

Critical Evaluation of Stock Price Changes of Value Stock and Growth Stock in India During 2005-2025: Evidence from the Indian Equity Market (2005–2025)

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Department of Finance – R V Institute of Management Dataset: 60 NSE/BSE-Listed Stocks | Period: January 2005 – December 2025 Analysis Based on 255 Monthly Observations per Stock

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ABSTRACT

A detailed comparative financial and statistical analysis of the growth stocks and value stocks has been done with the data of 60 Indian equity securities (30 growth stocks and 30 value stocks) selected from the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE) of India. The study period is from January 2005 to December 2025 with a total of 255 monthly data points for each stock. Multiple financial performance metrics are used in the analysis, such as: Average monthly return, Annualised return, Standard deviation, Sharpe ratio, Value at Risk (VaR) at the 95% and 99% levels of the confidence interval, Regression analysis, Pearson correlation coefficients. The key findings are that growth stocks have outperformed value stocks on all of the primary measures: growth stocks have a higher average monthly return of 1.398% compared to 1.003% for value stocks, a higher annualised return of 18.35% versus 12.84%, and a higher Sharpe ratio of 0.4635 compared to 0.3316 for value stocks. Interestingly, growth stocks also have a lower volatility (SD: 10.662% vs 10.961%) and lower downside risk (VaR 95%: -12.926% vs -13.674%). The differences are significant at 1% level of significance ($t = 3.1753$, $p = 0.0024$). The study also reveals the average return-volatility relationship is statistically insignificant, and weak in all conditions for growth stocks as well as value stocks, which suggests that the volatility of the stocks does not necessarily correspond to its proportionately larger returns in Indian equity markets. The regression analysis shows that volume of trading is not a significant determinant of price dynamics in both groups (average R^2 is around 0.09), indicating that macroeconomic fundamentals play a more important role in the pricing of equities than technical signals based on volume, while in value stocks, the average Multiple R is slightly higher, suggesting that institutional and volume-driven trading in state-owned enterprises may be more influential. Further, the heavy weighting of value stocks in the high risk category is counter to the traditional view of value investing as being less risky, as a large number of value stocks are in cyclical and commodity like industries like metals, oil & gas, PSU banks etc. Consumer, Auto and Cement emerge as the best-performing sectors in growth stocks, and Consumer, FMCG and Cement are the best-performing sectors in value stocks from the sector analysis. The results of this research have many implications to the retail investors, institutional investors and portfolio managers and the academic researchers who do the research on Indian capital markets.

Keywords: Growth Stocks, Value Stocks, Sharpe Ratio, Value at Risk, Indian Equity Market, OLS Regression, Portfolio Performance

INTRODUCTION

Investment decision-making in equity markets remains one of the most critical and complex areas in modern finance. Among the many investment philosophies available to investors, the choice between growth investing and value investing has been a subject of persistent academic debate and practical significance. Growth investing involves the purchase of stocks of companies expected to grow at an above-average rate compared to their industry or the broader market, typically characterised by higher price-to-earnings (P/E) ratios and greater reinvestment of earnings. Value investing, on the other hand, involves the identification and purchase of stocks

believed to be undervalued relative to their intrinsic worth, typically featuring lower valuation multiples, stable dividends, and established cash flows.

The Indian equity market, represented by the NSE and the BSE, presents a unique and dynamic environment for such an investigation. India is one of the fastest-growing major economies globally, with its capital markets reflecting diverse sectoral dynamics — from high-growth technology and consumer companies to capital-intensive public sector undertakings (PSUs), energy firms, and metals producers. The distinction between growth and value stocks in this context is particularly relevant and practically significant.

This research paper undertakes a rigorous comparative analysis of 60 Indian equity securities — 30 categorised as growth stocks and 30 as value stocks — over a period of twenty years from January 2005 to December 2025. The study utilises a comprehensive suite of financial and statistical tools, including return analysis, volatility measurement, risk-adjusted performance metrics (Sharpe ratio), downside risk estimation through VaR, OLS regression of trading volume on price, and Pearson correlation analysis. The primary aim is to determine which investment category delivers superior risk-adjusted returns and to provide data-driven insights for investment strategy formulation.

This study covers a sufficiently long time horizon that encompasses multiple business cycles, market corrections, and economic booms relevant to the Indian market context. It employs a balanced and representative sample of stocks from diverse sectors. It combines quantitative rigour with practical investment insights. The results are valuable to retail investors, fund managers, financial analysts, and academic researchers engaged in Indian equity markets.

LITERATURE REVIEW

The debate between growth and value investing has a long and rich scholarly history. Fama and French (1992) provided foundational evidence that value stocks (low price-to-book ratio) consistently outperform growth stocks over long periods in the United States, attributing the premium to compensating the greater fundamental risk. Their three-factor model later became a cornerstone of asset pricing research globally. Lakonishok, Shleifer, and Vishny (1994) extended this finding and attributed the value premium to investor overreaction and behavioural biases rather than systematic risk, suggesting that value stocks are simply overlooked or irrationally discounted by the market.

Basu (1977) was among the earliest to document that low P/E ratio stocks earned higher returns than high P/E stocks in the United States between 1957 and 1971, providing initial quantitative support for value investing. Chan, Hamao, and Lakonishok (1991) extended these findings to the Japanese market, reinforcing the cross-country applicability of the value premium. More recent studies have examined emerging and developing markets, which are subject to different institutional structures, informational efficiencies, and investor behaviour patterns.

In the Indian context, Sehgal and Tripathi (2005) documented evidence of a value premium on the BSE during the 1990s, consistent with global findings. Choudhary and Choudhary (2010) found that P/E-based value strategies delivered superior returns in India. However, Mohanty (2002) and Taneja (2010) both noted that the persistence of the value premium in India is sensitive to the choice of time period and selection criteria, suggesting that market cycles significantly affect relative performance. More recent work by Rikala (2022) and Nair et al. (2023) examined the behaviour of growth and value portfolios during the COVID-19 pandemic, finding that growth stocks — particularly technology and healthcare names — outperformed dramatically during 2020–2021.

On the risk measurement front, Jorion (2006) provided a comprehensive treatment of Value at Risk as a tool for quantifying downside risk in investment portfolios. Sharpe (1966) introduced the concept of the reward-to-variability ratio, which remains the most widely used measure of risk-adjusted performance. Studies applying these tools to Indian stock market data include work by Bhatt and Vyas (2012), who analysed the performance of Indian mutual funds using Sharpe and Treynor ratios. Research on trading volume and stock price relationships in Indian markets has been explored by Chordia and Swaminathan (2000) at a global level, and by

Krishnan and Menon (2009) specifically in the Indian context, with both studies finding a generally weak relationship.

RESEARCH GAP

While existing literature has extensively documented the growth versus value debate in developed markets, particularly the United States, Europe, and Japan, comparative studies specific to the Indian equity market covering the full post-liberalisation period from 2005 to 2025 with granular monthly data remain limited. Most Indian studies either cover shorter time windows, use small samples, or do not simultaneously incorporate return analysis, risk-adjusted metrics, VaR-based downside risk, OLS regression, and correlation analysis in a unified analytical framework.

Furthermore, existing studies rarely assess the volume-to-price predictive relationship (regression analysis) alongside portfolio performance metrics for both growth and value stock categories simultaneously. The present study directly addresses these gaps by providing a holistic, multi-metric comparative analysis of 60 stocks over 255 monthly observations, making it comprehensive empirical evaluation in the Indian context.

OBJECTIVES OF THE STUDY

The study aims to achieve the following specific objectives:

- To compare the average monthly and annualised returns of growth stocks and value stocks over the study period.
- To evaluate the volatility (standard deviation) of both categories and assess differences in their risk profiles.
- To compute and compare the risk-adjusted performance of growth and value stocks using the Sharpe ratio.
- To measure and compare the downside risk using Value at Risk (VaR) at the 95% and 99% confidence levels.
- To examine the predictive relationship between trading volume and stock price using OLS regression analysis.
- To conduct sector-level performance analysis and identify the dominant sectors in each category.
- To study the relationship and dependency of key financial metrics for both categories.
- To evaluate the return and volatility differences between growth and value stocks.

HYPOTHESES

The following null and alternate hypotheses are formulated for testing:

H₀₁: There is no significant difference in average returns between growth stocks and value stocks.

H₁₁: Growth stocks generate significantly higher average returns than value stocks.

H₀₂: There is no significant difference in risk-adjusted returns (Sharpe ratio) between the two categories.

H₁₂: Growth stocks exhibit a significantly higher Sharpe ratio than value stocks. H₀₃: The variance of monthly returns is equal for growth and value stocks.

H₁₃: The variance of monthly returns differs significantly between growth and value stocks.

H₀₄: Trading volume is a significant predictor of stock price movement (R^2 meaningfully different from zero) for both categories.

H₁₄: Trading volume has negligible predictive power over stock price for both growth and value stocks.

RESEARCH METHODOLOGY

This study adopts a quantitative, empirical research design. The approach is descriptive-analytical in nature: it describes the financial characteristics of both stock categories and conducts statistical tests to compare them. Secondary time-series financial data are used, and no primary data collection (e.g., surveys or interviews) is undertaken. The study is cross-sectional in terms of the number of stocks and longitudinal in terms of the time dimension, making it a panel-style analysis.

Data used in this study is sourced from secondary databases. Monthly closing prices, trading volumes, and turnover figures for each stock were collected from the NSE/BSE historical data repositories. The dataset covers the period from January 2005 to December 2025, resulting in 255 monthly observations per stock. Price-based monthly returns were computed as the percentage change in closing price between consecutive months. Data was cleaned to remove non-trading months and verified for consistency before analysis.

A purposive sampling technique was employed to select the 60 stocks. Growth stocks were identified based on historically high price-to-earnings ratios, above-average revenue growth rates, significant market capitalisation, and sector characteristics (banking, IT, pharmaceuticals, automobile, consumer goods, FMCG). Value stocks were selected based on lower valuation multiples, typically higher dividend yields, and sector profiles associated with commodity-linked or capital-intensive industries (metals, oil and gas, utilities, PSU banks, mining).

The final sample comprises 60 stocks: 30 classified as growth stocks and 30 as value stocks. Each stock carries 255 monthly observations, yielding a total of 15,300 data points. Growth stocks include major Indian equities from banking (HDFC, ICICI, KOTAK, AXIS, INDUS IND), pharmaceuticals (CIPLA, DR. REDDY'S, SUN PHARMA, LUPIN), automobiles (MARUTI, TATA, M&M, BAJAJ, HERO, EICHER), consumer and FMCG names (TITAN, ASIAN PAINTS, NESTLE, BRITANNIA, COLGATE, GODREJ), information technology (HCL, WIPRO, TECH MAHINDRA), and others. Value stocks include PSU banks (SBI, CANARA, PNB), metals (TATA STEEL, JSW STEEL, HINDALCO, VEDL, SAIL), oil and gas (ONGC, BPCL, HPCL, GAIL, IOC), utilities (NTPC, POWERGRID), cement (UTC, ACC, AMBUJA), capital goods (L&T, SIEMENS, BHEL), and FMCG/consumer names.

The analysis incorporates a comprehensive set of financial and statistical measures to evaluate stock performance in a structured manner. The average monthly return is calculated as the arithmetic mean of monthly percentage price changes, while the annualised return is derived using the compound growth formula $(1 + \text{averagemonthlyreturn})^{12} - 1$, ensuring consistency in long-term performance comparison. Risk is assessed through the standard deviation of monthly returns, capturing overall price volatility, and further refined using the annualised Sharpe ratio, computed as $(\text{averagemonthlyreturn} \div \text{standarddeviation}) \times \sqrt{12}$, with the risk-free rate assumed to be 0% for relative comparison purposes. Downside risk is evaluated using Value at Risk (VaR), estimated through historical simulation at both 95% (5th percentile) and 99% (1st percentile) confidence levels. To examine relationships within the data, OLS regression is applied by regressing trading volume on monthly closing prices, with Multiple R and R^2 used to interpret the strength and explanatory power of the model. Additionally, Pearson correlation analysis is conducted to study the relationships between key variables such as returns, standard deviation, Sharpe ratio, and total return. For hypothesis testing, an independent samples t-test is used to determine the statistical significance of differences in mean returns and Sharpe ratios, while Levene's test assesses the equality of variances between growth and value stock returns. All computations and analyses are carried out using Microsoft Excel for regression and ANOVA outputs, alongside Python libraries such as NumPy, Pandas, and SciPy for efficient data processing and statistical aggregation.

DATA ANALYSIS AND INTERPRETATION

Table 1 presents the aggregate comparative performance dashboard for the two categories of stocks. This summary table provides a snapshot of all key financial metrics computed for the study.

Table 1: Comparative KPI Summary — Growth vs Value Stocks

Metric	Growth Stocks	Value Stocks	Difference	Winner
Avg Monthly Return	1.398%	1.003%	+0.395%	Growth
Annualised Return	18.35%	12.84%	+5.51%	Growth
Avg Std Deviation	10.662%	10.961%	Growth lower by 0.299%	Growth
Sharpe Ratio (Ann.)	0.4635	0.3316	+0.1319	Growth
VaR @ 95%	-12.926%	-13.674%	Growth better	Growth
VaR @ 99%	-27.169%	-26.934%	-0.235%	Comparable
Avg R ² (Regression)	0.0906	0.0964	-0.0058	Value (Higher)
Avg Multiple R	0.2435	0.2629	-0.0194	Value (Higher)

(Source : Calculated Value)

The KPI summary clearly demonstrates that growth stocks outperform value stocks on all primary financial metrics. Growth stocks yield an average monthly return of 1.398% compared to 1.003% for value stocks — a difference of 39.5 basis points per month. On an annualised basis, this translates to 18.35% for growth stocks versus 12.84% for value stocks — a significant alpha of 5.51% per annum. The Sharpe ratio advantage (0.4635 versus 0.3316) indicates that growth stocks not only return more but also do so with better per-unit-of-risk efficiency. Growth stocks also exhibit marginally lower volatility (10.662% versus 10.961%) and superior VaR at the 95% confidence level (-12.926% versus

-13.674%), suggesting less downside risk per month. The regression metrics (R² and Multiple R) presented in the table No 3 favour value stocks marginally, indicating a slightly stronger volume-price relationship in the value category.

Pearson Correlation Analysis

Table No 2 presents the Pearson correlation coefficients between key financial metrics, computed separately for growth and value stock portfolios. Correlation analysis helps identify the strength and direction of linear relationships between key variables.

Table No 2 : Pearson Correlation Analysis — Growth and Value Stocks

Variables	Category	r	Strength	p-value	Interpretation
Avg Return vs Std Dev	Growth	0.0742	Weak	0.6967	Positive, weak — higher volatility does not guarantee higher return
Avg Return vs Sharpe	Growth	0.9111	Strong	0.0000	Positive, very strong — high-return stocks dominate Sharpe
Avg Return vs Total Ret	Growth	0.6678	Strong	0.0001	Positive, strong — consistent monthly alpha compounds to wealth
Std Dev vs VaR 95%	Growth	- 0.8277	Strong	0.0000	Negative, strong — more volatile growth stocks face worse VaR
Avg Return vs Std Dev	Value	0.1043	Weak	0.5902	Positive, weak — same pattern holds in value category
Avg Return vs Sharpe	Value	0.8346	Strong	0.0000	Positive, strong — Sharpe driven by return in value stocks

Avg Return vs Total Ret	Value	0.5692	Moderate	0.0013	Positive, moderate — return-wealth link weaker vs growth
Std Dev vs VaR 95%	Value	- 0.9491	Strong	0.0000	Extremely strong — cyclical value stocks most exposed

(Source : Calculated Value)

Several important relationships emerge. First, Avg Return vs Sharpe Ratio shows an extremely strong positive correlation in both categories ($r = 0.9111$ for growth; $r = 0.8346$ for value), confirming that higher-returning stocks also tend to be better risk-adjusted performers. Second, Avg Return vs Total Return shows a strong positive correlation for growth ($r = 0.6678$) and a moderate correlation for value ($r = 0.5692$), indicating that consistent monthly alpha compounds to greater long-run wealth creation. Third, the Std Dev vs VaR 95% relationship shows strong negative correlations in both categories (growth: $r = -0.8277$; value: $r = -0.9491$), confirming that more volatile stocks have worse VaR values. The extreme negative correlation for value stocks ($r = -0.9491$) suggests that volatility is an especially powerful driver of downside risk in the value category. Fourth, the Avg Return vs Std Dev correlation is weak and statistically insignificant in both groups (growth: $r = 0.0742$, $p = 0.6967$; value: $r = 0.1043$, $p = 0.5902$), meaning that tolerating higher volatility alone does not guarantee proportionally higher returns in Indian equity markets.

Regression Analysis: Volume vs Price

Table No 3 presents OLS regression results showing the relationship between monthly trading volume and monthly closing price for growth stocks. Key statistics — Multiple R and R^2 — are reported for each stock.

Table No 3: OLS Regression Results — Selected Growth Stocks (Volume vs Closing Price)

Stock	Mult. R	R^2	Interp.	Stock	Mult. R	R^2	Interp.
HDFC	0.0588	0.0035	Weak	DRREDDY	0.3272	0.1070	Weak
ICICI	0.0758	0.0057	Weak	LUPIN	0.3313	0.1097	Weak
KOTAK	0.3084	0.0951	Weak	MARUTI	0.1690	0.0286	Weak
AXIS	0.0475	0.0023	Weak	M&M	0.5742	0.3298	Moderate
INDUS	0.0951	0.0091	Weak	BAJAJ	0.3181	0.1012	Weak
CIPLA	0.0545	0.0030	Weak	HERO	0.3672	0.1348	Weak
BRITANNIA	0.4573	0.2091	Moderate	PIDLI	0.6467	0.4182	Moderate
HCL	0.5093	0.2593	Moderate	SHREE	0.5049	0.2549	Moderate
GODREJ	0.4468	0.1996	Moderate	TITAN	0.0901	0.0081	Weak
Average	0.2435	0.0906	—	Average	0.2435	0.0906	—

(Source : Calculated Value)

Regression Comparison Summary: Growth Stocks Average R^2 : 0.0906 | Value Stocks Average R^2 : 0.0964 | Growth Stocks Average Multiple R: 0.2435 | Value Stocks Average Multiple R: 0.2629

The regression analysis reveals that trading volume is a weak predictor of stock closing price for both categories. The average R^2 of approximately 0.09 for growth stocks and 0.10 for value stocks implies that trading volume explains only 9–10% of the variation in stock prices. This finding is consistent with the literature suggesting that Indian equity prices are predominantly driven by macroeconomic fundamentals, earnings announcements, policy changes, and broader market sentiment rather than technical volume signals. Within the growth category, PIDLI ($R^2 = 0.4182$) and M&M ($R^2 = 0.3298$) show the strongest volume-price relationship. Value stocks' slightly higher average Multiple R (0.2629 versus 0.2435) may reflect the greater role of institutional and volume-driven trading in state-owned enterprises.

Sector-wise Performance Analysis

Table No 4 shows the sector-wise performance of growth and value stocks, ranked by average monthly return. This analysis identifies the sectors that drive outperformance within each category.

Table No 4 : Sector-wise Performance — Growth vs Value Stocks (Ranked by Avg. Monthly Return)

Growth Sector	# Stocks	Avg Mo. Ret	Value Sector	# Stocks	Avg Mo. Ret
Cement	1	2.269%	Consumer	2	1.334%
Consumer	5	1.810%	Metals	4	1.269%
Auto	6	1.591%	Cement	3	1.225%
Capital Goods	1	1.587%	Cap. Goods	3	1.047%
Banking	5	1.385%	FMCG	5	1.028%
FMCG	3	1.239%	PSU Bank	3	0.954%
Telecom	1	1.217%	Utilities	2	0.800%
Pharma	4	1.090%	Oil & Gas	5	0.561%
IT	3	0.913%	Mining	1	0.477%
Media	1	0.543%	—	—	—

(Source : Calculated Value)

In the growth stock basket, the Cement sector (SHREE CEMENT) leads with 2.269% average monthly return, followed by Consumer (1.810%), Auto (1.591%), and Capital Goods (1.587%). The IT sector is the weakest growth sector at 0.913%, weighed down by WIPRO's near-flat performance. Media (ZEEL) is the single worst-performing sector at 0.543%, reflecting company-specific governance concerns. where Consumer (1.334%) and Metals (1.269%) top the leaderboard. The Oil & Gas sector is the weakest performer in value stocks (0.561%), reflecting structural headwinds faced by public sector oil marketing companies subject to government-mandated pricing restrictions.

Risk Analysis and Value at Risk (VaR)

Table No 5 classifies all stocks by risk level (LOW, MEDIUM, HIGH) based on a combination of Sharpe ratio and VaR 95% criteria. LOW risk requires a Sharpe ratio above 0.60 and VaR 95% better than -12%; HIGH risk is assigned to stocks with Sharpe below 0.35 or VaR significantly worse than average; MEDIUM risk applies to the remaining stocks.

Table No 5 : Risk Classification of Growth and Value Stocks

Risk Level	Category	Key Stocks	Criteria	Count (%)
LOW	Growth	PAGNED, BAJAJ	Sharpe > 0.60 & VaR > -12%	2 / 30 (6.7%)
LOW	Value	HINDUSTANUNILVR	Sharpe > 0.60 & VaR > -12%	1 / 30 (3.3%)
MEDIUM	Growth	TITAN, EICHERMOTO, SHREE, MARUTI, ASIAN, HERO, BRITANNIA + others	Sharpe 0.35-0.60	21 / 30 (70.0%)
MEDIUM	Value	UTC, BRITANNIA, ASIAN, NESTLE, NTPC, LT + others	Sharpe 0.35-0.60	14 / 30 (46.7%)
HIGH	Growth	WIPRO, ZEEL, HDFC, DRREDDY, TATA, KOTAK	Sharpe < 0.35 or VaR worse	7 / 30 (23.3%)
HIGH	Value	ONGC, BPCL, IOC, PNB, BHEL, GAIL, HPCL, POWERGRID + others	Sharpe < 0.35 or VaR worse	15 / 30 (50.0%)

(Source : Calculated Value)

The risk classification reveals a striking distributional asymmetry. Among growth stocks, 70.0% (21 of 30) are classified as MEDIUM risk, 23.3% (7 of 30) as HIGH risk, and only 6.7% (2 of 30) as LOW risk. In contrast, among value stocks, 50.0% (15 of 30) are HIGH risk, only 46.7% (14 of 30) are MEDIUM risk, and a mere 3.3% (1 of 30) is LOW risk. This concentration of value stocks in the HIGH risk category is counterintuitive to the traditional perception of value investing as inherently less risky, and can be explained by the dominance of cyclical, commodity-linked sectors (metals, oil and gas, PSU banks) in the value portfolio, which are subject to severe price swings. Growth stocks, on the other hand, are predominantly in stable sectors such as consumer goods, FMCG, private banking, and pharmaceuticals.

Hypothesis Testing

Table 8 summarises the results of all formal statistical tests conducted in the study to test the four hypotheses formulated in Section 5.

Table 6: Results of Hypothesis Testing

Hypothesis	Test Statistic	p-value	Significance	Conclusion
H1: Growth > Value (Returns)	t = 3.1753	p = 0.0024	Highly Sig. (p<0.01)	REJECT H0 — Supported
H2: Growth Sharpe > Value	t = 2.9100	p = 0.0052	Highly Sig. (p<0.01)	REJECT H0 — Supported
H3: Variance Equality (Levene)	F = 4.8317	p = 0.0320	Significant (p<0.05)	REJECT H0 — Unequal Variances
H4: Volume explains Price (R ²)	Avg R ² ≈0.09	N/A	Low R ² — both groups	Fail to Reject H0 — Macro drives price

(Source : Calculated Value)

H1 (Returns Difference) — The independent samples t-test yields t = 3.1753, p = 0.0024, which is highly significant at the 1% level. The null hypothesis of equal mean returns is rejected, providing strong statistical evidence that growth stocks generate significantly different returns. H2 (Sharpe Ratio) — t = 2.9100, p = 0.0052, again significant at the 1% level; growth stocks' risk-adjusted performance advantage is statistically confirmed. H3 (Variance Equality) — Levene's test yields F = 4.8317, p = 0.0320, significant at the 5% level; the null hypothesis of equal variances is rejected, though the practical difference in standard deviations is small (10.662% vs 10.961%). H4 (Volume-Price Regression) — With an average R² of approximately 0.09 for both categories, H₀₄ cannot be rejected: trading volume does not meaningfully predict stock price for the majority of Indian equities in either category.

RESULTS AND FINDINGS

The study reveals several key findings regarding the comparative performance of growth and value stocks in the Indian equity market. Growth stocks significantly outperform value stocks in terms of returns, delivering a mean monthly return of 1.398% compared to 1.003% for value stocks, with the difference being statistically significant (t = 3.175, p = 0.0024). On an annualised basis, growth stocks generate 18.35% returns versus 12.84% for value stocks, resulting in a substantial differential of 5.51 percentage points per year. In addition to higher returns, growth stocks also demonstrate superior risk-adjusted performance, achieving a Sharpe ratio of 0.4635 compared to 0.3316 for value stocks (p = 0.0052), indicating better returns per unit of risk. Interestingly, contrary to traditional assumptions, growth stocks exhibit slightly lower volatility, with an average standard deviation of 10.662% compared to 10.961% for value stocks; this difference is statistically significant as confirmed by Levene's test (p = 0.0320). This paradox is largely attributed to the presence of stable consumer and FMCG sectors within growth stocks, whereas value stocks are more exposed to cyclical and commodity-driven industries.

Further analysis shows that growth stocks also provide better downside protection, with a Value at Risk (VaR) of -12.926% at the 95% confidence level compared to -13.674% for value stocks, while both categories show

similar risk at the 99% level (-27.169% vs -26.934%). Regression results indicate that trading volume is a weak predictor of stock prices, explaining only about 9–10% of price variation (average R^2 : growth = 0.0906; value = 0.0964), thereby supporting the hypothesis that volume has limited explanatory power in the Indian equity context. Sector-wise, growth stocks are led by Cement, Consumer, and Auto sectors, whereas value stocks are dominated by Consumer, FMCG, and Cement sectors, with Oil & Gas and Mining emerging as the weakest performers among value stocks.

In terms of long-term wealth creation, growth stock PAGNED delivers an exceptional return of 10,661.82%, while in the value category, UTC (3,421.56%), HUL (1,315.48%), and COLGATE (1,075.45%) stand out as strong performers. Risk distribution analysis shows that growth stocks are largely concentrated in the medium-risk category (70.0%), whereas value stocks exhibit a higher concentration in high-risk stocks (50.0%), driven by their exposure to cyclical sectors. Correlation analysis further reveals that the relationship between returns and volatility is weak ($r = 0.07$ for growth and $r = 0.10$ for value), indicating that higher risk does not necessarily translate into proportionally higher returns in the Indian market. Interestingly a notable data anomaly is identified in JSWSTEEL, which shows an unusually high standard deviation of 120.87% (approximately 8.5 times the sample average); this outlier is likely due to a data recording issue and is therefore excluded from aggregate value stock calculations.

DISCUSSION

The findings of this study carry important theoretical and practical implications and largely align with existing literature on growth and value investing in emerging markets. The study objectives are clearly addressed through the analysis: growth stocks are shown to significantly outperform value stocks in terms of average returns ($p = 0.0024$), while volatility comparisons and Levene's test reveal the unexpected result that growth stocks are slightly less volatile. Risk-adjusted performance is evaluated through Sharpe ratios, confirming the superiority of growth stocks, and downside risk analysis using VaR further supports this by showing better protection at the 95% level. The regression analysis indicates low R^2 values across both categories, suggesting that stock prices are influenced more by fundamentals than trading volume, while sector and correlation analyses provide additional insights into market behavior.

This outperformance of growth stocks can be understood in the context of India's economic environment between 2005 and 2025, a period marked by strong GDP growth, rising middle-class consumption, digital transformation, and financial sector expansion. These trends particularly benefited sectors such as private banking, consumer discretionary, automobiles, and healthcare, which dominate the growth stock category. In contrast, value stocks—largely concentrated in PSU banks, oil and gas, and metal sectors—faced challenges such as commodity price fluctuations, regulatory constraints, and structural inefficiencies, which limited their performance. Interestingly, the finding that growth stocks exhibit lower volatility contradicts traditional financial theory, which typically associates higher returns with higher risk. This may be explained by the cyclical nature of value stocks, where sharp boom-bust cycles increase volatility without proportionate returns, as well as the stabilizing influence of institutional investors in high-quality growth companies.

The regression results further reinforce that trading volume is not a strong predictor of price movements in the Indian market, explaining only about 9–10% of variation. This suggests that strategies based primarily on technical indicators like volume may be less effective, while fundamental analysis—focusing on earnings growth, management quality, and competitive positioning—remains more reliable. At the same time, the findings are not entirely one-sided. Certain value stocks such as HUL, COLGATE, UTC, BRITANNIA, and NTPC demonstrate strong risk-adjusted returns and stability, making them suitable for conservative investors, especially during market downturns. Similarly, not all growth stocks perform well; companies like WIPRO, ZEEL, and Tata Motors underperformed significantly over the study period, pulling down the overall category performance. Overall, the results highlight that while growth stocks generally offer superior performance in the Indian context, both growth and value strategies have their own roles depending on investor goals, risk appetite, and market conditions.

CONCLUSION

This study presents comprehensive empirical evidence on the comparative performance of growth and value stocks in the Indian equity market over a twenty-year period from January 2005 to December 2025. Using a dataset of 60 NSE/BSE-listed stocks and a battery of financial and statistical tools, the study conclusively demonstrates that growth stocks have outperformed value stocks on all primary metrics during the study period.

Growth stocks generated higher returns, both monthly and annual, than value stocks on average, as well as higher risk-adjusted returns and lower downside risk, with slightly lower volatility. These differences were statistically significant ($t = 3.175$, $p = 0.0024$), contravening the old rule of risk vs. return. The regression analysis showed that the trading volume only has a small effect on the stock prices ($R^2 = 0.09-0.10$), which means that fundamental analysis plays an important role. Among the value stocks, Consumer, FMCG and Cement were the top growth sectors, whereas among the value stocks, Consumer, Cement and Auto led the way. The research also identified weak stocks like WIPRO, ZEEL, ONGC and IOC, for practical use to Indian equity investors and emerging market research.

RECOMMENDATIONS

Investors looking for long-term capital appreciation should have a higher weightage of their portfolio in growth stocks, namely, the Consumer, Auto, Cement and Private Banking sectors, of which the stocks of companies such as Titan, Asian Paints, Maruti Suzuki, Bajaj Auto, and Shree Cement have performed well in terms of risk-adjusted returns. Value stocks like Hindustan Unilever, Britannia, UltraTech Cement and NTPC can help take the edge off portfolios in market corrections when the allocation is 35-40%. Investors should pay more attention to the fundamental analysis than trading volume signals, and rebalance their portfolios based on the cycle of interest rates, and use VaR for risk management. A word of caution for consistently underperforming stocks such as Wipro, ZEEL, ONGC, ITC and IOC.

LIMITATIONS OF THE STUDY

There are some limitations noted here: Dividends have not been included, transaction costs have been ignored, taxes have not been taken into account, and the effects of liquidity constraints may be less than the actual investor returns, especially for value stocks. The classification of stocks was done qualitatively and not according to dynamic valuation criteria, and the application of a simple regression with a zero risk-free rate could restrict the validity of the outcomes obtained from the valuation of the risk. In addition, the results will only be valid for the Indian market in the 2005-2025 forecast period and may not be completely transferable to other markets or other forecast period.

FUTURE SCOPE

This study can be extended in future by including total returns, advanced asset pricing models, like Fama-French framework, and machine learning methods to analyze and predict the performance of the stocks. Sub-period and event-based analyses could be used to study the behavior of growth and value stocks in various market conditions such as financial crises and changes in policy. A larger sample of emerging markets and time varying risk measure such as rolling Sharpe ratio and VaR would yield more comprehensive and deeper understanding of the changing risk-return relationship.

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