

# A STUDY ON PERFORMANCE EVALUATION OF SELECTED MUTUAL FUNDS IN INDIA

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## Abstract

*In the Indian Capital market various platforms for the investor to take a position their money for getting more return. Among equity share, bond, Treasury bill, bond, open-end fund then many, but within the Indian capital market, an open-end fund is one among the foremost favorable platforms for an investor to increase their wealth. That is why here we are conducting a study on selected mutual funds in India, the sample of the study is 7 mutual funds The Financial ratio analysis is employed for performance evaluation of fund, therein taking NAV (Net assets value) and return of the three years from 17th July 2017 to 2019. Finding Sharpe ratio, Variance, BETA, and Jensen's alpha on the bases of three-year data. In this study found market sentiment affect more in aggressive hybrid open-end fund compare to conservative.*

**Keyword:** Standard deviation, Indian Capital Market, Sharpe ratio, Jensen's Alpha, BETA, Mutual Fund

## INTRODUCTION

Mutual funds are one of the most popular investment options these days. A mutual fund is an investment vehicle formed when an asset management company (AMC) or fund house pools investments from several individuals and institutional investors with common investment objectives. A fund manager, who is a finance professional, manages the pooled investment. The fund manager purchases securities such as stocks and bonds that are in line with the investment mandate.

Mutual funds are an excellent investment option for individual investors to get exposure to an expert managed portfolio. Also, you can diversify your portfolio by investing in mutual funds as the asset allocation would cover several instruments. Investors would be allocated with fund units based on the amount they invest. Each investor would hence experience profits or losses that are directly proportional to the amount they invest. The main intention of the fund manager is to provide optimum returns to investors by investing in securities that are in sync with the fund's objectives. The performance of mutual funds is dependent on the underlying assets.

### Types of Mutual Funds

Mutual funds in India are broadly classified into equity funds, debt funds, and balanced mutual funds, depending on their asset allocation and equity exposure. Therefore, the risk assumed and returns provided by a mutual fund plan would depend on its type. We have broken down the types of mutual funds in detail below:

#### 1. Equity Funds

Equity funds, as the name suggests, invest mostly in equity shares of companies across all market capitalizations. A mutual fund is categorized under equity fund if it invests at least 65% of its portfolio in equity instruments. Equity funds have the potential to offer the highest returns among all classes of mutual funds. The returns provided by equity funds depend on the market movements, which are influenced by several geopolitical and economic factors. The equity funds are further classified as below:

#### Small-Cap Funds

Small-cap funds are those equity funds that predominantly invest in equity and equity-linked instruments of companies with small market capitalization. SEBI defines small-cap companies as those that are ranked after 251 in market capitalization.

#### Mid-Cap Funds

Mid-cap funds are those equity funds that invest primarily in equity and equity-linked instruments of companies with medium market capitalization. SEBI defines mid-cap companies as those that are ranked between 101 and 250 in market capitalization.

### **Large-Cap Funds**

Large-cap funds are those equity funds that invest mostly in equity and equity-linked instruments of companies with large market capitalization. SEBI defines large-cap companies as those that are ranked between 1 and 100 in market capitalization.

### **Multi-Cap Funds**

Multi-Cap Funds invest substantially in equity and equity-linked instruments of companies across all market capitalizations. The fund manager would change the asset allocation depending on the market condition to reap the maximum returns for investors and reduce the risk levels.

### **Sector or Thematic Funds**

Sectoral funds invest principally in equity and equity-linked instruments of companies in a particular sector like FMCG and IT. Thematic funds invest in equities of companies that operate with a similar theme like travel.

### **Index Funds**

Index Funds are a type of equity funds having the intention of tracking and emulating the performance of a popular stock market index such as the S&P BSE Sensex and NSE Nifty50. The asset allocation of an index fund would be the same as that of its underlying index. Therefore, the returns offered by index mutual funds would be similar to that of its underlying index.

### **ELSS**

Equity-linked savings scheme (ELSS) is the only kind of mutual funds covered under Section 80C of the Income Tax Act, 1961. Investors can claim tax deductions of up to Rs 1,50,000 a year by investing in ELSS.

## **2. Debt Mutual Funds**

Debt mutual funds invest mostly in debt, money market and other fixed-income instruments such as treasury bills, government bonds, certificates of deposit, and other high-rated securities. A mutual fund is considered a debt fund if it invests a minimum of 65% of its portfolio in debt securities. Debt funds are ideal for risk-averse investors as the performance of debt funds is not influenced much by the market fluctuations. Therefore, the returns provided by debt funds are very much predictable. The debt funds are further classified as below:

### **Dynamic Bond Funds**

Dynamic Bond Funds are those debt funds whose portfolio is modified depending on the fluctuations in the interest rates.

### **Income Funds**

Income Funds invest in securities that come with a long maturity period and therefore, provide stable returns over time. The average maturity period of these funds is five years.

### **Short-Term and Ultra Short-Term Debt Funds**

Short-term and ultra-short-term debt funds are those mutual funds that invest in securities that mature in one to three years. These funds are ideal for risk-averse investors.

### **Liquid Funds**

Liquid funds are debt funds that invest in assets and securities that mature within ninety-one days. These mutual funds generally invest in high-rated instruments. Liquid funds are a great option to park your surplus funds, and they offer higher returns than a regular savings bank account.

### **Gilt Funds**

Gilt Funds are debt funds that invest in high-rated government securities. It is for this reason that these funds possess lower levels of risk and are apt for risk-averse investors.

### **Credit Opportunities Funds**

Credit Opportunities Funds mostly invest in low rated securities that have the potential to provide higher returns. Naturally, these funds are the riskiest class of debt funds.

### **Fixed Maturity Plans**

Fixed maturity plans (FMPs) are close-ended debt funds that invest in fixed income securities such as government bonds. You may invest in FMPs only during the fund offer period, and the investment will be locked-in for a predefined period.

### 3. Balanced or Hybrid Mutual Funds

Balanced or hybrid mutual funds invest across both equity and debt instruments. The main objective of hybrid funds is to balance the risk-reward ratio by diversifying the portfolio. The fund manager would modify the asset allocation of the fund depending on the market condition, to benefit the investors and reduce the risk levels. Investing in hybrid funds is an excellent way of diversifying your portfolio as you would gain exposure to both equity and debt instruments. The debt funds are further classified as below:

#### Equity-Oriented Hybrid Funds

Equity-oriented hybrid funds are those that invest at least 65% of its portfolio in equities while the rest is invested in fixed-income instruments.

#### Debt-Oriented Hybrid Funds

Debt-oriented hybrid funds allocate at least 65% of its portfolio in fixed-income instruments such as treasury bills and government securities, and the rest is invested in equities.

#### Monthly Income Plans

Monthly income plans (MIPs) majorly invest in debt instruments and aim at providing a steady return over time. The equity exposure is usually limited to under 20%. You can decide if you would receive dividends on a monthly, quarterly, or annual basis.

#### Arbitrage Funds

Arbitrage funds aim at maximizing the returns by purchasing securities in one market at lower prices and selling them in another market at a premium. However, if the arbitrage opportunities are not available, then the fund manager may choose to invest in debt securities or cash equivalents.

## LITERATURE REVIEWS

**S TRIPATHI, DRGP JAPEE** (2020) researched fifteen equity mutual funds of different categories based on the market capitalization of companies. Used different financial ratios for the evaluation of funds. They found most equity mutual funds are performing well, but when a sharp fall in NIFTY 50 in 2019 is affecting the return of the mutual fund.

**KB Sharma** (2020) found that three funds have performed well, and two funds had not performed well during the study period from the selected five Debt funds. The sharp fall in the NIFTY during the year 2019 has impacted the performance of all the selected funds. statistical parameters used for performance evaluation were alpha, beta, standard deviation.

**S Tripathi** (2020) concluded that people are aware of a mutual fund but still, very few peoples are investing in mutual funds. Respondents are preferring equity, hybrid & debt, respectively. 75% of respondents are preferring a Systematic Investment Plan (SIP). Respondents are also aware of share market functioning. Respondents know that the Asset Management Company (AMC) invest their money in Share Market. Primary data was used for research.

**CMA Panigrahi et. al** (2020) studied an analysis of ten equities linked saving scheme mutual funds. Using financial ratios and tools for analysis including the average return, coefficient of determination (R<sup>2</sup>), S.D, Beta, Sharpe ratio, Jensen alpha. They found a more attractive return in ELSS mutual funds and takes a tax benefit of 1.5 lakh.

## OBJECTIVE OF STUDY

- The main purpose of the study is to get information about the performance of mutual funds in India.
- To look at the arrival from the selected equity mutual funds
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- To identified security market return with fund return.
- Finding out that Mutual fund is good investment instrument for investors.

## RESEARCH METHODOLOGY

#### Sources of Data

These data examination depends on secondary data collected from various Asset Management Companies (AMCs).

**Duration of study**

Three years from 17th July 2017 to 2019

**Parameters for analysis**

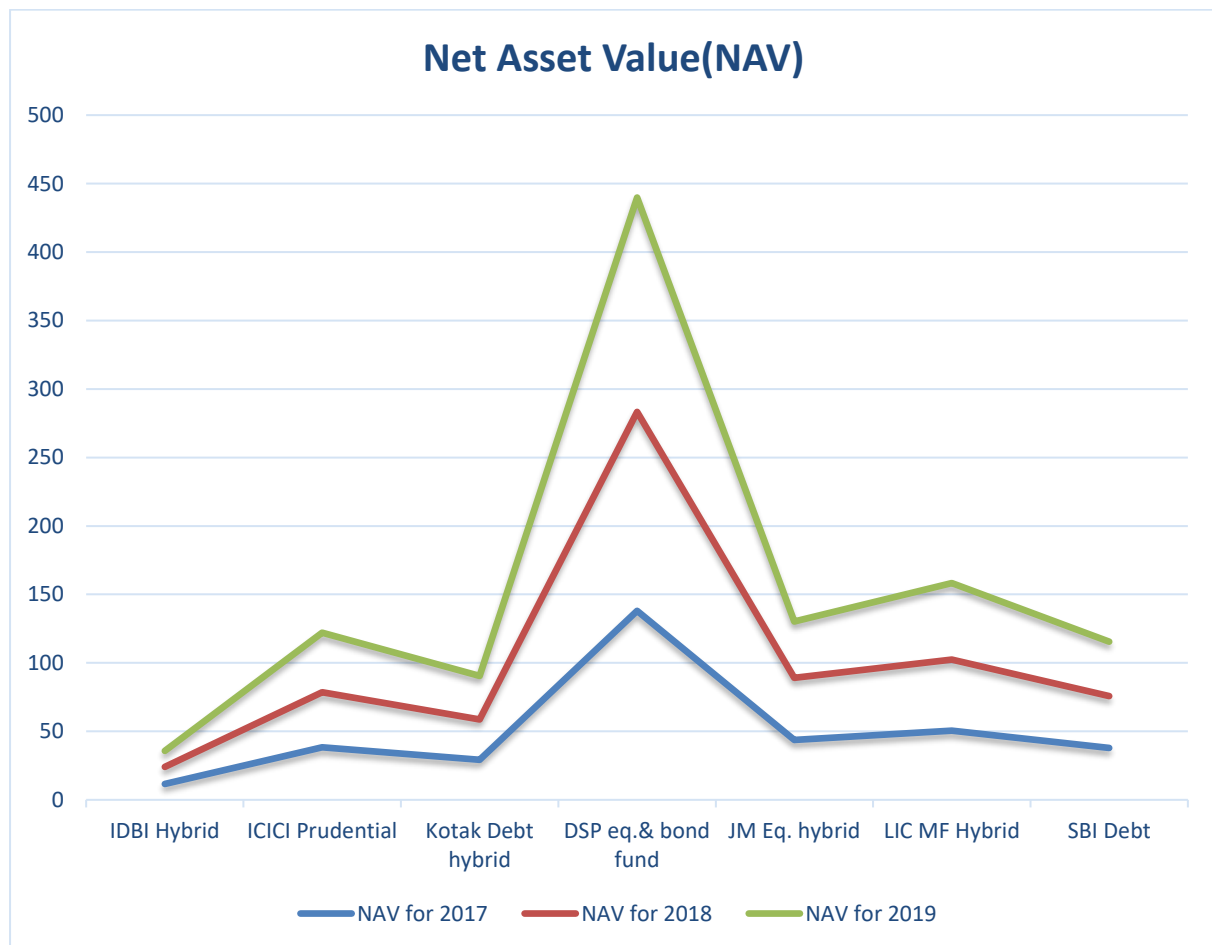
- 1) Returns
- 2) Standard Deviation
- 3) Beta
- 4) Sharpe ratio
- 5) Jensen's ratio

**DATA ANALYSIS**

**Table 1 Conservative funds**

No.	Fund name	NAV for 2017	Return for 2017	NAV for 2018	Return for 2018	NAV for 2019	Return for 2019
1	IDBI Hybrid	11.59	1.02%	12.46	-2.00%	11.69	1.80%
2	ICICI Prudential	38.33	6.61%	40.22	7.45%	43.53	6.68%
3	Kotak Debt hybrid	29.21	5.34%	29.46	7.64%	31.83	7.28%
4	DSP eq.& bond fund	138	3.46%	145.28	3.59%	156.54	1.79%
5	JM Eq. hybrid	43.64	0.86%	45.48	-0.77%	41.18	-8.72%
6	LIC MF Hybrid	50.61	6.01%	51.77	7.93%	55.89	7.88%
7	SBI Debt	37.80	3.69%	37.89	5.45%	39.90	5.60%

**Chart 1**



<https://www.gapgyan.org/>

Chart 2

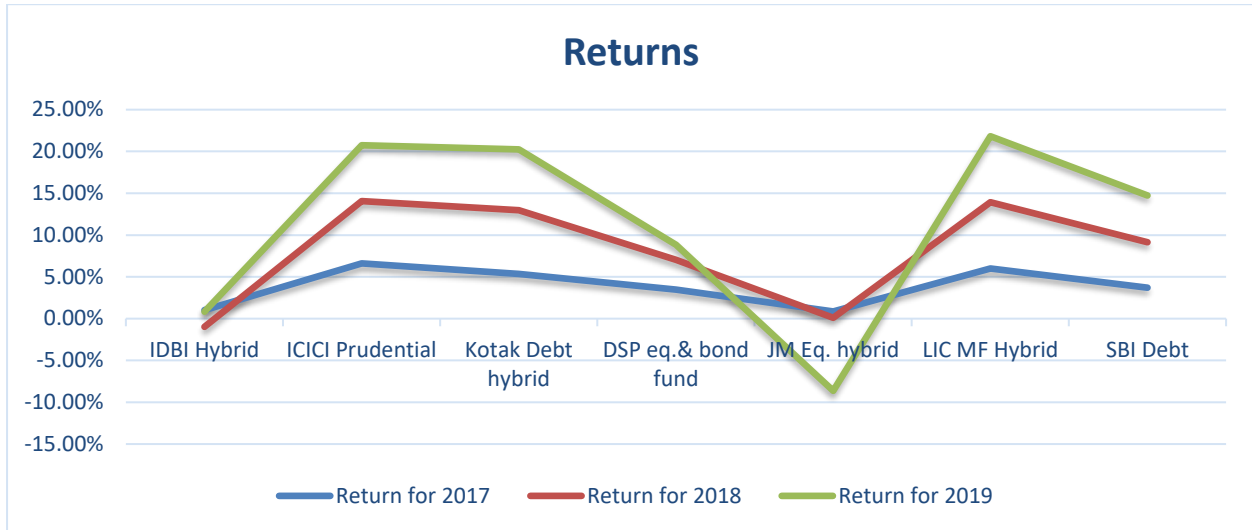
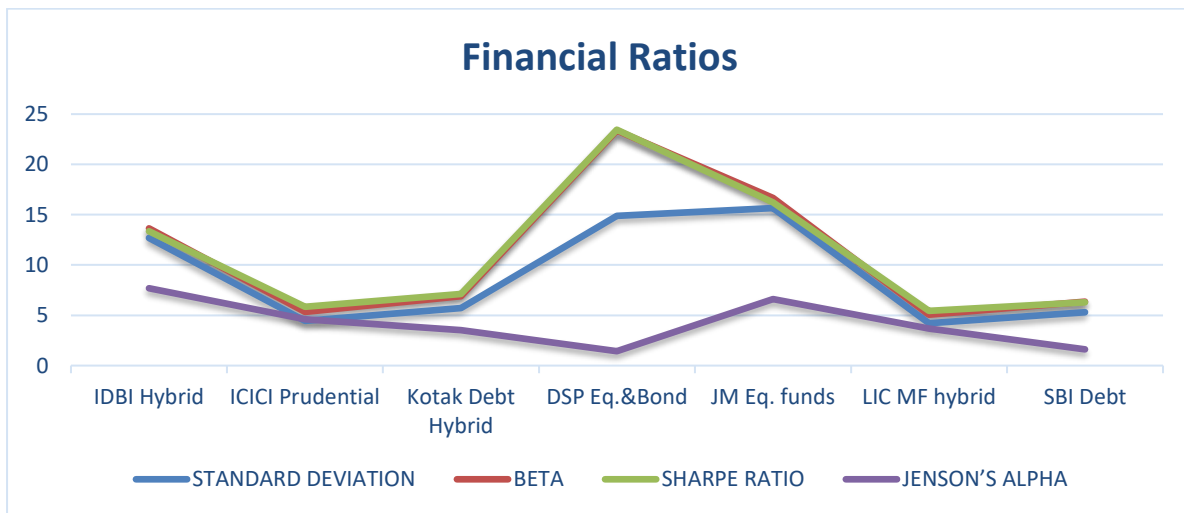


Table 2 Aggressive fund

No.	Fund name	STANDARD DEVIATION	BETA	SHARPE RATIO	JENSON'S ALPHA
1	IDBI Hybrid	12.69	0.94	-0.27	-5.67
2	ICICI Prudential	4.45	0.88	0.52	-1.25
3	Kotak Debt Hybrid	5.71	1.2	0.21	-3.59
4	DSP Eq.& Bond	14.9	8.47	0.08	-22.02
5	JM Eq. funds	15.66	1.02	-0.46	-9.61
6	LIC MF hybrid	4.21	0.85	0.38	-1.76
7	SBI Debt	5.29	1.08	-0.07	-4.69



### FINDINGS

At the end of the year 2017 NAV & TOTAL RETURN for selected schemes (IDBI Hybrid 11.59 & 1.02%, ICICI Prudential 38.33 & 6.61%, Kotak Debt Hybrid 29.21 & 5.34%, DSP Eq.&Bond 138 & 3.46%, JM Eq. funds 43.64 & 0.86%, LIC MF hybrid 50.61 & 6.01%, SBI Debt 37.80 & 3.69%)

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At the end of the year 2017 NAV & TOTAL RETURN for selected schemes (IDBI Hybrid 11.69 & 1.02%, ICICI Prudential 38.33 & 6.61%, Kotak Debt Hybrid 29.21 & 5.34%, DSP Eq.&Bond 138 & 3.46%, JM Eq. funds 43.64 & 0.86%, LIC MF hybrid 50.61 & 6.01%, SBI Debt 37.80 & 3.69%)

In IDBI Hybrid Fund it has a standard deviation of fund is 12.69 and beta value of the fund is 0.94 which means the fund is low volatile and where it has Sharpe's Ratio of the fund is -0.27 and Jensen's Alpha of fund is -5.67 which says that the fund is a better risk-adjusted return to benchmark indices, and it has performed well by providing a better return to the investors.

In ICICI Prudential Fund it has a standard deviation of fund is 4.45 and beta value of the fund is 0.88 which means the fund is very low volatile and where it has Sharpe's Ratio of the fund is 0.52 and Jensen's Alpha of fund is (-1.25) which says that the fund is a better risk-adjusted return to benchmark indices, and it has performed well by providing a better return to the investors.

In KOTAK Debt Hybrid Fund, it has a standard deviation of fund is 5.71 and beta value of the fund is 1.2 which means the fund is very low volatile and where it has Sharpe's Ratio of the fund is 0.21 and Jensen's Alpha of fund is (-3.59) which says that the fund is a better risk-adjusted return to benchmark indices, and it has performed well by providing a better return to the investors.

In DSP Equity & Bond Fund it has a standard deviation of fund is 14.9 and beta value of the fund is 8.47 which means the fund is very high volatile and where it has Sharpe's Ratio of the fund is 0.08 and Jensen's Alpha of fund is (-22.02) which says that the fund is a very poor risk-adjusted return to benchmark indices, and it has not performed well by providing a poor return to the investors.

In JM Equity Fund it has a standard deviation of fund is 15.66 and beta value of the fund is 1.02 which means the fund is very high volatile and where it has Sharpe's Ratio of the fund is -0.46 and Jensen's Alpha of fund is (-9.61) which says that the fund is a very poor risk-adjusted return to benchmark indices, and it has not performed well by providing a poor return to the investors.

In LIC Hybrid Mutual Fund it has a standard deviation of fund is 4.21 and beta value of the fund is 0.85 which means the fund is very high volatile and where it has Sharpe's Ratio of the fund is 0.38 and Jensen's Alpha of fund is (-1.76) which says that the fund is a very poor risk-adjusted return to benchmark indices, and it has not performed well by providing a poor return to the investors.

In SBI Debt Fund it has a standard deviation of fund is 5.29 and beta value of the fund is 1.08 which means the fund is very high volatile and where it has Sharpe's Ratio of the fund is -0.07 and Jensen's Alpha of fund is (-4.69) which says that the fund is a very poor risk-adjusted return to benchmark indices, and it has not performed well by providing a poor return to the investors.

## CONCLUSION

The study is conducted based on seven selected mutual funds. From the foregoing performance analysis of the selected seven funds, 3 funds have performed well, and 4 funds had not performed well during the study period. In the ultimate analysis, it may be concluded that all the funds have performed well in the high volatile market movement expect DSP equity & bond fund, JM Equity fund, LIC Hybrid Mutual Fund, SBI Debt Fund. Therefore, investors need to consider statistical parameters like Jensen's alpha, beta, standard deviation, Sharpe Ratios while investing in mutual funds apart from considering NAV and Total Return to ensure consistent performance of mutual funds.

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