"IS SELECTED LARGE CAP GROWTH FUND PERFORMING WELL" - A STUDY ON INDIAN STOCK MARKET

Sathish P, Deemed to be University Janani Ravinagarajan, Deemed to be University

ABSTRACT

Mutual fund is an investment avenue which enables small investors to satisfy their appetite on market securities by allowing fund managers to decide for them. India has 44 mutual fund companies offering a choice over 11,000 primary schemes. Academic research conducted in the past has shown that the mutual funds have been performing in line to the benchmark standards. There has been systematic outperformance only by recent top performers. The performance of poor performing mutual fund companies has always been suggestively worse. In this paper, the performances of growth plan schemes are evaluated for the selected 10 mutual fund companies. Evaluation is done for 60 months from April 2014 to Mar 2019. Based on benchmark index and tools like standard deviation, beta is calculated along with risk adjusted techniques such as Sharpe, Treynor and Jenson ratios. The study is an addition to the existing literature and may help in improving the quality of informed decisions taken by investors with special reference to growth options provided by mutual fund companies. The study records that the growth plans provided by the top mutual fund companies (based on AAUM), did not outperform the benchmark index during the study period. Though the mutual fund schemes show less chances of procuring stable returns compared to the risk free return investments, it is also representing that long run investments are to be made to see higher returns. The large cap funds represents investments made in stable companies. Risk-averse investors who intent to invest on long run should stay invested for a minimum period of 5 years or more. The fund may not show positive return on immediate basis.

Keywords: Mutual Fund, Large Cap, Stock Market, Growth Plan.

INTRODUCTION

Mutual fund companies are investment mobilizers of small investors' funds to invest in various types of securities ranging from ownership investment to lending investments. Indian mutual fund companies diversify their risk by investments made in equity, futures, options and debt including short and long term. While SEBI is seeking feedback and analysing the proposed framework on permitting Mutual Fund companies to invest in commodity derivatives, our Mutual fund market has grown over a period of time in terms of the annual Asset Under Management. Investor education and protection fund authority, Ministry of Corporate Affairs, Government of India explains that Mutual Fund industry's' growth can be phased into four where under first phase (1963-1987) the total AUM amounted to Rs. 6,700 crores. UTI was the first ever company to introduce the unit 64 scheme which was the only option available for Indian mutual fund investors when India embarked itself as country having mutual fund industry by 1963 During the second phase (1987-1993) when the industry made an entry to public sector funds the AUM was amounting to Rs. 47,004 croes. The entry to private sector funds during the third phase (1993-2003) and with more comprehensive Mutual Fund Regulation in 1996, the AUM of the industry amounted to Rs.

1,21,805 crores (2003). During that period, 33 mutual fund companies were operating in India with a mix of Indian and foreign mutual funds, merged and acquired institutions. UTI the pioneers in the industry branched to two – (i) Specified Undertaking of Unit Trust of India – governed by Government of India with AUM of Rs. 29,835 crores (ii) The UTI fund comprising of sponsorship of SBI, PNB, BOB and LIC, regulated by Mutual fund Regulation, with AUM of Rs. 76,000 crores. The growth and consolidation of the current phase in phenomenally. The following Table 1 presents the growth on mutual fund companies in terms of total Asset under management.

C.	Table 1 ROWTH OF MUTUA	J. FUNDS
Phase	Time	AUM (in crores)
Dl 1	Mar-1965	25
Phase 1	Mar-1967	4564
Dlaga 2	Mar-1993	47000
Phase 2	Jan-2003	121805
	Feb-2003	87190
Phase 3	Mar-2003	79464
	Mar-2004	139616
	Mar-2005	149554
	Mar-2006	231862
	Mar-2007	326388
	Mar-2008	505152
Phase 4	Mar-2009	417300
riiase 4	Mar-2010	613979
	Mar-2011	592250
	Mar-2012	587217
	Mar-2013	701443
	Mar-2014	825240
	Mar-2015	1082757

Source: AMFI

Introduction to Growth Plan Schemes

The investment made in the securities fetches a return called dividend. Various Mutual funds companies' provide growth option with restriction to the investors in terms of withdrawal of fund profits, but allows them to reinvest in the fund. It is noteworthy to understand the power of compounding in terms of mutual funds which offers a reinvestment option to the investors. The mutual fund companies provide the investors a liberty to choose between dividend option and growth option. Dividend plans pay-out dividends on regular basis and such pay-out affects the Net Asset Value. The dividends are often underutilized and the wealth of the investor diminishes. The growth options of mutual fund schemes are autocompounders and aims at wealth creation.

There are various investment avenues available for investors across India, with differential returns based on the risk. Indian financial system allows investors to choose from safest investment avenues featuring less risk, ranges from bank deposits to post office investment schemes. Shares market allows the investors to choose stocks based considering the fundamental, technical analysis and ability to handle risk. Debt securities are investments that generate interest income to the investors who chooses to invest based on the historical performances and other factors of the company. But, Mutual funds are advanced, lucrative and innovative tool that caters the appetite of investors based on individual risk taking ability, needs and objective where the fund manager designs the portfolio with due consideration to

all the fundamental, technical aspects by diversifying the allocation of collected funds. 10 mutual fund companies are chosen based on the total AUM. The regular "Growth Plan" and growth option schemes of all the 10 companies are chosen for analysing the performance based on risk and return.

Scope of the Study

The complexity of the market situation in terms of macro and micro economy, the deficiency of investor's time restricts the individual investor to take informed decisions. This study would help investors to understand the risk and return involved in investing in regular "Growth Plan" with growth option. The study specifically aims to understand growth schemes of the selected companies.

Review of Literature

A study conducted by Bauer et al. (2005) analyses the International mutual funds. The study analysed the mutual fund performance based on market fluctuation. It also considered correlation between the fund manager's selectivity and the performance of the market. It was concluded that the selection pattern adopted by the fund managers and the market performance are negatively correlated in line to the local European capital. The study also showed that the international mutual fund schemes performed better than the domestic funds. Open ended Pakistani mutual fund schemes were analysed by Talat Afza (2009) extracting the significant variables impacting the performance. It was found that lagged return and liquidity created a major impact on the fund performance. The study considered variables other than market fluctuation such as fund age and liquidity.

Busse et al. (2016) analysed the fund performance based on trading regularity. The study states that the larger the trade, larger the dip in return paving way to lose out the money in transaction cost. An interesting study conducted by John et al. (2006) collected samples of various large cap mutual funds and clusters were formed to evaluate if one growth cluster persists. The morning star 500 funds were taken into consideration and clusters were formed based on three homogeneous styles (one growth and two values) and were later identified that there were certain misclassification. These cluster styles were clearly projecting differentiation on the basis of various risk quotients and Jenson and Sharpe risk return performance measures.

Robiyanto et al. (2019) studied the performance of Sharia mutual funds of Indonesia. In India there are only three mutual funds which comply with Sharia compliance requirement naming Tata Ethical, Taurus Ethical and Reliance ETF Shariah BeES. The study evaluates the performance with benchmark returns. Persistence in the performance of mutual fund was identified by various authors. The research conducted by Hendricks et al, (1993) documented the evidence of mutual fund performance for shorter period and such performance was categorised as "hot hand" attribute. The study also states that the mutual funds do not outperform the indices or respective benchmarks systematically every period at which the return is assessed. Various authors including Elton (1993) has recorded evidences in their researches which states that the mutual fund performances are predictable if the investments are made for longer duration. Study conducted by Grinblatt et al. (1995) states that the performance of mutual funds are comparatively better before the transaction and fees charged by mutual fund companies.

Jenson (1969) states that, mutual fund performances will not be consistently the same. The research recorded the out performances of the mutual fund in the past will not assure that it will continue to be the same. A study conducted by Kothari (2001), adopted simulation

method to assess the performance of the mutual fund. The study adopted time series method and found that the previous research conducted on mutual fund performances were not relatable to the results of the current study.

Lee & Venkatesan (2020) conducted a study on mutual fund performance. The perspective of the study was, the mutual funds which were traded more had the chances of sourcing a higher return. The study reported that the momentum effect does not reflect the performance of a fund. It also recorded that the skills of the fund manager have shorter persistence. The traditional methods of performance measures show a positive relationship in the fund performance. Indro et al. (2019) studied the impact of fund size (AUM) and the performance of the mutual fund. The results of the study recorded that the growth funds performed less whereas the value and growth fund gained a higher return. It also presents that the performance of mutual fund will be optimal if the fund reaches a certain size which enables to cut the cost of transacting the mutual fund. The Italian researcher Basso & Funari (2017) studied the role of fund size in the performance of mutual funds. The studies observed the mutual fund performance based on DEA model. Different statistical tools were applied to find that the European mutual fund increase or decrease returns.

Objectives of the Study

- 1. To evaluate the performance of selected regular Growth Fund, growth option schemes in India.
- 2. To examine the risk and return based on volatility of market of the selected growth option fund.
- 3. To arrive at the connection between NAV and Index return.
- 4. To ascertain the risk adjusted performance of selected growth schemes by relating the measures of Sharpe, Treynor and Jensen.

Research Methodology

The research is descriptive study which also considers analytical aspects of mutual fund performance based on various tools. The research compares different Growth Plans offered by selected ten mutual fund companies. The mutual fund companies were selected on the basis of the average asset under management (AAUM) in the category of large cap growth fund. The study considers secondary data collected from the official website of Association of Mutual Funds in India (AMFI) and National Stock Exchange and Bombay Stock Exchange. Total of 87 large cap – growth fund schemes of various mutual fund companies were taken into account to choose the top 10 schemes accounting for major average AUM for the quarter January – March 2019. The study sample consists of 10 mutual fund companies' Growth Plan scheme for five accounting period dated 1-04-2014 to 30-03-2019. For market portfolio comparison NSE Nifty data comprising of 1270 observation for the corresponding year has been taken into account. Government security return rate of 5.94% was considered as a surrogate for risk free rate of return comparison., Return, beta, standard deviation, correlation and risk adjusted performance measures namely Treynor &Jensen measures were arrived at, to measure the performances of the growth funds.

The following Table 2 shows the average asset under management as on 31-3-2019 of the companies that were selected for the purpose of analysis.

Table 2 AVERAGE ASSET UNDER MANAGEMENT OF LARGE CAP SCHEME										
Name of the Large cap fund	Scheme wise (AAUM) for the quarter of January - March 2019 (Rs in Lakhs)	Mutual Fund								
Reliance Large Cap Fund- Growth Plan - Growth Option	6,81,327.76	Reliance Nippon Life Asset Management Limited								

Di I C E I Di I	1 20 51 6 25	D II AII TIC 1 A A
Reliance Large Cap Fund - Direct Plan	1,39,516.35	Reliance Nippon Life Asset Management
Growth Plan - Growth Option		Limited
BNP PARIBAS LARGE CAP Fund-Growth	60,242.86	BNP Paribas Asset Management India Private
Option		Limited
Tata Large Cap Fund Regular Plan -	50,347.02	Tata Asset Management Limited
Growth		
HSBC Large Cap Equity Fund – Growth	32,685.40	HSBC Asset Management (India) Private Ltd.
L&T India Large Cap Fund - Regular Plan -	31,316.10	L&T Investment Management Limited
Growth		
IDFC Large Cap Fund-Regular Plan-	30,372.03	IDFC Asset Management Company Limited
Growth		
DHFL Pramerica Large Cap Fund – Growth	23,991.57	DHFL Pramerica Asset Managers Private
		Limited
Union Largecap Fund - Regular Plan -	23,567.80	Union Asset Management Company Private
Growth Option		Limited
LIC MF Large Cap Fund-Regular Plan-	20,009.57	LIC Mutual Fund Asset Management Limited
Growth		

Top 10 mutual fund selected based on AUM, Source - AMFI

During the course of data collection, it was found that though the growth funds such as Reliance Large Cap Fund- Growth Plan -Growth Option, DHFL Pramerica Large Cap Fund – Growth and Union Largecap Fund - Regular Plan - Growth Option have top Average Asset Under Management, they fund were either discontinued or did not exist all across the study period. Therefore, the study had narrowed down to measure the performance of the seven selected mutual fund.

Data Analysis

Table 3, Table 4, Table 5, Table 6 and Table 7 shows the performance of selected mutual fund companies growth funds for the year 2014-15, 2015-16, 2016-17, 2017-18, 2018-19 respectively. The calculation includes a comparison of Total return of the selected growth funds. The outperformances of each growth fund compared to Nifty returns are arrived at for further study of the fund performance. The standard deviation on daily return and annualized return has been arrived at to understand the spread of the returns compared to an average return. Government security return has been taken as the base to arrive at the Sharpe, Treynor & Jenson ratio. Sharpe ratio measures the performance of the mutual fund's return with a given risk. The representation of Treynor Ratio is such that it measures the excess of return on investing in mutual fund of that which could have been earned on an investment which has no systematic risk vested to it. Jensen's ratio measures the performance of mutual fund in terms of fund manager's skill in choosing stocks for the vested fund. It can also be understood as measure that brings out the excess return made by the fund comparing to a return generated through a Capital Asset Pricing Model (CAPM).

Interpretation of Data Analysis

Table 3 is the summary of data analysis which enables to quantify the performance of the growth schemes of the mutual fund for the year 2014-2015. Column 1 depicts the measures and Column 2 depicts the period of measurement. Column 3 represents the Nifty measurement and the following columns represent the performance of the respective growth plan mentioned. Nifty recorded a positive return for Q1 (0.1325), Q2 (0.0407), Q3 (0.0548) and Q4 (0.0250). All the selected mutual fund recorded a positive return except for HSBC Large Cap Equity Fund – Growth, which recorded a negative return in Q2 (-0.0073) and further shows a positive return for the quarters Q3 (0.0620) and Q4 (0.0167) during 2014-15. The outperformance measure of the respective fund in comparison to Nifty indicated that all the selected growth funds except BNP PARIBAS LARGE CAP Fund-Growth Option showed a negative performance in Q3 (-0.0048), HSBC Large Cap Equity Fund – Growth recorded

negative performance in Q2 (-0.0480) and Q4 (-0.0083) and IDFC Large Cap Fund-Regular Plan-Growth recorded negative values on Q1 (-0.0034) and Q3 (-0.0201) whereas LIC MF Large Cap Fund-Regular Plan-Growth records a negative performance in Q1 (-0.0030) alone. The recorded Beta values for the period 2014-15 are below 1. The correlation for the period 2014-15 recorded positive values. The NAV of HSBC Large Cap Equity Fund – Growth recorded a negative value during Q2 (-0.7260). The Sharpe and Treynor ratio arrived at negative values for all growth funds throughout the year 2014-15. Jenson alpha recorded the measure of fund managers with positive figures except for the two funds - HSBC Large Cap Equity Fund - Growth and L&T India Large Cap Fund - Regular Plan - Growth which recorded negative figures for Q1 (-0.4808) and Q1 (-0.0537) respectively. HSBC Large Cap Equity Fund – Growth recorded a negative Jenson alpha for Q4 (-0.0572).

Performance of the selected funds for the year 2015-16 is tabulated in Table 4. The total return of all the selected growth fund four quarters showed a negative figure. It may also be noticed that Nifty also recorded a negative return. Reliance Large cap Fund – Direct Growth Plan growth option, BNP Paribas Large Cap fund -Growth Option, outperformed nifty during Q3 (0.0131, 0.0187) respectively. Tata Large cap fund regular plan growth outperformed during the first three quarters except Q4 (-0.016). HSBC Large Cap equity fund- growth outperformed for all three years. L&T and LIC growth plan showed a negative performance in Q4 (-0.0124, -0.0124) respectively where IDFC growth plan showed a positive outperformance in Q4 (0.0107). The standard deviation (daily return and annualized return) of Nifty and all the selected growth fund showed positive values. Taking a government security return of 5.937 Beta, NAV, Correlation, Sharpe, Treynor & Jenson ratio was calculated. Beta value recorded below 1 for Reliance growth fund and HSBC growth fund except for Q3 (1.0050). L&T growth fund and LIC growth plan had a beta value above 1 except for Q4 (0.1408, 0.1408) respectively. The NAV of Nifty and all selected fund recorded a negative value. The Sharpe and Treynor ratio recorded a negative value when compared with Nifty. Jenson alpha recorded positive figures for Reliance growth plan and Tata growth plan during 2015-2016. But during Q3 (-0.1013,-0.1171) the figures were negative for the respective funds. L&T & LIC growth plan recorded negative values for three quarters, but recorded a positive Jenson ration in Q4 (7.1363, 7.1363).

COMI	PARISON	OF RET	URN AND RISK	-ADJUSTEI	Table 3 D RETURN 15	OF SELEC	TED MUTUA	L FUND FOR	YEAR 2014-20
	2014 - 2015	Nifty	Reliance Lar ge Cap Fund - Direct Pla n Growth Pla n - Growth Option	BNP PA RIBAS LARGE CAP F und-Gro wth Opt ion	Tata Lar ge Cap Fund Re gular Pl an – Gr owth	HSBC L arge Ca p Equity Fund - Growth	L&T India Large Ca p Fund - Regular Pl an - Grow th	IDFC Large Cap Fund- Regular Pla n-Growth	LIC MF La rge Cap Fu nd-Regular Plan-Growth
Total Ret									
urn	Q1	0.1325	0.2264	0.2135	0.1518	0.1820	0.1895	0.1290	0.1294
4111	Q2	0.0407	0.0572	0.0813	0.0539	-0.0073	0.0540	0.0471	0.0935
	Q3	0.0548	0.1064	0.0500	0.0569	0.0620	0.0778	0.0347	0.0865
	Q4	0.0250	0.0492	0.0903	0.0451	0.0167	0.0515	0.0361	0.0555
Out perf orm	_								
ance	Q1		0.0939	0.0810	0.0193	0.0495	0.0571	-0.0034	-0.0030
	Q2		0.0165	0.0406	0.0132	-0.0480	0.0133	0.0064	0.0528
	Q3		0.0516	-0.0048	0.0021	0.0072	0.0230	-0.0201	0.0317
	Q4		0.0242	0.0653	0.0201	-0.0083	0.0265	0.0111	0.0305
stde v (D aily retu									
rn)	Q1	0.0089	0.0096	0.0097	0.0087	0.0104	0.0098	0.0089	0.0074

	Q2	0.0079	0.0093	0.0084	0.0077	0.0105	0.0094	0.0078	0.0079
	O3	0.0079	0.0088	0.0073	0.0077	0.0094	0.0088	0.0077	0.0079
	Q4	0.0101	0.0099	0.0088	0.0092	0.0107	0.0105	0.0098	0.0103
stde									
v (a									
nnua									
lized									
)	Q1	0.1407	0.1520	0.1534	0.1386	0.1656	0.1563	0.1417	0.1174
	Q2	0.1256	0.1477	0.1333	0.1228	0.1666	0.1492	0.1233	0.1259
	Q3	0.1248	0.1395	0.1167	0.1224	0.1494	0.1398	0.1228	0.1259
0.0	Q4	0.1596	0.1577	0.1389	0.1454	0.1694	0.1666	0.1560	0.1631
GS									
ec R etur									
n	Q1	5.9370							
Beta	Q1	3.3310	0.9648	0.9950	0.9449	1.1057	1.0321	0.9814	0.9640
ьсіа	Q1 Q2	+ +	0.6333	0.6278	0.6274	0.7686	0.6698	0.6208	0.9226
+	Q2 Q3	+ +	0.0333	0.0278	0.0274	0.7000	0.1658	0.1723	0.9220
	04	+	0.9088	0.7595	0.8762	1.0139	0.9591	0.9544	0.9330
	QΤ	13,246	0.2000	0.7555	0.0702	1.0137	0.7571	0.2544	0.5550
NAV	Q1	4	22.6381	21.3466	15.1813	18.2004	18.9539	12.9015	12.9417
11111	Q2	4.0715	5.7182	8.1282	5.3941	-0.7260	5.3977	4.7099	9.3503
	Q3	5.4799	10.6388	4.9975	5.6872	6.1951	7.7827	3.4669	8.6514
	04	2,4988	4.9233	9.0254	4.5100	1.6674	5.1488	3.6124	5.5512
Corr				7,77					
elati									
on	Q1		0.9085	0.9284	0.9763	0.9556	0.9454	0.9913	0.8184
	Q2		0.5476	0.5916	0.6417	0.5888	0.5732	0.6429	0.9356
	Q3		0.2043	0.0858	0.1096	0.1993	0.1508	0.1783	0.9172
	Q4		0.9350	0.8722	0.9618	0.9713	0.9339	0.9928	0.9283
Shar									
pe R									
atio	Q1		-37.5623	-37.3049	-41.7533	-34.7436	-36.7773	-40.9766	-49.4772
	Q2		-39.8165	-43.9192	-47.8921	-35.6727	-39.4340	-47.7810	-46.4175
	Q3	1	-41.7830	-50.4609	-48.0280	-39.3168	-41.9232	-48.0705	-46.4820
TD	Q4		-37.3326	-42.0845	-40.5337	-34.9541	-35.3189	-37.8282	-36.0654
Trey									
nor Dotio	01		5.0197	-0.8170	-6.1223	5 2051	-0.8109	5.0179	-6.0246
Ratio	Q1 Q2	+	-5.9187 -9.2837	-1.0876	-9.3771	-5.2051 -7.7344	-0.8109	-5.9178 -9.4880	-6.3339
	Q2 Q3	+	-9.2837	-1.4340	-54.6908	-7.7344	-0.5253	-34.2636	-6.4419
	Q3 Q4	+	-6.4785	-1.4340	-6.7244	-5.8392	-0.3233	-6.1825	-6.3039
Jense	Q4	+ +	-0.4763	-1.3908	-0.7244	-3.6392	-1.141/	-0.1643	-0.3039
n Ra									
tio	Q1		0.3366	0.1614	0.4521	-0.4808	-0.0537	0.2402	0.3416
110	O2	+ +	2.2026	2.2353	2.2378	1.4054	1.9875	2.2768	0.3410
	Q2 Q3	+	4.6179	5.4654	5.3046	4.5590	4.9616	4.9237	0.5948
j.									

COMI	Table 4 COMPARISON OF RETURN AND RISK-ADJUSTED RETURN OF SELECTED MUTUAL FUND FOR YEAR 2015-20 16											
	2015 - 2016	Nifty	Reliance Lar ge Cap Fun d - Direct Pl an Growth Plan - Grow th Option	BNP PA RIBAS LARGE CAP F und-Gro wth Opt ion	Tata Lar ge Cap Fund Re gular Pl an – Gr owth	HSBC Lar ge Cap Eq uity Fund - Growth	L&T Indi a Large C ap Fund - Regular Plan - Gro wth	IDFC Large Cap Fund- Regular Pla n-Growth	LIC MF La rge Cap Fu nd-Regular Plan-Growth			
Total												
Ret		-0.025										
urn	Q1	4	-0.0326	-0.0339	-0.0163	-0.0148	-0.0203	-0.0339	-0.0203			
	Q2	-0.025 4	-0.0326	-0.0339	-0.0163	-0.0148	-0.0203	-0.0339	-0.0203			
		-0.059										
	Q3	6	-0.0465	-0.0410	-0.0307	-0.0495	-0.0415	-0.0741	-0.0415			
	Q4	-0.026 6	-0.0591	-0.0531	-0.0281	-0.0197	-0.0389	-0.0159	-0.0389			
Outp erfor												
man	Q1		-0.0072	-0.0085	0.0091	0.0106	0.0051	-0.0085	0.0051			

ce									
ce	Q2		-0.0072	-0.0085	0.0091	0.0106	0.0051	-0.0085	0.0051
	Q2 Q3		0.0132	0.0187	0.0289	0.0101	0.0182	-0.0145	0.0182
	Q3 Q4	1	-0.0326	-0.0266	-0.0016	0.0161	-0.0124	0.0107	-0.0124
Ctdo	Q4		-0.0320	-0.0200	-0.0010	0.0009	-0.0124	0.0107	-0.0124
Stde									
v (D									
aily									
retur	0.1	0.0102	0.0101	0.0005	0.0000	0.0101	0.0114	0.0000	0.0114
n)	Q1	0.0102	0.0101	0.0095	0.0099	0.0101	0.0114	0.0099	0.0114
	Q2	0.0102	0.0101	0.0095	0.0099	0.0101	0.0114	0.0099	0.0114
	Q3	0.0125	0.0131	0.0112	0.0124	0.0129	0.0132	0.0126	0.0132
	Q4	0.0124	0.0140	0.0108	0.0115	0.0132	0.0119	0.0120	0.0119
Stde									
v (a									
nnua									
lized									
)	Q1	0.1615	0.1602	0.1516	0.1577	0.1604	0.1810	0.1564	0.1810
	Q2	0.1615	0.1602	0.1516	0.1577	0.1604	0.1810	0.1564	0.1810
	Q3	0.1980	0.2083	0.1774	0.1975	0.2053	0.2088	0.2002	0.2088
	Q4	0.1967	0.2223	0.1721	0.1827	0.2102	0.1895	0.1903	0.1895
G S									
ec R									
eturn	Q1	5.9370							
Beta	Q1		0.9329	0.8713	0.9508	0.9504	1.0398	0.9406	1.0398
Deta	Q2		0.9329	0.8713	0.9508	0.9504	1.0398	0.9406	1.0398
	Q2 Q3	1	1.0050	0.8673	0.9856	1.0069	1.0092	0.9827	1.0092
	Q4		0.1668	0.1281	0.1362	0.1465	0.1408	0.0929	0.1408
		-2.536							
NAV	Q1	0	-2.6432	-2.6335	-1.6309	-1.4755	-2.0260	-3.3901	-2.0260
		-2.536							
	Q2	0	-2.6432	-2.6335	-1.6309	-1.4755	-2.0260	-3.3901	-2.0260
	_	-5.964							
	Q3	1	-4.6483	-4.0979	-3.0746	-4.9507	-4.1485	-7.4117	-4.1485
	Q3		-4.0463	-4.0373	-3.0740	-4.9307	-4.1463	-/.411/	-4.1463
	0.4	-2.657	5.01.27	5 01 41	2 0124	1.0670	2.0027	1 5050	2 1201
~	Q4	2	-5.9137	-5.3141	-2.8134	-1.9678	-3.8927	-1.5853	-2.1291
Corr									
elati									
on	Q1		0.9566	0.9284	0.9740	0.9731	0.9434	0.9879	0.9434
	Q2		0.9566	0.9284	0.9740	0.9731	0.9434	0.9879	0.9434
	Q3		0.9706	0.9681	0.9881	0.9865	0.9724	0.9874	0.9724
	Q4		0.1501	0.1463	0.1466	0.1393	0.1485	0.0976	0.1485
Shar									
pe R									
atio	Q1		-52.0764	-55.0409	-52.8039	-51.8907	-46.0138	-53.3531	-46.0138
	Q2		-52.0764	-55.0409	-52.8039	-51.8907	-46.0138	-53.3531	-46.0138
	Q3		-40.1167	-47.0716	-42.2246	-40.7126	-40.0002	-41.8731	-40.0002
	Q4		-37.6468	-48.5860	-45.6320	-39.6263	-44.0531	-43.7554	-44.0531
Trey									
nor									
Rati									
0	Q1		-8.9425	-1.1660	-8.7570	-8.7588	-0.9640	-8.8709	-8.0116
	Q2	İ	-8.9425	-1.1660	-8.7570	-8.7588	-0.9640	-8.8709	-8.0116
	Q3		-8.3150	-1.3277	-8.4624	-8.3025	-1.1415	-8.5315	-8.2756
	04		-50.1606	-1.7703	-61.2286	-56.8572	-1.5092	-89.6258	-59.3017
Jens	ν,		50.1000	1.,,103	01.2200	50.0512	1.5072	07.0230	57.5017
en R									
atio	Q1		0.5338	1.0470	0.3846	0.3877	-0.3569	0.4698	-0.3569
ano	Q1 Q2		0.5338	1.0470	0.3846	0.3877	-0.3569	0.4698	-0.3569
	Q2 Q3		-0.1013	1.0470	0.0607	-0.1171	-0.3369	0.0850	-0.3369
			6.9191	7.2425	7.1747	7.0887	7.1363	7.5356	7.1363
	O4								

The comparison of return and risk-adjusted return of selected mutual fund for the year 2016-17 is tabulated in Table 5. The total return of Nifty recorded a negative figure in the Q3 (-0.0632). The same has been reflected in growth fund option of selected mutual fund companies. Reliance, L&T, IDFC growth funds showed negative values when for Q1 (-0.0108, -0.0104, -0.0039) & Q3 (-0.0057, -0.0381, -0.0055) respectively where BNP recorded negative values in Q2 (-0.0104) & Q3 (-0.0584). Tata and LIC recorded negative

values when the outperformance was calculated for Q3 (-0.0178,-0.0089) & Q4 (-0.0089, -0.0144). Daily and annualized standard deviation on the returns was observed to have positive values. The government security rate of return (5.9370) was taken into account to assess the risk adjusted return of the growth funds. It was noticed that Beta values for Q1 had values below 1. Except Q2 (0.9675, 0.9596) for IDFC and LIC the funds showed a value above 1 and during Q3 (0. 9221) Tata growth fund has a value below 1. The NAV showed a negative figure during the Q3 for all the growth plans where Nifty also recorded a negative value. The correlation between index and selected growth fund recorded positive values. Sharpe and Tryenor's ratio recorded negative values across all four quarters of 2016-17. The Jenson alpha recorded positive values for Tata growth plan whereas for the Q2 (-0.5368, -0.3262, -0.1202) & Q3 (-0.3493, -1.12996, -0.9621) the representation was negative figure for the Reliance, HSBC and L&T growth plans respectively.

Table 6, represents the performance of the selected growth funds in accordance to various measures of performances for the year 2017-18. The total return recorded negative figures during the Q4 for all the selected growth funds and Nifty. Outperformance recorded a positive value, but for Q2 (-0.0021, -0.0159) and Q4(-0.0312, -0.0248) for Reliance and BNP growth fund respectively. Tata and IDFC recorded a negative value during the Q4(-0.0296, -0.0369) respectively. Other growth funds outperformed with a negative value in minimum of two quarters. The standard deviation of daily and annualized return recorded a positive value. With government security of 5.9370 the beta value was arrived above 1 on most of the selected growth fund. NAV recorded negative figure for all the growth plans and Nifty during Q3 of the 2016-17. Sharpe & Treynor ratio showed records for all quarter of 2017-18. Jenson alpha showed a positive record only for IDFC and LIC growth plan for the Q2 (0.0258, 0.3968). Q1 (-0.1638,-0.0831) recorded negative Jenson alpha only for HSBC and L&T growth funds. Q3 showed a positive Jenson ratio for all growth plans whereas Q4 (-0.4184) recorded a negative ration only for HSBC.

COMPA	RISON C	OF RETUR	N AND RISK-A	ADJUSTED	Table 5 RETURN O 6-2017	F SELECTI	ED MUTUAL	FUND FOR	R YEAR 201
	2016 - 2017	Nifty	Reliance La rge Cap Fu nd - Direct Plan Growt h Plan - Gr owth Option	BNP PA RIBAS LARGE CAP Fu nd-Grow th Optio n	Tata Lar ge Cap Fund Re gular Pl an – Gr owth	HSBC L arge Ca p Equity Fund – Growth	L&T Indi a Large C ap Fund - Regular Plan – Gr owth	IDFC L arge Ca p Fund- Regular Plan-Gr owth	LIC MF L arge Cap Fund-Regu lar Plan-G rowth
Total									
Return	Q1	0.0745	0.0637	0.0853	0.0655	0.0809	0.0641	0.0706	0.0760
	Q2	0.0340	0.0710	0.0236	0.0562	0.0743	0.0614	0.0536	0.0613
	Q3	-0.0632	-0.0689	-0.1216	-0.0810	-0.0709	-0.1013	-0.0687	-0.0944
	Q4	0.1216	0.1512	0.1764	0.1126	0.1385	0.1316	0.1228	0.1071
Outper forman									
ce	Q1		-0.0108	0.0108	-0.0090	0.0064	-0.0104	-0.0039	0.0015
	Q2		0.0371	-0.0104	0.0223	0.0403	0.0274	0.0196	0.0274
	Q3		-0.0057	-0.0584	-0.0178	-0.0077	-0.0381	-0.0055	-0.0312
	Q4		0.0297	0.0549	-0.0089	0.0169	0.0101	0.0013	-0.0144
stdev (Dai									
ly return)	Q1	0.0088	0.0091	0.0080	0.0075	0.0084	0.0080	0.0079	0.0080
	Q2	0.0070	0.0083	0.0077	0.0066	0.0079	0.0076	0.0071	0.0072
	Q3	0.0092	0.0102	0.0108	0.0087	0.0111	0.0109	0.0097	0.0104
	Q4	0.0057	0.0064	0.0067	0.0059	0.0061	0.0063	0.0060	0.0062
stdev (annuali									
zed)	Q1	0.1395	0.1437	0.1273	0.1186	0.1327	0.1267	0.1253	0.1272
	Q2	0.1109	0.1316	0.1229	0.1040	0.1254	0.1210	0.1120	0.1143
	Q3	0.1465	0.1612	0.1719	0.1386	0.1756	0.1733	0.1533	0.1643
	Q4	0.0907	0.1022	0.1065	0.0932	0.0968	0.0994	0.0950	0.0992
G Sec Return	Q1	5.9370							

Beta Q1 0.9593 0.8497 0.8309 0.9024 0.8740 0.8676 Q2 1.0690 1.0024 0.9127 1.0435 1.0186 0.9675 Q3 1.0342 1.0979 0.9221 1.1477 1.1074 1.0103 Q4 0.9755 1.0465 0.9712 1.0014 1.0064 1.0023 NAV Q1 7.4510 6.3724 8.5325 6.5513 8.0870 6.4096 7.0568 Q2 3.3956 7.1022 2.3567 5.6231 7.4255 6.1369 5.3588 Q3 -6.3206 -6.8945 -12.1642 -8.1047 -7.0901 -10.1335 -6.8732 Correlation Q4 12.1554 15.1216 17.6415 11.2605 13.8487 13.1646 12.2817 Correlation Q1 0.9468 0.9312 0.9772 0.9648 0.9788 0.9826 Q2 0.9209 0.9089 0.9783 0.9431 0.9542 0.9791	0.8585 0.9596 1.0595 1.0045 7.6012 6.1319 -9.4402 10.7115
Q3 1.0342 1.0979 0.9221 1.1477 1.1074 1.0103 Q4 0.9755 1.0465 0.9712 1.0014 1.0064 1.0023 NAV Q1 7.4510 6.3724 8.5325 6.5513 8.0870 6.4096 7.0568 Q2 3.3956 7.1022 2.3567 5.6231 7.4255 6.1369 5.3588 Q3 -6.3206 -6.8945 -12.1642 -8.1047 -7.0901 -10.1335 -6.8732 Q4 12.1554 15.1216 17.6415 11.2605 13.8487 13.1646 12.2817 Correlation Q1 0.9468 0.9312 0.9772 0.9648 0.9788 0.9826 Q2 0.9209 0.9089 0.9783 0.9431 0.9542 0.9791 Q3 0.9554 0.9358 0.9750 0.9733 0.9517 0.9814 Q4 0.8976 0.9078 0.9519 0.9612 0.9399 0.9794 Sharpe Ratio </td <td>1.0595 1.0045 7.6012 6.1319 -9.4402</td>	1.0595 1.0045 7.6012 6.1319 -9.4402
Q3 1.0342 1.0979 0.9221 1.1477 1.1074 1.0103 Q4 0.9755 1.0465 0.9712 1.0014 1.0064 1.0023 NAV Q1 7.4510 6.3724 8.5325 6.5513 8.0870 6.4096 7.0568 Q2 3.3956 7.1022 2.3567 5.6231 7.4255 6.1369 5.3588 Q3 -6.3206 -6.8945 -12.1642 -8.1047 -7.0901 -10.1335 -6.8732 Q4 12.1554 15.1216 17.6415 11.2605 13.8487 13.1646 12.2817 Correlation Q1 0.9468 0.9312 0.9772 0.9648 0.9788 0.9826 Q2 0.9209 0.9089 0.9783 0.9431 0.9542 0.9791 Q3 0.9554 0.9358 0.9750 0.9733 0.9517 0.9814 Q4 0.8976 0.9078 0.9519 0.9612 0.9399 0.9794 Sharpe Ratio Q	1.0045 7.6012 6.1319 -9.4402
NAV Q1 7.4510 6.3724 8.5325 6.5513 8.0870 6.4096 7.0568 Q2 3.3956 7.1022 2.3567 5.6231 7.4255 6.1369 5.3588 Q3 -6.3206 -6.8945 -12.1642 -8.1047 -7.0901 -10.1335 -6.8732 Q4 12.1554 15.1216 17.6415 11.2605 13.8487 13.1646 12.2817 Correla tion Q1 0.9468 0.9312 0.9772 0.9648 0.9788 0.9826 Q2 0.9209 0.9089 0.9783 0.9431 0.9542 0.9791 Q3 0.9554 0.9358 0.9750 0.9733 0.9517 0.9814 Q4 0.8976 0.9078 0.9519 0.9612 0.9399 0.9794 Sharpe Ratio Q1 -57.3740 -64.5966 -69.4859 -62.0182 -65.0949 -65.7780 Q2 -62.6290 -67.4002 -79.3628 -65.6768 -68.1824 -73.7238 <td>7.6012 6.1319 -9.4402</td>	7.6012 6.1319 -9.4402
Q2 3.3956 7.1022 2.3567 5.6231 7.4255 6.1369 5.3588 Q3 -6.3206 -6.8945 -12.1642 -8.1047 -7.0901 -10.1335 -6.8732 Q4 12.1554 15.1216 17.6415 11.2605 13.8487 13.1646 12.2817 Correla tion Q1 0.9468 0.9312 0.9772 0.9648 0.9788 0.9826 Q2 0.9209 0.9089 0.9783 0.9431 0.9542 0.9791 Q3 0.9554 0.9358 0.9750 0.9733 0.9517 0.9814 Q4 0.8976 0.9078 0.9519 0.9612 0.9399 0.9794 Sharpe Ratio Q1 -57.3740 -64.5966 -69.4859 -62.0182 -65.0949 -65.7780 Q2 -62.6290 -67.4002 -79.3628 -65.6768 -68.1824 -73.7238 Q3 -51.9747 -49.0591 -60.5591 -47.7203 -48.5344 -54.6486 Q4	6.1319 -9.4402
Q3 -6.3206 -6.8945 -12.1642 -8.1047 -7.0901 -10.1335 -6.8732 Q4 12.1554 15.1216 17.6415 11.2605 13.8487 13.1646 12.2817 Correla tion Q1 0.9468 0.9312 0.9772 0.9648 0.9788 0.9826 Q2 0.9209 0.9089 0.9783 0.9431 0.9542 0.9791 Q3 0.9554 0.9358 0.9750 0.9733 0.9517 0.9814 Q4 0.8976 0.9078 0.9519 0.9612 0.9399 0.9794 Sharpe Ratio Q1 -57.3740 -64.5966 -69.4859 -62.0182 -65.0949 -65.7780 Q2 -62.6290 -67.4002 -79.3628 -65.6768 -68.1824 -73.7238 Q3 -51.9747 -49.0591 -60.5591 -47.7203 -48.5344 -54.6486 Q4 -79.8073 -76.3406 -87.9092 -84.4414 -82.2565 -86.1710	-9.4402
Q4 12.1554 15.1216 17.6415 11.2605 13.8487 13.1646 12.2817 Correla tion Q1 0.9468 0.9312 0.9772 0.9648 0.9788 0.9826 Q2 0.9209 0.9089 0.9783 0.9431 0.9542 0.9791 Q3 0.9554 0.9358 0.9750 0.9733 0.9517 0.9814 Q4 0.8976 0.9078 0.9519 0.9612 0.9399 0.9794 Sharpe Ratio Q1 -57.3740 -64.5966 -69.4859 -62.0182 -65.0949 -65.7780 Q2 -62.6290 -67.4002 -79.3628 -65.6768 -68.1824 -73.7238 Q3 -51.9747 -49.0591 -60.5591 -47.7203 -48.5344 -54.6486 Q4 -79.8073 -76.3406 -87.9092 -84.4414 -82.2565 -86.1710	
Correla tion Q1 0.9468 0.9312 0.9772 0.9648 0.9788 0.9826 Q2 0.9209 0.9089 0.9783 0.9431 0.9542 0.9791 Q3 0.9554 0.9358 0.9750 0.9733 0.9517 0.9814 Q4 0.8976 0.9078 0.9519 0.9612 0.9399 0.9794 Sharpe Ratio Q1 -57.3740 -64.5966 -69.4859 -62.0182 -65.0949 -65.7780 Q2 -62.6290 -67.4002 -79.3628 -65.6768 -68.1824 -73.7238 Q3 -51.9747 -49.0591 -60.5591 -47.7203 -48.5344 -54.6486 Q4 -79.8073 -76.3406 -87.9092 -84.4414 -82.2565 -86.1710	10.7115
tion Q1 0.9468 0.9312 0.9772 0.9648 0.9788 0.9826 Q2 0.9209 0.9089 0.9783 0.9431 0.9542 0.9791 Q3 0.9554 0.9358 0.9750 0.9733 0.9517 0.9814 Q4 0.8976 0.9078 0.9519 0.9612 0.9399 0.9794 Sharpe Ratio Q1 -57.3740 -64.5966 -69.4859 -62.0182 -65.0949 -65.7780 Q2 -62.6290 -67.4002 -79.3628 -65.6768 -68.1824 -73.7238 Q3 -51.9747 -49.0591 -60.5591 -47.7203 -48.5344 -54.6486 Q4 -79.8073 -76.3406 -87.9092 -84.4414 -82.2565 -86.1710	
Q2 0.9209 0.9089 0.9783 0.9431 0.9542 0.9791 Q3 0.9554 0.9358 0.9750 0.9733 0.9517 0.9814 Q4 0.8976 0.9078 0.9519 0.9612 0.9399 0.9794 Sharpe Ratio Q1 -57.3740 -64.5966 -69.4859 -62.0182 -65.0949 -65.7780 Q2 -62.6290 -67.4002 -79.3628 -65.6768 -68.1824 -73.7238 Q3 -51.9747 -49.0591 -60.5591 -47.7203 -48.5344 -54.6486 Q4 -79.8073 -76.3406 -87.9092 -84.4414 -82.2565 -86.1710	
Q2 0.9209 0.9089 0.9783 0.9431 0.9542 0.9791 Q3 0.9554 0.9358 0.9750 0.9733 0.9517 0.9814 Q4 0.8976 0.9078 0.9519 0.9612 0.9399 0.9794 Sharpe Ratio Q1 -57.3740 -64.5966 -69.4859 -62.0182 -65.0949 -65.7780 Q2 -62.6290 -67.4002 -79.3628 -65.6768 -68.1824 -73.7238 Q3 -51.9747 -49.0591 -60.5591 -47.7203 -48.5344 -54.6486 Q4 -79.8073 -76.3406 -87.9092 -84.4414 -82.2565 -86.1710	0.9575
Q3 0.9554 0.9358 0.9750 0.9733 0.9517 0.9814 Q4 0.8976 0.9078 0.9519 0.9612 0.9399 0.9794 Sharpe Ratio Q1 -57.3740 -64.5966 -69.4859 -62.0182 -65.0949 -65.7780 Q2 -62.6290 -67.4002 -79.3628 -65.6768 -68.1824 -73.7238 Q3 -51.9747 -49.0591 -60.5591 -47.7203 -48.5344 -54.6486 Q4 -79.8073 -76.3406 -87.9092 -84.4414 -82.2565 -86.1710	0.9511
Q4 0.8976 0.9078 0.9519 0.9612 0.9399 0.9794 Sharpe Ratio Q1 -57.3740 -64.5966 -69.4859 -62.0182 -65.0949 -65.7780 Q2 -62.6290 -67.4002 -79.3628 -65.6768 -68.1824 -73.7238 Q3 -51.9747 -49.0591 -60.5591 -47.7203 -48.5344 -54.6486 Q4 -79.8073 -76.3406 -87.9092 -84.4414 -82.2565 -86.1710	0.9603
Sharpe Ratio Q1 -57.3740 -64.5966 -69.4859 -62.0182 -65.0949 -65.7780 Q2 -62.6290 -67.4002 -79.3628 -65.6768 -68.1824 -73.7238 Q3 -51.9747 -49.0591 -60.5591 -47.7203 -48.5344 -54.6486 Q4 -79.8073 -76.3406 -87.9092 -84.4414 -82.2565 -86.1710	0.9453
Q2 -62.6290 -67.4002 -79.3628 -65.6768 -68.1824 -73.7238 Q3 -51.9747 -49.0591 -60.5591 -47.7203 -48.5344 -54.6486 Q4 -79.8073 -76.3406 -87.9092 -84.4414 -82.2565 -86.1710	
Q2 -62.6290 -67.4002 -79.3628 -65.6768 -68.1824 -73.7238 Q3 -51.9747 -49.0591 -60.5591 -47.7203 -48.5344 -54.6486 Q4 -79.8073 -76.3406 -87.9092 -84.4414 -82.2565 -86.1710	-64.7360
Q4 -79.8073 -76.3406 -87.9092 -84.4414 -82.2565 -86.1710	-72.1408
	-51.1419
Treyno	-82.6994
	,
r Ratio Q1 -8.5965 -0.8687 -9.9226 -9.1190 -0.8688 -9.4966	-9.5916
Q2 -7.7074 -0.9662 -9.0428 -7.8923 -0.9137 -8.5334	-8.5961
Q3 -8.1021 -1.1118 -9.0994 -7.3026 -1.0840 -8.2934	-7.9322
Q4 -8.3634 -0.7366 -8.4406 -8.1599 -0.8105 -8.1685	-8.1661
Jensen	
Ratio Q1 0.4101 1.3127 1.4673 0.8782 1.1121 1.1648	1.2402
Q2 -0.5368 0.0137 0.7561 -0.3262 -0.1202 0.3025	0.3685
Q3 -0.3493 -0.8831 0.5886 -1.2996 -0.9621 -0.1493	-0.5617
Q4 0.3218 -0.2591 0.3575 0.1099 0.0694 0.1028	

				_	able 6				
COMPAI	RISION (OF RETUR	N AND RISK	ADJUSTED F		F SELECTED	MUTUAL FU	JND FOR YE	AR 2017-2
	2017			BNP PARIBA S LARGE C	018 Tata Lar ge Cap Fund Re	HSBC Lar	L&T Indi a Large C ap Fund -	IDFC Lar ge Cap Fu	LIC MF Large Cap Fun
	2018	Nifty		AP Fund-Gro wth Option	AP Fund-Gro gular Pl		Regular Plan - Gro wth	nd-Regula r Plan-Gro wth	d-Regula r Plan-G rowth
Total R									
eturn	Q1	0.0306	0.0538	0.0675	0.0401	0.0344	0.0355	0.0615	0.0447
	Q2	0.0181	0.0160	0.0021	0.0198	0.0269	0.0150	0.0257	0.0282
	Q3	0.0681	0.1080	0.0735	0.0757	0.0534	0.0634	0.0766	0.0459
	Q4	-0.0308	-0.0620	-0.0556	-0.0604	-0.0382	-0.0342	-0.0677	-0.0457
Outperf ormance	Q1		0.0232	0.0368	0.0094	0.0038	0.0048	0.0308	0.0141
	Q2		-0.0021	-0.0159	0.0018	0.0089	-0.0031	0.0076	0.0101
	Q3		0.0399	0.0054	0.0076	-0.0147	-0.0047	0.0085	-0.0222
	Q4		-0.0312	-0.0248	-0.0296	-0.0074	-0.0034	-0.0369	-0.0149
stdev (Daily r									
eturn)	Q1	0.0049	0.0057	0.0058	0.0054	0.0054	0.0056	0.0056	0.0050
	Q2	0.0062	0.0073	0.0068	0.0068	0.0071	0.0069	0.0069	0.0065
	Q3	0.0057	0.0062	0.0057	0.0057	0.0060	0.0054	0.0051	0.0056
	Q4	0.0078	0.0083	0.0079	0.0079	0.0086	0.0079	0.0081	0.0077
stdev (a nnualiz									
ed)	Q1	0.0770	0.0901	0.0924	0.0851	0.0861	0.0888	0.0893	0.0789
	Q2	0.0987	0.1156	0.1077	0.1082	0.1132	0.1097	0.1088	0.1028
	Q3	0.0900	0.0989	0.0901	0.0906	0.0951	0.0859	0.0812	0.0883
	Q4	0.1245	0.1323	0.1258	0.1252	0.1359	0.1254	0.1287	0.1226
G Sec Return	Q1	5.9370							
Beta	Q1		1.0020	0.9281	0.9875	1.0235	1.0137	0.9673	0.9225
	Q2		1.0860	1.0079	1.0374	1.0852	1.0453	0.9991	0.9543
	03		0.9607	0.9038	0.9258	0.9901	0.8960	0.7925	0.9102
	04		0.9660	0.9443	0.9562	1.0465	0.9508	0.9358	0.9110
NAV	Q1	3.0640	5.3827	6.7482	4.0061	3.4423	3.5477	6.1453	4.4704
	O2	1.8055	1.5999	0.2123	1.9827	2.6948	1.4976	2.5688	2.8172
	Q3	6.8076	10.7983	7.3476	7.5707	5.3392	6.3379	7.6587	4.5924
	04	-3.0842	-6.2043	-5.5607	-6.0405	-3.8238	-3.4246	-6.7720	-4.5732

Correlat								
ion	Q1	0.8705	0.7732	0.8934	0.9307	0.8940	0.8479	0.9156
	Q2	0.9418	0.9232	0.9456	0.9615	0.9551	0.9205	0.9310
	Q3	0.8881	0.9021	0.9190	0.9520	0.9542	0.8921	0.9422
	Q4	0.9244	0.9347	0.9509	0.9747	0.9604	0.9204	0.9409
Sharpe								-104.764
Ratio	Q1	-91.5994	-89.1794	-97.1675	-96.1019	-93.1920	-92.3382	7
	Q2	-71.7445	-77.1306	-76.5910	-73.2012	-75.5980	-76.1340	-80.5880
	Q3	-82.9082	-91.3914	-90.8730	-86.8095	-96.0284	-101.3454	-93.5459
	Q4	-63.2752	-66.5139	-66.8567	-61.4186	-66.5668	-65.0870	-68.1672
Treynor								
Ratio	Q1	-8.2397	-0.9515	-8.3744	-8.0857	-0.9028	-8.5271	-8.9594
	Q2	-7.6371	-1.0242	-7.9914	-7.6324	-0.9753	-8.2921	-8.6782
	Q3	-8.5378	-0.9887	-8.8946	-8.3391	-1.0086	-10.3891	-9.0798
	Q4	-8.6665	-1.1393	-8.7536	-7.9776	-1.1090	-8.9527	-9.1725
Jensen								
Ratio	Q1	0.0141	0.6257	0.1339	-0.1638	-0.0831	0.3011	0.6720
	Q2	-0.6952	-0.0473	-0.2919	-0.6888	-0.3576	0.0258	0.3968
	Q3	0.3923	0.8610	0.6799	0.1496	0.9252	1.7782	0.8085
	Q4	0.2526	0.4337	0.3343	-0.4184	0.3792	0.5049	0.7119

					Table 7				
COMPA	RISON	OF RETU	JRN AND RIS	SK-ADJUST	ED RETUR 8-2019	N OF SELE	CTED MUT	TUAL FUND FO	OR YEAR 201
	2017 - 2018	Nifty	Reliance L arge Cap Fund - Di rect Plan Growth Pl an - Grow th Option	BNP PA RIBAS LARGE CAP F und-Gro wth Opt ion	Tata Lar ge Cap Fund Re gular Pl an - Gro wth	HSBC L arge Ca p Equity Fund - Growth	L&T In dia Larg e Cap F und - R egular P lan - Gr owth	IDFC Large Cap Fund- Regular Pla n-Growth	LIC MF La rge Cap Fu nd-Regular Plan-Growth
Total Ret									
ırn	Q1	0.0492	0.0083	0.0204	0.0170	0.0352	0.0148	0.0463	0.0372
	Q2	0.0256	0.0396	-0.0183	-0.0073	-0.0076	-0.0037	0.0063	-0.0243
	Q3	-0.0132	0.0207	0.0138	0.0116	-0.0210	-0.0005	-0.0226	0.0320
	Q4	0.0654	0.0620	0.0510	0.0604	0.0665	0.0554	0.0576	0.0274
Outperfor	01		0.0400	0.0000	0.0222	0.04.40	0.0244	0.0020	0.0120
nance	Q1		-0.0409	-0.0288	-0.0322	-0.0140	-0.0344	-0.0029	-0.0120
	Q2		0.0140	-0.0439	-0.0330	-0.0332	-0.0293	-0.0193	-0.0499
	Q3		0.0339	0.0270	0.0249	-0.0077	0.0127	-0.0094	0.0453
41. (D.:	Q4		-0.0034	-0.0144	-0.0050	0.0011	-0.0100	-0.0079	-0.0380
tdev (Dai v return)	01	0.0060	0.0072	0.0056	0.0061	0.0068	0.0061	0.0058	0.0061
y return)	02	0.0066	0.0072	0.0056	0.0061	0.0068	0.0069	0.0058	0.0061
	_	0.0000	0.0086	0.0097	0.0075	0.0076	0.0009	0.0100	0.0070
	Q3 Q4	0.0110	0.0114	0.0099	0.0105	0.0109	0.0102	0.0164	0.0100
stdev (Q4	0.0007	0.0077	0.0002	0.0007	0.0009	0.0008	0.0004	0.0003
annual									
ized)	Q1	0.0957	0.1147	0.0885	0.0971	0.1080	0.0970	0.0928	0.0963
izeu)	O2	0.1046	0.1358	0.1547	0.1192	0.1207	0.1093	0.1078	0.1105
	O3	0.1749	0.1802	0.1576	0.1663	0.1731	0.1626	0.1586	0.1679
	04	0.1067	0.1227	0.0978	0.1065	0.1102	0.1075	0.1015	0.1003
G Sec Retur	<u> </u>	012007	0,122,	0,007.0	012002	VVII 0 2	012076	011010	01200
n	Q1	5.9370							
Beta	Q1		1.0603	0.8868	0.9308	1.0806	0.9492	0.8876	0.8706
	Q2		1.1311	1.0410	1.0873	1.0777	0.9912	0.9598	0.9603
	Q3		0.9237	0.8779	0.9167	0.9568	0.8991	0.8567	0.8995
	Q4		0.9592	0.8702	0.9555	0.9833	0.9667	0.8934	0.8717
NAV	Q1	4.9208	0.8279	2.0448	1.7044	3.5227	1.4846	4.6260	3.7198
	Q2	2.5630	3.9582	-1.8278	-0.7334	-0.7583	-0.3710	0.6284	-2.4251
		-1.324							
	Q3	0	2.0702	1.3792	1.1627	-2.0962	-0.0547	-2.2611	3.2010
	Q4	6.5426	6.1995	6.4011	8.0329	8.9048	7.7180	7.3267	4.5148
Correl									
ation	Q1		0.5986	0.7750	0.6197	0.8816	0.5759	0.9707	0.8427
	Q2		0.9311	0.8584	0.9668	0.9689	0.9142	0.9740	0.7599
	Q3		0.8901	0.9695	0.9637	0.9574	0.9713	0.9753	0.9321
	Q4		0.9245	0.9493	0.9788	0.9903	0.9846	0.9755	0.9297
Sharpe	Q1		-72.3612	-93.6484	-85.4148	-76.6453	-85.5364	-89.0747	-85.9285

Ratio								
	Q2	-60.8822	-53.8193	-69.8013	-68.9098	-76.0557	-77.0279	-75.4168
	Q3	-46.0019	-52.6462	-49.8937	-48.1406	-51.1101	-52.5482	-49.3013
	Q4	-67.2211	-84.4247	-77.4683	-74.8121	-76.7783	-81.3134	-82.5925
Treyno								
r Rati								
0	Q1	-7.8298	0.0231	-8.9092	-7.6575	0.0156	-9.3098	-9.5029
	Q2	-7.3117	-0.0176	-7.6497	-7.7181	-0.0037	-8.6518	-8.6788
	Q3	-8.9740	0.0157	-9.0524	-8.7074	-0.0006	-9.7265	-9.2031
	Q4	-8.5988	0.0586	-8.6336	-8.3834	0.0573	-9.2374	-9.5021
Jensen								
Ratio	Q1	-0.4487	0.9843	0.6206	-0.6167	0.4692	0.9774	1.1185
	Q2	-1.0606	-0.3144	-0.6974	-0.6178	0.0989	0.3589	0.3545
	Q3	0.6219	1.0032	0.6801	0.3466	0.8266	1.1796	0.8234
	Q4	0.4017	1.1360	0.4322	0.2030	0.3399	0.9445	1.1236

Table 7 is tabulated performance of the selected growth plan for the year 2018-19. The total return of Nifty showed a negative value during Q3 (-0.0132) where the selected growth funds except HSBC, L&T and IDFC growth fund showed Q3(-0.0210, -0.0005, -0.0226) return reflecting Nifty respectively. Q2 recorded a negative return for all funds except Reliance & IDFC selected growth fund Q2 (0.0396, 0.0063) respectively. None of the selected growth fund outperformed Nifty during Q1 whereas, in Q2 (0.0140) outperformed. HSBC and IDFC recorded a negative value in Q3 (-0.0077, -0.0094). HSBC growth plan recorded a positive outperformance for the period Q4 (0.0011). The daily and annualized standard deviation records a positive value. The risk free rate is taken as 5.9370 and the beta value is recorded below 1 for L&T, IDFC and LIC respectively in all quarters of 2018-19. Sharpe ratio records negative values all throughout the quarters. Treynors ratio recorded a positive value in O1 (0.0231, 0.0156) for the growth plans of BNP & L&T. BNP sustained positive Treynor's ratio for Q3 (0.0157) & Q4 (0.0586) wherein, L&T recorded a positive Treynor's ratio by Q4 (0.0573).

Findings

Systematic risk and volatility is measured by Beta. The selected mutual fund has been observed and the Beta value less than 1 represents that the security is less volatile compared to the market. The beta value when recorded more than 1 it can be arrived that the growth fund is more than more volatile compared to the market. It is noted that none of the selected growth plan offered by the companies accounting for high AAUM shows a Beta more than 2. This implies that the growth plans are highly volatile and movement of stocks are not crossing 2.

RECOMMENDATIONS & CONCLUSION

The growth funds offered by various mutual fund managers selected on the basis of AAUM as on Mar 2019 establishes the fact that the "mutual funds are subject to market risk". The fluctuations in the markets are highly reflected in the performance of mutual fund companies. The Beta value of the selected growth plans depicts that, beta value is more than 1 for each collected data for the past five years. It means that the fund will be more volatile than the market but not exceeding two. From the above study it is also evident that market corollaries are more and therefore the fund managers may not beat the market by their stock picking skills as per Jenson ratio.

Though the mutual fund schemes show less chances of procuring stable returns compared to the risk free return investments, it is also representing that long run investments are to be made to see higher returns. The large cap funds represents investments made in

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stable companies. Risk-averse investors who intent to invest on long run should stay invested for a minimum period of 5 years or more. The fund may not show positive return on immediate basis.

Mutual fund investors will yield a prominent corpus of returns considering the market volatility and the significant risk accepted while investing in the schemes committing for a long time. Investors with a short term investment motive may choose to invest in Nifty 50 taking advantage of the market fluctuations. Based on the study, it may be considered that the short time investors can choose to invest directly in capital market securities. It may also be noted that the large cap mutual funds are market oriented and therefore the repercussions of the market volatility can be noted evidently.

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