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PERFORMANCE EVALUATION OF LARGE CAP FUNDS

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ABSTRACT

A mutual fund is an investment vehicle made up of a pool of money collected from many investors for the purpose of investing in securities such as stocks, bonds, money market instruments and other assets. FUND is broadly divided into four categories, such as Large cap, Large and Mid cap, Multi cap and Mid & small cap. An analysis is made on Large cap based select large cap funds. Large Cap Funds are known to offer stable and sustainable returns over a period of time. The performance Evaluation of Large Cap Funds has been Evaluated by using parameters like risk returns related analysis. All the large cap category funds have succeeded in imitating the performance of the underlying index and registered excessive returns over CNX Nifty Index. All the schemes of Large Cap. Funds exhibited lesser risk than the bench mark Index and considered defensive portfolios. All schemes have succeeded in generating excess returns in commensurate with their systematic risk as compared to Bench mark Index. On testing of Hypothesis, it is noticed that all the schemes operated by select AMCs are positively Co-related with regard to financial and Investment dimension.

Performance Evaluation of Large Cap funds revealed that the ICICI Prudential Top 100 Fund Growth has dominated the market due to high returns, timely diversification of the portfolio, superior stock selection and effective asset management skills, ranked number one.

***KEYWORDS:** Performance Evaluation, Mutual Funds, Large Cap Funds & Investment*

Original Article

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INTRODUCTION

The funds which invest a large proportion of their corpus in companies with large market capitalization are called large cap funds. Large Cap funds are known to offer stable and sustainable returns over a period of time, but might be out performed by small and mid cap funds, which have higher risk exposure. Large cap funds are those mutual funds, which seek capital appreciation by investing primarily in stocks of blue chip companies, with a market capitalization in excess of Rs.1000 Crore. Investing in large caps is a lower risk-return proportion, because such companies are usually widely researched and information is widely available. Large cap funds are less volatile than mid and small cap funds and the near term prospects of large cap funds can be more accurately predicted. On the flip side, the large cap funds offer lower returns than mid cap or small cap funds. Large cap funds outperform all other funds when compared in totality. These funds come under low risk category. It is advisable to invest in large cap funds in volatile times.

RESEARCH METHODOLOGY

As per AMFI there are 63Asset Management Companies (AMCs) are operated in India during March 2017. They are as follows.

Table 1: Number of Asset Management Companies

S.No.	AMCs Name	S.No.	AMCs Name
1	AIG Global Investment Mutual Fund	33	JP Morgan Mutual Fund
2	Alliance Capital MF	34	**Kotak Mahindra MF**
3	Anagram Wellington MF	35	L&T Mutual Fund
4	Apple Mutual Fund	36	Lotus Mutual Fund
5	AXIS Mutual Fund	37	LIC Mutual Find
6	Benchmark Mutual Fund	38	Mirae Asset Mutual Fund
7	BOI AXA Mutual Fund	39	Mahindra MF
8	**Birla Sun Life Mutual Fund**	40	Morgan Stanley MF
9	BNP Paribus MF	41	Peerless Mutual Fund
10	Baroda Pioneer MF	42	Motilal Oswal MF
11	CRB Mutual Fund	43	Pioneer ITI Mutual Fund
12	Deutsche Mutual Fund	44	Pinbridge Mutual Fund
13	**DSP Blackrock MF**	45	Principal Mutual Fund
14	Dundee Mutual Fund	46	Quantum Mutual Fund
15	Edelweiss Mutual Fund	47	Reliance Capital MF
16	Escorts Mutual Fund	48	Sahara Mutual Fund
17	Fidelity Mutual Fund	49	SBI Mutual Fund
18	First India Mutual Fund	50	Shriram Mutual Fund
19	Fortis Mutual Funds	51	SREI Mutual Fund
20	Franklin Templeton MF	52	Sun F&C Mutual Fund
21	Goldman Sachs Mutual Fund	53	Sundaram MF
22	HB Mutual Fund	54	**Tata Mutual Fund**
23	HDFC Mutual Fund	55	Taurus Mutual Fund
24	HSBC Mutual Fund	56	UTI Mutual Fund
25	**ICICI Prudential MF**	57	Union KBC Mutual Fund
26	IDFC Mutual Fund	58	PPFAS
27	IL&FS Mutual Fund	59	DHFL Pramerica MF
28	ING Mutual Fund	60	IIFCL
29	ITC Classic Thread. MF	61	IDBI
30	Invesco MF	62	INDIABULLS
31	Jardine Fleming MF	63	IIFL
32	JM Mutual Fund		

Source: *AMFI*

Above shown AMCs are public and private sector asset management companies. Of the total 63 Asset Management Companies (AMCs), researcher has purposively selected Five AMCs which are operating all types of cap schemes. Furthermore, the researcher has selected each type of cap schemes floated by each chosen AMCs. So selected AMCs are shown in the bold letters in Table 1.

Sampling

Based on the Value research journal and AMFI, there are 63 Asset Management Companies (AMCs) that are in existence during the study period, Out of this, in the first stage, Five (05) mutual fund Asset Management Companies are purposively selected as these Asset Management Companies are found operating Growth funds categorized into Large Cap, Large & Mid Cap, Multi Cap and Mid & Small Cap funds. At the second stage, these five Asset Management Companies are found operating all types of cap funds. In all, there are 49 Cap schemes being floated by these five AMCs (Table 2). Out of 49 schemes, researcher has purposively selected one (01) scheme from each type of Cap fund from each AMC depending upon the existence of given scheme both at the beginning of the study period and at the end of the study period as well as on the basis of availability of required secondary data. The details of the sample design shown in the figure 3.

Period of the Study

The present study aims to carry out the evaluation of the chosen schemes from 2008-09 to 2016-2017. Hence, the study covers a period of 9 financial years. The rationale behind choosing nine years duration as a period of study is to cover bearish phase, bullish phase and consolidation phase as exhibited by the values of respective benchmark indices used in the study.

Table 2: Category-Wise and Sample Schemes According to AMCs

Name of the AMC	Categories and No. of Schemes (in Nos.)									
	Large Cap		Large and Mid Cap		Multi Cap		Mid and Small Cap		Grand Total	
	Total Scheme	Sample Scheme	Total Scheme	Sample Scheme	Total Scheme	Sample Scheme	Total Scheme	Sample Scheme	Total Scheme	Sample Scheme
Birla Sun Life Asset Management Company Limited	2	1	5	1	3	1	5	1	15	04
DSP BlackRock Investment Managers Private Limited	2	1	2	1	2	1	2	1	08	04
ICICI Prudential Mutual Fund	1	1	3	1	1	1	1	1	06	04
Kotak Mahindra Asset Management Company Limited	3	1	3	1	1	1	2	1	09	04
Tata Asset Management Limited	3	1	3	1	3	1	2	1	11	04
TOTAL	**11**	**5**	**16**	**5**	**10**	**5**	**12**	**5**	**49**	**20**

Source: Compiled by the researcher

From the table 2, it can be inferred that, in above mentioned growth funds are considered as universe is 49 schemes operated by respective AMCs with category-wise, of those, 20 schemes were selected as sample scheme which denotes 41% of the universe.

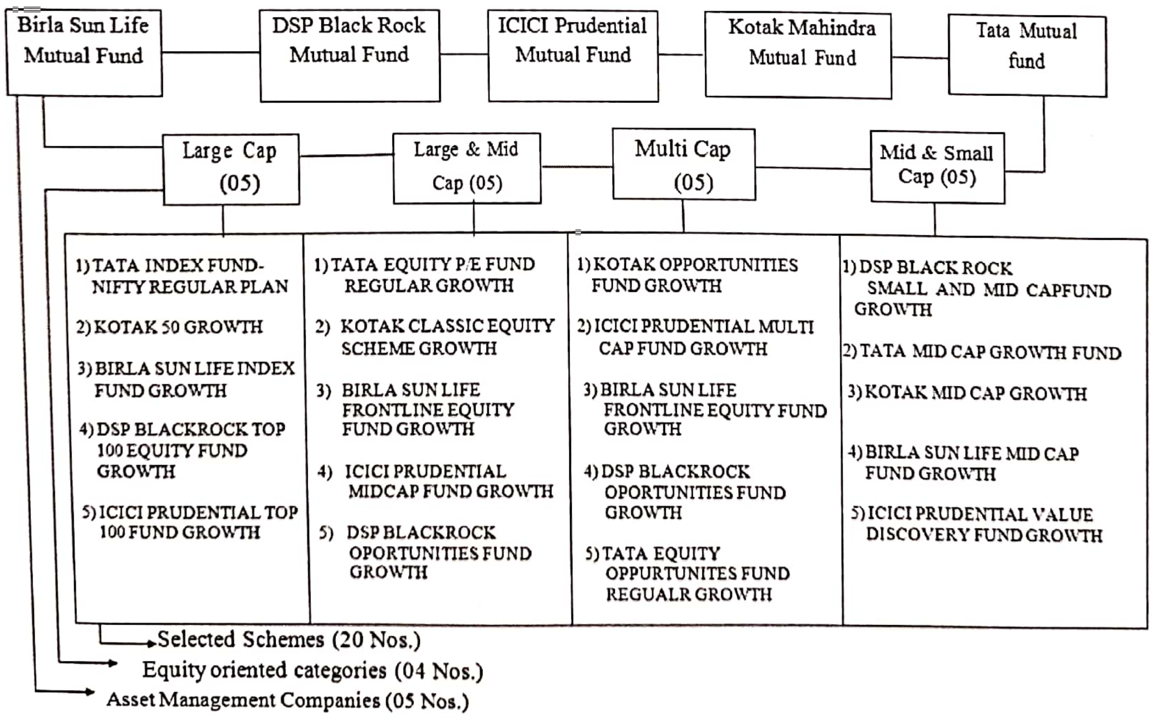

Figure 1: Sampling Design of the Study

Data Collection

The present study is purely based on the secondary sources of information. So, required secondary information has been collected from the published records of the Association of Mutual Funds of India (AMFI), Value Research website, respective Asset Management Companies (AMCs) websites, journals, magazines, CMIE Reports, money control.com, value research.com, morningstar.com and Prowess database.

Tools and Techniques used

- Secondary data collected from various published records
- Performance evaluation of each scheme is evaluated by
    - Sharpe's ratio
    - Treynor's ratio
    - Jensen's differential return
    - Fama decomposition and total return
    - M^2 -measures
- Bank rate has been selected as the risk free rate of return

This paper deals with data analysis and interpretation of large cap funds, adopting the following frame work for analysis and interpretation of data.

- Return related analysis and its interpretation
- Risk related analysis and its interpretation
- Risk – adjusted return analysis and its interpretation

Performance Evaluation Methods

Return Related Analysis and its Interpretation: For the purpose of carrying out return related analysis and interpretations, average holding period return (HPR i.e., 6.69%) for the study period had been compared with the average return on the chosen bench mark index. If the average return is found to be greater than the respective average return on the bench mark index, the said fund is to be considered as experiencing a superior return than the underlying index and vice-versa.

Risk Related Analysis and its Interpretation: Risk refers to variability in returns, the variation in return signifies risk associated with a portfolio. Risk gets measured in terms of standard deviation (σ), beta (β) and coefficient of determination (R^2) Evaluation of riskiness of select schemes, these three variables are measured and suitable interpretation is drawn thereupon. The details are furnished below.

- Total Risk analysis and its interpretation (σ)
- Systematic Risk analysis and its interpretation (β)
- Analysis and interpretation of co-efficient of determination (R^2).

Risk – Adjusted Return Analysis and its Interpretation: Risk and Return are the two variables required for performance evaluation of portfolio, Portfolio evaluation is said to be complete, if the comprehensive evaluation is based on both the return and risk. Thus, risk adjusted return analysis is required for evaluating portfolio performance.

In the lexicon of mutual fund performance evaluation, there are several risk-adjusted performance models evolved and implemented from time to time. The following five (5) models are used for evaluating performance of mutual funds.

- Treynor's Index
- Sharpe's Index
- Jensen's Differential Index
- Eugene Fama's Decomposition Net selectivity Index
- Modigliani and Modiglian's risk adjusted performance measure (M^2)

Returns for select schemes of the large cap funds and bench mark values from 2008-09 to 2016-17 of five top select Mutual Funds.

Table 3: Average Returns of Large Cap- Funds and Bench Mark Values

(Values in Percentages)

Period of Study	CNX Nifty	Tata Index Fund-Nifty Regular Plan	Kotak 50 Growth	Birla Sun Life Index Fund Growth	DSP Blackrock Top 100 Equity Fund Growth	ICICI Prudential Top 100 Fund Growth
2008-09	-51.80	-36.76	-34.62	-36.67	-26.47	-29.28
2009-10	75.80	69.65	69.94	69.91	74.75	69.52
2010-11	17.90	9.93	9.07	9.85	10.22	11.10
2011-12	-24.60	-8.99	-6.39	-10.02	-2.22	-1.48
2012-13	27.70	7.98	9.67	6.88	2.64	6.30
2013-14	6.80	16.99	13.95	18.04	15.01	24.22
2014-15	31.40	25.93	41.79	26.41	36.78	31.44
2015-16	-4.10	-9.69	-5.52	-9.66	-10.06	31.44
2016-17	3.00	19.07	18.92	18.35	22.45	30.72
Average	9.12	10.46	12.98	10.34	13.68	19.33
Deviation		1.34	3.86	1.22	4.56	10.21
Over		Over	Over	Over	Over	Over
Rank		4	3	5	2	1

Source: *Compiled from NAV records of respective AMCs.*

Above table reveals information about the values of holding period returns of select schemes as well as the bench mark index. On the basis of yearly Net Asset Values (NAVs) average returns are calculated for the study period 2008-2009 to 2016-17.

ICICI prudential top 100 fund growth has performed well over the other schemes in the category, with an excess return of 10.21% over its counterpart schemes. DSP black rock top 100 Equity Growth Fund stood second registering an average excess return of 4.56%. It is astonishing to note from the above table that the average rate of returns of all schemes registered excessive returns than the CNX Nifty Index. From the above analysis, it is concluded that all the large cap category funds have succeeded in imitating the performance of the underlying index and registered excessive returns over CNX Nifty Index.

Risk Related Analysis and Interpretation

Table 4: Standard Deviation of Select Schemes of the Large Cap Funds and Bench Mark Values

Particulars	CNX Nifty	Tata Index Fund-Nifty Regular Plan	Kotak 50 Growth	Birla Sun Life Index Fund Growth	DSP Blackrock Top 100 Equity Fund Growth	ICICI Prudential Top 100 Fund Growth
Standard Deviation (σ)	36.11	29.33	29.83	29.51	29.38	27.38
Deviation		-6.78	-6.28	-6.60	-6.73	-8.73
Riskiness		Less Risk	High Risk	Avg. Risk	Avg. Risk	Less Risk
Rank		2	5	4	3	1

Source: *Compiled from NAV records of respective AMCs.*

Table 4 shows the average standard deviation values of each scheme with corresponding bench mark index. A closure look at the above table reveals that ICICI Prudential Top 100 Fund Growth has less risk when compared to other schemes, followed by Tata Index Fund (ranked 2nd), DSP Black Rock Top 100 Equity Fund ranked 3rd, Birla sun life Index Fund ranked 4th, Kotak 50 Growth indicating high risk ranked 5th .

Above analysis reveals that ICICI Prudential Top 100 Fund Growth is yielding consistent returns with less risk over the counterpart select schemes. Further, it is advised to Fund Managers of Kotak 50 Growth and Birla sun life Index growth funds to think in terms of diversification of Portfolios to minimize the risk.

Table 5: Returns Versus Standard Deviation of Select Schemes of Large Cap Funds

Name of the Schemes	ARp	SDp	Deviation ARp	Deviation SDp	Situation
Tata Index Fund-Nifty Regular Plan	10.46	29.33	1.34	6.78	ARp>ARm: SDp <SDm
Kotak 50 Growth	12.98	29.83	3.86	6.28	ARp > ARm: SDp > SDm
Birla Sun Life Index Fund	10.34	29.51	1.22	6.60	ARp > ARm: SDp > SDm
DSP Black Rock Top 100 Equity Fund Growth	13.68	29.38	4.56	6.73	ARp > ARm: SDp > SDm
ICICI Prudential Top 100 Fund Growth	19.33	27.38	10.21	8.73	ARp > ARm: SDp > SDm
CNX Nifty	9.12	36.11			

Source: *Compiled from NAV records of respective AMCs.*

Table 5 provides the information about the average return of the portfolio and average standard deviation of the portfolio of select schemes relating to large cap funds for the study period. It also provides information about the deviation between the average return of the portfolio and average return on the market index as well as the standard deviation of the portfolio as compared to the standard deviation of the market. The comparison between AR_p and AR_m, SD_p and SD_m is made to find out higher returns with low risk funds.

It is advent from the above table that all funds of the select schemes are falling under the situation characterized ($AR_P > AR_m$; $SD_P < SD_m$), it implies that the schemes provided higher returns than the market with lower risk compared to a market index, this indicates the favourable performance of schemes in relation to return and risk. Thus, it is concluded that the diversification of portfolios is made from time to time to earn excess returns with lesser risk.

Table 6: Systematic Risk (Beta) for Select Schemes of Large Cap- Funds

Particulars	CNX Nifty	Tata Index fund-Nifty Regular Plan	Kotak 50 Growth	Birla Sun Life Index Fund Growth	DSP Blackrock Top 100 Equity Fund Growth	ICICI Prudential Top 100 Fund Growth
Beta	1.00	0.76	0.78	0.77	0.73	0.64
Deviation		-0.24	-0.22	-0.23	-0.27	-0.36
Rank		3	1	2	4	5

Source: *Compiled from NAV records of respective AMCs.*

Table 6 provides the information about the Beta values of select schemes of large cap funds for the study period. It is generally known fact that, higher the value of beta higher will be responsiveness of a given fund to the changes in the market index and vice-versa. A fund having higher beta may do well in a general up-trend. Hence, a fund with lower beta may not exhibit attractive performance but it may save investors from extreme losses during the down trend. A beta value of 1.0 of a fund implies neither over responsiveness nor under responsiveness to the changes in the market. A beta value of greater than 1.0 shows more than a proportionate response to the changes in the market. A beta of less than 1.00 shows less than proportionate responsiveness.

From the above table it can be inferred that Kotak 50 Growth large cap-fund has a highest beta value of 0.78 indicating high responsiveness and ICICI Prudential Top 100 Fund Growth has the lowest value of 0.64 which shows less responsive to the changes in the market.

Hence, all the schemes having beta values of less than 1.0, it can be inferred that, all portfolios are defensive portfolios.

Table 7: Co-Efficient of Determination (R2) for Select Schemes of Large Cap-Funds

Particulars	CNX Nifty	Tata Index Fund-Nifty Regular Plan	Kotak 50 Growth	Birla Sun Life Index Fund Growth	DSP Blackrock Top 100 Equity Fund Growth	ICICI Prudential Top 100 Fund Growth
Coefficient of Determination (R^2)	1.00	0.89	0.88	0.88	0.80	0.72
Deviation		-0.11	-0.12	-0.12	-0.20	-0.28
Rank		1	2.5	2.5	4	5

Source: *Compiled from NAV records of respective AMCs.*

Table 7 crystallizes the information about values of $R^2$of each scheme for the study period. The term R^2 value explains the percentage of returns explained by the index. Higher the value of R^2 will be the percentage of return explained by the index and lower will be unexplained returns.

Hence, higher value implies better diversified portfolio and lower value implies inadequately diversified portfolio. A high R^2 (between 0.85 to 1.0) indicates the fund's performance patterns, have been in line with the index. A fund with a low R^2 (0.70 or less) does not act much like the index.

From the above analysis, it can be stated that Tata Index Fund can be considered as a highly diversified portfolio as its average value of $R^2$is 0.89 and the performance of both Kotak 50Growth and Birla Sun Life Index Fund Growth with the average value of R^2 is 0.88 can be considered as possessing moderately diversified portfolio. The performance of DSP Black Rock Top 100 Equity Fund Growth is ranked 4th ICICI Prudential Top 100 Growth Fund ranked 5th , Which can be considered as inadequately diversified portfolios as the R^2 values are falling below 0.85.

Risk-Adjusted Return Analysis and Interpretation

Table 8: Treynor's Values of Select Schemes of the Large Cap Funds and Bench Mark Values

Particulars	CNX Nifty	Tata Index Fund-Nifty Regular Plan	Kotak 50 Growth	Birla Sun Life Index Fund Growth	DSP Blackrock Top 100 Equity Fund Growth	ICICI Prudential Top 100 Fund Growth
Average	2.43	0.93	8.10	4.76	9.60	19.61
Deviation		2.5	5.67	2.33	7.17	17.18
Over/Under		Over	Over	Over	Over	Over
Rank		4	3	5	2	1

Source: *Compiled from NAV records of respective AMCs*

Table 8 furnishes the average values of Treynor's Index for the select schemes and the underlying bench mark index for the study period 2008-2009 to 2016-17. It is astonishing to note from the above table that all the select schemes of large cap funds over performed as compared to bench mark index. ICICI Prudential Top 100 Fund Growth out performed its counterpart Schemes with an average values of 19.61 Percent.

Hence all Schemes have succeeded in generating excess return in commensurate with their systematic risk (β) as compared to a bench mark index. The BSL Index fund has shown lower deviation value of 4.76 Percent. All fund managers of respective AMCs have succeeded in incorporating appropriate changes in the composition of their portfolio to changing conditions in the overall market to get maximum returns with minimal risk.

Table 9: Sharpe's Values for Select Schemes of the Large Cap Funds and Bench Mark Values

Particulars	CNX Nifty	Tata Index Fund-Nifty Regular Plan	Kotak 50 Growth	Birla Sun Life Index Fund Growth	DSP Blackrock Top 100 Equity Fund Growth	ICICI Prudential Top 100 Fund Growth
Shapes Return	0.07	0.13	0.21	0.12	0.24	0.46
Deviation		0.06	0.14	0.05	0.17	0.39
Over/Under		Over	Over	Over	Over	Over
Rank		4	3	5	2	1

Source: *Compiled from NAV records of respective AMCs*

Table 9 summarizes the average values of the Sharpe's Index for the select schemes of large cap funds and the underlying bench mark index for the study period. It is observed from the above table, that all select schemes of large cap funds over performed as compared to average performance of bench mark index. The Sharpe index measures the risk premium of the portfolio relative to the total amount of risk in the portfolio. This index measures the slope of the risk-return line, summarizing the risk and return on a portfolio in a single measure that categories the performance on a risk-adjusted basis. Among the select schemes of large cap funds, ICICI Prudential Top 100 Fund growth ranked 1st, followed by DSP Black Rock Top 100 Equity Fund Growth ranked 2nd, Kotak 50 growth fund ranked 3rd, Tata Index Fund and Kotak 50 Growth performed average, with a mean difference of 0.01, ranked 4th and 5th respectively. Hence, all the schemes have succeeded in generating excess return in commensurate with total risk (σ) as compared to bench mark index. Fund Managers of all select schemes of large cap funds have succeeded in incorporating appropriate changes in the composition of their portfolio to changing conditions in the overall market.

Table 10: Jensen's Alpha (α) for Select Schemes of Large Cap Funds

Particulars	CNX Nifty	Tata Index Fund-Nifty Regular Plan	Kotak 50 Growth	Birla Sun Life Index Fund Growth	DSP Blackrock Top 100 Equity Fund Growth	ICICI Prudential Top 100 Fund Growth
Alpha (α)	0	0.89	1.40	0.85	1.90	4.49
Over/Under		Over	Over	Over	Over	Over
Rank		4	3	5	2	1

Source: *Compiled from NAV records of respective AMCs*

Table 10 furnishes the information about values of alpha (α) for each select scheme for the study period. Jensen's measure attempts to measure the differential return between the actual return earned on a portfolio and the return expected from the portfolio given its level of risk. The CAPM model is used to calculate the expected return on a portfolio and the return expected from the portfolio is a measure of the excess return or differential return that has been earned over and above what is mandated for its level of systematic risk. The differential return gives an indication of the portfolio manager's predictive ability (or) managerial skills. It is clear from the above table; all schemes performed well and generated excess returns as per CAPM model. A Positive alpha implies superior returns due to superior management skills and negative alpha implies inferior management skills as compared to the market. ICICI prudential Top 100 Growth ranked number one, (1st rank) among the select schemes. DSP Black Rock Top 100 Equity Fund Growth ranked 2nd, Kotak 50 Growth ranked 3rd, Tata Index Fund Nifty Regular Plan ranked 4th, Birla Sun Life Index Fund Growth ranked last among the select schemes.

Table 11: Fama's Value of Net Selectivity for Select Schemes of the Large Cap Funds

Particulars	Tata Index Fund-Nifty Regular Plan	Kotak 50 Growth	Birla Sun Life Index Fund Growth	DSP Blackrock Top 100 Equity Fund Growth	ICICI Prudential Top 100 Fund Growth
Alpha (α)	0.71	1.09	0.67	1.30	3.05
Over/Under	Over	Over	Over	Over	Over
Rank	4	3	5	2	1

Source: *Compiled from NAV records of respective AMCs*

Table 11 reveals the values of Fama's net selectivity of select schemes of the large cap funds. The value of selectivity indicates superior/inferior stock selection ability of respective fund managers. A Positive value implies superior stock selection ability and negative value implies inferior stock selection ability of respective fund managers. It can be inferred that all funds of select schemes recorded positive values, indicating superior stock selection ability of fund managers. The performance of ICICI Prudential Top 100 Fund Growth with highest positive net selectivity of 3.05 percent, indicates this company is selecting superior stock as their portfolio ranked 1st , DSP Black Rock Top 100 Equity Fund Growth ranked 2nd , Kotak 50 Growth ranked 3rd , Tata Index Fund Nifty Regular plan ranked 4th , Birla Sun Life Index Fund Growth ranked 5th.

Table 12: Modigliani and Modigliani Risk-Adjusted Performance (M2) Values for Select Schemes of Large Cap Fund

Particulars	CNX Nifty	Tata Index Fund-Nifty Regular Plan	Kotak 50 Growth	Birla Sun Life Index Fund Growth	DSP Blackrock Top 100 Equity Fund Growth	ICICI Prudential Top 100 Fund Growth
Alpha (α)	-3.26	-2.60	0.52	-2.72	1.37	8.85
Deviation		0.66	3.78	0.54	4.63	12.11
Over/Under		Over	Over	Over	Over	Over
Rank		4	3	5	2	1

Source: *Compiled from NAV records of respective AMCs*

Table 12 indicates Modigliani and Modigliani risk – adjusted performance of select schemes of the large cap funds for the study period. The value of M^2 measures the performance of the portfolio of risk-adjusted basis, the value of M^2 is the difference between return on a risk adjusted basis of a portfolio and return on the market portfolio. If the return on risk-adjusted basis of a portfolio is greater than the return on the market portfolio, it can be inferred that, given portfolio did well corresponding to the bench mark index and vice-versa. A positive value of M^2 indicates better performance on total risk adjusted basis, if the value of M^2 is negative it points out that, performance of the portfolio is poor as compared to the bench mark, and if, $M^2 = 0$ it implies neither better nor poor performance of such portfolio as compared to the underlying bench mark index. Accordingly the performance of ICICI Prudential Top 100 Fund growth, DSP Black Rock Top 100 Equity Fund Growth and Kotak 50 Growth is better as their values are 8.85 percent, 1.37 percent and 0.52 percent respectively. It indicates that the return on risk-adjusted basis of a portfolio is greater than the return on the market portfolio. It can be inferred that the ICICI Prudential Top 100 Fund is performing well corresponding to the bench mark index. The performance of Birla Sun Life Index Fund and Tata Index Fund is said to be poor as their values of M^2 are negative i.e., -2.72 percent and -2.60 percent respectively. Hence, fund managers of Birla Sun Life Index and Tata Index Fund are required to initiate return maximization strategies at the given level of risk and they have to change the portfolio for better performance.

Table 13: Overall Ranking of Select Large Cap Funds

Parameters	Ranking					Total
	Tata Index Fund-Nifty Regular Plan	Kotak 50 Growth	Birla Sun Life Index Fund Growth	DSP Blackrock Top 100 Equity Fund Growth	ICICI Prudential Top 100 Fund Growth	
Return	4	3	5	2	1	15
Risk	2	5	4	3	1	15
Treynor's	4	3	5	2	1	15
Sharpe's	4	3	5	2	1	15
Jensen's	4	3	5	2	1	15
Fama's	4	3	5	2	1	15
M-Squared	4	3	5	2	1	15
Total	26	23	34	15	7	105
RANK	4	3	5	2	1	

Source: *Compiled from respective tables.*

Above table indicates the overall ranking of all chosen Large Cap Funds for the study period. From the above table, it is evident that ICICI Prudential Top 100 Fund Growth has placed first position, followed by DSP Black Rock Top 100 Equity fund growth, Kotak 50 Growth placed at the third position, Tata Index Fund – Nifty Regular Plan has placed at 4th position. Lastly, placed in 5th position is Birla Sun Life Index fund Growth.

ICICI Prudential Top 100 Fund Growth has dominated the market due to high returns, timely diversification of portfolio, effective asset management skills, better performance and their superior stock selection skill when compared to its counter parts. Birla Sun Life Index Fund Growth Fund managers need to exercise care and caution in developing and implementing strategies to overcome their inferior stock selection.

Table 14: Hypothesis Testing of Large Cap. Funds
(a) Descriptive Statistics of Large Cap Funds

	Mean	Std. Deviation	N
C1	6.50	7.910	9
C2	5.75	7.005	9
C3	8.50	10.309	9
C4	2.75	4.559	9
C5	1.75	2.121	9

(b) Multiple Co-Relation of Overall Ranking of Select Large Cap Funds

	C1	C2	C3	C4	C5
R1	1.0				
R2	0.50	1.00			
R3	1.0	0.50	1.00		
R4	1.0	0.50	1.00	1.0	
R5	1.0	0.50	1.00	1.0	1.0
R6	1.0	0.50	1.00	1.0	1.0
R7	1.0	0.50	1.00	1.0	1.0

From the above table 14, it can be inferred that there is a positive co-relation among the schemes operated by select Large Cap Funds viz, Tata Index Fund Nifty Regular plan, Kotak 50 Growth, Birla sun life Index Fund Growth, DSP Black Rock Top 100 Equity Fund growth and ICICI Prudential Top 100 Fund growth. Further, it is noticed in Tata Index Fund Nifty regular Plan, there is 50 percent positive co-relation with regard to Investment dimension and 50 percent positive co-relation had been noticed in Kotak 50 Growth with regard to Financial dimension.

Therefore, it can be suggested to the fund managers of Tata Index- Fund Nifty Regular Plan and kotak 50 Growth to initiate measures to maximize the returns by diversification of stocks in commensurate with the changes of the stock market. It can be concluded that all the schemes operated by select AMCs are positively co-related in respect of Financial and Investment dimensions.

CONCLUSIONS

Finally, it is summarized that Large Cap Funds are known to offer stable and sustainable returns over a period of time. The performance Evaluation of Large Cap Funds has been Evaluated by using parameters like risk returns related analysis. All the large cap category funds have succeeded in imitating the performance of the underlying index and registered excessive returns over CNX Nifty Index. All the schemes of Large Cap. Funds exhibited lesser risk than the bench mark Index and considered defensive portfolios. All schemes have succeeded in generating excess returns in commensurate with their systematic risk as compared to Bench mark Index. On testing of Hypothesis, it is noticed that all the schemes operated by select AMCs are positively Co-related with regard to financial and Investment dimension.

Performance Evaluation of Large Cap funds revealed that the **ICICI Prudential Top 100 Fund Growth** has dominated the market due to high returns, timely diversification of portfolio, superior stock selection and effective asset management skills, ranked number one.

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