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Performance Evaluation Of Mutual Fund: A Study With Special Reference With Selected Mutual Fund Schemes Offered By SBI And HDFC

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Abstract:

The concept of mutual fund is similar to that of a portfolio which follows the policy of "not all the eggs in the same basket". The pool of funds collected through mutual funds is invested in diversified financial instruments. The funds are managed by professional fund manager who apply their special managing skills in devising superior portfolio strategies for maximum gain of investors at minimum risk. The study is to measure the performance of the selected mutual funds of HDFC and SBI, on the basis of NAV and different parameters, along with make a comparative analysis of performance of similar funds of HDFC and SBI. The period of the study is for ten years commencing from (1-4-2009 to 1-4-2018). Coefficient of correlation is used to get an effective view regarding the NAV movement of the mutual fund schemes. For the purpose of performance evaluation Sharpe Ratio is calculated for the period 3 years. The mutual fund schemes are ranked accordingly on basis of Sharpe Ratio in decreasing order of performance. The equity based funds are generally highly risky but along with they provide higher value of NAV over the period. These are favorable for that investor who is interested to take high risk with comparatively high return. One of the options in the hands of the investors is that they can take the SIP (Systematic Investment Plan) option which helps the investors to equalize the volatility of the market to a certain extent.

Key words: mutual fund, portfolio, NAV (net asset value), Sharpe ratio, risk & return.

1.1 INTRODUCTION:

Investment is the process of, sacrificing something now for the prospect of gaining something later" .it is an economic activity which involves creation of assets or exchange of assets with profit motive. It is the employment of funds with the purpose of earning additional income or growth in value. The return of investment is an award for abstaining from present consumption for parting with the money or liquidity and for taking risk.

The concept of mutual fund is similar to that of a portfolio which follows the policy of "not all the eggs in the same basket". The pool of funds collected through mutual funds is invested in diversified financial instruments. The funds are managed by professional fund manager who apply their special managing skills in devising superior portfolio strategies for maximum gain of investors at minimum risk. The fund owner own units of the fund which represent their share in it. The returns from the investment are distributed among the fund owners in proportion of the units held by them after deduction of any additional expanses in the management of these funds. The value of the funds does not always remain the same. It varies with the volatility of investment constituents but to a limit extent.

The returns of the mutual fund cannot be taken as a sole factor to evaluate its performance. Risk which is associated with the different mutual funds varies and this plays an important role in the performance evaluation of the funds. Risk associated with a mutual fund measures the variability or fluctuation in the returns of that fund. The higher the risk, the greater is the fluctuation in the returns of those mutual funds.

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1.2 OBJECTIVE OF THE STUDY:

1) To study the performance of the selected mutual funds of HDFC and SBI, on the basis of NAV.
2) To study the performance of selected mutual funds of HDFC and SBI on the basis of different parameters.
3) To make a comparative analysis of performance of similar funds of HDFC and SBI.

1.3 HYPOTHESES OF THE STUDY:

- Null hypotheses: There is no significant difference between the HDFC and SBI mutual funds.
- Alternate hypotheses: There is significance difference between HDFC and SBI.

1.4 Review of literature:

1. Gupta Amitabh (2004) "Mutual Funds: Growth, Performance and Prospects" evaluates in detail the performance of mutual funds during the five-year period from April 1, 1994 to march 31, 1999. The study also investigates the market timing abilities of Indian mutual fund managers. It also examines the structural changes arising in the Indian mutual fund industry during the period 1987 to September 30, 2001. The book also examines the regulatory frame work of mutual funds, the growth of mutual fund industry in India and it also attempts to test the market timing abilities of fund managers.

2. Raju, Priya & Mrudula (2016) Mutual Fund Industry In India -He said that how mutual funds are seen as more reliable. It traces the history of the mutual fund industry in India from the establishment of the Unit Trust of India in 1964 as well as presenting successful strategies for mutual fund investors

3. Singh Daryab(2013) Mutual Funds In India – It reviews how economic scenario worldwide has radically changed in recent years and also the principle of Globalization and Liberalization has accepted by the economy of different countries of the world including India.

4. Sumalatha.B.S (2007)-State of competition among the mutual funds in India: an exploratory analysis In the context of growing importance of mutual funds in the developing countries like India, the study objectives are to analyze the structure of the mutual fund industry in India, to examine the state of competition among the mutual funds, sector wise competition and within sector competition. The preliminary observation provides that there occurred drastic changes in the industry after liberalization. The entry of large number of private and the foreign mutual funds.

5. Prava Nalini(2006) Mutual Funds In India : Emerging Issues – He said how to: Discover the most profitable mutual funds and the right amount to invest in each Develop your retirement strategy using mutual funds Choose the best broker to meet your needs, or do it yourself online Avoid common pitfalls and mistakes Minimize fees and potential losses.

6. Sadhak.H (2009) Mutual Funds In India: Marketing Strategies And Investment Practices - According to him he explains the most important of its kind regarding the mutual funds industry in India. It provides a thorough analysis of mutual funds to the general public and fund managers alike..

1.5 RATIONALE OF THE STUDY:

A lot of work on performance evaluation has been carried out in India following the growth trend of mutual fund market but no significant work on comparison of similar mutual fund schemes offered by HDFC and SBI with reference to some significant parameters being carried out came in the notice of the researcher. Keeping this in view the project attempt to draw the attention of the investor and interested analyst towards the performance of these selected mutual fund schemes regarding the risk association and Net Asset Value in different period of time.

1.6 RESEARCH METHODOLOGY:

1. **Scope of study**: The period of the study is for ten years commencing from (1-4-2009 to 1-4-2018). The study comprises a sample of different mutual fund schemes of HDFC and SBI of different categories. For the purpose of performance analyses of the different mutual fund schemes of HDFC and SBI are compared on the basis of Net Asset Value. A sample of ten mutual fund schemes of HDFC and SBI each which are highly rated and covering different types of schemes. The benchmark return i.e. NAV is being collected from the returns available in BSE SENSEX at different point of time.

2. **BRIEF PROFILE OF THE STUDY**: The study is conducted by undertaking ten mutual funds. The funds are listed below:

SBI Medium Duration Fund, HDFC Medium Duration Fund, SBI Arbitrage Fund HDFC Arbitrage Fund, SBI Gilt Fund ,HDFC Gilt Fund, SBI Equity Fund, HDFC Equity Fund ,SBI Magnum Tax Gain Scheme, HDFC Tax Saver Growth Scheme, HDFC monthly income plan, SBI hybrid growth-monthly plan, HDFC capital builder value fund, SBI magnum multi cap fund and different others.

3. **Sources of data**: To gain an insight into the current trend in performance of the Indian mutual fund industry, mainly secondary data have been used. Along with that data are also collected from the newspaper, journals and periodicals. The data were also collected from various websites of BSE, money control.com, morning star.com etc. The Net Asset Value of the selected set of mutual fund schemes has been collected over a period of 10 years. BSE SENSEX has been used as a benchmark for performance evaluation of different schemes. Along with those different parameters like BETA, R^2 and Sharpe ratio has been analyzed for 3 years upto March 31, 2019 to undertake an effective performance analyses.

4. **Tools and techniques**: To make an analysis of the performance evaluation of the mutual fund schemes by using the following tools and techniques.

4.1 **For risk analyses** :

1) Standard deviation (total risk)
2) Beta (Systematic risk)

4.2 **For Return Analyses**:

1) Net Asset Value
2) Average Return computed for a period of ten years of different mutual fund schemes.

4.3 **For analyze relation of returns with Equity content of HDFC and SBI Mutual Fund schemes**:

1) Coefficient of correlation is used to get an effective view regarding the NAV movement of the mutual fund schemes.

4.4 **Performance evaluation by risk adjusted measures**:

1) For the purpose of performance evaluation Sharpe Ratio is calculated for the period 3 years (1/4/2016) to (31/3/2019). The mutual fund schemes are ranked accordingly on basis of Sharpe Ratio in decreasing order of performance.

4.5 **Performance evaluation by benchmark return**:

1) R^2 measure is used to measure the relationship between a portfolio and its benchmarks. It indicate the relevance of the Beta measure

R^2 measures-

- 1-40% = low correlation between the portfolio's returns and the benchmark's return.
- 40-70% = average correlation between the portfolio's returns and the benchmark's return.
- 70-100% = good correlation between the portfolio's returns and the benchmark's return.

1) Analysis of Data:

Net Asset Value:

The net asset value of a mutual fund is the price at which the units of a mutual fund are bought and sold. It is the market value of the fund after deducting its liabilities. The value of all units of mutual fund portfolio are calculated on daily basis, from this all expenses are subtracted.

NAV indicates the market value of the units of the funds. It helps the investors to keep a track record of the performance about the mutual funds. Investors can evaluate the performance by taking into consideration of the Mutual fund NAV.

Calculation of NAV:

$$\text{NAV of a mutual fund} = \frac{\text{(Assets of the fund- Liabilities of the fund)}}{\text{Number of outstanding units of the fund}}$$

Since the mutual fund depends on stock market so the value of NAV is declared after the closing hours of the stock exchange. NAV is obtained after subtracting the expense made by the mutual funds. It includes operating expenses and management fees, transfer agent fees, custodian fees and audit fees.

Limitation of the study:

- Only ten mutual fund schemes offered by two institutions are taken into consideration.
- The study is conducted for limited period of ten years
- The selected funds might have other variables of performance measurement.

ANALYSES AND INTERPRETATION

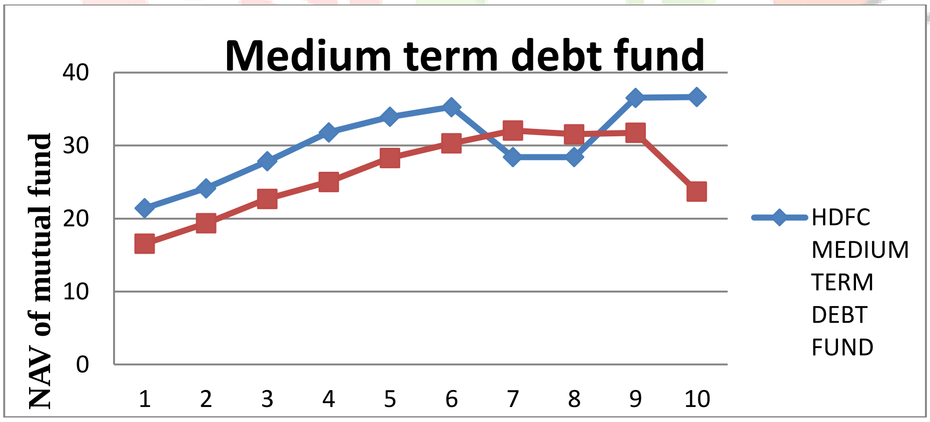
NAV OF HDFC AND SBI MEDIUM TERM DEBT MUTUAL FUND

FIGURE 2.1

Correlations

		NAV HDFC	NAV SBI
NAV HDFC	Pearson Correlation	1	.613
	Sig. (2-tailed)		.060
	N	10	10
NAV SBI	Pearson Correlation	.613	1
	Sig. (2-tailed)	.060	
	N	10	10

Source: compiled from excel



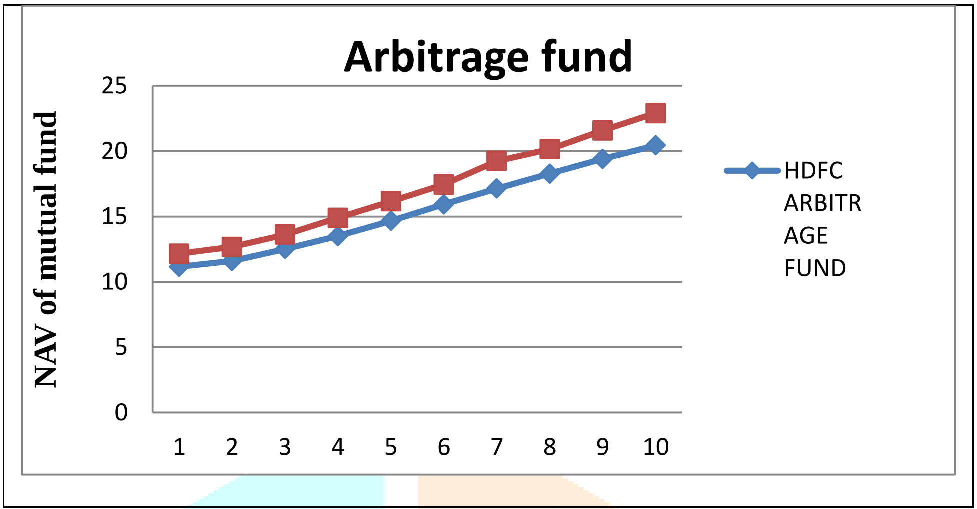
Source: Compiled using SPSS version 16.0

INTERPRETATION:

From the above table and diagram it is reflected that both the funds are growing but after 2014 the NAV of HDFC Medium term debt fund falls below the NAV of SBI magnum medium duration fund and after 2016 it again rises and grow above but the NAV of SBI magnum medium duration fund falls. Regarding correlation between the two funds, there is 61.3% correlation among the NAV's of the two mutual funds. But however the above correlation is not significant.

NAV OF HDFC AND SBI ARBITRAGEMUTUAL FUND

FIGURE 2.2



Source: compiled from excel

Correlations

		NAV HDFC	NAV SBI
NAV HDFC	Pearson Correlation	1	.999**
	Sig. (2-tailed)		.000
	N	10	10
NAV SBI	Pearson Correlation	.999**	1
	Sig. (2-tailed)	.000	
	N	10	10

**. Correlation is significant at the 0.01 level (2-tailed).

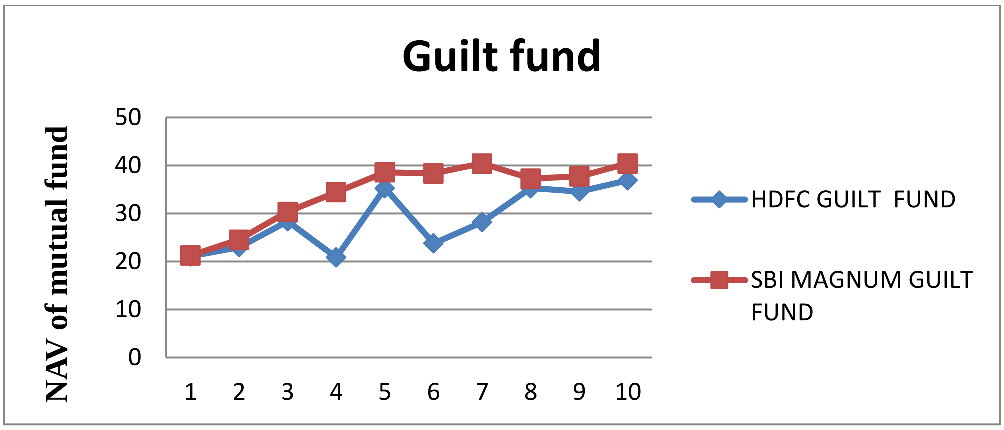
Source: Compiled using SPSS version 16.0

INTERPRETATION:

From the above table and diagram it is reflected that the HDFC Arbitrage fund and the SBI Arbitrage opportunity fund are moving in similar direction both are growing in upward direction. The SBI Arbitrage fund is attaining higher values than HDFC Arbitrage fund. Regarding correlation between the two funds, there is 99.9% correlation among the NAV's of the two mutual funds. The NAV's of both the funds are moving in similar direction. There is a significant correlation of 99.9% among the two funds. The correlation is significant at 0.01 levels between HDFC and SBI arbitrage mutual fund scheme.

NAV OF HDFC AND SBI GUILT MUTUAL FUND

FIGURE 2.3



Source: compiled from excel

Correlations			
		NAV HDFC	NAV SBI
NAV HDFC	Pearson Correlation	1	.646*
	Sig. (2-tailed)		.044
	N	10	10
NAV SBI	Pearson Correlation	.646*	1
	Sig. (2-tailed)	.044	
	N	10	10

*. Correlation is significant at the 0.05 level (2-tailed).

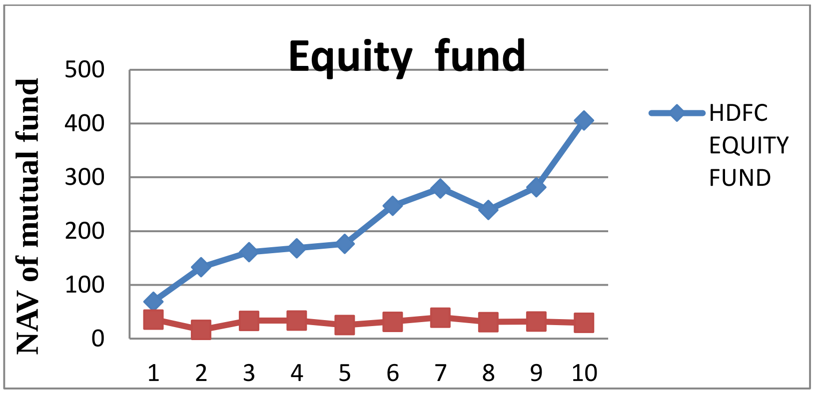
Source: Compiled using SPSS version 16.0

INTERPRETATION:

From the above table and diagram it is reflected that the HDFC Guilt fund and the SBI magnum guilt fund are moving in different direction though both are growing in upward direction. The SBI magnum guilt fund is attaining higher values and consistent return but HDFC guilt fund is initially rising but in subsequent period of time it shows a non concordant return. Regarding correlation between the two funds, there is 64%correlation among the NAV's of the two mutual funds. The NAV shows difference in return in different course of time. The correlation is significant at 0.05 levels between HDFC and SBI guilt mutual fund scheme.

NAV OF HDFC AND SBI EQUITYMUTUAL FUND

FIGURE 2.4



Source: compiled from excel

Correlations			
		NAV HDFC	NAV SBI
NAV HDFC	Pearson Correlation	1	.146
	Sig. (2-tailed)		.687
	N	10	10
NAV SBI	Pearson Correlation	.146	1
	Sig. (2-tailed)	.687	
	N	10	10

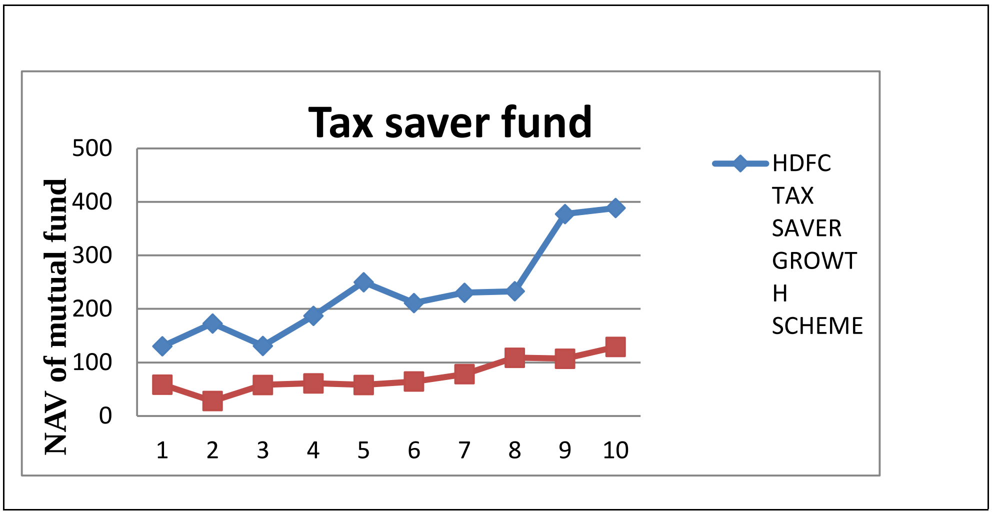
Source: Compiled using SPSS version 16.0

INTERPRETATION:

From the above table and diagram it is reflected that the HDFC equity fund and the SBI magnum equity ESG fund are moving in different direction. HDFC equity fund are growing upward direction with high return. On the other hand SBI magnum equity fund is showing only a consistence return which is stable over the 10 years with a relatively lower NAV. Regarding correlation between the two funds, there is 14.6% correlated among the NAV's of the two mutual funds. However the above stated correlation is not significant at 5% level of significance.

NAV OF HDFC AND SBI TAX SAVER MUTUAL FUND

FIGURE 2.5



Source : compiled from excel

Correlations			
		NAV HDFC	NAV SBI
NAV HDFC	Pearson Correlation	1	.802**
	Sig. (2-tailed)		.005
	N	10	10
NAV SBI	Pearson Correlation	.802**	1
	Sig. (2-tailed)	.005	
	N	10	10

**. Correlation is significant at the 0.01 level (2-tailed).

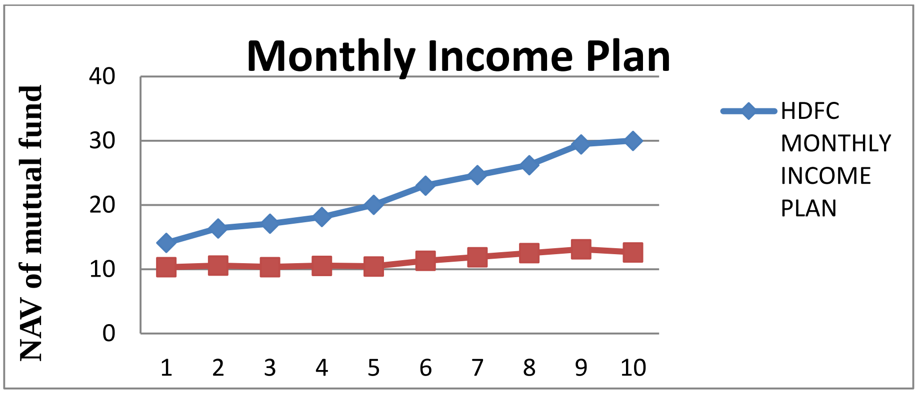
Source: Compiled using SPSS version 16.0

INTERPRETATION:

From the above table and diagram it is reflected that the HDFC Tax saver growth scheme and the SBI magnum tax gain scheme moving in similar direction both are growing in upward direction. The HDFC tax saver growth scheme growing in upward direction but SBI magnum tax gain scheme shows a consistent rate of growing. Regarding correlation between the two funds, there is 80.2% correlated among the NAV's of the two mutual funds. The NAV's of both the funds are moving in similar direction. . There correlation is significant between the NAV's of HDFC and SBI mutual fund which is only 0.01level.

NAV OF HDFC AND SBI MONTHLY INCOME PLAN MUTUAL FUND

FIGURE 2.6



Source: compiled from excel

Correlations

		NAV HDFC	NAV SBI
NAV HDFC	Pearson Correlation	1	.954**
	Sig. (2-tailed)		.000
	N	10	10
NAV SBI	Pearson Correlation	.954**	1
	Sig. (2-tailed)	.000	
	N	10	10

**. Correlation is significant at the 0.01 level (2-tailed).

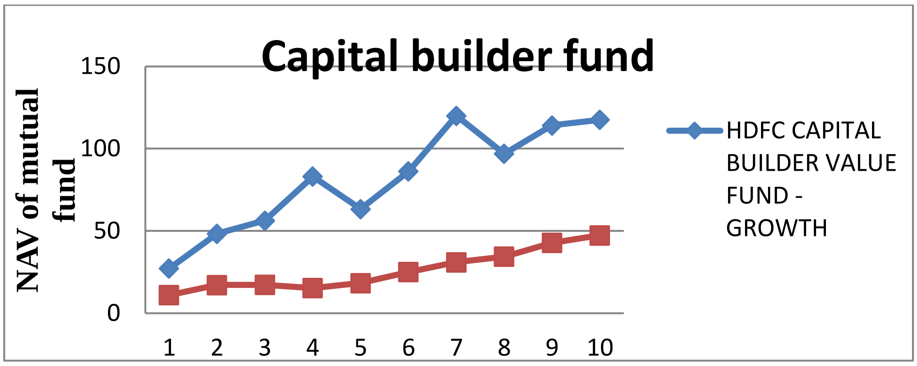
Source: Compiled using SPSS version 16.0

INTERPRETATION:

From the above table and diagram it is reflected that the HDFC monthly income plan and the SBI debt hybrid fund dividend- monthly fund are moving in different direction. HDFC monthly income plan grows diversely with different point of time but SBI debt hybrid fund dividend-monthly scheme shows only a consistent return over the period of time. The HDFC monthly income plan is attaining higher values than SBI debt hybrid fund dividend - monthly. Regarding correlation between the two funds, there is 95.4% correlated among the NAV's of the two mutual funds. There is correlation is significant between the NAV's of HDFC and SBI mutual fund which is only 0.01 levels.

NAV OF HDFC AND SBI CAPITAL BUILDER MUTUAL FUND

FIGURE 2.7



Source: compiled from excel

Correlations

		NAV HDFC	NAV SBI
NAV HDFC	Pearson Correlation	1	.868**
	Sig. (2-tailed)		.001
	N	10	10
NAV SBI	Pearson Correlation	.868**	1
	Sig. (2-tailed)	.001	
	N	10	10

**. Correlation is significant at the 0.01 level (2-tailed).

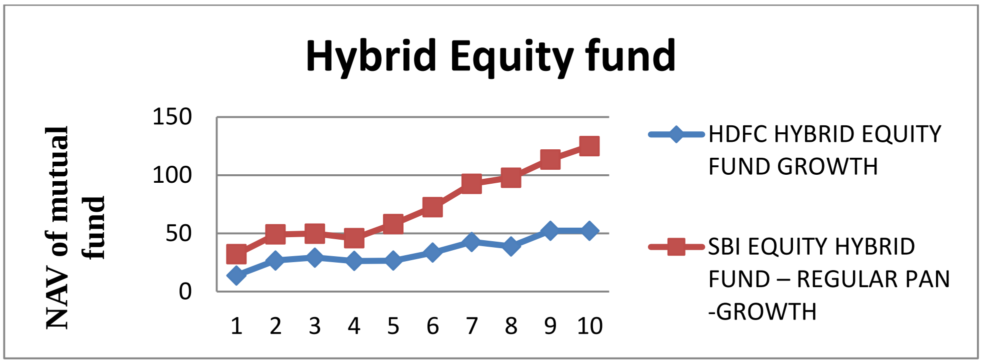
Source: Compiled using SPSS version 16.0

INTERPRETATION:

From the above table and diagram it is reflected that the HDFC capital builder value fund- growth and the SBI magnum multi cap fund are moving in similar direction both are growing in upward direction. The SBI magnum multi cap fund shows a consistent growth in the subsequent years than HDFC capital builder value fund- growth fund shows higher return but which is not consistent. Regarding correlation between the two funds, there is 86.8% correlated among the NAV's of the two mutual funds. The NAV's of both the funds are not moving in similar direction. There is correlation is significant between the NAV's of HDFC and SBI cap mutual fund which shows only 0.01 levels.

NAV OF HDFC AND SBI MUTUAL HYBRID EQUITY FUND

FIGURE 2.8



Source: compiled from excel

Correlations

		NAV HDFC	NAV SBI
NAV HDFC	Pearson Correlation	1	.969**
	Sig. (2-tailed)		.000
	N	10	10
NAV SBI	Pearson Correlation	.969**	1
	Sig. (2-tailed)	.000	
	N	10	10

**. Correlation is significant at the 0.01 level (2-tailed).

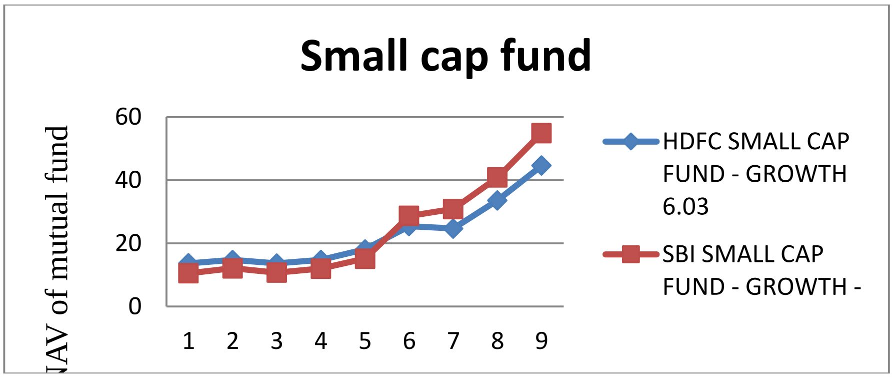
Source: Compiled using SPSS version 16.0

INTERPRETATION:

From the above table and diagram it is reflected that the HDFC hybrid equity fund growth and SBI equity hybrid fund – regular plan –growth are moving in similar direction both are growing in upward direction. The SBI equity hybrid fund is attaining higher values than HDFC hybrid equity fund growth. Regarding correlation between the two funds, there is 96.9% correlated among the NAV's of the two mutual funds. The NAV's of both the funds are moving in similar direction. There correlation is significant between the NAV's of HDFC and SBI mutual fund which shows only 0.01 levels.

NAV OF HDFC AND SBI MUTUAL SMALL CAP FUND

FIGURE 2.9



Source: compiled from excel

Correlations

		NAV HDFC	NAV SBI
NAV HDFC	Pearson Correlation	1	.994**
	Sig. (2-tailed)		.000
	N	10	9
NAV SBI	Pearson Correlation	.994**	1
	Sig. (2-tailed)	.000	
	N	9	9

**. Correlation is significant at the 0.01 level (2-tailed).

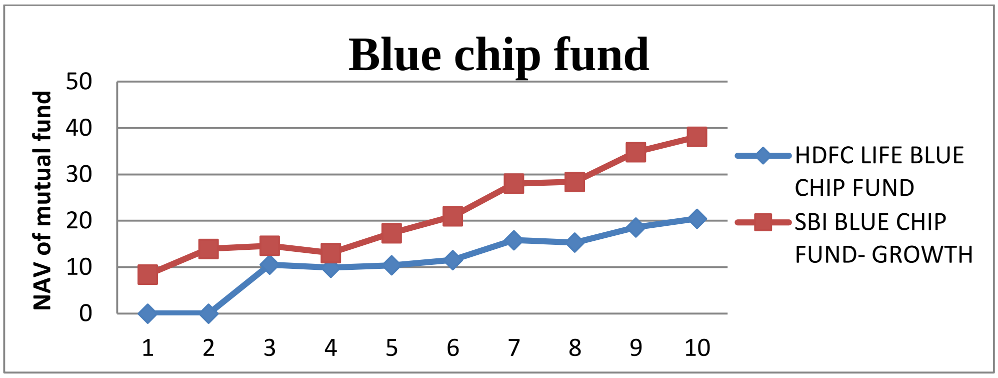
Source: Compiled using SPSS version 16.0

INTERPRETATION:

From the above table and diagram it is reflected that the HDFC small cap fund -growth and the SBI small cap fund are moving in similar direction both are growing in upward direction. The NAV of HDFC small cap fund – growth and SBI small cap fund – growth is equal or intersects at a point of time. Regarding correlation between the two funds, there is 99.4% correlated among the mutual funds. . There correlation is significant between the NAV's of HDFC and SBI mutual fund which is reflected 0.01levels.

NAV OF HDFC AND SBI BLUE CHIP MUTUAL FUND

FIGURE 2.10



Source: compiled from excel

Correlations			
		NAV HDFC	NAV SBI
NAV HDFC	Pearson Correlation	1	.987**
	Sig. (2-tailed)		.000
	N	8	8
NAV SBI	Pearson Correlation	.987**	1
	Sig. (2-tailed)	.000	
	N	8	10

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Compiled using SPSS version 16.0

INTERPRETATION:

From the above table and diagram it is reflected that the HDFC life blue chip fund and the SBI blue chip fund -growth are moving in similar direction both are stabilized the difference between the NAV's is very less. The SBI blue chip fund attaining higher values of NAV are than HDFC life blue chip fund. Regarding correlation between the two funds, there is 98.7% correlated among the NAV's of the two mutual funds. . There correlation is significant between the NAV's of HDFC and SBI mutual fund which is reflected 0.01levels.

Table 2.11

Table showing value of R^2 and Beta of the mutual fund schemes

SL. NO.	NAME OF THE MUTUAL FUND	R^2	BETA
1	HDFC SMALL CAP FUND- GROWTH	91.96	0.76
2	SBI SMALL CAP FUND – GROWTH	86.41	0.90
3	HDFC TAX SAVER GROWTH SCHEME	83.00	0.94
4	SBI MAGNUM MULTI CAP FUND	94.75	0.94
5	SBI BLUE CHIP FUND GROWTH	92.15	0.94
6	SBI MAGNUM TAX GAIN SCHEME	93.53	0.98
7	HDFC CAPITAL BUILDER VALUE FUND-GROWTH	93.35	1.00
8	HDFC EQUITY FUND	88.21	1.06
9	SBI DEBT HYBRID FUND- DIVIDENT MONTHLY	85.61	1.08
10	HDFC MEDIUM TERM DEBT FUND	89.74	1.13
11	SBI MAGNUM MEDIUM DURATION FUND	85.23	1.32
12	HDFC MONTHLY INCOME PLAN	81.85	1.37
13	SBI MAGNUM GUILT FUND	79.73	1.44
14	HDFC BLUE CHIP WEALTH BUILDER	91.20	1.51
15	HDFC GUILT FUND	78.97	1.55
16	SBI MAGNUM EQUITY HYBRID FUND	39.48	1.61
17	SBI EQUITY HYBRID FUND – REGULAR PLAN – GROWTH	39.48	1.67
18	HDFC HYBRID EQUITY FUND GROWTH	38.42	3.28

Source: compiled from Morningstar.nic.in

INTERPRETATION:

In a portfolio a beta value of more than 1 indicate the portfolio is more volatile than market where as a beta value of less than 1 indicate vice versa. From the above observation it can be reflected that only six mutual fund schemes have Beta less than one and remaining mutual fund schemes having more than one Beta value. Mutual funds like SBI magnum equity hybrid fund, HDFC hybrid equity fund having more Beta value which indicates that the funds are highly risky. On the other hand HDFC small cap fund and SBI small cap fund-growth has low beta values.

The R^2 indicate the reliability of the Beta value in regards to the portfolio. From the above table it is reflected that fifteen mutual fund schemes have R^2 ranging from 70-100% and only three mutual fund schemes have less than 40% value of R^2.

Table 2.12

Table showing Shape Ratio of the mutual fund schemes

Source: compiled from Morningstar.nic.in

SL. NO.	NAME OF THE MUTUAL FUND	SHARPE RATIO
1	HDFC HYBRID EQUITY FUND GROWTH	0.20
2	SBI MAGNUM TAX GAIN SCHEME	0.56
3	HDFC GUILT FUND	0.62
4	SBI BLUE CHIP FUND GROWTH	0.69
5	SBI SMALL CAP FUND – GROWTH	0.70
6	SBI DEBT HYBRID FUND- DIVIDENT MONTHLY	0.72
7	HDFC TAX SAVER GROWTH SCHEME	0.77
8	HDFC MONTHLY INCOME PLAN	0.81
9	HDFC CAPITAL BUILDER VALUE FUND-GROWTH	0.81
10	SBI MAGNUM MULTI CAP FUND	0.83
11	HDFC EQUITY FUND	0.86
12	SBI MAGNUM EQUITY HYBRID FUND	0.88
13	SBI EQUITY HYBRID FUND – REGULAR PLAN – GROWTH	0.88
14	SBI MAGNUM GUILT FUND	0.89
15	HDFC BLUE CHIP WEALTH BUILDER	0.91
16	HDFC SMALL CAP FUND- GROWTH	0.95
17	HDFC MEDIUM TERM DEBT FUND	1.74
18	SBI MAGNUM MEDIUM DURATION FUND	2.35
19	SBI ARBITRAGE OPPORTUNITY FUND	5.31
20	HDFC ARBITRAGE FUND	5.36

INTERPRETATION:

The Sharpe ratio help investors to understand the return of an investment compared to its risk. The ratio is the average return earned in excess of the risk free rate per unit of volatility or total risk.

Sharpe ratio can be used as a tool to compare funds which are placed in the same category for better analyses and the performance of the funds. In the above listed table HDFC Monthly income plan, HDFC capital builder value fund- growth, and SBI magnum multi cap fund shows similar level of values.

Sharpe ratio suitable for the investors to compare against the benchmark. The bench mark for mutual fund is 0.74 and it helps to find out the out performance of the mutual fund whether the funds are under performing and well performing. It also helps in analyses the fund strategy and risk return trade off and portfolio diversification of the funds.

Higher Sharpe ratio better is the performance of the mutual fund scheme. The above mutual fund schemes are ranked on the basis of Sharpe's ratio in ascending order. From the above analyses it is reflected that the mutual funds like SBI magnum medium duration fund, SBI arbitrage opportunity fund and HDFC arbitrage fund has higher Sharpe values compare to other.

On the other side the mutual fund schemes like HDFC hybrid equity fund growth, SBI magnum tax gain scheme and HDFC guilt fund have shown lower value of Sharpe ratio. This may be the reason behind the portfolio construction and

Table 2.13

Table showing average value of NAV and standard deviation

SL.NO	NAME OF THE MUTUAL FUND	AVERAGE VALUE OF NAV	STANDARD DEVIATION OF NAV
1	HDFC TAX SAVER GROWTH SCHEME	231.16	89.74
2	HDFC EQUITY FUND	216.25	95
3	HDFC CAPITAL BUILDER VALUE FUND-GROWTH	81.32	31.83
4	SBI MAGNUM TAX GAIN SCHEME	75.16	30.72
5	SBI EQUITY HYBRID FUND – REGULAR PLAN – GROWTH	73.64	31.74

Source: Compiled using SPSS version 16.0

Interpretation:

The average value of the NAV is taken to showcase the return from the mutual fund schemes in different point of time. The more standard deviation indicates high risk associated with the scheme on the other hand the funds shows low standard deviation value are generally risk adverse. From the above analyses it can be interpreted that the above mention five securities having high standard deviation and the return associated with that also high. This mutual fund schemes are suitable for the investors who is interested to take risk and expected higher return out of the fund. Among the schemes HDFC tax saver growth scheme, HDFC equity fund is recommendable because though the standard deviation is high but the NAV of the funds are also comparatively high.

Table 2.14

Table showing average value of NAV and standard deviation

SL.NO	NAME OF THE MUTUAL FUND	AVERAGE VALUE OF NAV	STANDARD DEVIATION OF NAV
1	SBI DEBT HYBRID FUND- DIVIDENT MONTHLY	11.38	1.08
2	HDFC ARBITRAGE FUND	15.46	3.29
3	SBI ARBITRAGE OPPORTUNITY FUND	16.43	3.39
4	HDFC BLUE CHIP WEALTH BUILDER	14.06	4.05
5	HDFC MEDIUM TERM DEBT FUND	30.45	5.25

Source: Compiled using SPSS version 16.0

INTERPRETATION:

Standard deviation indicates the deviation of the NAV's in different period of time. The more deviation from one year to other indicate high risk associated with the scheme on the other hand the funds shows low standard deviation value are generally risk adverse. From the above analyses it can be interpreted that the above mention five securities having low standard deviation and the return associated with that also low. This mutual fund schemes are suitable for the investors who is not interested to take risk. Among the schemes HDFC medium term debt fund is recommendable because though the standard deviation is high but the return value of NAV is also comparatively high.

T test: to test the difference in the returns of HDFC and SBI mutual funds in last 10 years.

- Null hypotheses: There is no significant difference between the NAV of HDFC and SBI mutual funds.
- Alternate hypotheses: There is significance difference between the NAV of HDFC and SBI mutual funds.

Table 2.15 showing T-test values of the HDFC and SBI mutual funds

t- test paired two sample for mean	
	Average return
Mean	60.62
Variance	0.727
Observation	10
Pearson correlation	(.367)
Df	10
T stat	3.118
Significance	0.5

Source: Compiled using SPSS version 16.0

Observation:

From the above analyses table 2.15 it is reflected that the mean is 60.62 and the standard deviation is also shows 72.75. The total observation of the mutual fund schemes are 10. By testing through the Pearson correlation method the result shows a negative figure of 0.367 and the degrees of freedom is to be undertaken as 10. The t- test result also shows 3.118 which implies that the null hypothesis is rejected at 95% level of significance and the alternative hypothesis is accepted as there is significant difference between the NAV of HDFC and SBI mutual funds.

CHAPTER -3

3.1Findings:

1. From the study of performance analyses of the mutual fund schemes it is reflected that over the ten years the trend of mutual fund schemes is growing and it depict an upward direction movement.

2. Majority of the schemes of SBI and HDFC of similar categories shows marginal value of correlation.

3. The equity based funds are generally highly risky but along with they provide higher value of NAV over the period. These are favorable for that investor who is interested to take high risk with comparatively high return.

4. The blue chip funds and medium debt funds are generally risk adverse; the investors who are risk averse can invest on those securities, which provide steady income from the investment.

5. The SBI mutual fund schemes generate comparatively less return and risk associated with the schemes is also low. But the HDFC funds generate high return but with a relatively higher risk.

6. It is also reflected from the study that NAV of HDFC mutual fund schemes are relatively higher it indicate the portfolio construction of the scheme and the investment of the funds in different avenues. The portfolio construction is efficient enough to generate higher values of NAV.

7. The Sharpe ratio indicate the performance of the mutual funds, over the period of 5 years values are consider and this reflected the performance of HDFC is comparatively better to SBI mutual fund schemes. This higher value is subjected to diversification of the risk though one fund suffers losses but the profit can be generated from the other avenues.

8. It is found that the tax saver funds of SBI and HDFC continuously grow over the years. The NAV of HDFC tax saver fund increases from 130 to 388 and the SBI tax saver funds also increases from 58 to 129 which is relatively a higher rate. This hike in the value of NAV may due to the professional fund managers who have sufficient expertise and experience in picking right stock to get best risk adjusted return.

9. Regarding the R^2 parameter it is found that majority of the funds show higher value of R^2 which indicate the accuracy of the beta which measure the risk associate with the funds. The R^2 value of SBI multi cap fund is reflected a higher value. This may be the outcome of smaller capital investment outlay and diversified equity base.

10. The mutual fund schemes provided by the HDFC is different schemes for various investors and transact large volume of securities, the transaction cost on per unit reflected lower value than the retail investors. Apart from the equity there are balanced funds, monthly income plan liquid fund that become useful for different investors.

3.2 Recommendations:

1) In terms of investment period, investors who want to park their funds for a longer term they should invest in equity oriented funds which provide good return over the years. But in short term needs, it is better to invest in debt funds.

2) Returns are not only the criteria to be looked at while selecting the appropriate fund; it doesn’t reflect the overall performance. Hence an investor should look at the various statistical tools like standard deviation, Sharpe ratio, and beta values.

3) Investors can avoid the funds which displaying negative Sharpe values over the period of time. They can park the capital in other categories of funds which are showing positive values and may invest in risk free assets.

4) An investor can avoid the risk by investing the entire funds in one mutual fund rather than they can further diversified their portfolio by investing in different categories of mutual funds.

5) For the investors who are willing to take risk and can get higher return out of the funds can adopt HDFC tax saver growth scheme, HDFC equity fund, HDFC capital builder value fund-growth schemes. For the investors who want steady income and safety of investment can invest in SBI debt hybrid fund- dividend monthly, HDFC blue chip fund and HDFC medium term debt fund etc.

6) One of the best options with the hands of the investors is that they can take the SIP (Systematic Investment Plan) option which helps the investors to equalize the volatility of the market to a certain extent.

7) The investor may go through the records of the schemes over the period of time and continuously monitoring the portfolio also required for maximizing return out of the funds.

8) For the first time investors of the mutual fund it can be recommended to invest in the small cap funds and the blue chip funds which would be beneficial get adjustable return.

9) The investors who are interested to invest huge funds in mutual funds recommended investing in diversified form and tax saving schemes also being beneficial.

10) It is recommended to the investors that in short period, the funds may show negative return but over the period the funds show effective return out of the funds, but subjected to different condition.

3.3 Conclusion:

Mutual funds is one of the beneficial investment option which displayed tremendous growth potential when the analyses of the schemes are effectively made and well decisions are undertaken. It helps the investors to gain higher return as compare to the traditional investment options in long term. It is important for the investor to take into consideration of the risk and return factor of the mutual fund schemes of several periods of time. Statistical analysis helps investors to find out best schemes according to the requirement of the investors. The mutual fund industry in India still in its developing stage. As SBI and HDFC mutual funds are one of the most popular and high rated mutual funds so for the investors it would help the investor to gain out of the funds. The variation on the performance may be based on the portfolio manager's expertise and strategies in choosing the right combination of debt, equity and other component. Also the return depends on how wisely the equity components are being selected. Thus choosing the right fund by considering different parameters is become very essential. The study on evaluation of performance of selected prominent mutual funds indicate that the funds which guarantees steady and regular return at comparatively low amount of risk factor, and the funds provide high rate of return generally poses high risk. Majority of the Beta values of the securities are between (1-1.67) which shows volatility of the schemes. The higher Sharpe value indicates the superior performance of the securities over the year. The HDFC and SBI equity funds are highly risky and NAV of the securities also high.

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