

## LIQUID FUNDS: A COMPARATIVE EVALUATION WITH EQUITY MUTUAL FUNDS

**Sanjay Kumar Singh, Ph. D.**

*Associate Professor in Department of Commerce at Dyal Singh Evening College, Delhi University (Delhi).*

### Abstract

*The channelization of household savings in equity and equity related financial instruments has always been main objective of all policymakers in India over the last few decades, particularly after liberalization of Indian economy in 1991. With this objective at the background, the investment in Mutual funds has been promoted by offering various tax incentives and educating investors' community with other benefits associated with investment in Mutual funds. Under the present scenario, investors have opportunity to invest in various kinds of Mutual funds. Even among Mutual funds, the choice with regard to return and risk appetite can be exercised. The present study aims to highlight the difference in return offered by Equity Mutual funds and Liquid funds against the benefits available to the investors in case of Liquid funds. Various statistical tests such as KS test, Levenes' Test , t-test ,etc. have been employed using SPSS to arrive at meaningful conclusions from the available quantitative data.*

**Keywords:** *Equity mutual funds, Liquid funds, Mutual funds, Kolmogorov-Smirnov Test , Levenes test , t-test, Group statistics.*



**Scholarly Research Journal's is licensed Based on a work at [www.srjis.com](http://www.srjis.com)**

### Introduction

Mutual funds have always been an attractive investment alternative for small investors who could not track stock markets on regular basis and intends to earn a return relatively higher than that on fixed deposits by exposing themselves to a reasonable level of risk. With a view to attract household savings towards capital market, Government has provided many incentives for making investment in Mutual funds. On the other hand, various Asset management companies also keep on attracting varied class of investors from different age groups and income levels, offer different schemes of Mutual funds. Mutual funds offers variety of schemes depending upon different needs of investors in the market. There are income schemes , growth schemes , balanced schemes, etc. meeting the investment requirements of various class of investors with different age groups, income groups, having different risk appetite, etc. Though, the returns of Mutual funds are not guaranteed but they are determined to a large extent by the movement of stock market and other financial markets

but the investors still exercise lot of caution while investing in Mutual funds. The main factors which are normally considered by investors in Mutual fund are:

(a) Past performance of other schemes: The past track record of the schemes launched by in terms of return offered to its investors plays important role in attracting investors for its new schemes. Returns offered by mutual fund is an important parameter for any investor.

(b) Dynamism of fund manager: The performance of fund manager is exhibited by generating goods returns irrespective of the movement of market index. If a manager is able to beat the market in generating returns, his investment strategies are praised by investors. Such mutual funds often become first choice of investors.

(c) Performance of research team: Research team serves as an important tool for functioning of any mutual fund. The study made by research team through primary sources of data and secondary sources relating to any company is very crucial as funds collected from pool of small investors is to be invested in the stocks of such company. If the research team is able to identify good investment opportunities, it adds to the value of the mutual fund performance and hence become attractive investment destination for many investors.

(d) Total corpus of the scheme: The corpus of the scheme refers to the amount intended to be collected by a mutual fund from investors. If the scheme is coming out with large corpus, it indicates that the mutual fund is confident of getting response from the investor. This is feasible only when the Mutual Fund has good past performance and enjoys good reputation among the investors.

(e) Objective of the scheme: The mutual funds are required to disclose their investment areas in the scheme particularly in the sectoral mutual funds. In case mutual funds are coming out with a scheme for investment in any growing sector, it is likely to have good response from the investors.

It has been a general perception that equity mutual funds deliver significantly higher return than other type of mutual funds.

The present study aims to examine this notion developed among investors' community. Equity mutual funds mainly invest their corpus in equity or equity related instruments and their returns are determined by performance of stock markets. As equity mutual funds, liquid fund is a category of mutual fund which invests primarily in money market instruments like certificate of deposits, treasury bills, commercial papers and term deposits. Due to lower maturity period of the underlying assets, fund managers can easily meet the redemption

demand from investors. Liquid funds also provide facility of Systematic transfer plan under which money of investor is invested in a liquid fund and a fixed sum from the liquid fund is transferred to an equity fund each month. In case of these funds , In contrast to fixed deposits, return is not guaranteed as the performance of fund is dependent upon the performance of market unlike fixed deposits which are not dependant on the market. However, an investor looking for better returns prefers investment in a liquid fund instead of fixed deposit.

### **Benefits of liquid funds**

- i. These mutual funds are not subject to any kind of lock-in period. This means an investor can convert his securities into cash at any time after purchasing these mutual funds.
- ii. They do not have any entry or exit load either at the time of investment or at the time of maturity/withdrawal.
- iii. One can make withdrawals from liquid funds within 24 hours on business days. The cut-off time on withdrawal is generally 2 p.m. on business days. This implies a redemption request made by 2 p.m. on a business day, then the funds would get credited to the investors' bank account on the next business day by 10 a.m.
- iv. Liquid funds come with different plans like growth plans, daily dividend plan, weekly dividend plans and monthly dividend plans. Growth plans don't declare any dividend, and appreciation of fund is reflected in higher unit value. Investors can choose their plan as per their convenience and liquidity needs. Retail investors can also invest in direct plans as they have a lower expense ratio which helps in getting a higher return.
- v. Liquid funds are among the best investment options for the short term during a high inflation environment. As the Reserve Bank normally keeps interest rates high during inflationary period and tightens liquidity, helping liquid funds to earn good returns. According to the statistics given by value research, some liquid funds have even offered higher returns than bank fixed deposits, which levy a penalty on premature withdrawal.

	Liquid funds returns in %			
	1 month	3 month	6 month	1 year
Average returns	0.81	2.19	4.47	9.01
Highest returns	0.94	2.4	4.9	9.98

Source: Value Research  
Returns are as on April 11, 2014

## Review of Literature

There is lot of secondary information available on Mutual funds. Various researchers have attempted to measure performance of mutual funds through defined methods as well as through their own models/criteria. Kumar Lenin Nooney and Devi Rama Vengapandu examined the performance of selected mutual funds with the help of average rate of return, standard deviation, Risk/Return, Sharpe ratio, Treynor ratio, Jensen Ratio and tested the hypothesis with ANOVA analysis using sample 340 mutual funds belonging to Money market, Debt, Equity and Balanced category funds and further classified into public and private funds. The study concluded that there is no significant difference between the returns of private and public mutual funds. Debashish analysed performance of selected scheme of mutual funds based on risk return relationship models and measures. Various schemes offered by six private sector mutual funds and three public sector mutual funds were studied over the time period April 1996 to March 2009. The study concluded that mutual funds are the best source of investments during high stock market volatility as they ensure adequate returns provided the selection of mutual funds is in the right direction. Somya made use of different measures like information ratio, appraisal ratio and M2 measure other than conventional performance measures to bring out additional information about the competence of the fund manager. He observed that during the bull phase, the funds have outperformed well on the average but their benchmarks have performed even better.

## Hypothesis of the Study

The present study aims to test statistical difference between return offered by Equity fund Mutual funds and Liquid funds. The Null hypothesis in this case is

**Ho: There is no significant difference between return generated over long term period in case of Equity mutual fund and Liquid funds.**

**Ha: There is significant difference between return generated over long term period in case of Equity mutual fund and Liquid funds.**

**Analysis of Data**

In order to test the above hypothesis , the annual return generated by Equity Mutual fund and Liquid funds over last ten years, i.e. during the period 2007 to 2017 has been taken , as shown below in **table 1**.

Year	Equity funds	Liquid Funds
2007	61.42	7.82
2008	-55.38	8.82
2009	88.02	5.09
2010	19.41	5.3
2011	-24.12	7.85
2012	33.52	9.48
2013	4.68	9.08
2014	53.94	8.92
2015	3.44	8.14
2016	5.02	7.41
2017	33.98	5.87

**Table 1: Annualized return of Equity funds and Liquid funds**

*(Source: ACE MF , Compiled by ETIG Database Data as on 27 Nov,2017 )*

It can be observed from the data in table 1, in case of equity mutual funds ,the chances of having negative return or loss under certain situations cannot be ruled out whereas in case of liquid funds , only positive returns, though small in size, are insured.

The data was subject to various statistical tests using SPSS software and the output obtained has been interpreted .

<b>Group Statistics</b>					
	Group	N	Mean	Std. Deviation	Std. Error Mean
Return	Equity funds	10	18.9950	42.20236	13.34556
	Liquid funds	10	7.7910	1.51362	0.47865

**Table 2: Group statistics showing Average return and Standard deviation of returns**

As can be observed from the Group statistics shown in **table 2**, the average of return and the standard deviation of return , equity funds offers significantly higher return i.e. 18.99% in comparison to liquid funds which have average return of 7.79%. However, the risk (measure in terms of standard deviation) associated with returns in case of equity mutual funds is relatively much higher at 42.20% in comparison to 1.51% in case of liquid funds. In relative terms, the risk measured using coefficient of variation, it is 222.17% in case of Equity mutual

funds as against 19.4% in case of liquid funds. This shows that the liquid funds are more suitable for conservative investors who does not intend to expose themselves against high risk. In order to ascertain if the returns of equity mutual funds and liquid funds are statistically different or not , t- test has been employed after ensuring the normality and variability of the data , using One-Sample Kolmogorov-Smirnov Test and Levene’ s statistic. The assumption of normality of data has been examined using one sample Kolmogorov-Smirnov test (K-S test ) using SPSS. The result of the output are summarized below in **table 3**.

One-Sample Kolmogorov-Smirnov Test		
		Return
N		20
Normal Parameters <sup>a,b</sup>	Mean	13.3930
	Std. Deviation	29.62718
Most Extreme Differences	Absolute	.303
	Positive	.303
	Negative	-.268
Kolmogorov-Smirnov Z		1.353
Asymp. Sig. (2-tailed)		.051
a. Test distribution is Normal.		
b. Calculated from data.		

**Table3: SPSS output of One sample Kolmogorov – Smirnov Test**

As can be observed from above calculations, p – value (Aysmp. Sig) is greater than 0.05, therefore , we can conclude that our data complies with the condition of normality. In order to examine , equality of variance, Levene’s test has been employed. The output for Levenes test for equality of variance is produced alongwith t-test output as shown below in **table 4**.

	Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	15.525	.001	0.839	18	.041	11.20400	13.35414	-16.85201	39.26001
Equal variances not assumed			0.839	9.023	.041	11.20400	13.35414	-18.99335	41.40135

assum  
ed

---

**Table4. SPSS output for t-test and Levene's test for equality of variance**

In this case , Levenes test value is less than 0.05, which implies variability of the returns generated by Equity mutual fund and Liquid fund is not same. As equal variance have not been assumed , we have refer second row of the output for observing significance value, which is 0.0423, less than 0.05. This implies our hypothesis is rejected since our calculated value is less than 0.05. Therefore, we can conclude that, at 5% level of significance, the return offered by equity mutual funds and liquid funds are statistically different from each other.

**Conclusion**

Mutual funds have proved to be good investment alternative for investors having a reasonable level of risk appetite. Different type of Mutual funds can offer varied level of return depending upon the risk exposure , an investor can assume on his investible fund. The study reveals that Equity Mutual funds offer significantly different return from Liquid funds which offer number of benefits to the investor in terms of generating moderate return and without affecting liquidity of investors. The entry and exit timing in case of Equity mutual funds are also part of important decision variable as against Liquid funds as the chances of having negative return in some of the years cannot be ruled out. The investors ,therefore , should accordingly decide their time frame for investment in equity mutual funds and examine their risk appetite before making choice of investment in any kind of mutual fund.

**References**

*The Economic times Wealth , December 4-10,2017*

[www.economictimes.indiatimes.com](http://www.economictimes.indiatimes.com)

*“Why liquid funds are attractive alternative to saving deposits” by Priyabrata Prusty published in profit.ndtv.com on April 24, 2014.*

*Performance Evaluation of Indian Equity Mutual Funds against Established Benchmarks Index Syed Husain Ashraf\* and Dhanraj Sharma International Journal of Accounting Research Volume 2 • Issue 1 • 1000113*