

**AN EXPLORATORY STUDY OF MUTUAL FUNDS PERFORMANCE IN INDIA****Dr. Ramchandra D. Patil**

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**Abstract:****Purpose:**

The aim of the current research paper was to examine the performance of mutual fund schemes in India from the financial year 2010–11 to 2019–2020 in terms of Assets Under Management (AUM). Demonetization's effects on mutual fund performance in 2016 were also envisioned to be studied in relation to mutual fund scheme performance in previous years.

**Design /Methodology:**

The current study's basis is secondary data that was collected from a variety of sources, notably SEBI annual reports. For the purpose of this analysis, the performance of mutual fund investments during the previous ten years, from 2010–11 to 2019–20, has been used. Additionally, the researcher used several statistical techniques, like descriptive statistics, correlation, and coefficients of variation, to assess the data that had been collected. The following types of mutual fund schemes have been taken into account in the current study: exchange traded funds, balanced schemes, income/debt-oriented, growth/equity-oriented, and fund of funds investing overseas. The data are classified, and the outcomes are presented, using tabular and graphical representations.

**Findings:**

According to the present study, all mutual fund schemes have had consistent performance over the past 10 years. Whereas, during the duration of the study period, the contribution of income/debt oriented mutual fund schemes to total Assets Under Management (AUM) has

consistently been the most significant. In terms of Average Annual Growth Rate (AAGR), mutual fund schemes have performed 14.76 per cent. In comparison to other mutual fund schemes, exchange traded funds with an AAGR of 26.93 per cent and balanced funds with an AAGR of 25.10 per cent exhibit high growth rates. Additionally, it was found that the demonetization resulted in a nearly 50% fall in the yearly growth rate of mutual fund schemes in 2016 compared to 2015.

**Research Limitations/ implications:**

The present study is confined to the performance of Mutual Fund Schemes in India. It based purely on the secondary data collected for 10 years' time period starting from 2010-11 till 2019-20. The study's objectives are stated, and the performance of mutual fund scheme during the previous ten years is examined using secondary data collected from SEBI annual reports only. The study is restricted to the effects of demonetization, which can be extended further considering other factors. The study's scope is limited to India only.

**Originality:**

This research examined the performance of mutual fund schemes in India in terms of Assets Under Management (AUM) from 2010–11 to 2019–2020. Five different types of mutual funds schemes were used in this study to analyze the performance of mutual funds over a ten-year period in India. It compared the impact of demonetization on mutual fund performance in 2016 to that of mutual fund scheme performance in earlier year. For analysing the performance of the investments in mutual funds in India statistical techniques such as descriptive statistics, coefficient of variation, average annual growth rate (AAGR), compounded annual growth rate (CAGR), correlation between various types of funds are determined to find out the relationship between various kinds / schemes of mutual funds. The research may be beneficial in developing future policy for the mutual fund company.

**Keywords:** Securities, Financial Assets, Compound Growth Rate, Exchange Traded Funds, Balanced Funds.

**Introduction:**

Economic development and inclusive financial growth of any country is largely depend on the development of financial market with participation of all the segments of the society. Taking to consideration this objective, the first Mutual Fund namely 'Unit Trust of India (UTI) was established by Government of India and Reserve Bank of India in 1963. The objectives behind taking initiative to encourage savings and investment and enhance the participation in the corporate incomes, profits and gains accruing from acquisition, holdings, management and disposal of securities. In 1978 the regulatory and administrative control of the Mutual Fund industry in India was shifted from RBI to IDBI. The first scheme launched by UTI was Unit Scheme 64 (US 64). At the end of 1988 the UTI had Assets Under Management (AUM) were amounting to 6700 Crores. The public sector banks and institutions were allowed to set up Mutual Funds in late 1988.

As on March 31, 2021, there were 1,735 mutual fund schemes including 84 schemes launched in the year 2020-21. The grand total of resource mobilization during the financial year 2020-

21 was amounting ₹ 86,39,167 Crores. The Net Inflows in 2020-21 increased by 141 per cent to ₹ 2,14,743 Crores as compared to ₹ 87,301 crores in 2019-20.

Mutual funds pool funds from investors that they invest in assets on behalf of unit holders to enable them enjoy the benefits of professionally managed portfolios of investments. (Osaretin Igbiosa, 2019)

A mutual fund is a type of fund that aggregates the savings of several investors who have similar financial objectives. Depending on the goal of the scheme, the fund manager invests the money consequently collected in various kinds of securities. These might include securities such as equities, debt instruments, or capital market instruments. According to the number of units they own, the scheme's unit holders share the income generated by these investments and the capital appreciation realized by the scheme. Therefore, a mutual fund is the best type of investment for the average person since it gives them the chance to invest in a professionally managed, diversified portfolio at a reasonable price. Mutual funds are accessible to everyone with a few thousand rupees or more in investible surplus. Each mutual fund scheme has a clearly stated investing goal and plan.

#### **Importance:**

Indian financial markets and the Indian economy's mutual fund industry are both expanding quickly. When small and household investors utilise their resources (savings) to invest in the stock market, mutual fund investments are quite popular. Most Indian middle-class families desire to maximise their earnings while assuming the lowest possible risks. This study will guide to the existing as well as prospective mutual fund investors to understand the mutual fund performance and take their appropriate decisions.

#### **Literature Review**

(Kaur, 2018) To optimise their own return, investors look for factors that are systematically related to the performance of mutual funds. The current study looks at how certain fund characteristics affect mutual fund performance. For this, the information on Indian equities mutual funds from 2004 to 2013 was used by the researcher. The Generalized Method of Moment is the most effective estimator system used to estimate the dynamic panel data (sys-GMM). The findings demonstrate that the fund performance measured with conditional Carhart alpha was explained by the prior year's performance, flow to funds, and cash ratio. The earlier observed lack of persistence in the performance of mutual funds have resulted from failing to take the dynamic influence of the lag dependent variable into account. Researchers also looked at whether naive beta techniques used by mutual funds are systematically impacted by mutual fund features. The results demonstrate how fund attributes including size, expense ratio, portfolio turnover ratio, and age influence mutual fund trading strategy. The study has ramifications for mutual fund investors since they can use a strategy based on historical one-year risk adjusted conditional Carhart alpha to maximise the return on their portfolio. Additionally, conditional Carhart alpha might be one of the factors used by mutual fund ranking companies to rank mutual funds.

(Shalini Goyal & Dauliy Bansal, 2013) This paper focuses on the development of the mutual fund sector in India. Its beginning, its ups and downs over the years, and tried to forecast what

the long-term prospects would be for investors in mutual funds. An investment entity that pools the money of numerous investors is a mutual fund, often known as an investment corporation. The manager of the fund buys stocks and bonds with the money that has been raised. The portfolio of the fund refers to the securities that were acquired. Money market and (short-term) bond funds may have emerged as a result of limitations on competing products. This study compared and analysed the performance of various mutual fund types in India and conclude that equities funds performed better than income funds. The study also found that institutional fund managers can time their investments and that equities fund managers had strong market timing abilities, however broker operated funds did not demonstrate this capacity. Additionally, empirical research has shown that fund managers exhibit substantial timing ability and can time their investments to match market conditions.

(Osaretin Igbinsosa, 2019) Mutual funds are collective investment schemes. In Nigeria, mutual funds' assets are in excess of over 750 billion naira and with a dearth of empirical works in this area, the study investigated the performance of mutual funds (MFs) from 31<sup>st</sup> January to 31<sup>st</sup> December 2019. The study computed risk-adjusted performance values using the combinations of monthly net asset values of seven (7) mutual fund types, monthly treasury bill rates, and monthly allshare index using Microsoft Excel worksheet and EViews 9.0 econometric software, utilising commonly used risk-adjusted performance criteria of Sharpe, Treynor, Jensen, and information ratios, as well as the Treynor and Mazuy model. The study found that only three fund types (portfolios)—real estate funds, bond funds, and fixed income funds—have the ability to generate persistent returns above market returns to investors; managers of bond funds and fixed income funds can exercise superior selectivity skills but with limited flexibility. The study also found that money markets funds, fixed income funds, and equity funds outperformed the market benchmark index on the Nigerian financial market. The study suggests, among other things, that investors in mutual funds whose primary investment goal is profitability can do well by investing in funds that consistently produce above-market returns, and that professional fund managers, especially new market entrants who want to quickly make a name for themselves, can seek to boost fund performance by creating fund portfolios that enhance manager's stock-picking ability as well as portfolios that could consistently provide above-market returns.

(Prakash, Seet, Behera, & Borad, 2018) The mutual fund (MF) sector in India is growing as a result of a broadening investor base and expanding geographic distribution. In India, MFs are now significant players in the corporate bond and equities markets, as well as a key source of liquidity support for the money market. As a result, over time, their impact on domestic liquidity conditions as well as price changes in the equities and debt markets has grown. Although India's level of MF sector penetration, as indicated by the Assets under Management (AUM)/GDP ratio, is still below the worldwide average, the industry's prospects are improved by favourable demographics, a history of strong savings propensity, and regulatory improvements.

(Adhana, 2020) The comparison and analysis of equity fund schemes in terms of pure risk and return form the basis of the current work. The report also examines and evaluates the mutual

fund schemes with regard to basic risk and return. The research also examines the typical risk and typical return of particular corporations that issue equity shares and mutual funds. The final section of the study examines the connection between equity shares' risk and return and mutual funds'.

(Rathnamani, 2013) To assist investors in making investments in a variety of industries and ensuring a good return, the Indian capital market offers a number of routes for doing so. The growth and development of various mutual fund products in the Indian capital market has proven to be one of the most catalytic instruments in generating momentous investment growth in the capital market. Mutual funds, among other financial products, ensure the minimum risks and maximum return to investors. It has become crucial in this situation to closely monitor and assess mutual funds. Choosing lucrative mutual funds to invest in is therefore a crucial decision. The performance of particular equities large cap mutual fund schemes was the major focus of this study with regard to risk-return relationships. The major goals of this study project are to analyse the financial performance of particular mutual fund schemes using statistical measures including Sharpe ratio, alpha, beta, standard deviation, and r-squared. Investors can use the outcomes of this research study to inform their future investing choices.

(Kale & Panchapagesan, 2012) This article gives a general overview of the mutual fund market in India and discusses some of the factors, such as a lack of impartial research, that contribute to its low penetration. It assesses the sector globally and brings up important questions about mutual fund ownership and performance, the sensitivity of fund flows to performance, and the significance of regulation for the sector's expansion that have all gone largely unexplored in India. The opinions of top practitioners are then captured on these and other concerns, such as the difficulties created by low financial literacy, the nation's equity culture, and the regulatory environment's lack of support.

(Patil, 2017) The main objective of this research paper was to evaluate the performance of selected growth oriented mutual fund schemes. The researcher has used Sharpe Ratio, Treynor's Ratio & Jensen's Ratio to study the comparative performance during the period. The study was based mainly on the secondary data collected from the various sources like journals, websites etc. In this research paper, it is observed that, the average rate return of the selected mutual funds have been very high ranging from 21 per cent to 25.4 per cent and the return of these funds have been low volatile involving less risk. The Treynor Ratio of Motilal MOSh Shares NASDAQ has been 29.14261 indicating that this fund has paid highest return on investment as against the level of risk involved in the investment.

#### **Methods and Material:**

After being compiled by the researcher, the mutual fund investment analysis for 10 years (from 2011 to 2020) was analysed using secondary data. From SEBI's annual reports, the 10 year mutual fund investment details for India's schemes were collected. Exchange traded funds, balanced schemes, income/debt-oriented, growth/equity-oriented, and fund of funds investing overseas are some of the methods considered in the current study. Descriptive statistics, correlation, and coefficient of variation are used to analyse the data. Tabular and graphical representations are used to classify and display the results.

**Objectives:**

The study was carried out with the following objectives:

- To investigate the scheme-specific Assets Under Management (AUM) in India.
- To study the type of scheme wise Assets Under Management (AUM) in India.
- To study the impact of the demonetization on mutual fund investments in India.
- To study the annual growth rate of mutual fund investments in India.

Table1 Scheme wise Assets under Management in India as on 31<sup>st</sup> March for 10 years  
(₹ in Crores)

| Year | Income/ Debt oriented Schemes |        |                                 |           | Growth/Equity Oriented Schemes |         |         | Exchange Traded Fund |            |         | Balanced Schemes | Fund of Funds Investing Overseas |
|------|-------------------------------|--------|---------------------------------|-----------|--------------------------------|---------|---------|----------------------|------------|---------|------------------|----------------------------------|
|      | Liquid/Money Market           | Gilt   | Debt(Other than assured return) | Total     | ELSS                           | Others  | Total   | Gold ETF             | Other ETFs | Total   | Total            | Total                            |
| 2011 | 73,666                        | 3,409  | 291,975                         | 369,049   | 25,569                         | 169,753 | 195,322 | 4,400                | 2,516      | 6,917   | 18,445           | 2,516                            |
| 2012 | 80,354                        | 3,659  | 290,844                         | 374,857   | 23,644                         | 158,432 | 182,076 | 9,886                | 1,607      | 11,493  | 16,261           | 2,530                            |
| 2013 | 93,392                        | 8,074  | 395,985                         | 497,451   | 22,746                         | 149,762 | 172,508 | 11,648               | 1,477      | 13,124  | 16,307           | 2,053                            |
| 2014 | 133,280                       | 6,114  | 461,551                         | 600,945   | 25,547                         | 165,560 | 191,107 | 8,676                | 4,528      | 13,204  | 16,793           | 3,191                            |
| 2015 | 162,562                       | 14,614 | 516,951                         | 694,128   | 39,470                         | 305,669 | 345,139 | 6,655                | 8,060      | 14,715  | 26,368           | 2,408                            |
| 2016 | 199,404                       | 16,306 | 567,190                         | 782,900   | 41,696                         | 344,707 | 386,403 | 6,346                | 16,063     | 22,408  | 39,146           | 1,967                            |
| 2017 | 314,086                       | 14,875 | 745,691                         | 1,074,652 | 61,403                         | 482,138 | 543,541 | 5,480                | 44,436     | 49,915  | 84,763           | 1,747                            |
| 2018 | 335,525                       | 11,404 | 788,021                         | 1,134,950 | 80,583                         | 669,207 | 749,790 | 4,806                | 72,888     | 77,694  | 172,151          | 1,451                            |
| 2019 | 436,224                       | 8,099  | 721,569                         | 1,165,891 | 96,019                         | 796,082 | 892,101 | 4,447                | 134,626    | 139,072 | 180,648          | 1,871                            |
| 2020 | 391,742                       | 9,285  | 779,131                         | 1,180,158 | 77,837                         | 525,125 | 602,962 | 7,949                | 146,463    | 154,412 | 262,150          | 2,734                            |

Source: Secondary data from SEBI annual reports, compiled for the study

**Results and Discussion:**

The data in Table 1 above pertains to mutual fund investments made in India from 2011 to 2020 over a ten-year period. During the study period the amount of Assets Under Management (AUM) of Liquid/Money Market Scheme has increased from ₹73,666 crores to ₹ 3,91742 crores, whereas during the same period the amount of Assets Under Management of other Debt oriented schemes has gone up from ₹2,91,775 crores to ₹ 7,79,131 crores. Accordingly the amount of AMU of Income/Debt Oriented Schemes has increased from ₹3,69,039 crores to ₹11,80,158 crores. This growth has been followed by Growth/Equity Oriented Schemes showing increase from ₹ 1,95,332 crores at the end of financial year 2010-11 to ₹ 6,02,962 crores at the end of financial year 2019-20. During the same period performance of Balanced Schemes have been very poor followed by Funds of Funds Investing Overseas, which has also shown very constitutently poor performance.

The data in Table 1 above pertains to mutual fund investments made in India from 2011 to 2020 over a ten-year period. Five mutual fund investing plans are summarized in the table above. The total is calculated using the three sub schemes of the income/debt scheme, such as the liquid/money market, gilts, and debt (other than the assured return). The second scheme, which

is a growth/equity oriented plan, is totaled using two sub schemes, such as ELSS and others, as indicated in the table. To calculate the total of the third scheme, the exchange traded fund scheme, two sub schemes, such as the gold EFT and other EFTs, are used.

The total investment made in these five schemes is graphically represented in the following figure1.

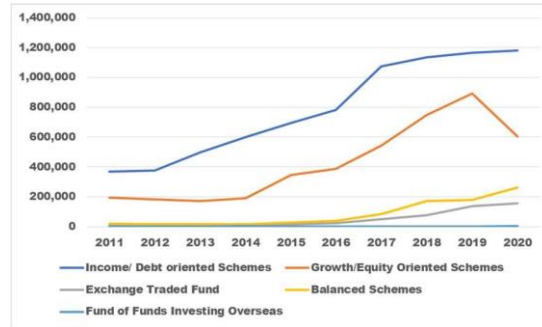


Figure1. Scheme wise Mutual fund Details for 10 years

Table2 Types of Scheme wise Assets Under Management in India with percentage change for 10 years

(₹ in Crores)

| Year                               | Income/Debt Oriented Schemes |         |        | Growth/Equity Oriented Schemes |          |       | Balanced Schemes |        |       | Exchange Traded Fund |        |       | Fund of Funds Investing Overseas |       |       | Total (Cr.) |          |       |
|------------------------------------|------------------------------|---------|--------|--------------------------------|----------|-------|------------------|--------|-------|----------------------|--------|-------|----------------------------------|-------|-------|-------------|----------|-------|
|                                    | -                            | -       | AGR    | -                              | -        | AGR   | -                | -      | AGR   | -                    | -      | AGR   | -                                | -     | AGR   | -           | -        | AGR   |
| 2011                               | 369,049                      | -       | -      | 195,322                        | -        | -     | 18,445           | -      | -     | 6,917                | -      | -     | 2,516                            | -     | -     | 592,249     | -        | -     |
| 2012                               | 374,857                      | 5,808   | 1.55   | 182,076                        | -13,246  | 7.27  | 16,261           | -2,184 | 13.43 | 11,493               | 4,576  | 39.82 | 2,530                            | 14    | 0.55  | 587,217     | -5,032   | 0.86  |
| 2013                               | 497,451                      | 122,594 | 24.64  | 172,508                        | -9,568   | 5.55  | 16,307           | 46     | 0.28  | 13,124               | 1,631  | 12.43 | 2,053                            | -477  | 23.23 | 701,443     | 114,226  | 16.28 |
| 2014                               | 600,945                      | 103,494 | 17.22  | 191,107                        | 18,599   | 9.73  | 16,793           | 486    | 2.89  | 13,204               | 80     | 0.61  | 3,191                            | 1,138 | 35.66 | 825,240     | 123,797  | 15.00 |
| 2015                               | 694,128                      | 93,183  | 13.42  | 345,139                        | 154,032  | 44.63 | 26,368           | 9,575  | 36.31 | 14,715               | 1,511  | 10.27 | 2,408                            | -783  | 32.52 | 1,082,757   | 257,517  | 23.78 |
| 2016                               | 782,900                      | 88,772  | 11.34  | 386,403                        | 41,264   | 10.68 | 39,146           | 12,778 | 32.64 | 22,408               | 7,693  | 34.33 | 1,967                            | -441  | 22.42 | 1,232,824   | 150,067  | 12.17 |
| 2017                               | 1,074,652                    | 291,752 | 27.15  | 543,541                        | 157,138  | 28.91 | 84,763           | 45,617 | 53.82 | 49,915               | 27,507 | 55.11 | 1,747                            | -220  | 12.59 | 1,754,619   | 521,795  | 29.74 |
| 2018                               | 1,134,950                    | 60,298  | 5.31   | 749,790                        | 206,249  | 27.51 | 172,151          | 87,388 | 50.76 | 77,694               | 27,779 | 35.75 | 1,451                            | -296  | 20.40 | 2,136,036   | 381,417  | 17.86 |
| 2019                               | 1,165,891                    | 30,941  | 2.65   | 892,101                        | 142,311  | 15.95 | 180,648          | 8,497  | 4.70  | 139,072              | 61,378 | 44.13 | 1,871                            | 420   | 22.45 | 2,379,584   | 243,548  | 10.23 |
| 2020                               | 1,180,158                    | 14,267  | 1.21   | 602,962                        | -289,139 | 47.95 | 262,150          | 81,502 | 31.09 | 154,412              | 15,340 | 9.93  | 2,734                            | 863   | 31.57 | 2,226,203   | -153,381 | 6.89  |
| Average AGR(AAGR)                  |                              |         | 11.61  | 22.02                          |          |       | 25.10            |        |       | 26.93                |        |       | 22.38                            |       |       | 14.76       |          |       |
| Compound Annual Growth Rate (CAGR) |                              |         | 12.33% | 11.93%                         |          |       | 30.40%           |        |       | 36.42%               |        |       | 0.83%                            |       |       | 14.16%      |          |       |

Source: Secondary data from SEBI annual reports, compiled for the study

The data in Table 2 above pertains to the total mutual fund investments made in India from 2011 to 2020, subdivided per scheme. The total Assets Under Management for five different schemes is shown in the table above. For each scheme, the average annual growth rate (AAGR) in % is determined. For the period from 2011 to 2020, a compound annual growth rate (CAGR) in percentage form is also estimated.

The average AAGR for exchange traded funds is high (26.93%), followed by balanced schemes (25.10%), funds of funds investing overseas (22.38%), and growth/equity oriented schemes (22.02%), according to the data of table 2 above. Income/debt-oriented schemes had the lowest average AGR (11.61%). The above table2 further demonstrates that exchange traded funds have the highest compounded annual growth rate (CAGR) of exchange traded funds (36.42%),

followed by balanced schemes (30.40%). And the schemes that are growth/equity oriented and income/debt oriented have the lowest CAGRs (11.93% and 12.33%), respectively.

As an impact of demonetization, AGR of Income/Debt Oriented Schemes came down from 13.42 per cent in 2015 to 11.34 per cent in 2016. In case of Growth/Equity Oriented Schemes the AGR has come down to 10.68 per cent in 2016 as compared to 44.63 per cent in 2015. The AGR of Balanced Schemes has decreased from 36.31 per cent to 32.61 per cent during same period i.e. 2015 and 2016 respectively. But during the same period the demonetization has shown positive impact resulting into in AGR from 10.27 per cent in 2015 to 34.33 per cent in 2016. As a consequence the total AGR has decreased from 23.78 per cent to 12.17 per cent in 2015 and 2016 respectively.

The data from table 2 is represented graphically according to the AAGR method in the following figure 2. Figure 3 shows the average AAGR and compound annual growth rate in accordance with the scheme.

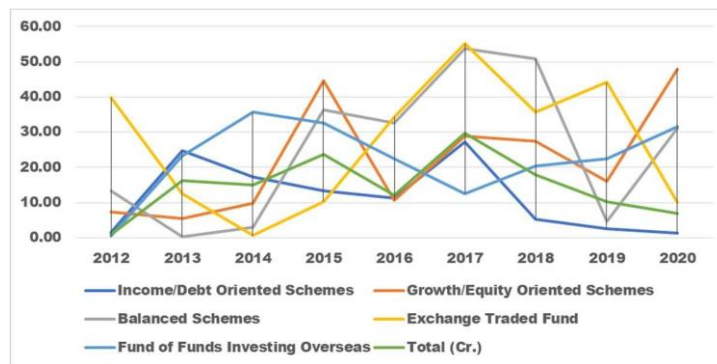


Figure2. Types of Scheme wise Assets Under Management in India using AAGR  
Figure 2 above shows that, with the exception of the exchange traded fund scheme, all schemes' average yearly growth rates decreased during the demonetization timeframe.



Figure3. Scheme wise Mutual Fund performance in India using Average AAGR and CAGR  
A statistical tool was used to analyse the data, and the results are shown in a tabular format. Descriptive statistics like the mean, standard deviation, and coefficient of variance (CV) were determined on the collected data. Additionally, an estimate of subschemas' correlation is done. The results have all been presented in the table 3 below.

Table3. Results of Descriptive statistics



|                              | Income/Debt Oriented Schemes   |               |                                  | Growth/Equity Oriented Schemes |                                 | Exchange Traded Fund |                                 | Balanced Schemes    | Fund of Funds Investing Overseas  |
|------------------------------|--------------------------------|---------------|----------------------------------|--------------------------------|---------------------------------|----------------------|---------------------------------|---------------------|-----------------------------------|
|                              | Liquit /Money Market           | Gilt          | Debt(otherr than assured return) | ELSS                           | Others                          | Gold ETF             | Other ETFs                      |                     |                                   |
| Mean                         | 222,023.50                     | 9,583.90      | 555,890.80                       | 49,451.40                      | 376,643.50                      | 7,029                | 43,266.00                       | 83303.20            | 2246.80                           |
|                              | 787,498.10                     |               |                                  | 426,094.90                     |                                 | 50295.40             |                                 |                     |                                   |
| Standard Deviation           | 136,052.81                     | 4,614.53      | 195,280.20                       | 27,420.72                      | 232,667.29                      | 2462.665             | 56,270.73                       | 89543.95            | 521.50                            |
|                              | 395,505.40                     |               |                                  | 259,801.64                     |                                 | 55438.50             |                                 |                     |                                   |
| Coefficient of Variance (CV) | 61.28                          | 48.15         | 35.13                            | 55.45                          | 61.77                           | 35.03                | 130.06                          | 107.49              | 23.21                             |
|                              | 41.77                          |               |                                  | 60.97                          |                                 | 110.23               |                                 |                     |                                   |
| Correlation                  | Liquit / Money Market and Debt | Gilt and Debt | ELSS and Others                  | Income and Growth              | Income and Exchange Traded Fund | Income and Balanced  | Growth and Exchange Traded Fund | Growth and Balanced | Exchange Traded Fund and Balanced |
|                              | 0.94                           | 0.59          | 0.98                             | 0.93                           | 0.85                            | 0.87                 | 0.85                            |                     |                                   |

Table 3 above displays the findings from descriptive statistics and association between various mutual fund investment schemes in India. This table demonstrates that income/debt-oriented schemes receive the most mutual fund investments, followed by growth or equity-oriented ones. Growth and equity-oriented plans have substantially more variability than other schemes. Results show that the CV of the fund of funds investing overseas scheme is (23.21%) lower than that of other schemes, indicating that the performance of this scheme is more stable than that of other schemes.

The income/debt-oriented scheme is performing better continuously when compared to other mutual fund investment schemes since its CV is (41.77) less than those of the other schemes. The correlation between income and debt-oriented schemes and other mutual fund investment schemes, such as income and growth schemes ( $r = 0.93$ ), income and balanced schemes ( $r = 0.87$ ), and income and exchange traded funds ( $r = 0.85$ ), is also found to be highly positive. Growth/equity-oriented schemes exhibit strong positive correlation with other schemes, including growth and exchange traded funds ( $r=0.85$ ) and growth and balanced strategies ( $r=0.84$ ).

### Conclusion:

Mutual funds are among the most popular types of investments for individual investors. There are numerous mutual fund schemes available in India. Based on the mutual fund's prior success, one can invest in them. This research examined the performance of mutual fund schemes in India in terms of Assets Under Management (AUM) from the year 2010–11 to 2019–2020. Mutual fund schemes are classified into many categories based on the underlying assets, such as income/debt oriented, growth/equity oriented, exchange traded funds, and so forth. All types of mutual funds schemes were used in this study to analyze the performance of mutual funds over a ten-year period in India. The present study is based on the secondary data collected for 10 years' time period starting from 2010-11 till 2019-20. The study's objectives are stated, and the performance of mutual fund scheme during the previous ten years is examined using secondary data collected from SEBI annual reports. It compared the impact of demonetization

on mutual fund performance in 2016 to that of mutual fund scheme performance in earlier year. For analyzing the performance of the investments in mutual funds in India statistical techniques were used such as descriptive statistics, coefficient of variation, average annual growth rate (AAGR), compounded annual growth rate (CAGR), correlation between various types of funds are determined to find out the relationship between various significant schemes of mutual funds. AAGR is high for exchange traded funds, balanced and growth/equity types which indicates that these funds are performing better as compared with other types of funds. It was found that the demonetization resulted in a nearly 50% fall in the yearly growth rate of mutual fund schemes in 2016 compared to 2015.

From the statistical analysis it is found that coefficient of variance (CV) is less for income/debt-oriented funds and hence we can conclude that these funds are consistently performing better in comparison to other types of funds. It is observed from the results of correlation statistics that there is high degree positive correlation between various types of mutual fund schemes and hence it is concluded that mutual fund investment performance has been better and it can be a better option to investors to invest their surplus income with minor risk investment option. The research may be beneficial in developing future policy for the mutual fund company.

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