Does Covid-19 Have any Impact on the Performance of Multi-Cap Funds in India? A Study with Reference to HDFC Equity Fund and Kotak Standard Multi-Cap Fund

Sourav Kumar Das^{1,2}*, Samyabrata Das³

- ¹Department of Economics and Commerce, School of Business and Economics, Adamas University, West Bengal, India
- ²Department of Commerce, University of Calcutta, Kolkata, West Bengal, India
- ³Department of Commerce, New Alipore College, Kolkata, West Bengal, India

ABSTRACT

The stupendous growth of Assets under Management (AUM) of Indian Mutual Fund Industry is evident from the fact that from meagre Rs. 25 crores in 1964 the AUM of the industry crossed Rs. 23.93 lakh crores in April 2020. Multi-cap funds tend to invest in stocks of companies across the stock market irrespective of sector and size. As such, these funds provide the much-needed diversification. In a direct plan, the investor decides to invest directly in mutual funds without routing the investment through any distributor or agent. The direct plan has a lower expense ratio than a regular plan because of the absence of intermediary commission which leads to a higher return. However, the direct plan makes sense for knowledgeable, experienced and do-it-yourself (DIY) investors. Since the outbreak of COVID-19 in India, the global contagious disease caused by coronavirus in January 2020, the stock markets have experienced an extensive crisis with severe dampening effects in the entire global scenario. This has affected the Indian Mutual Fund Industry as well. In this backdrop, the present research paper endeavours to examine the impact of COVID-19 on the performance of direct plans of two open-ended Multi-cap funds [HDFC Equity Fund (HEF) and Kotak Standard Multi-cap Fund (KSMF)] based on certain parameters. This secondary data-based study covers 5-year period (2015-2020). The criterion for selecting the funds was net assets above Rs.15,000 crores as on 31.03.2020. Results reveal that the funds and the benchmark (Nifty 500 TRI) experienced reduced returns with increased risks and reduced risk-adjusted returns due to pandemic COVID-19. However, KSMF outperformed the benchmark while HEF underperformed the benchmark both before and after COVID-19. Further, HEF remained aggressive with inefficient fund management whereas KSMF was defensive with superior stock-picking by fund managers. However, both the funds remained adequately diversified before and after COVID-19.

Keywords: AUM; COVID-19; Multi-cap fund; Mutual Fund

INTRODUCTION

In times of enhancing need and mobilization of domestic savings in lucrative investments, the importance of mutual funds has increased significantly. The mutual fund acts as a financial intermediary by pooling up the savings of small and large income-earners and helps these investors in deriving the benefits of capital market advancement. This intermediation between the suppliers and customers of financial resources gains importance globally on account of attractive returns with reduced risks. Thus, in the era of globalization, the involvement of mutual funds has become crucial to serving not only financial intermediary but also as pace colonizers in the mobilization of investible funds through financial markets.

^{*}Corresponding Author's Email: ssd.sourav@gmail.com

The Mutual Fund industry in the Indian economy has been developing constantly since its inception. Its Assets under Management (AUM) has been experiencing a radical increase from only Rs.25 crores in 1964 to Rs. 23.93 lakh crores till April 2020. But this growth has been dampened since January 2020 by the sudden outbreak of COVID 19, the contaminated disease of coronavirus, which originated from China. The stock markets have been experiencing a severe dampening effect both in India and in other parts of the globe. BSE SENSEX and NIFTY50 (the two key benchmark indices of Indian Stock market) slumped down by around 16000 points and 4500 base points respectively within February–March 2020. This also affected the Indian Mutual Fund industry (AMFI, 2022).

The number of New Fund Offers (NFOs) filed by Mutual Fund companies with the Securities and Exchange Board of India (SEBI) decreased drastically from 11 NFOs in January 2020 to just Nil in April 2020. Moreover, among the Debt funds, Franklin Templeton had suddenly shut down its 6 schemes, leading to an unknown dark fortune to its investors.

Multi-Cap funds create a portfolio with a combination of large-cap, mid-cap and small-cap stocks with a minimum investment of 65% of total assets in equity and equity-related instruments. Alike other mutual fund schemes, the Multi-Cap funds also faced such terrible trash due to this pandemic outbreak of coronavirus (SEBI, 2017).

Objectives of the Study

The main objectives of the study are:

- a) To analyze the return of the chosen open-ended multi-cap funds in relation to the benchmark both before and after the coronavirus outbreak;
- b) To examine the risk associated with investing in the chosen funds both before and after COVID-19;
- c) To look at the risk-adjusted return of the chosen funds both before and after the coronavirus outbreak;
- d) To observe the aggressiveness of the funds during pre-COVID and post-COVID period;
- e) To measure the stock-picking ability of the fund managers of the chosen funds both before and after COVID-19;
- f) To understand the extent of diversification of the select funds pre-COVID and post-COVID period.

LITERATURE REVIEW

Amihud and Goyenko (2013) observed that lower R2 or higher eccentric risk in relation to total risk examines excellent fund management. However, lagged R2 holds substantial negative predictive coefficient in calculating alpha or Information ratios. Karrupasamy and Vanaja (2014) concluded that most of the public sector schemes outperformed the benchmark index and the diversified schemes outperformed the performance indices. Jagric *et al.* (2015) applied several tests to analyze the performance of mutual funds. Their analysis depicted similar ranking of performance in both Sharpe and Treynor ratios which implies thatthe chosen funds were adequately diversified. Shukla (2015) selected three mutual fund schemes from five categories of mutual funds in terms of various parameters such as risk, return and nature of funds. She examined and stated that Mid-Cap and Small-Cap mutual funds outperform the market and the overall fund performance showed a positive mark from 2012 to 2014. Bhagyashree and Kishori (2016) analyzed the performance of thirty mutual fund schemes for five years. They stated that Tata Equity Opportunity Fund provided maximum return while Reliance Growth Fund generated minimum return. Tata Equity Opportunities Fund, HDFC Large Cap Equity Fund and Franklin India Flexi Cap Fund were the top three mutual funds in terms of Sharpe ratio. Soni (2017) examined the returns of several asset classes and correlated them with their risks

and determined the positive association between returns and risks in all asset classes. Pandow (2017) focused on the growth and development of mutual funds in India. He mentioned that lack of product differentiation, ineffective communication with customers, low penetration ratio, lack of retail investor participation are the major challenges faced by Indian Mutual Fund sector. Kumar (2020a) opined that mutual fund investors should choose three or four equity funds with good long-term track records and invest steadily through SIPs, and not bother about market crashes. Further, the only way to use the combination of great returns and great volatility is to keep investing continuously, regularly and steadily, without interruption.

METHODOLOGY

The present study has been conducted based on secondary sources of information using several journals, articles, books, etc. The study is conducted using the official websites of Securities and Exchange Board of India (SEBI), Association of Mutual Funds in India (AMFI), Bombay Stock Exchange, etc.

This analysis on the performance of open-ended Multi-cap funds has been conducted in two stages for a five-year study period [First Stage, i.e., 31.12.2014 – 31.12.2019 (pre-COVID) and Second Stage, i.e., 30.04.2015 – 31.04.2020 (post-COVID)]. Two open-ended Multi-cap Mutual Fund schemes, namely, HDFC Equity Fund (HEF) and Kotak Standard Multi-cap Fund (KSMF) have been selected among thirty-three funds that meet the criteria bearing net assets above Rs. 15,000 crores (as on 31.03.2020). The 'Direct Plan' under 'Growth Option' for these above-mentioned Asset Management Companies (AMCs) has been chosen for this analysis. NIFTY 500 TRI has been considered as the common benchmark index. The risk-free return of 7.10% has been taken for computing the risk-adjusted return of the chosen funds using the Sharpe ratio. This is the rate offered by the Public Provident Fund (PPF) scheme of the Government of India since April 2020. Compound Annual Growth Rate (CAGR) has been computed to examine the overall return of the chosen funds for the last five years. Standard Deviation and Beta values have also been computed to explore the total risk and aggressiveness of the funds respectively. Not only that, Alpha values and R-Squared values have also been computed to analyze the skill of the fund managers in choosing funds and the extent of diversification of the funds respectively.

RESULTS AND DISCUSSION

Assets managed by the Indian mutual fund industry has decreased from Rs. 28.29 trillion in February 2020 to Rs. 24.71 trillion in March 2020 and further to Rs. 23.53 trillion in April 2020. The proportionate share of equity-oriented schemes is now 38.8% of the industry assets in April 2020, down from 42.1% in February 2020 and 39.7% in March 2020. Individual investors now hold a lower share of industry assets, i.e. 52.1% in April 2020, compared with 52.7% in February 2020 and 52.2% in March 2020 (www.amfiindia.com).

Multi-Cap funds are preferred mostly by potential investors to gain significant flexibility in terms of returns and risks. These diversified equity funds invest in stocks of different companies with varied market capitalizations, combining large-cap, mid-cap and small-cap stocks. But these funds have also been experiencing serious dampening effects of coronavirus since the last few months, when COVID-19 first outburst in India in January 2020, which originated from China.

Compound Annual Growth Rate (CAGR):

The formula for computing CAGR is given below:

CAGR = (End value of an investment / beginning value of an investment) 1/n - 1

where n = time horizon, i.e., number of years, months, days, etc.

CAGR of the funds and the benchmark index are presented in Table 1.

Table 1: CAGR of the fund and the benchmark (in %)

Fund & benchmark		1Y		3Y		5Y	
		Pre COVID	Post COVID	Pre COVID	Post COVID	Pre COVID	Post COVID
	KSMF	13.34	(-) 13.83	15.54	1.46	12.17	7.70
		O	О	О	О	О	О
	HEF	7.43	(-) 22.47	13.03	(-) 1.86	8.37	3.28
		U	U	U	U	U	U
CAGR	NIFTY 500 TRI	8.97	(-) 15.97	13.65	0.42	9.11	4.77

Source: Computed by researchers

U = underperformance; O = outperformance

Table 1 depicts that the coronavirus outbreak created a huge adverse impact in returns of both the funds and the benchmark index. But KSMF outperformed the benchmark (NIFTY 500 TRI) throughout the Pre and Post COVID outbreak scenario. However, HEF underperformed the benchmark index during the entire study period.

Standard Deviation

This measurement of volatility in mutual fund prices is often used by financiers through comparison between the past prices with the current. Higher the standard deviation, the more discrete the return from an investment with increased riskiness. Table 2 exhibits standard deviation of the funds and that of the benchmark index.

Table 2: Risk of the Fund and the Benchmark (in%)

Fund & benchmark	1Y		3Y		5Y	
	Pre COVID	Post COVID	Pre COVID	Post COVID	Pre COVID	Post COVID
KSMF	12.15	29.22	12.46	20.02	13.49	18.19
	U	О	О	О	О	О
HEF	14.92	30.52	15.12	22.43	16.39	20.92
	U	U	U	U	U	U
NIFTY 500 TRI	11.62	29.85	12.97	20.83	13.72	18.62

Source: Computed by researchers

Apart from reduced returns, this outburst of deadly contagious disease also created a gigantic upsurge in the riskiness of investments. The total risk of the funds and that of the benchmark index increased significantly during the post-COVID period. KSMF outperformed the benchmark index during the post-COVID period. But pre-COVID period figures showed that KSMF outperformed the benchmark index during the 3-year and 5-year period but underperformed the benchmark in the 1 year. On the contrary, HEF underperformed the benchmark index throughout the study period (both pre-COVID and post-COVID).

Sharpe Ratio

Sharpe ratio measures the risk-adjusted performance of a particular investment. The higher an investment's Sharpe ratio, the better its risk-adjusted performance is.

This ratio, developed by William Forsyth Sharpe, examines the return for an investment in comparison to the risk associated with it. It is the extra return from a mutual fund over the risk-free return. It can be computed using the following formula:

Sharpe ratio = (Ri-Rf)/SDi

where Ri is the return from a particular investment, Rf is the risk-free return and SDi is the total risk associated with the particular investment.

Table 3 shows the risk-adjusted return of the fund and the benchmark.

Table 3: Risk-adjusted Return of the Fund and the Benchmark

Fund & benchmark	1Y		3Y		5Y	
	Pre COVID	Post COVID	Pre COVID	Post COVID	Pre COVID	Post COVID
KSMF	0.514	(-)0.716	0.677	(-)0.282	0.376	0.033
	0	О	O	О	0	О
HEF	0.022	(-)0.969	0.392	(-)0.400	0.078	(-)0.182
	U	U	U	U	U	U
NIFTY 500 TRI	0.161	(-)0.773	0.505	(-)0.321	0.147	(-)0.125

Source: Computed by researchers

Reduced risk-adjusted returns were another highlighting effect of the pandemic coronavirus outbreak. Within a few months of the outbreak, due to constant fluctuations of returns with spontaneously increased risks, risk-adjusted returns slumped down to even negativity; signifying that it's safer to keep money at PPF (risk-free investment) rather than investing in Multi-Cap mutual funds. It is observed that KSMF outperformed the benchmark index and HEF underperformed the benchmark throughout the study period (both pre-COVID and post-COVID). The benchmark index and HEF exhibited negative Sharpe Ratio during the entire post-COVID period whereas KSMF had positive Sharpe Ratio in 5-year during the post-COVID period. However, both the funds and the benchmark outperformed the risk-free return during the entire pre-COVID period.

Beta

It measures the sensitivity of a mutual fund scheme in relation to market movements. It can be computed by dividing the covariance of excess returns from a mutual fund and excess returns from the benchmark index by the variance of excess returns of the benchmark index above the risk-free return. Beta > 1 implies that the fund is aggressive in relation to the benchmark while Beta < 1 signifies that the fund is defensive or conservative with respect to the benchmark index.

Alpha

It determines the efficiency of the fund managers in choosing quality stocks for investment. Positive Alpha denotes that the fund managers are successful in picking quality stocks.

Alpha is a risk-return indicator that can help you to judge the fund's performance, and measures performance on a risk-adjusted basis. It is often considered to represent the value that a portfolio manager adds or subtracts from a fund portfolio's return. A positive alpha means the fund has

Impact of Covid-19 on the Performance of Multi-Cap Funds

outperformed its benchmark index (Kumar, 2020b).

R-Squared (RSQ)

This examines the extent of diversification of mutual fund schemes. R-squared value of more than 0.6 indicates excellent diversification of funds. The value of RSQ ranges between 0 and 1. There exists an inverse relationship between RSQ and unsystematic risk. The higher the RSQ the lower will be the unsystematic risk.

Table 4 presents values of beta, alpha, and RSQ.

Table 4: Beta, Alpha, and RSQ of the Funds

Fund & benchmark		1Y		3Y		5Y	
		Pre COVID	Post COVID	Pre COVID	Post COVID	Pre COVID	Post COVID
	KSMF	1.029	0.974	0.938	0.952	0.963	0.966
		A	D	D	D	D	D
	HEF	1.198	1.010	1.085	1.041	1.124	1.085
		A	A	A	A	A	A
НА	KSMF	0.313	0.168	0.204	0.084	0.259	0.244
АГРНА	HEF	(-) 0.237	(-) 0.628	(-) 0.118	(-) 0.171	(-) 0.125	(-) 0.127
RSQ	KSMF	0.9692	0.9890	0.9529	0.9809	0.9584	0.9769
<u> </u>	HEF	0.8696	0.9763	0.8663	0.9353	0.8853	0.9323

Source: Computed by researchers

A = Aggressive mutual fund, D = Defensive mutual fund

Though the coronavirus outburst immensely worsened the performance of Multi-cap funds in terms of returns, risks, and risk-adjusted returns, this has not affected much to the nature of the funds, stock-picking ability of the funds, and the extent of diversification.

A fund that remained aggressive (HEF) in the pre-covid period continued to be so even after the COVID-19 outbreak. KSMF remained defensive during the entire post-covid period whereas it remained aggressive in the 1-year period before the coronavirus outbreak.

It is noticed that KSMF generated positive alpha values during the entire study period (both pre and post covid) though the alpha value of the post-covid period was less than the alpha value of the precovid corresponding period. It implies that the fund managers of KSMF were successful in picking quality stocks. On the other hand, HEF exhibited negative alpha values during the entire study period (both pre and post covid). It signifies that the fund managers of HEF were not successful in picking quality stocks.

Further, it is observed from RSQ values that both the funds were well diversified both before and after the coronavirus outbreak. It implies that the funds succeeded in deducing unsystematic risk component to a great extent.

CONCLUSION

The whole world started following a new pace since December 2019 due to spread of contagious disease of coronavirus. This contagious disease first outburst in India in January 2020. To mitigate

the spread of such deadly disease, the Government of India announced lockdowns and several strict rules like social distancing. This had also affected the capital market as well as the mutual fund industry. The market fall was like a financial cyclone that waved away the faith and stability despite miscellaneous liquidity measures taken by the Central Government. The markets were worried on account of lack of clarity in near future. This led to massive fluctuations in the markets. With the sudden shut down of six debt mutual fund schemes by Franklin Templeton AMC, the investors' fear mounted again with increased lack of confidence about the way forward.

The present study analyzed that the Multi-cap funds experienced tremendous back flush of returns with increased risks. But this pandemic COVID-19 failed to change the nature of the funds and the stock-picking ability of the fund managers, as well as the extent of diversification of such funds. Throughout the entire five years (both pre and post covid), KSMF outperformed HEF in terms of CAGR, risk, risk-adjusted return, stock-picking ability while remaining defensive most of the times.

Indian economy in general and Indian mutual fund industry in particular are resilient enough to rebound from this COVID-19 hit, just as soon as the fight against the virus is won.

Limitations of the study

The present study suffers from certain limitations which are as follows:

- (i) The study focuses on analyzing performances using traditional measures only.
- (ii) The sample size taken for this study is very small.
- (iii) The analysis is fully based on secondary sources of information where limitations are usual.
- (iv) Only five years' data have been considered for this study.
- (v) The effect of brokerages, exit load and taxes are not considered here.

ACKNOWLEDGEMENT

The researchers express their heartfelt gratitude to Prof. Ashish Kumar Sana, Professor and former Head, Department of Commerce, University of Calcutta, Kolkata, West Bengal, India for his constant

REFERENCES

- Amihud, Y., & Goyenko, R. (2013). Mutual fund's R 2 as predictor of performance. *The Review of Financial Studies*, 26(3), 667-694. https://doi.org/10.1093/rfs/hhs182
- Arora, R., & Raman, T. V. (2020). A study on performance evaluation of equity mutual funds schemes in India. *International Journal of Financial Engineering*, 7(02), 2050017. http://dx.doi.org/10.1142/S24247 86320500176
- Association of Mutual Funds in India (2022) Indian Mutual Fund Industry's Average Assets Under Management (AAUM) stood at ₹ 37.70 Lakh Crore (INR 37.70 trillion). https://www.amfiindia.com/indian-mutual
- Association of Mutual Fund in India (AMFI) (2020). Industry Trades (2022). https://www.amfiindia.com/Themes/Theme1/downloads/home/Industry-Trends.pdf,
- Jagric, T., Podobnik, B., Strasek, S., & Jagric, V. (2015). Risk-adjusted performance of mutual funds: some tests. *South-Eastern Europe Journal of Economics*, *5*(2).
- Karrupasamy, R., & Vanaja, V. (2014). Performance evaluation of selected category of public sector mutual fund schemes in India. *International Research Journal of Business and Management, 1*, 1-9.
- Kumar, D. (2020a). The futility of market timing. https://www.valueresearchonline.com/stories/48067/the-futility-of-market-timing/
- Kumar, S. (2020b). Key steps to get the right mix of mutual fund. https://www.dnaindia.com/business/

Impact of Covid-19 on the Performance of Multi-Cap Funds

- report-key-steps-to-get-the-right-mix-of-mutual-fund-2425536.
- Pandow, B.A. (2017). Performance of Mutual Funds in India. *International Journal of Research in IT, Management and Engineering*, 7(1), 14-23. https://www.doi.org/10.2139/ssrn.2925049
- Securities and Exchange Board of India. (2017). *Categorization and Rationalization of Mutual Fund schemes*. https://www.sebi.gov.in/legal/circulars/oct-2017/categorization-and-rationalization-of-mutual-fund-schemes_36199.html
- Shukla, S. (2015). Comparative Performance Evaluation of Selected Mutual Funds. *International Journal of Science Technology & Management*, 4(2), 140-149. http://dx.doi.org/10.18535/afmj/v2i9.02
- Soni, R. (2017). Designing a portfolio based on risk and return of various asset classes. *International Journal of Economics and Finance*, *9*(2), 142-147. https://www.doi.org/10.5539/ijef.v9n2p142