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Evaluating the large-cap mutual funds performance vis-à-vis benchmark index in India a decadal study

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Abstract
This paper analyzes the returns and risk of large cap funds vis-a-vis their benchmark index, NIFTY 100 and explores the effect of COVID-19 on the returns of these funds. The study is based on the monthly returns of eleven large cap funds viz., Aditya Birla, Edelweiss large cap fund, Franklin India Bluechip Fund, Grow Large cap fund, HDFC Top 100 fund, ICICI Prudential, Invesco India Large cap fund, Kotak Bluechip fund, LIC MF Large cap fund, Mirae Asset Large cap fund, and Tata Large cap fund from 2014 to 2023. Further, in order to attain the three objectives of the study, we utilize independent t-test and the multiple regression model. The results of an independent t-test indicate that the returns of the eleven large cap funds are not significantly different from the returns of their benchmark index, NIFTY 100. Further, the results of the multiple regression model suggest that except LIC MF, the returns of these funds are almost similar to the NIFTY 100 index returns. We find that returns of LIC MF were significantly lower than the NIFTY 100 index returns during the last decade. Moreover, our findings indicate that except HDFC top 100 fund, the systematic risk associated with these funds is lower than that of the NIFTY 100 index. We find that the HDFC top 100 fund was slightly riskier as compared to the NIFTY 100 index. Additionally, we find that COVID-19 significantly increased the returns of Aditya Birla Sun Life Frontline Equity Fund and ICICI Prudential Bluechip Fund.

Keywords: Large cap funds, nifty 100, COVID-19 impact, monthly returns

Introduction

Indian economy has been progressing steadily with affirmative growth projections from global rating agencies including Moody's [1], S&P Global [2] and Fitch's [3] consistently in the recent past. Buoyant investment scenario and increasing opportunities is driving this nation of surplus savers towards active investments in securities markets and allied instruments to generate returns. Investment paves the way for wealth creation. This demand side push has been further supplemented by a multitude of mutual fund (MF) products offering portfolio diversification without constant monitoring and active participation in the markets. Indian MF Industry has witnessed multifold growth in past few decades and that has also led to increase in MF offerings. Now a variety of MFs catering to specific investors needs are available like firms ranging from small to mid and large-cap funds and their hybrid combinations. Retail investors do not track capital and money markets on daily basis and prefer to rely on professional expertise to park their surplus funds with the expectation of beating the market returns. Modern portfolio theory permits investment specialists to assists better the requirements of their clients by providing an outline to choose a diversified portfolios based on the risk involved and anticipated performance of the investments (Fabozzi *et al.*, 2002) [6]. However active MF being professionally managed incur higher cost and the same is passed on to the investors in terms of expense ratio. Conversely, passively managed MF portfolio nearly mirrors the benchmark index and is regularly updated with

[1] https://www.moodys.com/
[2] https://www.spglobal.com/
[3] https://www.fitchsolutions.com/

changes in benchmarked index at an albeit lesser risk and expenses. When we compare the returns, cost of index fund will be lesser than actively managed MF. According to (Cox, 2017) [3], individuals' perception on market efficiency is the determinant factor for difference in return. Investors who are not expecting extra return and aim to earn as per market efficiency prefer passive MFs and people who are expecting alpha that is risk adjusted returns and perceive market will be inefficient prefers active MFs. There is a possibility of earning more revenue than expected from passively invested MFs when market is efficient. In such a case no difference in performance of both bench mark and active management MFs is witnessed because the net return in actively managed MFs may be fairly identical to index funds. (Elton *et al.*, 2019) [5] discussed that matching technique, method of managing index variations, share buybacks, cash inflows and outflows to the fund, proceeds earned from security lending, transaction costs, expenses and capital gain taxes on sales of securities are the factors influences the performance of both funds in pre-expense and showed the higher effect of expenses at the time of low performance. Research of 22 large-cap and 18 'mid and small-cap' funds in India over period 2009-14 by (Rai *et al.*, 2014) [2] revealed that a significant out performance was found in both the kind of funds over respective benchmark indices. Further, (Maheen, 2021) [15] concluded that investors' risk will increase during uncertainties like war, pandemic etc., and that there was no excess return from Indian MFs to adjust the risk during Covid 19 period. According to (Gupta, 2020) [8] emerging economies like India or Brazil face market inefficiencies and leave scope for earning returns over and above market returns. With this background of MF investment, this paper addresses the question whether the yield of longterm large-cap MF investment in passive option would be any different from those of actively management MFs in India. The study further adds a perspective on impact of global pandemic that brought the world to a standstill and led to a fall of 25-30 percent in major stock markets of the world. It is therefore pertinent to understand its impact on stock market returns of an emerging economy like India.

A strong foundation has been laid down by discussing published literature in Section 2, followed by data and methods in Section 3. A discussion on results has been presented in Section 4 and lastly, Section 5 concludes the research paper.

Literature Review

Most of the earlier researches have discussed the strategies used to select the MF investment, factors influencing the MF investment, performance of active and passive fund investment, manager's efficiency and the relationship of risk and return on MFs. Managers knowledge on prediction and allocation of fund is an important factor in actively managed MFs. Employing a weight-based method (Khang & Miller, 2022) [11] examined whether active involvement of fund managers affect the returns. They found persistently active managers continue to be persistent in the future reflecting high level movement in the future period. However, this active involvement does not capitalise into higher returns beating the market on a persistent basis in the future. (Pástor & Stambaugh, 2002) [17] analyse whether the selection of investment on MFs depends on incorporated pricing models and managerial skill. They deduce that there is a significant influence on optimal portfolios by the information shared in non- benchmark assets, previous opinions about pricing and talent of the fund manager.

(Shreekant *et al.*, 2020) [22] investigated "the performance of 25 actively manged large cap funds and 22 large cap indexed funds" in India and revealed that returns from actively managed funds are not higher than market indexed fund returns and no significant performance variance found between them. Conversely, (Kremnitzer & Malmendier, 2012) [13] studied whether the performance of investment on actively managed MFs in emerging markets steadily yield higher return than indexed funds. They used the data of all existing US MFs and ETFs based on emerging markets and results showed that these funds exhibited better returns due to arbitrage opportunities of emerging markets. The idea of studying active and passive MFs based on emerging markets was put forward due to lower market efficiencies of these markets offering higher arbitrage opportunities. Hence empirical results lend support to the hypothesis. (Mateus *et al.*, 2019) [16] examined the performance and its tenacity of MF investment selected on the basis of indices for the sample of 817 active UK long term equity MFs. The authors revealed that positive adjustments in peer group investments have produced a progressive return on equities. The value attained by 194 active funds in the German investment fund market was studied by (Fahling *et al.*, 2019) [7] and concluded that though abnormal return could be derived from active MF investment and it was counter balanced by higher expenses. (Maheen, 2021) [15] tested if the Indian equity MFs could offer superior returns during the COVID period and did not find evidence of beating the market. (Cox, 2017) [3], investigated the role of passive and active investment tactics in US and revealed that passive investment provides maximum return in long term return than active investing strategy. By analysing 15 well-known stock market differences. (Lee *et al.*, 2020) [14] find that undervalued stocks performed better than investments in overvalued stocks and portfolio has to be adjusted for better return instead of taking advantages of mispricing in equity markets.

MF investment benefits are certainly based on market risks by its nature. (Krantz & Karlsson, 2022) [12] analysed the risk-adjusted returns between indexed funds and actively managed equities and discovered significant negative result of revenue between the passive and active management of equities. (Raju & R, 2018) [18] evaluate the Indian large cap equity MF schemes on the basis of risk - return relationship and conclude that active funds would be earning higher returns with uncertainty of risk compared to indexed investments. (Redman *et al.*, 2000) [19] compared the risk agreed revenue between vanguard indexed international MFs and a portfolio of funds that invest exclusively in US stocks for three different time periods. The study revealed the combined and divergent portfolio of foreign and domestic securities derived more probable benefits than US stock market and domestic MF investments. Analysis of factors influencing the passive and active fund savings and its return plays a crucial role in the investment procedure.

(Elton *et al.*, 2019) [5] analysed the factors causes differences in returns across funds and system of searching passive funds and finds the expense ratio has significant impact on differential return and investor should select the lowest expense passive MFs than the average index fund which will improve income. By employing a pooled cross-

section analysis, (Droms & Walker, 1996) [4] investigated "long-run relationship between risk-adjusted performance of equity MFs and expense ratio, income from portfolio, size of the asset and load-no load status on 151 equity funds returns" and reported there is no association between investment performance and the selected variables. (Gupta, 2020) [8] analysed the information efficiency on the performance of 20 active and 20 passive MFs each for a cross section of eight countries including four developed and four developing countries. The study reveals that there is no major variation between active and passive MF returns based on development status of the country. To investigate the comprehensive insight of index and exchange traded funds are passive and mostly substitutable (Akey *et al.*, 2021) [1] used hand-collected prospectus data and three different concepts of activeness. Authors conclude that wide range of styles possible in passively managed funds and they offer risky contracts than actively managed funds. (Sherrill *et al.*, 2017) [21] examined the relationship between exchange-traded funds (ETFs) within actively managed MF (AMMF) portfolios. The results indicates that no remarkable difference between small position of ETF and non-ETFS whereas great under performance was found in that large ETF positions.

As Indian economy witnessed a strong and persistent surge in MF industry during the last decade, it becomes pertinent to study whether active MFs are able to justify higher expense ratios by performing better than the market. Along with the impact of global pandemic on returns.

Data and Research Methods

This study is based on the secondary data of eleven large cap funds NAV for the last decade with same benchmark index, NIFTY 100 [4]. The study is based on all large-cap funds that earmarked NIFTY 100 as its benchmark index and were functional for entire study period. The paper may suffer from survival bias as funds with lack of data for entire study period were kept outside the scope of present study. Hence the hypotheses have been tested on Daily NAV data of eleven large cap MFs listed in Table 1. The relevant data was collected from AMFI website from 2014 to 2023. Daily data was converted into monthly returns using Python. Our analysis begins with an independent t-test to compare the average returns of these 11 funds during last ten years with the average returns of benchmark index, i.e. NIFTY 100 Total Return Index (NIFTY100).

$$t = \frac{(\bar{x}_i - \bar{x}_m) - (\mu_i - \mu_m)}{\sqrt{\frac{s_i^2}{n_1} + \frac{s_m^2}{n_2}}} \quad (1)$$

where $\bar{x}_i$ are returns of the i[th] large cap fund and $\bar{x}_m$ are the returns of benchmark index, viz. NIFTY 100. μ_i and μ_m are the mean population returns of index i and benchmark index respectively. s_i and s_m are the standard deviation of index i and NIFTY 100 respectively. n_1 and n_2 are the number of observations in i[th] MF and NIFTY 100 respectively.

Further, we use multiple regression analysis to compare the returns and volatility of the selected large cap MFs with that of benchmark index funds. The regression equation utilized in this study is based on the traditional capital asset pricing model (CAPM) and single factor model developed by (Sharpe, 1964) [20] and (Jensen, 1968) [9].

$$R_l - R_t = \alpha + \beta\,(R_b - R_t) + \gamma Covid + \varepsilon \quad (2)$$

We estimate the above equation for all eleven MFs. R_l is the return of large cap MF, R_b is the NIFTY 100 return, R_t is the risk-free rate of 91-day treasury bill, α is the intercept coefficient that denotes Jensen's alpha for large cap MF, β is the slope coefficient that denotes beta for large cap MF and ε is random error term. $Covid$ is the dummy variable with values '0' and '1':

$$Covid = \begin{cases} 1 \; if \; t \; \epsilon \; January\; 2020 \; - \; May\; 2023 \\ 0 \; otherwise \end{cases}$$

The monthly data of 91-day treasury bill rate is collected from the St. Louis Federal Reserve database. Further, before running the above regression, we test for the stationarity of variables using Dickey-Fuller Generalised Least Squares (DF-GLS) test.

A positive and significant α_i indicates that MF i has outperformed over the benchmark index NIFTY 100. β_i measures the risk or volatility of MF 'i' compared to the benchmark index. If the value of β_i is less than one, it shows that the MF 'i' is less volatile vis-a-vis the benchmark index. We use hetrokscedasticity and autocorrelation corrected standard errors to account for the deviation from the i.i.d assumption. Thus, in this study, we test the following three hypothesis for the large cap MFs.

1. **H1:** The return on large-cap MFs and the return on NIFTY 100 index are not significant, viz. $(\mu_i - \mu_m) = 0$ in (1) and $\alpha = 0$ in (2)
2. **H2:** Large cap funds are less risky than the benchmark index, viz. $\beta < 1$
3. **H3:** There is no significant impact of Covid-19 on the returns of large cap returns.

Results and Discussion

The findings of this study are discussed in detail in this section. We initially hypothesised that the difference in the returns of the selected large cap funds and the benchmark are not significantly different. Table 1 of this study shows that the p-value of each of the eleven MFs is much higher than the level of significance (LoS).This clearly demonstrates that in this present instance, we have failed to reject the null hypothesis. A similar methodology has been followed by (Jonwall *et al.*, 2024) [10]. Hence, the returns of the funds selected imitate the results of the benchmark.

Table 1: Results of Independent t-test

Name of Large-cap fund	p-value**
Aditya Birla Sun Life Frontline Equity Fund (ABSF)	0.5839
Edelweiss Large Cap Fund (ELCF)	0.6334
Franklin India Bluechip Fund (FLBF)	0.8035
Groww Large Cap Fund (GLCF)	0.7645
HDFC Top 100 Fund (HDFCF)	0.6226
ICICI Prudential Bluechip Fund (ICICIF)	0.5792
Invesco India Largecap Fund (IILF)	0.5929
Kotak Bluechip Fund (KBF)	0.6025
LIC MF Large Cap Fund (LICF)	0.8316
Mirae Asset Large Cap Fund (MALF)	0.5049
Tata Large Cap Fund (TLCF)	0.6995

[4] This category was chosen due to massive market capitalization of Rs. 20,000 crore or more.

*Independent t-test: Average yearly returns of large cap funds compared with the average yearly returns of the benchmark. ** The p-value is at 5% LoS.
Source: Authors' Estimation

The underlying constitution of these funds are large cap stocks that are the dominant force in the index composition as well, the index being slightly more broad based than these funds. Our findings show that the large cap MFs that are actively managed are not able to provide superior returns as compared to the market (represented by the benchmark index performance). Despite the relatively higher expense ratios, majority of these funds fail to beat the market during the period of study. Further, fund-wise results of multiple regression are presented in Tables 2 - 7.

Table 2: Regression results between ABSF and ICICIF with NIFTY 100

	Intercept	NIFTY 100 Total Return Index	Covid	Multiple R-squared	F-statistic
Aditya Birla Sun Life Frontline Equity Fund					
Coefficient	-0.142618	0.922441	0.375899	97.17%	p-value < 0.000001
Std. Error	0.13204	0.014353	0.151374		
t value	-1.080116	64.26635	2.483253		
p-value*	0.2823	0	0.0144		
ICICI Prudential Bluechip Fund					
Coefficient	-0.143796	0.92123	0.373671	97.18%	p-value < 0.000001
Std. Error	0.131461	0.014117	0.150813		
t value	-1.093831	65.25463	2.477716		
p-value*	0.2763	0	0.017		

* The p-value is at 5% LoS
Source: Authors' Estimation

Table 2 shows the regression results at 5% LoS between ABSF and benchmark Nifty 100, and regression between ICICIF and benchmark Nifty 100 indicate that the estimated alpha is negative and insignificant, implying that the returns of NIFTY 100 index and returns of these funds are almost the same. Hence, we find no significant difference between the returns of ABSF and ICICIF, compared with Nifty 100 index. Hence, we fail to reject H1 in both these cases. The estimated beta coefficient of 0.92 in both regressions indicate that the two funds' returns would change by only 0.92 units when there is a unit change in the benchmark return. This shows that both ABSF and ICICIF are less volatile than its benchmark index. Hence, we fail to reject H2 as well that these large cap funds are less volatile than the benchmark index. We also hypothesised that the impact of Covid-19 on the performance of these two funds is insignificant. But our analysis shows otherwise. Hence, we reject H3. The high Multiple R-squared value of about 97% indicates that our independent variables explain most of the model's variability. This, combined with the p-value of F statistics being less than 0.05 indicate that the model is appropriately fitted. Thus, we conclude that these funds at best perform as the benchmark index.

Table 3: Regression results between ELCF, FIBF and KBF with NIFTY 100

	Intercept	NIFTY 100 Total Return Index	Covid	Multiple R-squared	F-statistic
Edelweiss Large Cap Fund					
Coefficient	-0.034202	0.940264	0.161394	96.21%	p-value < 0.000001
Std. Error	0.114632	0.019162	0.15394		
t value	-0.298361	49.07045	1.04842		
p-value*	0.766	0	0.2966		
Franklin India Bluechip Fund					
Coefficient	-0.260655	0.9366	0.370295	93.25%	p-value < 0.000001
Std. Error	0.173172	0.025134	0.320934		
t value	-1.505179	37.26367	1.153805		
p-value*	0.135	0	0.2509		
Kotak Bluechip Fund					
Coefficient	-0.059111	0.934283	0.236198	97.58%	p-value < 0.000001
Std. Error	0.132442	0.016233	0.181501		
t value	-0.446315	0.55556	1.301362		
p-value*	0.6562	0	0.1957		

* The p-value is at 5% LoS
***Source*:** Authors' Estimation

We will now demonstrate the regression results of the ELCF, FIBF and KBF against the NIFTY 100, as shown in Table 3. In each these cases, the estimated alpha is found to be negative and insignificant. These three funds also closely follow the returns of the benchmark index. Hence, we conclude that there, indeed is no significant difference between the returns of actively managed funds and the NIFTY 100 in all three cases. Further, the beta value of these funds is less than 1 indicating less relative volatility to the market returns. We conclude that the selected funds demonstrate less dispersion as compared to the benchmark and fail to reject the second hypothesis (H2), as well. The coefficient of the independent variable that demonstrated the impact of Covid-19 on the performance of these funds had a p value greater than 0.05, and thus we fail to reject the null (H3). The high R-squared value for these models indicates that the benchmark index Nifty 100 and dummy variable, demonstrating Covid-19's impact explain more than 93%

variation in the return of these funds. The model is appropriately fitted, as shown by p value of the F-Statistic being less than 0.05. The aforementioned actively managed large cap funds fail to beat the market for the period under consideration.

Table 4: Regression results between GLCF, IILF and MALF with NIFTY 100

	Intercept	NIFTY 100 Total Return Index	Covid	Multiple R squared	F-statistic
Groww Large Cap Fund					
Coefficient	0.018287	0.953756	-0.179998	94.73%	p-value < 0.000001
Std. Error	0.183944	0.024787	0.190173		
t value	0.099417	38.47804	-0.946494		
p-value*	0.921	0	0.3458		
Invesco India Largecap Fund					
Coefficient	0.006346	0.92723	-0.07742	94.27%	p-value < 0.000001
Std. Error	0.16306	0.018959	0.276017		
t value	0.038921	48.90736	-0.280489		
p-value*	0.9069	0	0.7796		
Mirae Asset Large Cap Fund					
Coefficient	0.149034	0.940644	-0.04163	96.75%	p-value < 0.000001
Std. Error	0.162391	0.016765	0.178467		
t value	0.917745	56.10657	-0.233265		
p-value*	0.366	0	0.816		

* The p-value is at 5% LoS
***Source*:** Authors' Estimation

The results of the regression between GLCF, IILF and MALF with NIFTY 100 (Table 4) indicate that these funds have a positive but insignificant alpha. This also shows the expected result, similar to the previously analysed funds, that the difference in returns of these funds and the benchmark is statistically insignificant. Further, these three funds are less volatile than the the NIFTY 100 with beta less than 1, concluding that large cap funds are less risky than the benchmark index in all three cases. There is an insignificant relationship (p> 0.05) with dummy variable Covid signifying that Covid did not impact the returns of these funds. Therefore, we fail to reject the null hypothesis H3. These models explain more than 94% variations in returns of these funds as indicated by Multiple R-square. In all these models, F-statistic p-value < 0.000001 indicates that models are a good fit. Hence, in line with the previously discussed funds, we can conclude that these funds are providing a similar return as the benchmark Nifty 100 Index.

Table 5: Regression results HDFCF with NIFTY 100

HDFC Top 100 Fund	Coefficient	Std. Error	t value	p-value*
Intercept	0.414235	0.359729	1.151520	0.2519
NIFTY 100 Total Return Index	1.021911	0.047688	21.42921	0.0000
Covid	0.113522	0.348139	0.326083	0.7449
Multiple R-squared: 91.73%, F-statistic p-value < 0.000001				

* The p-value is at 5% LoS
***Source*:** Authors' Estimation

On analysing the results of the regression between HDFC Top 100 Fund and benchmark Nifty 100 Index (Table 5), we find positive and insignificant alpha (0.414235). The benchmark Index's coefficient of 1.021911 clearly shows that, HDFC Top 100 Fund would change by 1.02 units if there is one unit change in the benchmark index. This result is not in line with our previous results since this fund is able to perform slightly better than the market, on an average, rejecting H1 in the process. HDFC's β is slightly greater than 1, meaning that HDFCF is an aggressive fund with a higher beta indicating higher systematic risk, rejecting the hypothesis H2 that large cap funds are less volatile than the NIFTY 100. Covid-19's impact is statistically insignificant (p-value>0.05) and has no effect on the performance of the fund and therefore, failing to reject hypothesis H3. Multiple R-squared of 91.73% indicates that the dummy variable Covid-19 and the benchmark index Nifty 100 is able to explain 91.73% variations in the model. This, combined with the F-statistic p-value < 0.000001 explains that the predictive power of the model is robust and is reliable and demonstrates good prediction capabilities.

Table 6: Regression results between LICF with NIFTY 100

LIC MF Large Cap Fund	Coefficient	Std. Error	t value	p-value*
Intercept	-0.490671	0.247611	-1.981618	0.0499
NIFTY 100 Total Return Index	0.879728	0.040166	21.90204	0.0000
Covid	0.090758	0.242691	0.373966	0.7091
Multiple R-squared: 92.57%, F-statistic p-value < 0.000001				

* The p-value is at 5% LoS
***Source*:** Authors' Estimation

The regression results between LIC MF and benchmark Nifty 100 Index depicted in Table 6 demonstrate negative and significant alpha (-0.490671) for LIC MF large cap fund. The estimated coefficient of beta, 0.879728 indicates a strong positive relationship between LICF and Nifty 100 Index. LIC MF's return would change by 0.88% with a 1% change in the benchmark's value. Hence, we fail to reject the null hypothesis H1. This fund's beta equals 0.879, suggesting that this fund is less volatile than the benchmark Nifty 100 Index, failing to reject H2 in the process. The p value of the Covid-19 dummy variable is greater than the level of significance and shows that the pandemic had a statistically insignificant impact on the fund's returns. Therefore we fail to reject H3, as well. The high Multiple R squared value indicates that this fund mirrors the benchmark, in terms of returns. The model is well fitted, as shown by an extremely low p-value of the F-Statistic.

Table 7: Regression results between TLCF with NIFTY 100

Tata Large Cap Fund	Coefficient	Std. Error	t value	p-value*
Intercept	0.022895	0.120683	0.189714	0.8499
NIFTY 100 Total Return Index	0.961507	0.016015	60.03629	0.0000
Covid	0.133409	0.181105	0.736639	0.4628
Multiple R-squared: 96.63%, F-statistic p-value < 0.000001				

** The p-value is at 5% LoS*

***Source*:** Authors' Estimation

The OLS regression between TLCF and NIFTY 100 (Table 7) indicate positive and insignificant alpha as is the case with MALF, GLCF, IILF and HDFCF. TLCF's returns share a significant relationship with the benchmark's returns, with a p-value<0.05. The returns of this fund would change by 0.96 units for a unit change in the benchmark index. Hence, we, again fail to reject the H1. The fund's beta equals 0.96, signalling that the fund is slightly less volatile than the benchmark, failing to reject H2, as well. Covid-19 pandemic also had no significant impact on TLCF's returns and therefore we fail to reject H3 as well. The high Multiple R-Squared (96.63%) and F-statistic p-value < 0.000001 indicate that the model is robust and a good fit. Here again we can conclude that this fund is providing the similar return as the benchmark Nifty 100 Index.

Thus, as summarized in Table 8, we find that out of eleven selected large cap equity mutual funds analysed in this paper, only the returns of LICF were significantly lower than the benchmark index NIFTY 100. The remaining ten funds considered in this study performed similar to the benchmark index, i.e., NIFTY 100 index. Further, it may be seen from Table 8 that for all large cap funds except HDFCF, the value of beta is positive, less than 1 and significant. For HDFCF the value of beta is positive and greater than one.

Table 8: Fund-wise Overview of Results

Fund	Estimated Alpha (Intercept)		Beta	Covid-19 (Dummy)	
	Direction	Significance		Direction	Significance
ABSF	Negative	Insignificant	Less than 1	Positive	Significant
ELCF	Negative			Positive	Insignificant
FIBF	Negative			Positive	
GLCF	Positive			Negative	
HDFCF	Positive		More than 1	Positive	
ICICIF	Negative		Less than 1	Positive	Significant
IILF	Positive			Negative	Insignificant
KBF	Negative			Positive	
LICF	Negative	Significant		Positive	
MALF	Positive	Insignificant		Negative	
TLCF	Positive			Positive	

***Source*:** Authors' Estimation

Conclusion

This paper compares the returns and risk of large cap funds vis-a-vis their benchmark index, NIFTY 100 and explores the effect of COVID-19 on returns. The study is based on the monthly returns of eleven large cap funds from 2014 to 2023. Further, the three objectives of the study have been addressed by employing independent t-test and the multiple regression model. The results of an independent t-test indicate that the returns of the eleven large cap funds are not significantly different from the returns of their benchmark index, NIFTY 100. Further, the results of the multiple regression model suggest that except LICF, the returns of these funds are almost similar to the NIFTY 100 index returns. We find that returns of LICF were significantly lower than the NIFTY 100 index returns during the last decade. Moreover, our findings indicate that except HDFCF, the systematic risk associated with these funds is lower than that of the NIFTY 100 index. We find that the HDFCF was slightly riskier as compared to the benchmark index. Additionally, we find that COVID-19 significantly increased the returns of ABSF and ICICIF only during the study period. The results are in line with those of (Shreekant *et al.*, 2020) [22] due to lack of significant difference between returns generated by these actively managed funds vis-à-vis the benchmark index. The results can be furthered with a more exhaustive list of MFs benchmarked against NIFTY 500 to capture the movement of nearly entire market. Also, a deeper analysis may be conducted to identify the reasons for these insignificant differences in returns despite arbitrage opportunities in an emerging economy like India.

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