International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

A Comparative Study of Equity and Mutual Fund Schemes in India

Kabir Bhakta[1] and Nisarg Shah[2]

[1] Student, B.V.Patel Institute of Management, UkaTarsadia University, Bardoli, Gujarat
[2] Assistant professor, B.V.Patel Institute of Management, UkaTarsadia University, Bardoli, Gujarat

ABSTRACT:

The need of the study arises because the investor needs suggestions regarding where the investment are to be made and maximize the revenue. As by comparing the mutual fund and equity risk and return might have inverse relationship.

1. INTRODUCTION

In this study the comparison between investing in equity and mutual fund will be done. So, under this the main topics like stock market as well as mutual fund industry will be undertaken as investing in equity means stock market is included along with it the portfolio return and risk will also be discussed.

There are two kinds of share markets namely the Primary and the Secondary Markets. Primary share market is in the primary market that companies register themselves to issue their shares and raise money. This process is additionally referred to as known as listing on the stock exchange. The purpose of getting into the primary market is to boost money and if the company is selling their shares for the very first time it's mentioned as the Initial Public Offering (IPO).A mutual fund is an investment vehicle formed when an asset management company (AMC) or fund house pools investments from several individuals and institutional investors with common investment objectives.

A fund manager, who is finance professional, manages the pooled investment. The fund manager purchases securities such as stocks and bonds that are in line with the investment mandate. The main intention of the fund manager is to provide optimum returns to investors by investing in securities that are in sync with the fund's objectives.

A return is often expressed as a percentage derived from the ratio of profit to investment. Portfolio risks are often calculated, like calculating the risk of single investments, by taking the standard deviation of the variance of actual returns of the portfolio over time.

Portfolio risk consists of two components: systemic risk and diversifiable risk. Systemic risks, also known as systematic risks, are risks affecting all assets, such as general economic conditions, and, thus, systemic risk is not reduced by diversification. Diversifiable risks are risks specific to particular assets, such as factors affecting particular businesses and their stocks.

2. LITERATURE REVIEW

R.Jayaraman, Dr. G. Vasanthi, M.S.Ramaratnam (2014), studied about "A study on investors" behavior towards equity and mutual funds". The aim of this study was to analyses the behavior of investor in selecting the avenues with respect to the equity and mutual fund investment. Survey method was Non -probability convenience sampling and the sample size of 75 is selected for research. The finding of this study was revealed that 60% of the investors are irrational. 60% of the respondents are affected by disposition effect. 40% of the investors are conservative. 60% of the investors are affected by cognitive dissonance.60% of the investors are no regret investors

Pasalkar, N.V. (2015) studied about "A comparative study of Mutual Fund Investment vs. Equity Investment of Indian Individual Investors" with objective to compare mutual fund investment directly with equity investing. Survey was done in primary data and secondary data with sample size of 100 respondents using random sampling method. The finding was that the mutual fund is more favorable compare to equity and lack of education was observed among the people

Ehsan Khan, PallaviGedamkar (2015), studied about "Performance Evaluation of Equity Shares and Mutual Funds with Respect to their Risk and Return". The aim of this study was to analysis financial performance of selected equity shares and mutual fund schemes through the statistical parameters. Survey method was Exploratory Research and Non probability judgmental sampling (purposive sampling/ authoritative sampling). The study covers 5 selected stocks out of 30 BSE and 5 mutual fund schemes out of mutual fund industry in India for comparison. The finding of this study was revealed that Performance evaluation measurement ratios as Treynor"s, Sharpe"s and Jensen"s alpha are mostly used by fund managers to take decision of investment and to diversify portfolio and for new investors mutual funds is advantageous in terms of portfolio diversification, high liquidity, lesser risk, low transaction cost, professional management, choiceof schemes, transparency & safety, flexibility.

3. OBJECTIVES

- Primary Objective: To evaluate the performance between mutual fund schemes and equity investment in India.
- Secondary Objective: To compare returns of equity investment and mutual fund, To suggest which is the best platform to invest, To examine the performance between mutual fund schemes using Sharpe and Treynor Model.

4. SCOPE OF THE STUDY

- The scope of the study of mutual funds and equities is very large but my study is limited to 10 companies.
- The analysis is strictly based on share price and unit price information. Other company performance indicators are not considered.
- The scope of the study of mutual funds is very large but this study includes only 10 AMC's of mutual funds without any priority towards any particular sector or theme.

- In analysis of mutual fund the schemes of different AMC's will be compared and result will be ranked to generate an overview of performance during the period of study.

5. RESEARCH METHODOLOGY

Data Collection

- Basically, the study is based on secondary data.
- The source of data are from money control or BSE websites and mutual fund website.{mutualfundsahihai}
- The data collected for this study is of last 5 years of top 10 equity shares and 10 mutual funds AMC.
- The data will be collected of last 5 years that is from 2017 to 2021

Research Design

- Research Design is purely and simply the framework of a plan for a study that guides the collection and analysis of data.
- Descriptive research design will be used which will indicate that the study is all about a certain characteristic of investor towards investment.

Sampling Method

The list of top 10 equity companies are as under:-

Equities	Benchmark
Reliance Industries	BSE SENSEX
TCS (Tata Consultancy Services)	BSE SENSEX
HDFC Bank Ltd	BSE SENSEX
Infosys Ltd	BSE SENSEX
Hindustan Unilever Ltd	BSE SENSEX
ICICI Bank Ltd	BSE SENSEX
Housing Development Finance Corp. Ltd	BSE SENSEX
Bajaj Finance Ltd.	BSE SENSEX
SBI (State Bank of India)	BSE SENSEX
Wipro	BSE SENSEX

The list of AMC's of Mutual Funds is as under:-

Mutual fund Schemes	Name of the AMC
LIC MF Government Securities Fund-PF Plan	LIC
Tata Equity Savings Fund-Direct Plan	TATA
IIFL Focused Equity Fund-Direct Plan	IIFL
MotilalOswal Ultra Short Term Fund (MOFUSTF)	MotilalOswal
Mahindra Manulife Liquid Fund - Regular Plan	Mahindra
Nippon India Corporate Bond Fund -Direct Plan Growth Plan	Nippon
INVESCO India Treasury Advantage Fund-Regular Growth	INVESCO
Mirae Asset Savings Fund Regular Savings	Mirae Asset
IDBI Equity Savings Fund Growth Option Direct	IDBI
HDFC Equity Savings Fund-Growth Option-Direct Plan	HDFC

Sampling Size:

- There are many numbers of companies and AMCs but I will consider top 10 companies in terms of market capitalization from different sectors are selected for equities and 10 AMC's of mutual funds without any bias towards any particular sector or theme.
- The samples are selected based on Non-probability sampling techniqueJudgmental

sampling which involves the choice of and mutual funds AMC's.

- All these mutual fund AMC's are obtained from Association of mutual fund of India and equities are obtained from bseindia website.

Tools and Techniques:

- Following techniques like Rate of return and Risk is used to measure the risk of a stock.
- Beta is also used to calculate and know whether investment in the companies is risky or not.
- Alpha is used to measure the performance of all the funds. Alpha is a measure of an investment's performance on a risk-adjusted basis.
- Standard Deviation: The total risk is measured by the standard deviation of the monthly returns.
- Sharpe technique: Sharpe devised an index of portfolio performance measure, referred to as reward o variability ratio. The Sharpe ratio provides the reward to volatility trade-off. It is the ratio of the fund portfolio's average excess return divided by the standard deviation of the return and giving the rank.
- Treynor Technique: Treynor technique is used to measure portfolio return and the performance and rank the companies and AMC's as per returns.

6. DATA ANALYSIS AND INTERPRETATION

- The study is based on secondary data which is collected from the BSE official website and money control website. In research study the monthly closing price of 5 years from 2017 to 2021 of companies are taken.
- The analysis of data is done by using MS Excel to calculate the Return, Standard Deviation, Beta and Alpha, Sharpe's ratio and Treynor ratio. Top Ten companies as per market capitalization in equities as per 2021 are selected for data that is their indices and for Benchmark BSE SENSEX has been taken as a sample and ten mutual funds are selected as per large cap/Blue-chip fund.

Analysis of Selected Equity Companies:

- Here in equity shares the summary of the comparison is done with the index to derive return, standard deviation, and beta through which we can apply Sharpe and Treynor method.
- Analysis of Selected Equity Companies:-

Security Name	Return	S.D	Beta	Alpha	Sharpe	Treynor
Reliance	8.36	1.805	1.41	0.005	1.51	1.93
TCS	8.37	1.47	0.67	0.026	1.86	4.07
HDFC Bank	8.23	1.44	1.17	-0.123	1.80	2.21
Infosys	8.39	1.63	1.08	0.028	1.68	2.54
HUL	8.40	0.79	0.22	0.209	3.52	12.50
HDFC	8.32	1.01	1.24	-0.206	2.64	2.17
ICICI Bank	8.90	1.65	1.94	0.021	1.67	1.42
Wipro	8.39	2.19	0.54	0.067	1.26	5.03
SBI	8.04	2.11	2.3	-0.138	1.14	1.04
Bajaj	7.84	3.99	2.41	-0.216	0.55	0.91

- Form the above table 4.1, it can be interpreted that almost all companies have provided comparative return. But Reliance, HUL, Wipro, ICICI and Infosys has provided highest return of 9% compare to Bajaj of 7% from the year 2017-2020.

- Standard Deviation measures the volatility in the market. So from the above table it can be interpreted that HUL and HDFC are less volatile compare to Wipro, Bajaj & SBI which were the highest volatile stocks from the year 2017-2021
- Alpha measure the performance of the stock that it has underperformed or outperformed in the market. So from the above table it can be interpreted that Reliance, TCS, Infosys, HUL, ICICI Bank and Wipro have positive alpha which indicates the stocks have outperformed into the market whereas HDFC, HDFC Bank, SBI, and Bajaj have negative alpha which indicates that the stock of these company has underperformed into the market from the year 2017-2021. Stock having positive alpha are safe for the long term investor.
- Beta indicates the price volatility of the stock into the market. So from the above table it can be interpreted that only TCS, HUL, and Wipro has less than 1 beta which indicates that the price of these three companies are less volatile compare to others as they posses more than 1
- Sharpe and Treynor are used to measure the performance of the company so in the below table the ranking is given as per the performance from the year 2017-2021.

Rank	Sharpe	Rank	Treynor
1	HUL	1	HUL
2	HDFC	2	Wipro
3	TCS	3	TCS
4	HDFC Bank	4	Infosys
5	Infosys	5	HDFC Bank
6	ICICI Bank	6	HDFC
7	Reliance	7	Reliance
8	Wipro	8	ICICI Bank
9	SBI	9	SBI
10	Bajaj	10	Bajaj

Analysis of Selected Mutual fund AMC's:

Years	NIFTY	LIC	Tata	IIFL	Motilal	Mahindra	Nippion	Invesco	HDFC	Mirae asset	IDBI
1	0.20	0.01	0.04	0.14	0.01	0.02	0.03	0.02	0.07	0.02	0.04
2	0.41	0.04	0.13	0.45	0.03	0.04	0.07	0.04	0.21	0.04	0.14
5	0.99	0.18	0.25	0.61	0.05	0.13	0.20	0.15	0.34	0.08	0.24

- In the analysis of mutual fund AMC's they are compared with each other to know performance between each other
- In this analysis the data are taken of mutual fund from the period 2017-2021. Below is the attached table which shows the return of 1, 3and 5 years of mutual fund AMC's.
- The summary of returns provided by selected mutual fund AMC from the year 2017-2021 from which we can observe the return of 1,3 and 5 years.
- From the above table it can be easily interpreted that in 1st year IIFL has provided return of 0.14 and HDFC provided 2nd highest of 0.07 return where other funds have given comparatively less return.
- In the 2ndyear the funds like TATA, IIFL, HDFC and IDBI have provided highest return of 0.13, 0.45, 0.21 and 0.14 respectively compare to other funds.
- In 5th year funds of TATA, LIC, IIFL, Mahindra, Nippon, HDFC and IDBI have given comparatively high return compare to others

Data of Mutual Fund Analysis from the period 2017-2021:

Particulars	LIC	TATA	IIFL	MO	Mahindra	NIPPION	INVESCO	HDFC	Mirae Asset	IDBI
Return	0.08	0.14	0.40	0.03	0.6	0.10	0.07	0.21	0.04	0.14
S.D	0.09	0.11	0.24	0.02	0.06	0.09	0.07	0.13	0.03	0.10
Beta	-0.24	0.03	0.60	0.01	-0.14	-0.17	-0.16	0.12	-0.01	0.07
RFR	0.06									
Sharpe	1.00									
Treynor	-0.09	2.44	0.58	-4.03	-0.04	-0.25	-0.06	1.2	1.13	1.15

- The above listed data represents the analysis of mutual funds schemes of selected AMCs. The analysis includes Average returns, S.D, Sharpe and Treynor of the selected schemes. Through which we can come to know about return, risk, volatility in return and also the performance of the schemes provided by these selected companies.
- From the above table it can be interpreted that funds of TATA and HDFC has provided highest return of 0.14 and 0.21 respectively whereas lowest return are provided byMirae Asset and other schemes.
- Beta measures the volatility of the price. Higher the beta indicates higher risk and vice versa. Here LIC, IIFL, TATA, Nippon and HDFC has highest beta which indicate that it is riskier foran investor to invest. The safest schemes are of MotilalOswal and Mirae Asset which possess the lowest beta and are safe for the investors who are not ready to take high risk.
- Standard deviation indicates the riskiness of the stock or the mutual fund. Here the scheme of IIFL posses the highest standard deviation of 0.24 along with this the HDFC possesses the 2nd highest deviation of 0.13 which indicate high level of risk is involved into this scheme.
- The ranking is given in the basis of return evaluated using Treynor ratio. Whichever scheme has performed well is ranked high and vice versa.

The Portfolio return of Selected Mutual fund is as under:

Years	Yearly Portfolio Returns.	S.D	Average Market return.	Average Portfolio return.	Fund Benchmark return	Sum of Benchmark
1	0.04	1.09	0.53	1.14	0.02638025	2.1289395
2	1.17				0.57684025	
5	2.22				1.5257190	

- In the above table, Sharpe model is used to understand the return of an investment compared to its risk. Here the Sharpe ratio of portfolio is 1, which indicates positive response which means risk free rate is lower than the portfolio return.

- In the below table ranking is given using Treynor ratio to measure the performance of the portfolio. Theranking is given on the basis of performance of the schemes of the following companies.

Names of Schemes and AMC's	Return	Rank.
IIFL(Focused Equity Fund-Direct Plan)	0.58	5
HDFC (Equity Savings Fund - Growth Option - Direct Plan)	1.2	2
IDBI(Equity Savings Fund Growth Option Direct)	1.15	4
Tata (Equity Savings Fund-Direct Plan)	2.44	1
Nippon(Nippon India Corporate Bond Fund - Direct Plan Growth Plan)	-0.25	9
LIC (LIC MF Government Securities Fund-PF Plan)	-0.09	8
INVESCO (India Treasury Advantage Fund - Regular – Growth)	-0.06	7
Mahindra (Manulife Liquid Fund - Regular Plan)	-0.04	6
Mirae Asset (Mirae Asset Savings Fund Regular Savings)	1.13	3
MotilalOswal (MotilalOswal Ultra Short Term Fund (MOFUSTF)	-4.03	10

7. FINDINGS OF THE STUDY

- The primary objective of this study was to evaluate the performance between equity investing and mutual fund investing.
- Where in equity TCS, Reliance and Wipro provided best return and performed well in the market and in mutual fund IDBI as well as HDFC and Mirae Asset has provided competitive return among the selected schemes.
- HDFC Bank, HDFC, SBI and Bajaj are the only companies have negative alpha which indicates that the shares of the company has not performed well into the market where other selected companies have outperformed into the market from the period 2017-2021.
- According to Sharpe Model, HUL, Wipro and HDFC are the companies which provided comparatively higher return which indicates the stock of these companies were more volatile than TCS, Reliance and other selected companies as they have provided lesser return and were less volatile during the period 2017-2021. According to Treynor Ratio, HUL and TCS has provided comparatively higher return than other selected companies during the period 2017-2021.
- In Mutual Fund, all the selected companies have provided positive return to their investors but specifically IDBI (1.12), TATA (2.44) & HDFC (1.2) has provided high return among the selected companies from the period 2017- 2021.
- Standard deviation helps to measure risk so from the selected companies IIFL, TATA and HDFC are more risky than other as their S.D is higher compare to others as their S.D is less and are also providing good return.
- Sharpe and Treynor are the useful ratios which help the investor to understand the return on investment compared with their risk. Here the Sharpe ratio is in positive which indicates that risk free return is lesser than the portfolio return.
- Treynor ratio is used to give ranking on the basis of performance from 2017- 2021.

8. CONCLUSION

- This paper aims at studying difference between investing in shares and mutual funds.
- The study revealed that as a new investor, one would like to get maximum returns on his investments, but it is important to devote time to study the stock market and to keep track of them. Also a lot knowledge and research is required for a good portfolio management. So, for new investors mutual funds is advantageous in terms of portfolio diversification, high liquidity, lesser risk, low transaction cost, professional management, choice of schemes, transparency & safety, flexibility etc. Mutual fund is subject to market risk, despite of that it have low risk than stock market.

- The risk-return analysis can be used as a stable platform by the investors in establishing the tradeoff between portfolio risk and return.
- The amount to be invested also plays an important role in generating return. If a person wants to earn in long term with low risk associated than he must invest in mutual fund and avail the benefit of compounding interest. If the person wants to earn money in short term and ready to take riskthan he must invest in equity or must do trade or short sell and book their profit or loss.
- Thus, Investment in both equity and mutual funds are subjected to market risk as well budget of amount and consistency and patience of the investor.

9. BIBLIOGRAPHY

References:

- Pasalkar., N. V. (2015) A comparative study of Mutual Fund Investment vs Equity Investment ofIndian Individual Investors. INCON , 1-15.
- R. Jayaram, D. G. (2014.)A study on investors' behavior towards equity and mutual funds. Global Institute of Research & Education. , 132-136
- Ankita Sharma, D. K. (2020). A Study of Performance Evaluation of Selected Equity Mutual Fund Schemes in IndiaUsing Sharpe's Ratio. International Multidisciplinary E-Research Journal. , 107-111.
- Bansal., D. S. (2012) Test of sharpe ratio on selected mutual fund schemes. International Journal of Marketing, Financial Services & Management Research, 60-69
- Dr. Ravi. B, D. B. (2018) An empherical study on indian mutual funds equity diversified growth schemes and their performance evaluation. International Journal of Creative Research Thoughts (IJCRT), 298-314.
- Edelen. W. &. (2000) Aggregate price effects of institutional trading: a study of mutual fund flow and market returns. Journal of Financial Economics. , 195-220.
- Fortune. (1998) Mutual Funds, Part II: Fund Flows and Security Returns. New England Economic Review , 1-20

Websites:

•www.moneycontrol.com
•www.bse.com
•www.researchgate.com