

Is Systematic Investment Plan (SIP) really a better option?

A study of Equity Mutual Funds Performance under Various Investment Plans

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Abstract

This study aimed to verify the performance of selected mutual funds under SIP, Lump sum Investment and Value Averaging methods after adjusting funds returns for time value. The study evaluated the performance of 15 open ended mutual fund schemes selected from Small, Mid and Large Cap funds for the period of January 2017- December 2019. The study found that Lump sum Investment option provide comparatively higher returns than SIP and Value Averaging method. The study sought the reason for under-performance of SIP over Lump sum Investment and found the reason that the whole market is driven consistently upwards during the study period. Also, the study opined that the horizon of 3 years has significant impact on returns generated under SIP and Lump sum Investment options especially in developing economies like India. The study also found that the Value Averaging method is better than SIP in generating returns. The study suggests the investor to consider some Bolt-On options in persistent market trends to achieve higher returns.

Key Words: Systematic Investment Plan, Value Averaging, Lump sum Investment, Mutual Funds, SIP, Performance Evaluation, Rupee Cost Averaging, Future Value of Periodic Payments

Introduction

Mutual fund is a pool of money collected by fund manager from various investors who wish to invest the money in securities like equity shares, bonds, money market instruments and other securities. Mutual funds gained popularity among other investment avenues in recent past. As of June 2019, the mutual funds industry in India held AUM of INR24.47 trillion and recorded an annual growth rate in excess of 15% for the last 10 years. There are 44 mutual funds companies offering mutual funds in India and around 3 crores of investors invested in mutual funds industry. Indian mutual fund industry witnessed tremendous growth in retail investor participation in the recent past. According to the 2017 Asia-Pacific Wealth Report by Capgemini, India is home to 2,19,000 millionaires and has 150,000 Number of HNWI families. High Net Worth Individuals (HNWIs) are those having investible assets of USD 1 million or more, excluding primary residence, collectibles, consumables, and consumer durables. The following table 1.1 presents the investor class wise investments made in Indian mutual funds by June 2019.

Table 1.1

THE INVESTOR CLASS WISE INVESTMENT

Type	AUM (US\$ bn)	%
Corporate	136.37	40.12
HNWI	107.38	31.59
Retail	89.98	26.47
Banks/FI	4.31	1.27
FII	1.9	0.56
Total	339.94	100

Source: Asia-Pacific Wealth Report 2017 by Capgemini services

According to Mutual Fund Report-India 2019 by CITI markets and security services, that Retail Investors and High Net Worth Individuals (HNWI) have strong presence in Indian mutual fund industry. They hold around 58% of total investment made into the industry as of 2019.

Systematic investment plan

The retail investors in India those who want to invest in mutual funds are given investment options like Systematic investment plan (SIP) or Lump sum Investment. If investor chose to invest under Lump sum Investment plan, he or she has to commit total amount of investment

in a single payment at the beginning of investment period. In SIP plan, one can invest a fixed amount in selected mutual fund for a specific period at fixed intervals that is mostly monthly basis. SIP considered the most convenient mode of investment for most retail investor in Indian mutual fund industry since an investor can invest minimum of Rs 500 every month through systematic investment plan. Systematic Investment Plans become successful investment option for mutual fund investors in India. As of 2019, there were 2.62 crore investors who had invested through systematic investment plan with AUM of INR 2,66,815 crores while Industry holding of Rs 25.50 lakh crore AUM. Also, retail investors preferring SIP over Lump sum Investment plan since a minimum of Rs 5000 has to be invested at the beginning of investment period if he or she chose to invest through Lump sum Investment plan which may not be a convenient plan for retail investors especially for those are salaried employees.

Theoretically SIP has advantage over Lump sum Investment plan under volatile market conditions and generate better returns from the benefits of rupee cost averaging. Investor has to buy mutual fund units when NAV of the fund is lower and has to exit from the fund when NAV is higher in order to achieve profits. However, one cannot predict the market movements and thus exposed to high risk. With rupee cost averaging method, investor invests fixed amounts at regular intervals and takes the advantage of market downward movements. This method enables the investor to buy more units while price is lowered and few units when price increases and significantly reduces the average cost per unit. rupee cost averaging method has its limitations and does not produce favourable results in all scenarios especially in consistent upward trend is expected. Many studies suggested that the rupee cost averaging method produce better returns if investments are made for the long term typically for 3 or more years since security markets are expected to be highly volatile in long run.

Value averaging

Similar to Systematic investment plan, under value averaging method, an investor invests regularly at specific time interval for a specific period. However, the periodic instalments may vary from time to time due to market volatility and are calculated by adjusting targeted periodic investments to prevailing market price. This technique was proposed by Michael Edelson and popularly used in equity trading rather than in mutual fund industry. Under this method, an investor can achieve a targeted growth in investment irrespective of market movements and allows the investors to manage their investments more efficiently. This technique is

theoretically accurate than SIP but comparatively complex in nature and requires more skills for execution.

Though mutual fund houses do not offer value averaging method of investment option to retail investors directly, some of fund houses offer some bolt-on extras enabling investors to vary their periodic contribution in order to buy more units during bear market conditions. Also, Indian mutual fund industry is highly represented by HNWI and value averaging method of investment is highly useful option for them since they invest large amount of funds for long time horizons.

Literature review

Systematic investment plan has gained lot of popularity in mutual fund industry over last two decades. There are several studies attempted to evaluate the performance of mutual funds in India. Sharpe (1966) and Treynor (1965) attempted to rate the performance of mutual funds on the basis of risk associated with the portfolios which laid the basis for evaluation models of portfolio performance. Jensen, Michal C. (1967) developed a new measure to evaluate fund performance and his study shed light on fund managers ability to generate returns over the risk adjusted returns. Gupta (1974) in his study evaluated the performance of Mutual Funds for the period 1962-71 and applied Sharpe, Treynor, and Jensen techniques for evaluation. He found that the all the selected funds performed better than the benchmark and found Sharpe, Treynor, and Jensen techniques produced similar results in evaluation of funds. Suchita Shukla (2015) studied small, mid and large cap mutual funds along with hybrid funds. This study attempted to analyse the performance of selected 15 funds basing on risk-return relationship. The study found that small and Mid-cap performed better than large cap and hybrid funds.

There are also sufficient number of studies made to identify the performance of mutual fund schemes in regard to systematic investment plans in Indian context. According to Trainor (2005) studied the concept of Dollar Cost Averaging (DCA) which is also known as rupee cost averaging in India. He suggested that a period of minimum three years would be appropriate for Dollar Cost Averaging (DCA) to dilute all conditions of market volatility and to produce better results. Ghosh (2011) studied the performance of mutual funds under SIP and Lump sum mode of investment. The study found that investing in mutual funds via SIP mode is comparatively better and less risky than investing via lump sum mode. Manoharan and Nair (2018) studied the performance evaluation of equity mutual funds under Systematic Investment

Plan (SIP) and Lump-Sum Investment Plan (LIP). They concluded that SIP resulted in better returns than Lump sum mode of investments. Jaison David, Geetanjali Purswani & Anju Jojo (2019) also found that the performance of mutual funds is better in SIP method of investing than value averaging method and Lump sum investments.

Few studies attempted to compare the performance of SIP with other modes of investments like value averaging methods. Panyagometh (2013) studied the efficiency of the Dollar Cost Averaging (DCA) and target terminal wealth methods in comparison with the Value Averaging (VA) investment strategy. It was found that the Value Averaging (VA) investment method is better than the Dollar Cost Averaging method of investment and target terminal wealth methods.

However, these studies ignored the concept of time value of money in evaluation and comparative analysis among SIP, Lump sum Investment and value averaging methods which is very important in modern financial analysis. Also, there is a need for scrutinizing the role of investment plan in generating returns from mutual fund schemes under various market scenarios. This would help the investors to make appropriate investment decisions and to choose better investment plan that suits their need. Since Indian mutual fund industry is highly dominated by HNWI and retail investors, it is important to identify an effective investment plan in order to provide implications for the same.

Objective of the study:

The study seeks to evaluate the performance of mutual funds in India in the recent past and to analyse investor cost-benefits under various investment plans. Also, this study aimed to verify the performance of selected mutual funds under SIP, Lump sum Investment and value averaging methods after considering time value of money concept for the evaluation. However, the main idea of this study is not to make comparison between the selected mutual funds and thus this study does not consider risk factor for the evaluation of fund performance.

Data selection and Analysis:

A total of 15 open ended equity schemes are selected for the study basing on their performance in the last 5 years prior to 2019. These 15 schemes are equity funds and selected from Small, Mid and Large Cap segments. The top 5 performing schemes are selected from each segment to represent the mutual fund industry as a whole. The following table 1.2 lists out the selected mutual fund schemes for the study from small, medium and large cap segments.

Table 1.2
The Selected Mutual Fund Equity Schemes for the study

SMALL CAP	DSP Small Cap Fund
	Franklin India Smaller Companies Fund
	HDFC Small Cap Fund
	Kotak-Small Cap Fund
	Nippon India Small Cap Fund
MID CAP	Axis Midcap Fund
	DSP Midcap Fund
	Edelweiss Mid-cap Fund
	Franklin India Prima Fund
	Kotak Emerging Equity Scheme
LARGE CAP	Aditya Birla Sun Life Frontline Equity Fund
	Axis Bluechip Fund
	Edelweiss Large Cap Fund
	ICICI Prudential Bluechip Fund
	Nippon India Large Cap Fund

These selected mutual fund schemes are the top ranked schemes in equity category basing on their performance in the past 5 years. Approximately 70% of assets of each fund are allocated to equity class and they are comprehensively representing Small, Mid and Large cap equity market segments. The data is collected from AMFI website which is an official source of Indian mutual fund industry. The data is collected for the period from January 2017 to December 2019 totaling 36 observations for each scheme. Closing NAV values from each scheme on the first weekend of every month are collected for the analysis of fund performance since most of mutual fund houses consider first weekend NAV values for systematic investment plan.

Future value of periodic payments:

SIP cannot be compared with Lump sum Investment plan without considering time value of money concept since the payments made at different time periods under both the methods. Likewise, it is advisable to consider time value adjusted cash flows under both SIP and value averaging methods for appropriate evaluation and comparison of both the methods. Thus, this study assessed the net investments made under SIP and value averaging investment plans under Future value of periodic payments method. Future value of periodic payments method converts the periodic payments into a future terminal value by compounding them at a fixed rate mostly a risk-free rate of return. This study assumed interest rate of 6.5% as risk-free rate of return for the evaluation of future values since most 91-Day T-Bills offered the same during the year

2019. The following equation exhibits the evaluation method of future values of periodic payments assuming the payments are made at the beginning of each period.

$$FV = PMT \times \left[\frac{(1 + r/n)^{nt} - 1}{(r/n)} \right] \times (1 + r/n)$$

Where:

- FV = the future value of the periodic payments, including interest
- PMT = the monthly payment
- r = the annual interest rate in decimal
- n = the number of times that interest is compounded per unit
- t = the time in months the money is invested for

For assessing the future value of Lump sum Investment, the study applied a simple compounding formula for future value since it involves only one-time investment at the beginning of the investment period.

$$FV = PV \times (1 + r)^t$$

Where:

- FV = the future value of the periodic payments, including interest
- PV = initial investment at the beginning of the period
- r = the annual interest rate in decimal
- t = the number of years the money is invested for

The study of Systematic Investment Plan:

This part of the study evaluates the performance of selected mutual fund schemes under systematic investment plan for the period of 2017-19. For the analysis, it is assumed that the investor makes payments of Rs. 1,000 in each month from January 2017 till December 2019 under a systematic investment plan. First weekend NAV values of every month are used for assessing number of units that are obtained under SIP mode of investment and total number of units bought during the period is calculated. The performance evaluation of DSP Small Cap Fund under SIP is presented in the following table 1.3. First weekend NAV values of every month are used for assessing number of units that are obtained under SIP mode of investment and total number of units bought during the period is calculated.

Table 1.3

Performance of DSP small cap fund under SIP

DSP Small Cap Fund - Regular - Growth							
Month	NAV	Monthly SIP in Rs.	no of units	Month	NAV	Monthly SIP in Rs.	no of units
Jan-17	51.118	1000	19.563	Jul-18	56.496	1000	17.7
Feb-17	55.157	1000	18.13	Aug-18	59.791	1000	16.725
Mar-17	54.695	1000	18.283	Sep-18	59.376	1000	16.842
Apr-17	58.857	1000	16.99	Oct-18	50.908	1000	19.643
May-17	60.374	1000	16.563	Nov-18	52.858	1000	18.919
Jun-17	61.092	1000	16.369	Dec-18	52.531	1000	19.036
Jul-17	61.741	1000	16.197	Jan-19	52.74	1000	18.961
Aug-17	60.408	1000	16.554	Feb-19	50.51	1000	19.798
Sep-17	59.757	1000	16.734	Mar-19	53.214	1000	18.792
Oct-17	60.477	1000	16.535	Apr-19	55.954	1000	17.872
Nov-17	64.587	1000	15.483	May-19	53.994	1000	18.521
Dec-17	65.893	1000	15.176	Jun-19	55.965	1000	17.868
Jan-18	72.96	1000	13.706	Jul-19	54.753	1000	18.264
Feb-18	65.339	1000	15.305	Aug-19	47.882	1000	20.885
Mar-18	65.575	1000	15.25	Sep-19	48.367	1000	20.675
Apr-18	65.373	1000	15.297	Oct-19	49.316	1000	20.277
May-18	65.725	1000	15.215	Nov-19	52.359	1000	19.099
Jun-18	59.262	1000	16.874	Dec-19	51.558	1000	19.396

Similarly, the performance of all selected mutual fund schemes of Small, Mid and large cap funds under SIP are evaluated and the results are presented in the following table 1.4. The Net value of mutual fund units under each scheme is calculated on the basis of NAV of the scheme 31st December 2019. Also, the periodic payments made into each scheme are converted into future value on 31st December 2019 and presented in the following table. The absolute returns over 3 years of investment horizon is calculated by considering the net value at the end of the period and the future value of periodic payments made under Systematic investment plan.

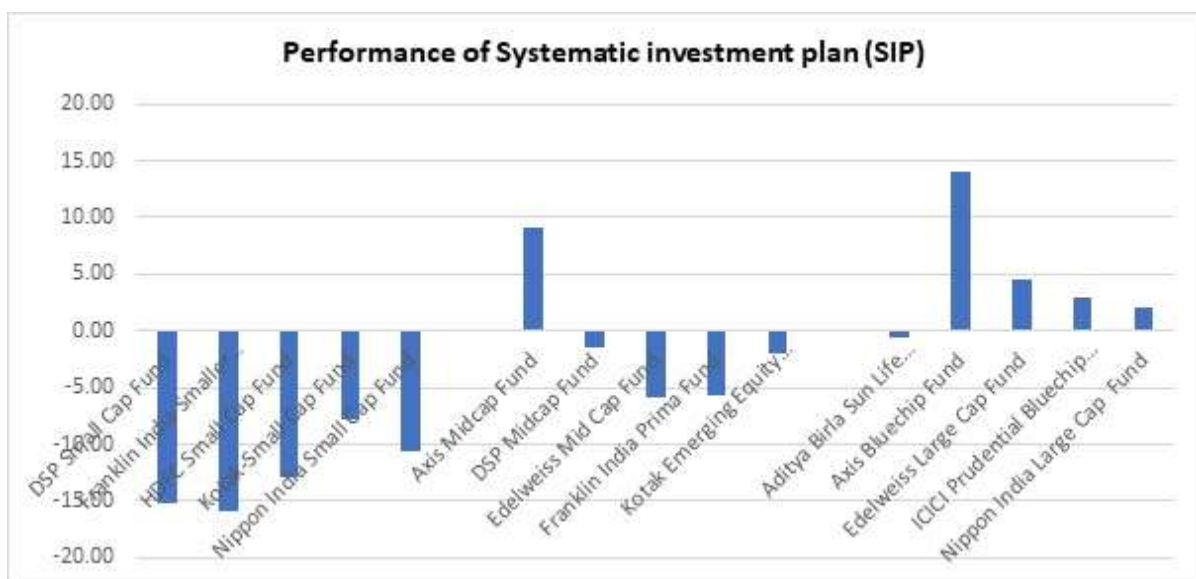
Table 1.4

Performance of Systematic investment plan (SIP)

SMALL CAP					
	DSP Small Cap Fund	Franklin India Smaller Compani es Fund	HDFC Small Cap Fund	Kotak- Small Cap Fund	Nippon India Small Cap Fund

No of Units	633	672	902	503	920
Net Value (In Rs.)	33825	33491	34729	36749	35640
Future value of periodic payments (In Rs.)	39846	39846	39846	39846	39846
Absolute return (%)	-15.11	-15.95	-12.84	-7.77	-10.56
MID-CAP					
	Axis Midcap Fund	DSP Midcap Fund	Edelweiss Midcap Fund	Franklin India Prima Fund	Kotak Emerging Equity Scheme
No of Units	1094	685	1392	39	966
Net Value (In Rs.)	43455	39278	37519	37605	39089
Future value of periodic payments (In Rs.)	39846	39846	39846	39846	39846
Absolute return (%)	9.06	-1.42	-5.84	-5.62	-1.90
LARGE CAP					
	Aditya Birla Sun Life Frontline Equity Fund	Axis Bluechip Fund	Edelweiss Large Cap Fund	ICICI Prudential Bluechip Fund	Nippon India Large Cap Fund
No of Units	170	1418	1105	922	1139
Net Value (In Rs.)	39622	45440	41619	41013	40654
Future value of periodic payments (In Rs.)	39846	39846	39846	39846	39846
Absolute return (%)	-0.56	14.04	4.45	2.93	2.03

Graph 1.1



The above graph 1.1 exhibits that the performance of the large cap funds is comparatively superior to the Small and Mid-cap funds during the period of time. Axis Mid-cap fund registered a positive return of 9.06% for 3 years of investment horizon and all other small and Mid-cap schemes are registered negative returns for the same period after adjusting for risk-free returns. This analysis clearly shows that the SIP could not generate returns over the risk-free return of 6.5% from either of the small and Mid-cap schemes except Axis Mid-cap fund. However, the large cap funds registered positive returns except Aditya Birla Sunlife Front Line Equity Fund.

The study of Lump sum Investment:

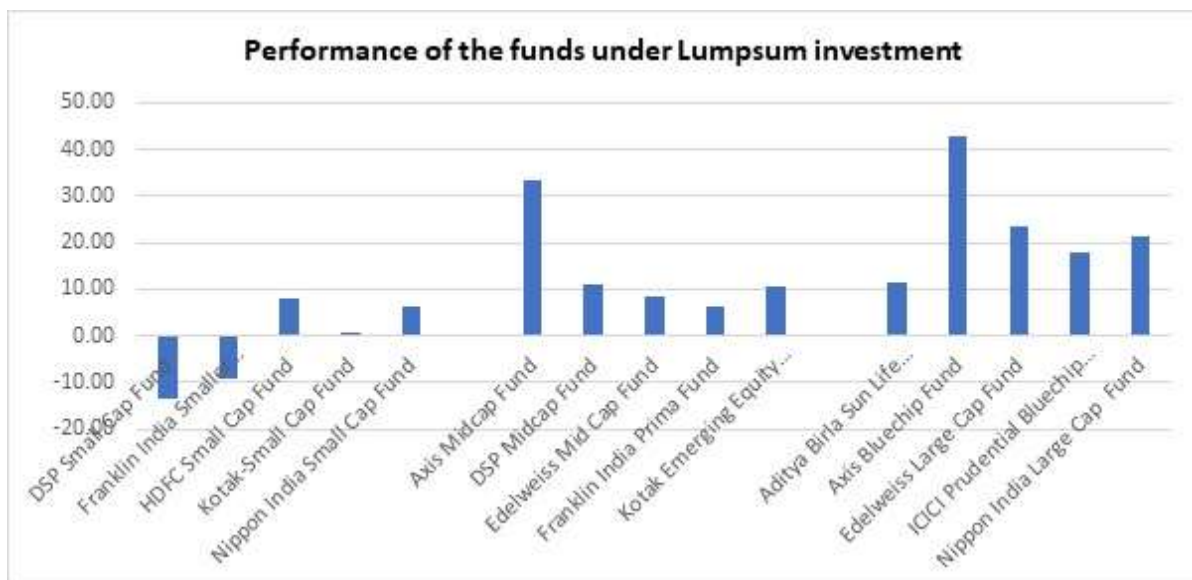
This part of the study presents the performance of selected funds on Lump sum mode of investments. For the analysis, it is assumed that the investor invests a lump sum of Rs. 36,000 in the month of January 2017 and holds the investment till December 2019. The following table 1.5 exhibits the performance of the selected schemes during the period on Lump sum Investment.

Table 1.5
Performance of the funds under Lump sum Investment

SMALL CAP					
	DSP Small Cap Fund	Franklin India Smaller Companies Fund	HDFC Small Cap Fund	Kotak-Small Cap Fund	Nippon India Small Cap Fund
No of Units	704	792	1219	600	1191
Net Value (In Rs.)	37603	39480	46933	43820	46136
Future value of periodic payments (In Rs.)	43486	43486	43486	43486	43486
Absolute return (%)	-13.53	-9.21	7.93	0.77	6.09
MID-CAP					
	Axis Midcap Fund	DSP Midcap Fund	Edelweiss Mid-cap Fund	Franklin India Prima Fund	Kotak Emerging Equity Scheme
No of Units	1460	842	1752	48	1189
Net Value (In Rs.)	57971	48291	47209	46241	48116
Future value of periodic payments (In Rs.)	43486	43486	43486	43486	43486
Absolute return (%)	33.31	11.05	8.56	6.33	10.65
LARGE CAP					

	Aditya Birla Sun Life Frontline Equity Fund	Axis Bluechip Fund	Edelweiss Large Cap Fund	ICICI Prudential Bluechip Fund	Nippon India Large Cap Fund
No of Units	208	1938	1424	1152	1477
Net Value (In Rs.)	48483	62099	53630	51269	52706
Future value of periodic payments (In Rs.)	43486	43486	43486	43486	43486
Absolute return (%)	11.49	42.80	23.33	17.90	21.20

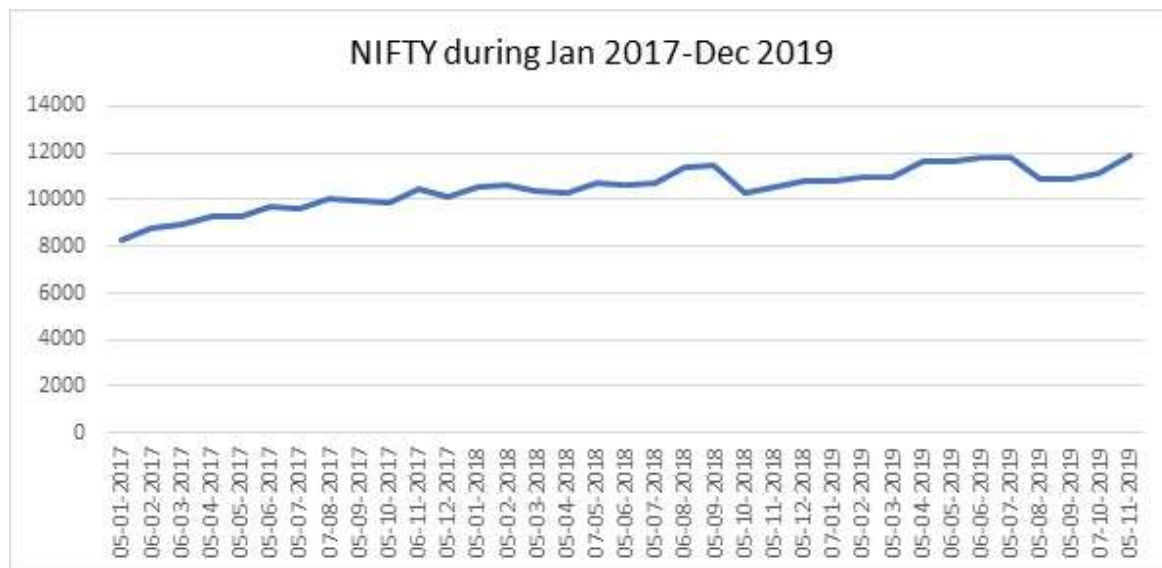
Graph 1.2



The above graph 1.2 shows that the absolute returns of all Medium and Large cap funds are positive and superior to small cap funds during the period. Large cap funds performed comparatively better than Mid-cap funds and generated superior returns. Except DSP Small Cap Fund and Franklin India Smaller Companies Fund, all the selected funds generated positive returns under Lump sum Investment option. In comparison of the fund’s performance under SIP and Lump sum Investment options, it is identified that Lump sum Investment option relatively yield better returns than SIP during the period. Theoretically in a volatile market conditions, SIP mode of investment would generate better returns than lump sum investments. However, the results from this analysis denying this hypothesis and suggesting Lump sum investment over SIP. Systematic investment plan could not help in mitigating negative return form the market amidst high volatile market conditions over 3 years of investment horizon.

The reason for this paradox is further explained by understanding the market as a whole. The study attempted to understand the prevailed market conditions during the study period by analyzing the performance of NIFTY index. The following graph 1.3 presents the market movement of NSE NIFTY during the period of Jan 2017- Dec 19 which is indicating almost a consistent upward trend.

Graph 1.3



The above NSE market performance shows consistent upward trend which is the major reason behind SIP investment option generated lower returns than Lump sum Investment option since Rupee cost average method does not produce favorable results under this market scenario. Similarly, it is also found that the large cap funds performed better than mid and small cap funds during the period since a strong and persistent upward trend is found in large cap securities than mid and small cap funds during the period.

The study of Value Averaging Method:

Very few studies attempted to present the mutual fund performance under Value Average method since it is not very advisable for retail investors. However, this study found that there is a strong presence of HNWI in Indian mutual fund industry and most of retail investors also investing large amount of funds in mutual funds. This part of study seeks to identify the performance of selected mutual funds under value averaging investment option and to compare it with other investment plans available for retail investors. The following table 1.4 exhibits the performance of selected schemes under value averaging investment option for the study period.

In order to evaluate the performance of funds under value averaging method, it is assumed that the investor invests a calculated amount of money into the selected funds every month in order to achieve predefined target amount of investment by the end of that particular month. Thus, monthly installments are adjusted to the changes in NAV value at the end of the month and investors invest different installments every month. However, in calculation of monthly installment for the study, it is found that the calculated number of units to be bought for several months became negative values suggesting to sell the units bought in previous periods. In order to make the analysis easier for interpretation, these negative values of units to be bought are adjusted to zero value and resulted in zero monthly contribution for these months.

Table 1.6

Performance of selected funds under Value averaging method

MONTH	NAV	UNITS BOUGHT	CUMULATIVE UNITS	MONTHLY INVESTMENT	CUMULATIVE INVESTMENT
Jan-17	51.12	20.00	20.00	1022.36	1022.36
Feb-17	55.16	17.00	37.00	937.67	1960.03
Mar-17	54.70	18.00	55.00	984.51	2944.54
Apr-17	58.86	13.00	68.00	765.14	3709.68
May-17	60.37	15.00	83.00	905.61	4615.29
Jun-17	61.09	16.00	99.00	977.47	5592.76
Jul-17	61.74	15.00	114.00	926.12	6518.88
Aug-17	60.41	19.00	133.00	1147.75	7666.63
Sep-17	59.76	18.00	151.00	1075.63	8742.26
Oct-17	60.48	15.00	166.00	907.16	9649.41
Nov-17	64.59	5.00	171.00	322.94	9972.35
Dec-17	65.89	12.00	183.00	790.72	10763.06
Jan-18	72.96	0.00	183.00	0.00	10763.06
Feb-18	65.34	36.00	219.00	2352.20	13115.27
Mar-18	65.58	14.00	233.00	918.05	14033.32
Apr-18	65.37	16.00	249.00	1045.97	15079.28
May-18	65.73	14.00	263.00	920.15	15999.43
Jun-18	59.26	45.00	308.00	2666.79	18666.22
Jul-18	56.50	33.00	341.00	1864.37	20530.59
Aug-18	59.79	0.00	341.00	0.00	20530.59
Sep-18	59.38	19.00	360.00	1128.14	21658.74
Oct-18	50.91	79.00	439.00	4021.73	25680.47
Nov-18	52.86	3.00	442.00	158.57	25839.04
Dec-18	52.53	21.00	463.00	1103.15	26942.19

Jan-19	52.74	18.00	481.00	949.32	27891.51
Feb-19	50.51	40.00	521.00	2020.40	29911.91
Mar-19	53.21	0.00	521.00	0.00	29911.91
Apr-19	55.95	0.00	521.00	0.00	29911.91
May-19	53.99	37.00	558.00	1997.78	31909.69
Jun-19	55.97	0.00	558.00	0.00	31909.69
Jul-19	54.75	30.00	588.00	1642.59	33552.28
Aug-19	47.88	102.00	690.00	4883.96	38436.24
Sep-19	48.37	14.00	704.00	677.14	39113.38
Oct-19	49.32	7.00	711.00	345.21	39458.59
Nov-19	52.36	0.00	711.00	0.00	39458.59
Dec-19	51.56	30.00	741.00	1546.74	41005.33

The above table 1.6 presents the performance of DSP Small Cap Fund for the study period under value averaging investment option. Likewise, the performance of all selected schemes under value averaging method is evaluated and presented in the following table 1.4. Also, these uneven monthly investments are converted into future value of periodic payments at a discount rate of 6.5% and then compared with Net Value of the fund. From the net value and future value of each fund, the absolute returns are calculated for each fund and presented in the following table 1.7.

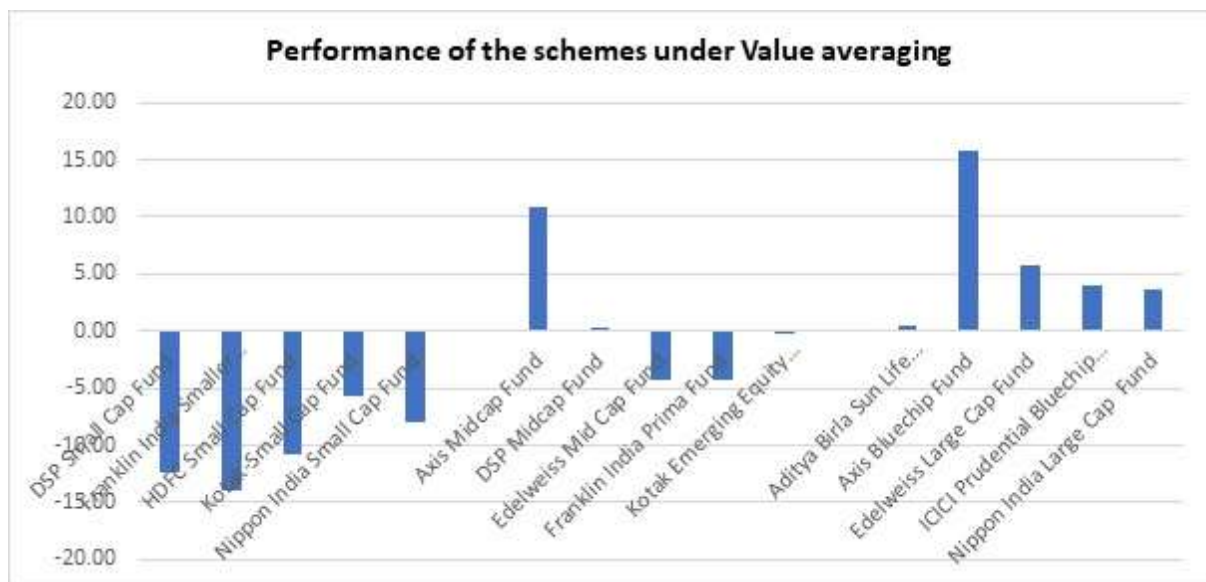
Table 1.7

Performance of the schemes under Value averaging

SMALL CAP					
	DSP Small Cap Fund	Franklin India Smaller Companies Fund	HDFC Small Cap Fund	Kotak-Small Cap Fund	Nippon India Small Cap Fund
No of Units	741	745	965	528	997
Net Value (In Rs.)	39565	37139	37151	38554	38629
Future value of periodic payments (In Rs.)	45118	43125	41619	40888	41985
Absolute return (%)	-12.31	-13.88	-10.74	-5.71	-7.99
MID-CAP					
	Axis Midcap Fund	DSP Midcap Fund	Edelweiss Midcap Fund	Franklin India Prima Fund	Kotak Emerging Equity Scheme
No of Units	955	675	1400	40	945
Net Value (In Rs.)	37923	38706	37724	38401	38234

Future value of periodic payments (In Rs.)	34178	38610	39379	40094	38331
Absolute return (%)	10.96	0.25	-4.20	-4.22	-0.25
LARGE CAP					
	Aditya Birla Sun Life Frontline Equity Fund	Axis Bluechip Fund	Edelweiss Large Cap Fund	ICICI Prudential Bluechip Fund	Nippon India Large Cap Fund
No of Units	164	1215	1012	859	1108
Net Value (In Rs.)	38174	38941	38112	38217	39533
Future value of periodic payments (In Rs.)	37969	33613	36053	36733	38168
Absolute return (%)	0.54	15.85	5.71	4.04	3.58

Graph 1.4



The above graph 1.4 presents the performance of selected schemes under value averaging method for the study period of 2017-19. The above graph indicates that the performance of large cap funds yields positive returns while all the small cap funds registered negative returns. Axis Mid-cap fund and DSP Mid-cap funds are able to register positive returns among the selected Mid-cap funds during the period.

Comparison between SIP / Lump Sum / Value averaging

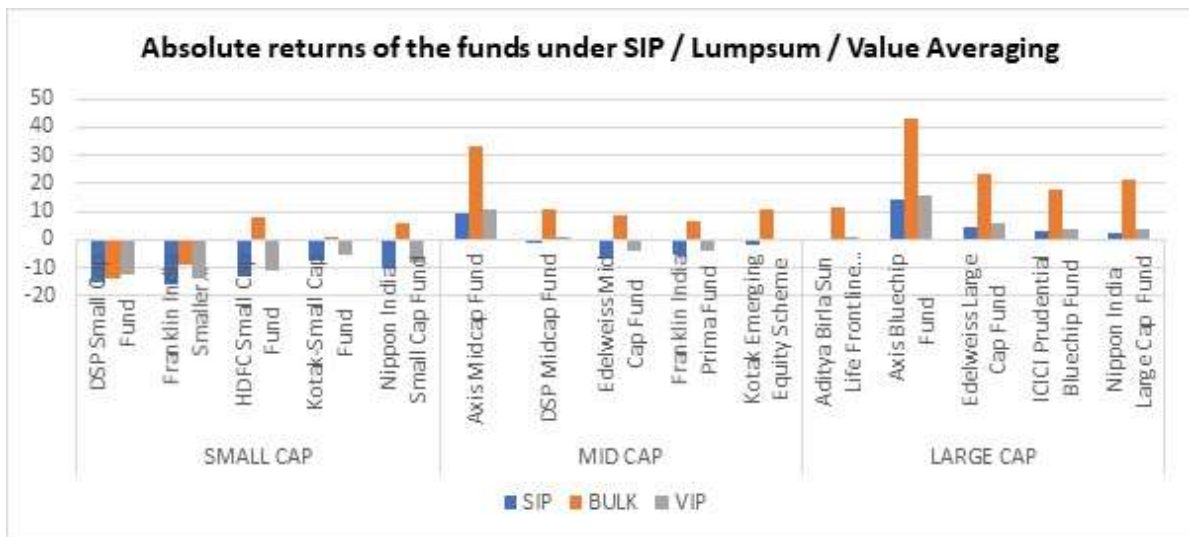
The study aimed to identify whether mode of investment in mutual fund make any significant difference in returns generated by the funds. The following table 1.8 exhibits the returns generated by all selected funds under different investment options.

Table 1.8

Absolute returns of the funds under SIP / Lump sum / Value averaging method

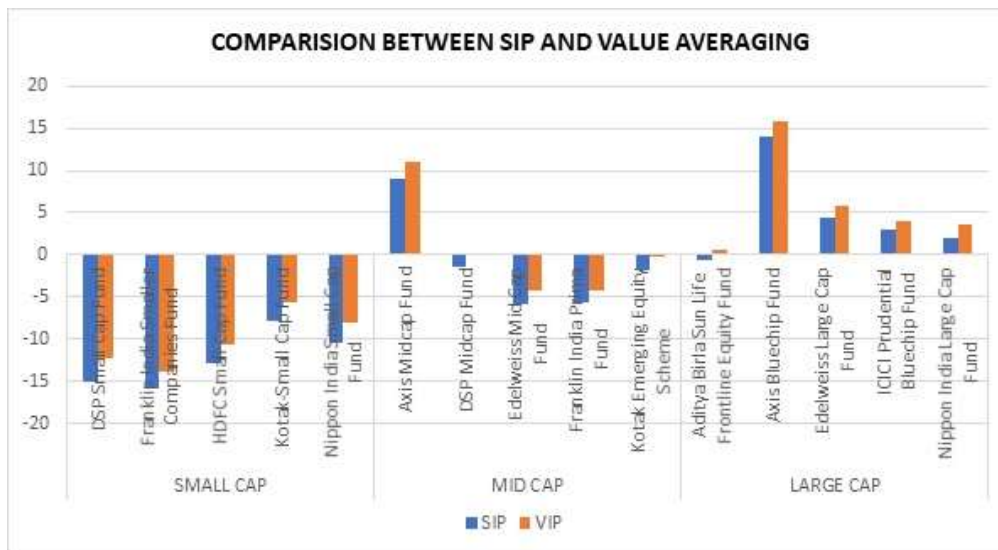
		SIP	Lump sum	Value Average
SMALL CAP	DSP Small Cap Fund	-15.1108	-13.5288	-12.3079
	Franklin India Smaller Companies Fund	-15.948	-9.21245	-13.8807
	HDFC Small Cap Fund	-12.8428	7.926417	-10.7374
	Kotak-Small Cap Fund	-7.77219	0.76706	-5.70989
	Nippon India Small Cap Fund	-10.5555	6.092827	-7.99444
MID-CAP	Axis Midcap Fund	9.057868	33.30912	10.95641
	DSP Midcap Fund	-1.42496	11.05043	0.247129
	Edelweiss Mid-cap Fund	-5.841	8.561988	-4.20182
	Franklin India Prima Fund	-5.62323	6.33461	-4.2205
	Kotak Emerging Equity Scheme	-1.89931	10.64745	-0.25291
LARGE CAP	Aditya Birla Sun Life Frontline Equity Fund	-0.56135	11.48997	0.540183
	Axis Bluechip Fund	14.03978	42.80235	15.85165
	Edelweiss Large Cap Fund	4.450475	23.32647	5.710195
	ICICI Prudential Bluechip Fund	2.927725	17.89745	4.041104
	Nippon India Large Cap Fund	2.027987	21.20166	3.576956

Graph 1.5



The above graph 1.5 confirms that the Lump sum Investment option is comparatively generate higher absolute rate of return than both the systematic investment plan and the value averaging methods for the selected funds. However, the reason for outperformance of Lump sum Investment option over SIP and value averaging method is already visited earlier in the study. The study identified that the performance of the large cap funds found better than all other selected mid and small cap funds irrespective of investment option. Mid-cap funds found performing better than the small cap funds under all investment options during the study period. The following graph 1.6 exhibits the performance of the funds under SIP and value averaging method in order to further study the better investment plan between SIP and value averaging since they are mostly similar in nature and most argued investment plans among available investment options.

Graph 1.6



The graph 1.6 implies that the value averaging method of investments result in relatively better returns for all selected funds from small, medium and large cap funds comparing to Systematic Investment Plan.

Discussion:

Though SIP is inarguably better and convenient option of investment for most of retail investors, some portion of investors still stand a chance to choose between SIP or value averaging and Lump sum mode of investments. Theory suggest SIP perform better over Lump sum Investment under volatile market conditions and yet SIP performance is subjected to market conditions and does not provide favorable outcomes in all scenarios. This is evident from a consistent market upward movement which is also found in this study. Also, the long investment horizon of 3 years has significant impact on the returns generated under SIP and Lump sum Investment since the market discounts all macro-economic factors in the long run and exhibit persistent upward trend especially in developing economies like India. Technically value averaging method is superior to SIP in timing the market and generating better returns. From this study it is also evident that the value averaging method is better than SIP in generating better returns. Yet, it is not as simple and convenient as SIP for ordinary investors to follow up market price movements and execute investments on regular basis. However, investors can make use of some Bolt-On options provided by mutual fund houses and to differ their periodic investments in order to achieve higher returns. Thus, the study concludes suggesting the investors to consider all the available investment plans carefully while investing

in mutual funds and should learn that SIP do not necessarily produce better returns against other investment plans in all market conditions.

References:

A. R. Krishnan and R.Selvamani (2012), "A Study on Customer Satisfaction with Special Reference of HDFC Standard Life Insurance Pvt Ltd in Chennai", *International Journal of Management*, Volume 3(2), 168 - 170

Ghosh, D. R. (2011), "The Scenario of Investment in Systematic Investment Plan (SIP) among the Retail Customers", *Global Journal of Finance and Economic Management*, 49-62.

Gupta Amitabh (2001), "Mutual Funds in India: A Study of Investment Management", *Finance India*, Vol. XV (2), 631-637

Hansen, K. A., & Carlson, S. J. (2014), "Using a Dollar Cost Averaging to range trade in bear markets", *Journal of Business and Educational Leadership*, 71-79.

Jaison David, Geetanjali Purswani, Anju Jojo (2019)," A study of investment decisions based on systematic investment plan, value averaging and lump-sum investment plan", *International Journal of Research and Analytical Reviews*, Vol. 6(1), 46x-55x

Jayadev, M (1996). "Mutual Fund Performance: An Analysis of Monthly Returns", *Finance India*, 10 (1), 73-84

Krishnan, K. G. (2017), "A study of growth oriented tax saving schemes of select Indian mutual fund companies". *The Indian Journal of Management*, 17-20.

Manoharan, T. G., & Nair, G. V. (2018), "Equity Funds or Mutual Funds? Through the Lens of SIP and LIP", *International Journal of Pure and Applied Mathematics*, 4177-4185.

Panyagometh, K. (2013), "Performance Comparison between Dollar Cost Averaging and Value Averaging Investment Strategies and the Impacts of Investment Horizon and Target Terminal Wealth", *Journal of Applied Finance & Banking*, 15-27.

Sharpe, W.F. (1966), "Mutual fund performance", *The Journal of Business*, 39, 119-138

Suchita Shukla (2015)," A comparative performance evaluation of selected mutual funds", *International Journal of Science Technology & Management*, Volume 04(2), 140-149

Trainor, J. w. (2005), "within-horizon exposure to loss for dollar cost averaging and lump sum investing", *Financial Services Review*, 319-330.

CITI markets and security services, *Mutual Fund Report-India* (2019)

Websites:

www.amfindia.com

www.business.mapsofindia.com

www.mutualfundsindia.com

www.ibef.org.
www.cmie.com
www.censusindia.gov.in
www.economicstimes.indiatimes.com
www.tradingeconomics.com