

# A Study on the Performance of Selected Mutual Fund Schemes

Ms. R. Priyanka<sup>1</sup>, Mr. M.Sakthivel<sup>2</sup>

<sup>1</sup>Assistant Professor, Department of Management Studies, EGS Pillay Engineering College, Nagapattinam, Tamil Nadu, India.

<sup>2</sup>MBA Student, Department of Management Studies, EGS Pillay Engineering College, Nagapattinam, Tamil Nadu, India.

Received: 20 May 2026

Revised: 23 May 2026

Accepted: 29 May 2026

Published: 30 May 2026

**Abstract:** This paper compares the performance of three equity and three debt mutual fund schemes in India over 2021–2025 using NAV, Percentage Return, CAGR, Range, and Pearson correlation to evaluate return and stability. Data were sourced from mutual fund reports and financial portals. Results show higher returns and volatility for equity funds, while debt funds offer greater stability and lower risk. The findings highlight the trade-off between growth and safety, offering practical implications for investors and fund managers.

**Keywords:** Mutual Funds, Equity Mutual Funds, Debt Mutual Funds, NAV, CAGR.

## I. INTRODUCTION

Mutual funds are considered to be among the most preferred methods for investing. Through mutual funds, people can invest in stocks, bonds, and other financial securities even if they do not possess any knowledge about the market. Mutual funds in India started off in the year 1963 with UTI, and after 1990, the presence of private companies helped mutual fund companies grow further. These funds are divided into equity funds, debt funds, and hybrid funds depending on the amount of risk and returns they offer. But with so many mutual fund schemes, people find themselves confused. Hence, analyzing equity and debt funds is crucial.

## II. NEEDS OF THE STUDY

1. The study arises from the necessity of knowing the performance of mutual funds over the years.
2. It helps in better decision-making regarding mutual fund investments.
3. Many investors face difficulty in choosing a scheme because of the wide range of options available.
4. The study provides information on risks, returns, and growth of mutual fund investments

## III. RESEARCH GAPS

The earlier research works were centered mostly around either the equity or the debt mutual funds independently. The few studies that considered comparing the performance of both types of mutual fund schemes have relied upon techniques like Percentage Return, CAGR, Range, and Correlation analysis. However, most of the studies conducted to date had relied upon earlier periods of the market and thus did not take into account the current market dynamics due to the increasing trend of SIP investments and online investment platform services. The proposed research paper aims to compare selected equity and debt mutual funds for the period of 2021 to 2025.

## IV. OBJECTIVES OF THE STUDY

- To examine the concept evolution and growth trajectory of mutual funds with emphasis on their role in financial intermediation.
- To evaluate the performance of selected equity mutual fund schemes using key indicators such as net asset value (NAV), return, and risk-adjusted measures.
- To assess the performance of selected debt mutual fund schemes with reference to stability, yield, and comparative risk factor.
- To conduct a comparative analysis of equity and debt mutual fund schemes, highlighting differences in return behavior, volatility, and investor suitability.

- To derive a conclusion and provide insights based on the comparative performance, offering implications for investors and fund managers.

## V. SCOPE OF THE STUDY

1. The study covers both equity and debt mutual fund schemes.
2. It spans a five-year period from 2021 to 2025.
3. NAVs (Net Asset Values) are used as the basis for analysis.
4. The study distinguishes between schemes and evaluates their risk-return behavior.

## VI. LIMITATION

1. The study is based entirely on secondary data from web sources and reports.
2. Only a limited number of mutual fund schemes are included.
3. External factors such as market conditions have not been examined in detail.

## VII. RESEARCH METHODOLOGY

The study focuses on analyzing the performance of selected equity and debt mutual fund schemes in India during the period from 2021 to 2025. The research mainly compares the return, growth, and stability of selected mutual fund schemes using statistical tools such as Percentage Return, CAGR, Range, and Correlation. The study is based on secondary data collected from financial websites, mutual fund reports, and online investment platforms. The required NAV data for selected mutual fund schemes was collected for the period from 2021 to 2025.

The study selected three equity mutual fund schemes and three debt mutual fund schemes for analysis.

Selected Equity Mutual Fund Schemes

- Parag Parikh Flexi Cap Fund
- Nippon India Small Cap Fund
- UTI Nifty 50 Index Fund

Selected Debt Mutual Fund Schemes

- Aditya Birla Sun Life Short Term Fund
- Kotak Corporate Bond Fund
- DSP Gilt Fund

The collected data was analyzed using statistical tools such as Percentage Return, CAGR, Range, and Correlation to measure the performance and relationship between selected mutual fund schemes. Microsoft Excel was used for calculations, tables, and graphical representation of the data. The study helps in understanding the risk and return performance of mutual fund schemes and provides useful information for investors in making investment decisions.

**Sampling:** Three equity and three debt schemes were purposively selected to represent Flexi-cap, Small-cap, Index, Short-term debt, Corporate bond, and Gilt categories. Data: Annual NAVs (end of year) for 2021–2025 were collected from official fund fact sheets, AMFI, and ValueResearch.

**Statistical methods:**

- Percentage Return =  $(\text{EndNAV} - \text{StartNAV}) / \text{StartNAV}$ .
- CAGR =  $(\text{EndNAV} / \text{StartNAV})^{1/4} - 1$ ; Range =  $\max(\text{NAV}) - \min(\text{NAV})$ ;
- Pearson correlation coefficient computed using sample standard deviations with denominator  $n-1$ . Microsoft Excel was used for computation and graphs.

## VIII. REVIEW OF LITERATURE

1. **Ananya Sharma (2026):** Ananya Sharma examined the growth of the systematic investment plan (SIP) and retail investments in the mutual fund industry of India. She noted the role of digital investment platforms as well as increased financial literacy in helping millennials invest in mutual funds.
2. **Raj Mehta & Azain Jaffer (2025):** Raj Mehta & Azain Jaffer evaluated the performances of equity mutual funds in India. Specifically, they assessed the returns of managed mutual funds and investigated the ability of the fund managers to earn abnormal returns by exploiting market inefficiencies. The researchers established that most Indian managed mutual funds do not earn abnormal returns.

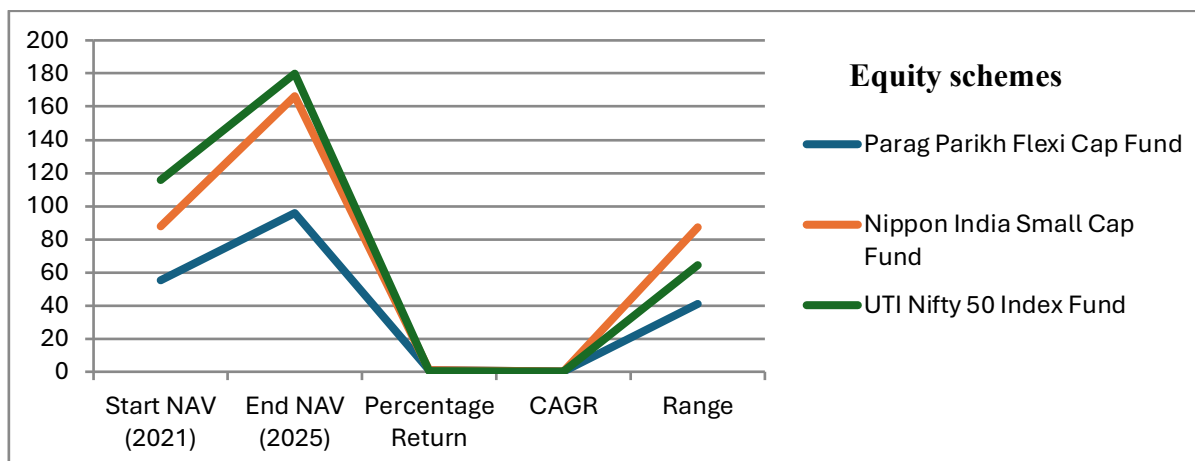
3. **Pankaj K. Agarwal, H. K. Pradhan & Konark Saxena (2025):** Pankaj K. Agarwal, H. K. Pradhan and Konark Saxena investigated the issue of management of mutual funds in India. Specifically, they explored the strategies of managing the liquidity and altering the portfolio composition of the mutual funds based on the prevailing economic situation. The study revealed that liquidity management improved the stability of mutual funds.
4. **Dr. Jyotirmoy Koley (2025):** Dr. Jyotirmoy Koley carried out an analysis of the performances of equity, hybrid, and debt mutual funds in India between 2020 and 2025. This paper made use of statistics in comparing the risk-return ratios among various categories of mutual funds. The result of the research indicates that equity mutual funds yield greater returns, whereas debt mutual funds exhibit relatively stable returns and lower risk.
5. **Dr. P. Muthamil Thirumagal (2024):** Based at Kunthavai Naachiyar Govt Arts College for Women, her collaboration on risk-return analysis provides a localized academic perspective on how Indian funds have performed relative to the specific economic conditions of South India.

## IX. DATA ANALYSIS AND INTERPRETATION

### A. Equity schemes

**Table 1: Comparative Performance Analysis of Selected Mutual Funds Based on NAV Growth, Percentage Return, CAGR, and NAV Range (2021-2025)**

Scheme	Start NAV (2021)	End NAV (2025)	Percentage Return	CAGR	Range
Parag Parikh Flexi Cap Fund	55.3163	95.7732	73.14%	14.70%	40.7103
Nippon India Small Cap Fund	87.6160	166.3286	89.84%	17.38%	86.9982
UTI Nifty 50 Index Fund	115.5117	179.9194	55.76%	11.71%	64.4077



**Figure 1. Performance Comparison of Selected Equity Mutual Funds Based on NAV, Returns, and CAGR**

### Interpretations

- **Parag Parikh Flexi Cap Fund:** Showed 73.14% total return and CAGR of 14.70% with low volatility (Range 40.71). Suitable for moderate investors seeking steady growth.
- **Nippon India Small Cap Fund:** Highest return (89.84%) and CAGR (17.38%), but a wide range (86.99) indicates high volatility. Suitable for aggressive investors with long horizons.
- **UTI Nifty 50 Index Fund:** Delivered 55.76% return and CAGR of 11.71%. Reflects market-linked performance, suitable for investors seeking diversified exposure.

### B. Debt schemes

**Table 2: Comparative Performance Analysis of Selected Debt Mutual Fund Schemes Based on NAV Growth, Percentage Return, CAGR, and Range (2021-2025)**

Scheme	Start NAV (2021)	End NAV (2025)	Percentage Return	CAGR	Range
Aditya Birla Sun Life Short Term Fund	40.03	53.23	32.97%	7.38%	13.20
Kotak Corporate Bond Fund	3004.92	3886.72	29.35%	6.64%	881.80
DSP Gilt Fund	76.23	96.46	26.54%	6.06%	20.23

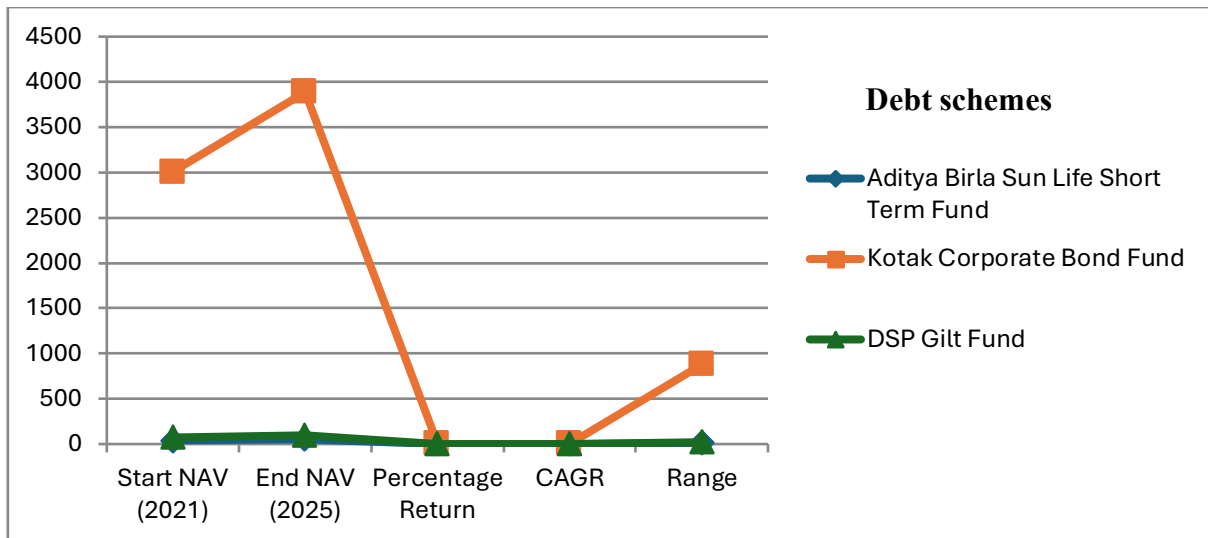


Figure 2. Comparative Evaluation of Debt Mutual Funds Using NAV, Returns, CAGR, and Range Metrics

**Interpretations**

- **Aditya Birla Sun Life Short Term Fund:** 32.97% return, CAGR 7.38%, narrow range (13.20). Suitable for conservative investors prioritizing stability.
- **Kotak Corporate Bond Fund:** 29.35% return, CAGR 6.64%, large NAV values but moderate volatility. Suitable for bond-focused investors.
- **DSP Gilt Fund:** 26.54% return, CAGR 6.06%, stable NAV growth. Suitable for risk-averse investors seeking predictable returns.

**C. Correlation**

**a. Parag Parikh Flexi Cap Fund. Vs Nippon India Small Cap Fund**

Table 3: Year-wise NAV Performance Comparison of Parag Parikh Flexi Cap Fund and Nippon India Small Cap Fund (2021-2025)

YEAR	Parag (NAV)	Nippon (NAV)
2025	95.7732	166.3286
2024	89.6441	174.6142
2023	70.3524	138.5047
2022	55.0629	93.0064
2021	55.3163	87.616

**Data**

- **Parag NAVs (X):** 55.3163, 56.0629, 70.3524, 89.4441, 95.7732
- **Nippon NAVs (Y):** 87.616, 93.0064, 138.5047, 174.6142, 166.3286

**Means**

$\bar{X} = 55.3163 + 56.0629 + 70.3524 + 89.4441 + 95.7732 \div 5 \approx 73.79$

$\bar{Y} = 87.616 + 93.0064 + 138.5047 + 174.6142 + 166.3286 \div 5 \approx 131.61$

**Deviations**

Subtract the mean from each value:

Table 4: Mean Deviation Calculation of Annual NAVs for Selected Equity Mutual Funds

Year	X (Parag)	X - $\bar{X}$	Y (Nippon)	Y - $\bar{Y}$
2021	55.3163	-18.47	87.616	-43.99
2022	56.0629	-17.73	93.0064	-38.60
2023	70.3524	-3.44	138.5047	+6.89
2024	89.4441	+15.65	174.6142	+43.00
2025	95.7732	+21.98	166.3286	+34.72

**Multiply Deviations**

$(X - \bar{X})(Y - \bar{Y})$ :

- 2021:  $(-18.47)(-43.99) \approx 812.9$

- 2022:  $(-17.73)(-38.60) \approx 684.0$
- 2023:  $(-3.44)(6.89) \approx -23.7$
- 2024:  $(15.65)(43.00) \approx 672.9$
- 2025:  $(21.98)(34.72) \approx 762.9$

**Sum = 2909.0**

### Standard Deviations

- **For Parag:**

$$\sum(x-\bar{x})^2 = 1020.9$$

$$S_x = \sqrt{1020.9/4}$$

$$S_x \approx 15.95.$$

- **For Nippon:**

$$\sum(y-\bar{y})^2 = 5667.6$$

$$= 5667.6.$$

$$S_y = \sqrt{5667.6/4} \approx 37.62.$$

### Correlation Formula

$$r = \frac{\sum((x-\bar{x})(y-\bar{y}))}{(n-1)S_x S_y}$$

$$r = \frac{2909.0}{4.15.95 * 37.62} = 0.965$$

The correlation coefficient ( $r = 0.965$ ) indicates a very strong positive correlation between the two funds compared. This means their NAVs moved almost in the same direction during the analysis period — when one fund's NAV increased, the other also showed an upward trend. The value being close to **+1** confirms that the relationship is highly linear and consistent.

### b. Kotak Corporate Bond Fund Vs DSP Gilt Fund

**Table 5: Year-wise NAV Performance Comparison of Kotak Corporate Bond Fund and DSP Gilt Fund (2021-2025)**

Year	Kotak (X)	DSP (Y)
2021	3004.92	76.23
2022	3115.27	78.28
2023	3329.26	83.64
2024	3604.80	92.29
2025	3886.72	96.46

Means

$$\bar{X} = 3004.92 + 3115.27 + 3329.26 + 3604.80 + 3886.725 = 3388.99$$

$$\bar{Y} = 76.23 + 78.28 + 83.64 + 92.29 + 96.465 = 85.38$$

Deviations

Subtract means:

**Table 6: Mean Deviation Analysis of NAV Values for Kotak Corporate Bond Fund and DSP Gilt Fund (2021-2025)**

Year	X - $\bar{X}$	Y - $\bar{Y}$
2021	-384.07	-9.15
2022	-273.72	-7.10
2023	-59.73	-1.74
2024	+215.81	+6.91
2025	+497.73	+11.08

Cross Products

$(X - \bar{X})(Y - \bar{Y})$

- 2021:  $(-384.07)(-9.15) = 3515.2$
- 2022:  $(-273.72)(-7.10) = 1942.4$
- 2023:  $(-59.73)(-1.74) = 103.9$

- 2024:  $(215.81)(6.91) = 1491.2$
- 2025:  $(497.73)(11.08) = 5514.2$

**Sum = 12,567.0**

Sum of Squares

- For Kotak:  $\sum(X - \bar{X})^2 = 540,000.6$
- For DSP:  $\sum(Y - \bar{Y})^2 = 318.9$

Standard Deviations

$$S_x = \sqrt{540000.6/4} = 367.0$$

$$S_y = \sqrt{318.9/4} = 8.93$$

F. Correlation Formula

$$r = \frac{\sum((x-\bar{x})(y-\bar{y}))}{(n-1) \cdot S_x \cdot S_y}$$

$$r = \frac{12567.0}{2 \cdot 4 \cdot 367.0 \cdot 8.93}$$

$$r \approx 0.9933$$

The correlation coefficient is 0.9933, showing an extremely strong positive correlation between Kotak Corporate Bond Fund and DSP Gilt Fund NAVs. Their NAVs move almost identically over time.

### c. Nippon India Small Cap Fund Vs Kotak Corporate Bond Fund

Data

**Table 7: Year-wise NAV Performance Comparison Between Nippon India Small Cap Fund and Kotak Corporate Bond Fund (2021–2025)**

Year	Nippon (X)	Kotak (Y)
2021	87.62	3004.92
2022	93.01	3115.27
2023	138.50	3329.26
2024	174.61	3604.80
2025	166.33	3886.72

Means

$$\bar{X} = 87.62 + 93.01 + 138.50 + 174.61 + 166.335 = 131.21$$

$$\bar{Y} = 3004.92 + 3115.27 + 3329.26 + 3604.80 + 3886.725 = 3388.99$$

Deviations

Subtract means:

**Table 8: Year-wise Mean Deviations of NAVs in Equity and Debt Mutual Funds**

Year	X - $\bar{X}$	Y - $\bar{Y}$
2021	-43.59	-384.07
2022	-38.20	-273.72
2023	+7.29	-59.73
2024	+43.40	+215.81
2025	+35.12	+497.73

Cross Products

$(X - \bar{X})(Y - \bar{Y})$ :

- 2021:  $(-43.59)(-384.07) = 16,740.9$
- 2022:  $(-38.20)(-273.72) = 10,467.0$
- 2023:  $(7.29)(-59.73) = -435.5$
- 2024:  $(43.40)(215.81) = 9,362.6$
- 2025:  $(35.12)(497.73) = 17,474.0$

**Sum = 53,609.0**

Sum of Squares

- For Nippon:  $\sum(X - \bar{X})^2 = 5,042.9$

- For Kotak:  $\sum(Y - \bar{Y})^2 = 540,000.6$

Standard Deviations

$$S_x = \sqrt{5042.94/4} = 35.5$$

$$S_y = \sqrt{540000.6/4} = 367.0,$$

7. Correlation Formula

$$r = \frac{\sum((x - \bar{x})(y - \bar{y}))}{(n-1) \cdot S_x \cdot S_y}$$

$$r = \frac{=53609.0}{4 \cdot 35.5 \cdot 367.0} = 0.9200$$

The correlation coefficient is 0.9200, confirming a very strong positive correlation between Nippon India Small Cap Fund and Kotak Corporate Bond Fund NAVs. Despite being in different categories (equity vs debt), their NAVs moved in a similar upward pattern during the analysis period.

## X. FINDINGS

Equity mutual funds outperformed debt funds in terms of returns, but with higher volatility. Nippon India Small Cap Fund achieved the highest CAGR (17.38%), while Parag Parikh Flexi Cap Fund balanced growth and stability. Debt funds such as Aditya Birla Short Term, Kotak Corporate Bond, and DSP Gilt offered consistent but lower returns. Correlation analysis confirmed strong positive relationships among schemes, indicating similar NAV movement patterns. Overall, equity funds are growth-oriented, while debt funds provide stability.

## XI. SUGGESTION

- Investors should align fund choice with risk tolerance and time horizon.
- Equity funds suit growth-oriented investors; debt funds suit conservative investors. SIPs are recommended for disciplined investing.
- Historical performance, CAGR, and volatility must be reviewed before selection. Fund houses should enhance investor literacy to support informed decisions.

## XII. CONCLUSION

The comparative analysis of equity and debt mutual funds (2021–2025) shows equity schemes delivered higher returns at greater volatility, while debt schemes ensured stable growth with lower risk. Nippon India Small Cap Fund was the top performer, whereas debt schemes provided consistent NAV appreciation. The study confirms the trade-off between risk and return, reinforcing the importance of diversification in mutual fund investment planning.

## XIII. REFERENCES

1. Ananya Sharma, "Capital Structure and Firm Performance in Different Economic Conditions," *Economics, Finance and Management Review*, vol. 3, no. 23, pp. 36–47, 2025. [Google Scholar](#) | [Publisher Site](#)
2. Raj Mehta and Azain Jaffer, "Alpha In Indian Mutual Fund Returns," SSRN, 2025. [Google Scholar](#) | [Publisher Site](#)
3. Pankaj K. Agarwal, H K Pradhan, and Konark Saxena, "Do Mutual Funds Make Active and Skilled Liquidity Choices in Portfolio Management? Evidence from India," *Emerging Markets Finance and Trade*, vol. 62, no. 7, pp. 2162–2176, 2025. [Google Scholar](#) | [Publisher Site](#)
4. Jyotirmoy Koley, "Customer's Satisfaction Towards Sustainable Banking Services of Public Sector Banks in India: A Study on SBI in the District of Hooghly, West Bengal," *Academia*, 2023. [Google Scholar](#) | [Publisher Site](#)
5. Dr. P. Muthamil Thirumagal, "Examining the Bibliometric Trends of Green Recruitment and Selection (GRS)," *International Journal of Arts, Science and Humanities*, vol. 11, no. 1(s), pp. 49–58, 2024. [Publisher Site](#)