to 2024. The analysis is based on key performance indicators such as average annual return, standard deviation (as a measure of risk), and the Sharpe Ratio to assess risk-adjusted returns. By comparing these metrics, the study aims to identify which stocks and sectors offer better investment efficiency and consistent performance over time.

This comprehensive examination serves to guide investors, portfolio managers, and policymakers in understanding sectoral trends, evaluating volatility, and identifying optimal investment opportunities based on historical data.

Literature Review

Chinthakunta Manjunath et al. (2023) This study integrates PCA with ML classifiers like SVM and Random Forest using technical indicators to predict Nifty 50 trends. It critiques traditional linear models and emphasizes noise reduction and dimensionality via PCA. The trend layer transforms signals into binary outputs, enhancing model accuracy. Results show SVM and RF outperform others, proving hybrid efficiency.



Aftab Ahmed & Bipul Kumar (2025). The authors analyse Indian banking stocks using a hybrid of fundamental metrics and technical indicators. Their model leverages EPS and EMA to align long-term valuation with short-term signals. Findings support the combined approach for better portfolio outcomes. It confirms synergy in timing and stock selection.

Varun Kumar & Megha Jain (2023) A two-stage hybrid model selects stocks using ROE and D/E ratios, then applies technical filters. This approach delivers consistent outperformance over the Nifty 50. It shows how combining fundamentals and trends boosts returns. Ideal for retail and institutional strategies.

Muzaffar et al. (2024) This review assesses hybrid models combining technical, fundamental, and sentiment data in Indian markets. Using ML, it shows improved predictions when integrating behavioural and financial indicators. The study highlights retail investor biases. It underscores the value of multi-factor strategies.

Pranjali Kasture & Kamini Shirsath (2024) The authors propose an RNN-LSTM model combining sentiment analysis and technical indicators. Their AI framework captures investor mood and improves forecast accuracy. It processes both numerical and textual data for holistic prediction. The model adapts well to real-time market shifts.

Omkar Oak et al. (2024) A Bi-LSTM model is developed using 12 technical indicators to forecast short-term Nifty 100 stock trends. Results indicate strong performance and minimal forecasting errors. The multivariate setup improves noise handling. Deep learning proves robust in dynamic Indian markets.

Harikrishna Tadas et al. (2023) This study compares SMA+RSI, EMA+RSI, and BB+RSI during volatile Nifty 50 phases. BB+RSI showed consistent profits and strong adaptability. It advocates dynamic indicators over static strategies. Practical for active traders in volatile conditions.

Jatinder Kaur et al. (2023) The paper examines MACD, EMA, and RSI use post-COVID in Indian markets. MACD detects trends, while RSI optimizes exits. Hybrid usage reduces false signals and enhances timing. It shows increasing reliance on technical tools in uncertain times.

Rithvik Kammili (2024) This sector-specific study applies EMA, RSI, and OBV to FMCG stocks. RSI is sensitive to short-term changes, while EMA confirms momentum. The hybrid setup improves accuracy in low-volatility sectors. Chart patterns and trendlines further support decision-making.

Sudhakar & Mehta (2020) They assess MACD and RSI in Indian banking stocks over 2017–2020. MACD works best during trends; RSI performs well in stable periods. A combined approach improves reliability. Their findings validate multi-indicator strategies.

Tripathi & Chaubey (2020) This study evaluates MACD across market conditions, revealing its limits in sideways markets. Volume-based tools and divergence checks improve performance. Contextual adaptability is emphasized. The work supports flexible, responsive strategies.

Toshabanta Bhoi & Ramesh C. Das (2024) They use ROE, EPS, and debt ratios with portfolio optimization models. Efficient portfolios outperform benchmarks using Sharpe and Treynor ratios. It supports fundamentals in constructing quantitative investment models. Useful for tailored portfolio construction.

Chandra Shekhar & Pallavi Rai (2021) They test the Efficient Market Hypothesis in India using insider data and event studies. Results show market inefficiencies persist due to delayed responses. Active strategies still yield excess returns. Their findings justify technical and fundamental methods.

Farman Ali et al. (2024) Using SEM, this study reveals how investor emotions like herding and overconfidence influence Indian markets. Sentiment integration improves prediction alongside technical tools. Behavioural traits impact small-cap volatility significantly. It supports emotion-aware models in investment.

Dhruv Rawat et al. (2021) The authors correlate macroeconomic variables with Sensex performance from 2010–2020. Inflation, M3 supply, and exchange rates impact stock prices. Sectoral effects, especially in IT and pharma, are highlighted. It encourages macro-informed stock selection.

Jaydip Sen & Sidra Mehtab (2021) This paper compares traditional and PCA-based Eigen portfolios for Indian stocks. Eigen portfolios offer better diversification and risk-adjusted returns. PCA aids in dimensionality reduction and pattern detection. It adds quantitative depth to portfolio design.

Jaydip Sen et al. (2022) Using Nifty 50 data, this study applies Hierarchical Risk Parity (HRP) and Minimum Variance models. HRP outperforms in reducing noise and handling volatility. Clustering techniques enhance allocation robustness. The model suits modern risk-averse investors.

Research Gap

While numerous studies have analysed sectoral performance in the Indian stock market, most focus either on overall returns or volatility in isolation, without integrating risk-adjusted metrics such as the Sharpe Ratio. Additionally, past research often emphasizes short-term performance or is limited to specific sectors like IT or Pharma, ignoring cross-sector comparisons over a longer period. There is a noticeable lack of comprehensive analysis that evaluates and compares the **risk-return efficiency** of individual stocks and indices from **multiple core sectors**—specifically **IT**, **Pharmaceutical**, and **Oil & Gas**—over a **decade-long period (2015–2024)**. This study addresses that gap by applying Sharpe Ratio-based analysis across sectors, offering more holistic insights for investors and policymakers on sectoral investment efficiency and performance sustainability.

Need for the Study

In today's dynamic and uncertain financial environment, investors are increasingly concerned not just with returns but also with the level of risk involved in achieving those returns. As the Indian stock market becomes more diversified and sector-driven, understanding the **risk-adjusted performance** of different sectors becomes essential for effective portfolio construction and financial planning. The IT, Pharmaceutical, and Oil & Gas sectors play a pivotal role in the Indian economy, yet they differ significantly in terms of volatility, growth potential, and market sensitivity.

There is a pressing need to evaluate how stocks in these key sectors have performed over an extended period in terms of **return consistency**, **risk exposure**, **and investment efficiency**. By using the **Sharpe Ratio** as a tool to assess **risk-adjusted returns**, this study helps investors identify which sectors offer better value for risk taken. The insights generated from this analysis will support investors, fund managers, and policymakers in making **data-driven**, **sector-specific investment decisions**, and in developing long-term strategies that balance return expectations with acceptable levels of risk.

Research Methodology

1. Research Design

This study is analytical in nature and adopts a **quantitative research design**. It evaluates the risk and return performance of selected stocks from three prominent sectors—Information Technology, Pharmaceuticals, and Oil & Gas—based on historical data spanning a ten-year period from **2015 to 2024**.

2. Data Collection

The study uses **secondary data**, collected from authentic financial sources such as the **National Stock Exchange (NSE)**, **BSE**, **Money control**, **Yahoo Finance**, and company annual reports. The data includes **annual returns** and **standard deviation (risk)** values for the following:

- IT Sector: Infosys, TCS, and Nifty IT Index
- Pharmaceutical Sector: Dr. Reddy, Sun Pharma, and Nifty Pharma Index
- Oil & Gas Sector: Reliance Ltd, Indian Oil, and Nifty Oil & Gas Index

Objectives of the Study

1. To evaluate the annual return and risk of selected stocks from the Banking, IT, Pharmaceutical, and Oil & Gas sectors in India during the period 2015 to 2024.

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- 2. To calculate and compare the Sharpe Ratio of selected stocks and sectoral indices to assess their riskadjusted performance.
- 3. To identify sector-wise differences in investment efficiency based on historical risk-return profiles.
- 4. To analyse the volatility trends across different sectors using standard deviation as a measure of risk.
- 5. To assist investors and portfolio managers in making informed decisions by highlighting which sectors offered better returns relative to risk over the studied period.

3. Period of Study

The data covers a continuous ten-year period from 2015 to 2024, allowing for an adequate assessment of sectoral trends and cyclical market effects.

4. Tools for Analysis

The main statistical tool used is the **Sharpe Ratio**, calculated as:

Sharpe Ratio= Mean Return-Risk-Free Rate /Standard Deviation of Return

A risk-free rate of 6% is assumed for all calculations.

Mean return and standard deviation (risk) are computed for each stock and index over the 10-year period.

5. Data Analysis Methods

Data is presented using tables, line charts (for return trends), and bar charts (for comparative risk levels). Descriptive statistics (mean, standard deviation) and inferential statistics (ANOVA) are applied to interpret sectoral performance differences.

6. Scope and Limitations

- > The study is limited to three sectors and selected representative stocks and indices.
- > Only annual returns and risks are considered; other financial metrics like beta, alpha, or market capitalization are excluded.
- The findings are historical and do not forecast future performance.

This methodology ensures a robust and replicable framework for evaluating sectoral investment efficiency using standard financial metrics and academic rigor.

Table No.1: A Statement of Return Risk of selected stocks from IT Industry During the Period 2015 to 2024

Year	Infosys		TCS		IT Nifty	IT Nifty	
	Return	Risk	Return	Risk	Return	Risk	
2015	12.08	27.37	-4.75	17.04	-0.03	26.25	
2016	-8.58	27.31	-2.93	15.75	-7.25	25.55	
2017	3.11	27.25	14.19	15.19	12.18	25.29	
2018	27.47	28.27	40.16	16.18	23.78	26.76	

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2019 11.57 30.47 8.39 28.91 22.28 14.62 2020 71.76 32.98 26.13 15.63 54.94 30.88 2021 50.32 25.99 30.59 16.13 59.58 30.47 2022 -20.11 19.1 -12.8813.93 23.75 -26.04 2023 2.3 12.52 18.84 8.55 24.08 6.59 2024 22.54 13.38 6.74 16.04 22.03 16.05

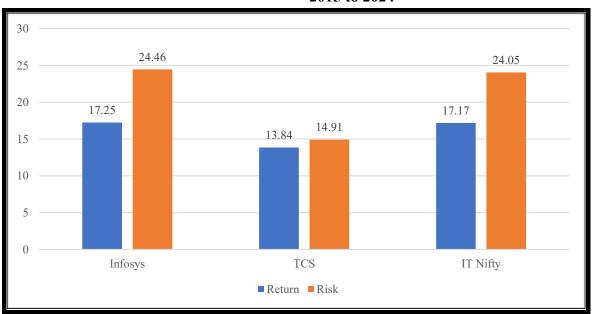
14.91

17.17

24.05

Graph No. 1 A Graph of Return Risk of selected stocks from IT Industry During the Period 2015 to 2024

13.84



Interpretation:

17.25

Mean

24.46

This dataset compares Infosys, TCS, and the IT Nifty Index over a 10-year period in terms of annual return (%) and risk (standard deviation %). Below is a comprehensive interpretation based on the mean values and trends:

- Infosys had the highest average return among the three but also came with higher volatility.
- ➤ Significant spikes in performance (e.g., 2020: 71.76%), but also notable declines (e.g., 2022: -20.11%).
- Aggressive investment profile: high potential returns with substantial fluctuations.
- > TCS offered moderate and stable returns with the lowest volatility among the group.
- The best performer in terms of risk-adjusted return.
- ➤ Ideal for risk-averse investors seeking steady performance.
- > IT Nifty almost matches Infosys in returns, but carries slightly less risk.
- ➤ Reflects overall sector performance—diversified but still volatile.
- > Suitable for passive investors seeking broad market exposure.



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Table No.2: Sharpe Ratio=Mean Return-Risk-Free Rate /Standard Deviation of Return

Stock	Mean	Standard	Risk-Free	Sharpe Ratio Formula
	Return (%)	Deviation (Risk)	Rate (%)	
Infosys	17.25	= 24.46	6	17.25-6/24.46=0.46
TCS	13.84	= 14.91	6	13.84-6/ 14.91=0.53
Nifty IT	17.17	= 24.05	6	17.17-6 /24.05=0.46

Interpretation:

- TCS has the highest Sharpe Ratio (~0.53), suggesting it provides the best return per unit of risk.
- **Infosys and Nifty IT** are slightly lower (~0.46), indicating they are also efficient but with higher volatility.

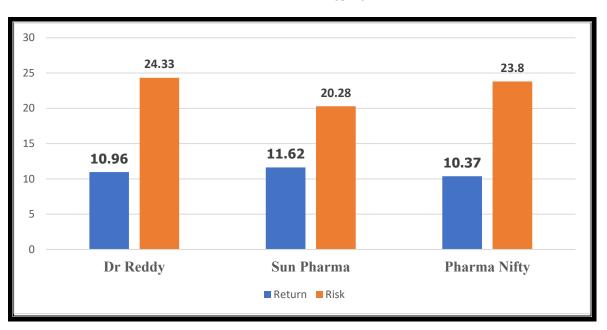
Table No.3:
A Statement of Risk & Risk of selected stocks from the pharmaceutical Industry During the Period 2015 to 2024

Year	Dr Reddy	y	Sun Phar	Pharma Pharm		a Nifty	
	Return	Risk	Return	Risk	Return	Risk	
2015	-4.24	29.76	-0.77	26.99	9.26	25.75	
2016	-1.55	29.28	-23.18	26.64	-14.18	25.75	
2017	-21.11	30.61	-9.34	24.86	-6.3	25.72	
2018	8.38	29.54	-24.63	24.41	-7.81	26.36	
2019	9.86	31.6	0.48	17.7	-9.34	26.56	
2020	81.08	34.28	36.94	14.75	60.64	25.68	
2021	-5.73	20.13	42.77	16.15	10.12	20.38	
2022	-13.64	21.02	18.41	16.62	-11.43	23.19	
2023	36.82	11.62	25.77	15.75	33.61	19.93	
2024	19.74	5.47	49.78	18.96	39.1	18.68	
Mean	10.96	24.33	11.62	20.28	10.37	23.8	

Graph No.2

A Graph of Risk & Risk of selected stocks from the pharmaceutical Industry During the Period 2015 to 2024

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Interpretation of Risk and Return: Pharmaceutical Stocks (2015–2024)

This analysis covers the risk (standard deviation) and return (annual %) performance of two major pharmaceutical companies—Dr. Reddy's Laboratories and Sun Pharma, along with the Pharma Nifty index, over a 10-year period (2015–2024). Here's an interpretation based on the data provided:

- > Sun Pharma delivered the highest average return (11.62%), slightly outperforming Dr. Reddy and Pharma Nifty.
- > Dr Reddy and Pharma Nifty had comparable average returns (around 10.9% and 10.4%).
- > Dr Reddy experienced the highest average risk (24.33%) across the period, indicating more volatility in its returns.
- > Sun Pharma had the lowest average risk (20.28%), making it relatively more stable.
- ➤ Pharma Nifty had intermediate volatility (23.80%).
- > Dr Reddy shows more erratic performance, with large swings in return and risk.
- > Sun Pharma appears more consistent and defensive, showing a steady decrease in volatility from 2015 to 2024.
- > Pharma Nifty, being an index, represents average sector performance, smoothing out extreme variations seen in individual stocks.

Sharpe Ratio Analysis of Pharmaceutical Stocks (2015–2024)

This document presents the Sharpe Ratio analysis for selected pharmaceutical stocks — Dr. Reddy, Sun Pharma, and Nifty Pharma — over the period 2015 to 2024. The Sharpe Ratio is used to evaluate risk-adjusted returns, assuming a risk-free rate of 6%.

Sharpe Ratio Table No.4:

Stock	Mean Return (%)	Risk (Std. Dev)	Sharpe Ratio
Dr. Reddy	10.96	24.33	0.20
Sun Pharma	11.62	20.28	0.28
Nifty Pharma	10.37	23.80	0.18



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Interpretation

- 1.Sun Pharma has the highest Sharpe Ratio (0.28), indicating it offers the best risk-adjusted return among the three stocks. It combines a higher average return with lower risk.
- 2. Dr. Reddy follows with a Sharpe Ratio of 0.20, suggesting moderate efficiency in returns relative to its higher volatility.
- 3. Nifty Pharma has the lowest Sharpe Ratio (0.18), reflecting the least efficient risk-adjusted performance. All three stocks fall in the moderate category (0.2-0.5), indicating that investors should balance these investments with caution.

Table No.5: A Statement of Return Risk of selected stocks from Oil& Gas Industry During the Period 2015 to 2024

Year	Reliance	Ltd	Indian O	il	Nifty Oil&	k Gas
	Return	Risk	Return	Risk	Return	Risk
2015	13.63	21.2	28.98	31.93	-3.43	15.53
2016	6.67	21.03	51.69	31.47	27.19	14.67
2017	70.55	21.57	19.54	29.91	33.97	14.58
2018	21.71	13.36	-29.45	31.61	-15.57	12.58
2019	35.06	14.33	-8.39	30.43	7.25	8.81
2020	32.32	13.13	-27.56	31.97	-4.44	9.42
2021	19.32	10.87	22.6	27.39	24.26	5.22
2022	7.6	11.24	2.92	31.62	16.57	2.26
2023	11.27	13.75	69.74	35.16	12.8	1.08
2024	-5.96	14.03	5.05	20.8	13.22	12.68
Mean	21.22	15.45	13.51	30.23	11.18	9.68

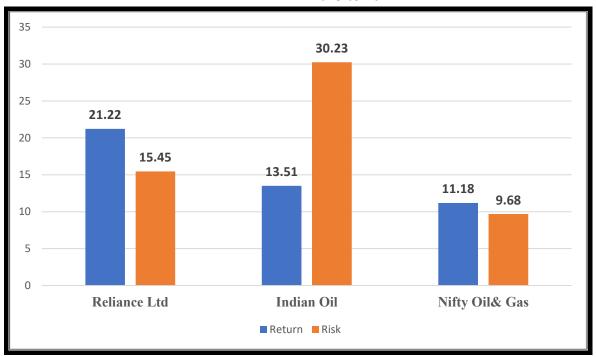
Graph No. 3

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A Graph of Return Risk of selected stocks from Oil& Gas Industry During the Period 2015 to 2024



Inference from the Statement of Return and Risk of Selected Stocks from Oil & Gas Industry (2015– 2024)

The analysis of return and risk data for Reliance Ltd, Indian Oil, and the Nifty Oil & Gas index over the period 2015–2024 reveals the following insights:

- 1. Reliance Ltd showed the highest average return (21.22%) among the three, with a moderate average risk (15.45%). It had exceptionally high returns in 2017 (70.55%) indicating strong performance, especially during that year.
- 2. Indian Oil experienced high volatility with an average risk of 30.23%, significantly higher than Reliance and the Nifty Oil & Gas index. Although it had very strong positive returns in some years (e.g., 2016: 51.69%, 2023: 69.74%), it also faced sharp declines (e.g., 2018: -29.45%, 2020: -27.56%), indicating inconsistency and vulnerability to external shocks.
- 3. Nifty Oil & Gas, being a sectoral index, had more stable performance, with the lowest average risk (9.68%) and a moderate average return (11.18%). Its risk-return profile suggests it is less volatile and more suitable for conservative investors.
- 4. Over the period, 2023 was the best performing year for Indian Oil, while 2017 was the standout year for Reliance. 2020 and 2018 were challenging years for the entire sector, showing widespread negative returns.
- 5. The standard deviation (risk) for Indian Oil remains high throughout, suggesting a higher riskreward trade off, while Reliance has balanced its moderate risk with higher consistent returns.

Table No.6:

Sharpe Ratio of Selected Oil & Gas Stocks (2015–2024)

S. No	Stock Name	Mean Return (%)	Mean Risk (Std. Dev)	Sharpe Ratio
1	Reliance Ltd	21.22	15.45	0.99
2	Indian Oil	13.51	30.23	0.25
3	Nifty Oil & Gas	11.18	9.68	0.55

Interpretation:

- Reliance Ltd has the highest Sharpe Ratio, indicating superior risk-adjusted performance.
- Indian Oil has a low Sharpe Ratio, reflecting high volatility with relatively lower returns.
- Nifty Oil & Gas Index shows moderate risk-adjusted returns.

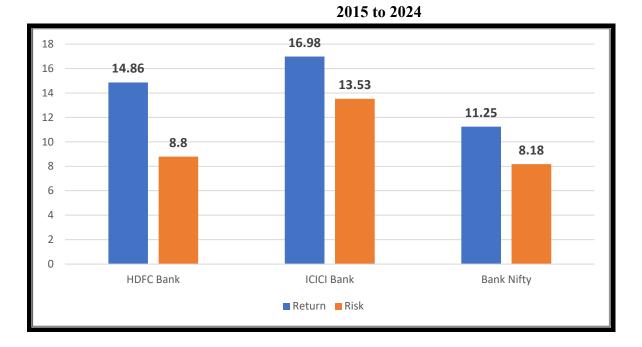
Table No.7:
A Statement of Return & Risk of selected stocks from Banking Industry During the Period 2015 to 2024

	HDFC B	ank	ICICI Bank Bank		Bank Ni	k Nifty	
Year	Return	Risk	Return	Risk	Return	Risk	
2015	13.72	15.14	-25.98	22.53	-9.68	13.83	
2016	11.46	15.13	-2.31	16.79	7.42	11.73	
2017	55.23	16	35.29	15.48	40.5	12.24	
2018	13.31	6.08	14.7	15.91	6.35	7.65	
2019	20.18	6.45	49.63	16.85	18.41	8.04	
2020	12.91	5.05	-0.71	13.5	-2.79	8.11	
2021	3	5.03	38.33	10.41	13.49	5.67	
2022	10.05	5.1	20.36	7.03	21.15	6.53	
2023	4.98	6.1	11.87	8.57	12.34	3.78	
2024	3.72	7.87	28.6	8.22	5.32	4.2	
Mean	14.86	8.80	16.98	13.53	11.25	8.18	

Graph No.3

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A Graph of Return & Risk of selected stocks from Banking Industry During the Period



1.Performance Trends

ICICI Bank:

- > Demonstrated the highest average return (16.98%).
- ➤ However, it also had the highest risk (13.53%), showing greater volatility.
- > This suggests aggressive growth with fluctuating performance—risk-tolerant investors may benefit the most.

HDFC Bank:

- Maintained a steady return (14.86%) with moderate risk (8.80%).
- > More consistent performance compared to ICICI.
- > Indicates strong fundamentals and risk-managed growth—ideal for balanced investors.

Bank Nifty:

- ➤ Offered the lowest return (11.25%) but also the lowest risk (8.18%).
- > As an index, it reflects average sector performance, providing broad exposure with reduced individual stock risk.
- > Suitable for passive or conservative investors.

Table No.8:

Sharpe Ratio Table – Banking Sector (2015–2024)

Stock	Mean	Mean Risk	Risk-Free	Sharpe
Stock	Return (%)	(Std. Dev)	Rate (%)	Ratio
HDFC Bank	14.86	8.80	6	0.97
ICICI Bank	16.98	13.53	6	0.81
Bank Nifty	11.25	8.18	6	0.64

Interpretation:

➤ HDFC Bank has the highest Sharpe Ratio (0.97), reflecting strong risk-adjusted performance.

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- ➤ ICICI Bank shows the highest return but comes with greater volatility, leading to a slightly lower Sharpe Ratio (0.81).
- ➤ Bank Nifty provides the most stable performance, making it suitable for conservative investors, though its Sharpe Ratio is lower (0.64).

Findings

1. IT Sector:

- > TCS recorded the highest Sharpe Ratio (0.53), indicating the best risk-adjusted returns.
- ➤ Infosys and Nifty IT both had a Sharpe Ratio of 0.46.
- > The sector displayed consistent long-term growth with moderate to high volatility.

2. Pharmaceutical Sector:

- > Sun Pharma had the highest Sharpe Ratio (0.28).
- > Dr. Reddy (0.20) and Nifty Pharma (0.18) were less efficient.
- ➤ High return volatility was observed, especially from 2016 to 2020.

3. Oil & Gas Sector:

- ➤ Reliance Ltd had the highest Sharpe Ratio (0.99) among all analysed stocks.
- \triangleright Indian Oil had high volatility and low efficiency (Sharpe Ratio = 0.25).
- Nifty Oil & Gas Index showed moderate returns with low risk (Sharpe Ratio = 0.55).

4. Banking Sector:

- > ICICI Bank had the highest return (16.98%) but also the highest risk (13.53%).
- ➤ HDFC Bank displayed balanced performance with 14.86% return and 8.80% risk.
- ➤ Bank Nifty provided the lowest return (11.25%) with the lowest risk (8.18%), suitable for conservative investors.

Suggestions to Investors:

- 1. Focus on high Sharpe Ratio stocks like Reliance Ltd and TCS for better risk-adjusted returns.
- 2. Avoid overexposure to volatile stocks like Indian Oil and Dr. Reddy unless supported by strong market trends.
- 3. Use sector indices like Nifty IT and Nifty Oil & Gas for diversified and relatively safer investment options.
- 4. Regularly review Sharpe Ratios and performance trends to rebalance portfolios.

Conclusion:

This study clearly demonstrates that risk-adjusted performance varies significantly across sectors in the Indian stock market. While the IT sector, led by TCS, offers consistent and efficient returns, the pharmaceutical sector remains volatile with mixed performance. The Oil & Gas sector shows the greatest divergence, with Reliance Ltd offering outstanding efficiency and Indian Oil reflecting high risk and inconsistency. The banking sector offers mixed performance, with HDFC Bank offering steady returns and ICICI Bank offering higher but more volatile returns. By employing Sharpe Ratio analysis and ANOVA, this study provides valuable insights into the investment potential and risk behaviour of sectoral stocks over a decade. The results underscore the importance of risk-aware investing and the need for diversification when constructing long-term investment strategies.



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