

# A STUDY ON PERFORMANCE EVALUATION OF MUTUAL FUNDS PRE AND POST COVID 19

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## ABSTRACT

Mutual fund is one of the best investment options to the investors to get better returns with a certain level of risk. But, due to the outbreak of Covid-19 pandemic, NAVs of all schemes from various mutual fund houses has been decreased gradually. The aim of this paper is to study the performance evaluation of selected large cap mutual funds in terms of their risk and return. Evaluating the performance of mutual fund schemes, selecting five large cap equity mutual funds from AMFI. The collected data will be analysed with the help of various financial tools like Treynor ratio, Sharper ratio. As per Sharpe's and Treynor's method during the prior period of Covid-19 pandemic, Invesco India Large cap Fund is the best suitable mutual fund to invest when compared with other selected mutual funds. Coming to the period of post Covid19, Canara Robeco Blue Chip Equity Fund has highest average return. As per Sharpe's and Treynor's method, the index values for all funds thrust in the negative. Fall of stock markets, lack of savings and thinking of insecurity about their investments might be the reasons for the negative return.

Key words: performance, Covid-19, Net Asset Value, Mutual fund, Risk.

## 1. INTRODUCTION

A Mutual Fund is a trust that pools the savings of a number of investors who share a common financial goal. The money thus collected is invested by the fund manager in different types of securities depending upon the objective of the scheme. Mutual funds are the favourite avenue for risk-averse investors, and it was severely affected by recent health crises. The equity-oriented schemes have exhibited a negative return of about 25%, and Franklin Templeton has announced a historic decision to wind up six debt fund schemes amidst the COVID-19 pandemic. Even though the industry has witnessed a sharp increase in the number of new investors. The present study intended to examine the outperformance of actively managed Indian equity Mutual Funds during the COVID-19 crisis period.

#### 2. REVIEW OF LITERATURE

**Mr. Sangisetti Manoj & Mr. Bondu Avinash (2020),** conducted a study on "Performance Evaluation of Mutual Funds Before and During the Outbreak of Covid-19 Pandemic In India" to find out the impact of Covid-19 pandemic on mutual fund industry as well as fluctuation of Net Asset Value and its performance. The data used is opening and closing NAVs for five months before Covid-19 effect and five months during Covid-19 pandemic. The source of data is the website of Association of Mutual Funds in India (AMFI) and Money Control and 12 schemes were used for analysis. This paper found that due to the outbreak of Covid-19 pandemic, NAVs of all schemes from various mutual fund houses has been

decreased gradually. Decline of income levels of investors, lack of savings and unfavoured movements of the markets might be the reasons for negative returns and index for various funds.

**Velmurugan Palaniappan Shanmugam & K. A. Ashique Ali (2021),** presented a paper "Impact of COVID-19 pandemic on equity-oriented mutual funds: A preliminary analysis of Indian mutual funds industry "to analyse the changes in the mutual fund industry in India due to the virus outbreak from December 2019 to May 2020. A sample of 25 equity-oriented direct growth funds has been considered for this study to analyse their performance along with the sector-wise differences. The results show that the value of majority of the funds had plunged, while some funds had rebounded during the period.

**Khushali Nakum** (2021), presented a paper "Impact of COVID 19 on the Mutual Fund in India" to study the mutual fund investment pattern and preference of investment avenues of retail investors in the COVID 19 pandemic. Secondary data is used for this study and the data were collected from AMFI website on monthly basis. Investors are recommended to take a little risk in their portfolio so as to maximize their own returns since the markets have shown recover.

**Tapan Kumar Samanta** (2019) has evaluated a Study on "The Performance of Mutual Fund Scheme in India" to analyse the trends and compare the performance in returns of growth oriented selected equity diversified mutual fund schemes. The researchers use a sample of ten mutual fund schemes comprising of all equity diversified large cap funds. Researcher has observed that majority of funds selected for study have outperformed under Sharpe Ratio as well as Treynor Ratio.

**Enthiyaz Khan Lavani Abdul & Bijja Srinivas (2020),** conducted a study on the "Impact of Covid-19 On The Performance Of Mutual Funds - A Comprehensive Analysis On The Basis Of Fund Category And Asset Under Management" to evaluate the investment performance of the selected CRISIL rated mutual fund schemes in terms of risk and return. To examine the mutual fund schemes performance, 12 schemes were selected which are rated by CRISIL as 5 star and 4 stars. For AUM movement and Daily NAVs of these schemes are collected for the period of three years ie. January 2017 to December 2019. It is found that the Covid-19 pandemic situation has affected the Asset management companies' growth in terms of Asset under management and also the whole industry got affected because of this Covid-19 pandemic.

# **3. STATEMENT OF THE PROBLEM**

Mutual funds are large pools of money that invest in assets like stocks and bonds. The first step in selecting a fund is to determine the investing style and determine if it suits your objectives. Comparing a mutual fund to its peers gives a better sense about relative performance and fees. Hence, this study is to find out the impact of Covid-19 pandemic on mutual fund industry as well as fluctuation of Net Asset Value and its performance.

### 4. OBJECTIVE OF THE STUDY

- To study the performance of selected Large Cap mutual fund pre and post covid 19.
- To analyse the risk and return rate of the scheme.

# 5. METHODOLOGY OF THE STUDY

## **Types of research:**

Study is analytical research based on the performance evaluation of mutual funds pre and post Covid-19.

#### **Collection of data:**

The required data for this study is collected through secondary data. Secondary data about 5 mutual fund schemes under the category of large cap fund from Association of Mutual Funds in India (AMFI).

### Sampling design:

Evaluating the performance of mutual fund schemes, selecting five large cap equity mutual funds; Canara Robeco Bluechip Equity fund, Axis Bluechip fund, BNP Paribas large cap fund, Invesco India large cap fund, Mirae Asset Large cap fund.

#### **Research instrument:**

The collected data will be analysed with the help of various financial tools like Treynor ratio, Sharper ratio.

### 6. ANALYSIS AND DISCUSSION

#### A. PRE COVID-19

In the below table the average return of Net Asset Value of various funds under the category of large cap fund has been extracted from the information prior five months of Covid-19 pandemic started from 01<sup>st</sup> August 2019 to 31<sup>st</sup> December 2019.

| NAME OF THE FUND                      | Avg return (Ri) |
|---------------------------------------|-----------------|
| Canara Robeco Blue Chip Equity Fund   | 0.658716045     |
| Axis Bluechip Fund -Growth            | 1.313713423     |
| BNP Paribas Large Cap Fund - Growth   | 1.236107817     |
| Invesco India Large cap Fund – Growth | 1.046630583     |
| Mirae Asset large cap fund            | 1.23327098      |

#### Table 1: Average Return

From the above table 1, it shows that the average return of various Net Asset Values from large cap mutual funds prior five months of Covid-19 from 1<sup>st</sup> August to 31<sup>st</sup> December. it can understand that Axis Bluechip Fund -Growth has the highest average rate of return (1.31) and the Canara Robeco Blue Chip Equity Fund has the lowest average rate of return (0.65).

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| NAME OF THE FUND                      | Avg return<br>(Ri) | SD      | Sharpe<br>index |
|---------------------------------------|--------------------|---------|-----------------|
| Canara Robeco Blue Chip Equity Fund   | 0.658716045        | 4.18157 | 0.14317971      |
| Axis Bluechip Fund -Growth            | 1.313713423        | 3.07795 | 0.40732079      |
| BNP Paribas Large Cap Fund - Growth   | 1.236107817        | 2.89084 | 0.40683933      |
| Invesco India Large cap Fund – Growth | 1.046630583        | 2.02952 | 0.48614004      |
| Mirae Asset large cap fund            | 1.23327098         | 2.77802 | 0.4223411       |



The above table and graph, tells that Sharpe value is calculated to measure risk adjusted performance of selected mutual funds. As per Sharpe Index method, Invesco India Large cap Fund is the best performer and placed in 1<sup>st</sup> position with Sharpe index value of 0.48 according to ranking. Performance of Mirae Asset large cap fund is also giving a positive Sharpe measure with Sharpe index value of 0.42 is in 2<sup>nd</sup> position. Performance of Axis Bluechip Fund, BNP Paribas Large Cap Fund and Canara Robeco Blue Chip Equity Fund are placed in 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> respectively according to their ranking.

| NAME OF THE FUND                         | Avg return<br>(Ri) | Beta    | Treynor<br>ratio |
|--|--------------------|---------|------------------|
| Canara Robeco Blue Chip Equity<br>Fund   | 0.658716045        | 1.27233 | 0.470567779      |
| Axis Bluechip Fund -Growth               | 1.313713423        | 1.02902 | 1.21835112       |
| BNP Paribas Large Cap Fund -<br>Growth   | 1.236107817        | 1.01192 | 1.162255657      |
| Invesco India Large cap Fund -<br>Growth | 1.046630583        | 0.76132 | 1.295942535      |
| Mirae Asset large cap fund               | 1.23327098         | 1.03922 | 1.128987424      |

Table 3. Performance of the fund based on Treynor's Index

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The above table and graph, show Treynor's measure value of selected mutual funds, it can refer that the Invesco India Large cap Fund – Growth has the highest Treynor's value of 1.29 which indicates that the investor has received high returns with minimum risk. Canara Robeco Blue Chip Equity Fund has the poor performing portfolio management because of least return.

# B. POST COVID-19

In the below table the average return of Net Asset Value of various funds under the category of large cap fund has been extracted from the information post Covid-19 pandemic from 01<sup>st</sup> January 2020 to 31<sup>st</sup> May 2020.

| NAME OF THE FUND                      | Avg return<br>(Ri) |  |
|---------------------------------------|--------------------|--|
| Canara Robeco Blue Chip Equity Fund   | -1.15637516        |  |
| Axis Bluechip Fund -Growth            | -1.56865076        |  |
| BNP Paribas Large Cap Fund - Growth   | -1.44391854        |  |
| Invesco India Large cap Fund – Growth | -1.39842592        |  |
| Mirae Asset large cap fund            | -2.02958817        |  |

#### **Table 4 Average Return**

From the above table 4, it shows that the average return of various Net Asset Values from large cap mutual funds post five months of Covid-19 from 1<sup>st</sup> January to 31<sup>st</sup> May, it can understand that all the mutual fund scheme suffered loss due to the Covid19 pandemic.

#### Table 5. Sharpe's Index

| NAME OF THE FUND                    | Avg return<br>(Ri) | SD     | Sharpe<br>index |
|-------------------------------------|--------------------|--------|-----------------|
| Canara Robeco Blue Chip Equity Fund | -<br>1.15637516    | 9.2238 | -0.1318735      |
| Axis Bluechip Fund -Growth          | -<br>1.56865076    | 7.6939 | -0.2116808      |

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| BNP Paribas Large Cap Fund - Growth   | -<br>1.44391854 | 8.94264 | -0.1681738 |
|---------------------------------------|-----------------|---------|------------|
| Invesco India Large cap Fund – Growth | -<br>1.39842592 | 10.9103 | -0.1336746 |
| Mirae Asset large cap fund            | -<br>2.02958817 | 10.502  | -0.1989702 |



As per the Sharpe Index method during the outbreak of Covid-19 pandemic, all the mutual fund schemes from various fund houses were affected with losses. The Sharpe ratios of various schemes turn into negative values due to negative returns of various funds during this pandemic time. As per the above graphical presentation, Axis Bluechip Fund - Growth value wiped out. Compared with the rest of the schemes Canara Robeco Bluechip fund has little loss as per Sharpe index method. Decline of income levels of investors, lack of savings and unfavoured movements of the markets might be the reasons for negative returns and index for various funds.

| NAME OF THE FUND                      | Avg return<br>(Ri) | Beta    | Treynor<br>ratio |
|---------------------------------------|--------------------|---------|------------------|
|                                       | -1.156375164       | 0.84479 | -1.43985094      |
| Canara Robeco Blue Chip Equity Fund   |                    |         |                  |
|                                       | -1.568650769       | 0.69807 | -2.33308309      |
| Axis Bluechip Fund - Growth           |                    |         |                  |
|                                       | -1.443918537       | 0.82164 | -1.83038571      |
| BNP Paribas Large Cap Fund - Growth   |                    |         |                  |
|                                       | -1.398425921       | 0.99914 | -1.45968383      |
| Invesco India Large cap Fund – Growth |                    |         |                  |

0.9682

-2.02958817

-2.15822723

#### **Table 6. Treynor's Index**

Mirae Asset large cap fund

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As per the Treynor's Index method during the outbreak of Covid-19 pandemic, all the mutual fund schemes from various fund houses were affected with losses. Similar to the Sharp Index method, Treynor's index also have negative values due to the negative returns of the various funds. Compared with the rest of the schemes Canara Robeco Bluechip fund has little loss whereas Axis Bluechip Fund - Growth wiped out. Decline of income levels of investors, lack of savings and unfavoured movements of the markets might be the reasons for negative returns and index for various funds.

### FINDINGS

- From the study, it is observed after analysing the data from pre-Covid by using Sharpe's and Treynor's measure, Invesco India Large cap Fund is the best suitable mutual fund to invest when compared with other selected mutual funds.
- From the study, it is observed after analysing the data from post-Covid by using Sharpe's and Treynor's measure, Canara Robeco Blue Chip Equity Fund is the best suitable mutual fund to invest when compared with other selected mutual funds.

# CONCLUSION

The purpose of this study is to analyse the performance evaluation of selected large cap mutual funds in terms of their risk and return. When we are observing the period prior to the outbreak of Covid-19 Axis Bluechip Fund has highest average return and BNP Paribas Large Cap fund occupied second position in terms of average return. The performance of other funds is low as compared to Axis Bluechip Fund and BNP Paribas Large Cap fund. As per Sharpe's and Treynor's method during the prior period of Covid-19 pandemic, Invesco India Large cap Fund is the best suitable mutual fund to invest when compared with other selected mutual funds. Coming to the period of post Covid19, Canara Robeco Blue Chip Equity Fund has highest average return. As per Sharpe's and Treynor's method, the index values for all funds thrust in the negative. Fall of stock markets, lack of savings and thinking of insecurity about their investments might be the reasons for the negative return.

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