Evaluating the Performance of Different Types of Schemes of Selected Mutual Funds in India on the basis of Different Measures of Risk and Risk-adjusted Rate of Return during the time of Revival of the Economy in the recent past

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Abstract – This research work has considered the different schemes, classified into 4 categories, of 7 selected Mutual Funds of India. This research work was undertaken for the study and analysis of the performance of different types of schemes of selected Mutual Funds in India on the basis of their risk and risk-adjusted rate of return during the time of recent past recovery of the market from recession. If they were performing well even at that time then there are good prospects of growth. Because Mutual funds are one of the best investment avenues, even for the laymen, and hence, this research would be beneficial for all the investors to guide them to invest in the best available Mutual Funds schemes with lots of growth propositions and why? In the last, this research finds out many facts and figures about the major classes of Mutual Funds Schemes. On these facts and figures we conclude that Liquid and Money Market Mutual Funds Schemes are best one for investment because either they are providing best return or bearing least risk or both.

Key Words - AUM, Scheme Snapshot, Investment Avenues, Mutual Fund Schemes, Risk, Risk-adjusted Rate of Return.

(1) <u>Introduction</u> – An investor can either invest directly in securities, or can invest through in Investment Company, also referred to us a mutual fund. An investment company is a financial intermediary that collects money from investors and invests in various securities on their behalf. The returns from these investments are passed on to the investors, either periodically, or at the end of a specified time period. The investment company charges fees for its services, referred to as management fees [1].

Professional experts manage the mutual funds to maximize the return & minimize the risk and to give the tax benefits. With the help of diversification, unsystematic risk can be reduced to a certain level [2].

Mutual funds claim to reduce risk through diversification, transaction costs and to increase liquidity with professional management of funds and tax benefit, etc. Fund manager's investment skills played a major role in the funds performances [3].

The main reason of its poor growth was that the mutual fund industry in India was new in the country. Large sections of Indian investors are yet to be acquainted / versed with this concept. Hence, it is the prime responsibility of all mutual fund companies, to market the product correctly abreast of selling [3].

The fund manager who is responsible for investing the gathered money into specific securities, invest in a large variety of securities like shares, debentures, bonds set-up for a limited period or with no winding up date, short-term money market instruments, and / or other securities. When you invest in a mutual fund, you are buying units or portions of the mutual fund and thus on investing you becomes a shareholder or unit holder of the fund. The investors thus have the advantage of owning a truly diversified portfolio which offers attractive annual dividends and a reasonable price appreciation with minimum risk involved [4].

The major market of Mutual Fund industry in India is in Income schemes, Growth schemes and Liquid / Money Market schemes, out of which Growth market was mostly leaded by HDFC, Templeton and ICICI. Out of these two are from joint venture: predominantly Indian and one is foreign Mutual Fund [3].

Performance of mutual funds can be evaluated on the basis of many factors out of which risk and risk-adjusted rate of return are important factors.

This research work has considered the different schemes, classified into 4 categories, of 7 selected Mutual Funds of India. This research work was undertaken for the study and analysis of the performance of different types of schemes of selected Mutual Funds in India on the basis of their risk and risk-adjusted rate of return during the time of recent past recovery of the market from the recession. If they were performing well even at that time then there are good prospects of growth. Because Mutual funds are one of the best investment avenues, even for the laymen, and hence, the study and analysis of the different types of Mutual Funds schemes would be beneficial to the investors to guide them to invest in the best available Mutual Funds schemes with lots of growth propositions. This research will tell us, on the basis of risk and risk-adjusted rate of return of different schemes, which scheme is performing well and why? Hence, this research finds out many facts and figures about the major classes of Mutual Funds Schemes. On these facts and figures we conclude that which one is best one for investment and why?

(2) Methods and Material - Only selected Mutual Fund organizations with their schemes are considered and a time period of approximately 8 years, i.e., after 2003 is taken for the study. Population, i.e., total number of selected Mutual Fund organizations is 43. Through the help of stratified and judgement sampling, sample size has been taken as 7 Mutual Funds organizations for this research work. Out of which, two are Bank Sponsored, two are from Indian Private

Sector, and two are from Joint Venture: Predominantly Indian, category and one is Foreign Mutual Fund organization.

Fund size details were obtained from the AMFI's (Association of Mutual Funds in India) website, i.e., www.amfiindia.com and the Asset Management Companies.

Due to the changes in the style of investment in different types of schemes of selected Mutual Funds, their risk and risk-adjusted rate of return also changes. Hence, comparative analysis is done w. r. t. risk and risk-adjusted rate of return.

Mutual fund industry in India has grown a lot & seen many significant structural changes during the 47 years since its inception. Its growth accelerated from the year 1987 when non-UTI players entered the industry.

Before, the monopoly of the market had seen an ending phase; the Assets Under Management (AUM) was Rs. 67bn. The private sector entry to the fund family raised the AUM to Rs. 470 bn in March, 1993 and till April, 2004; it reached the height of 1,540 bn.

(3) Results and Discussion (Data Analysis and Interpretation) - I am evaluating and comparing the performance of four different major types of Mutual Funds' schemes in India through two or more Mutual Funds' schemes from each of their (schemes) four main categories about the selected Mutual Funds.

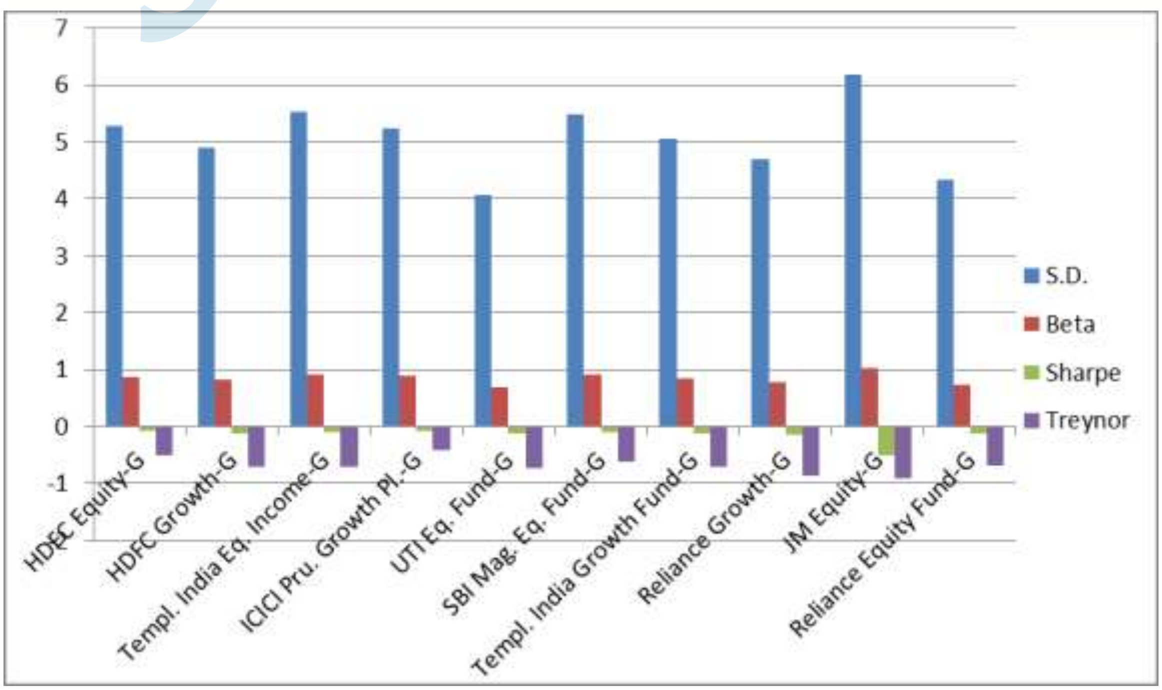
COMPARE FUND

Scheme Name	S.D.	Beta	Sharpe	Treynor
HDFC Equity Fund - Growth	5.28	0.87	-0.08	-0.51
HDFC Growth Fund - Growth	4.90	0.82	-0.12	-0.71
Templeton India Equity Income Fund - Growth	5.53	0.91	-0.11	-0.70
ICICI Prudential Growth Plan - Growth	5.24	0.90	-0.07	-0.42

UTI Equity Fund - Growth	4.07	0.68	-0.12	-0.73
SBI Magnum Equity Fund - Growth	5.48	0.92	-0.10	-0.61
Templeton India Growth Fund - Growth	5.06	0.85	-0.12	-0.71
Reliance Growth - Growth	4.70	0.78	-0.14	-0.87
JM Equity - Growth	6.19	1.03	-0.51	-0.92
Reliance Equity Fund - Growth	4.33	0.73	-0.12	-0.69

On the basis of total risk measure "Standard Deviation", the JM Equity-G is the most risky amongst the selected growth & equity schemes of these Mutual Funds with growth option as on Jan., 2011. Templ. India Equity Income-G and SBI Mag. Equity Fund-G come next in risk in their descending order. In their descending order then comes HDFC Equity-G, ICICI Pru. Growth-G, Templeton India Growth-G, HDFC Growth-G, Reliance Growth-G, Reliance Equity-G, and UTI Equity-G. UTI Equity-G is least risky on overall risk basis.

Chart-P: S.D., Beta, Sharpe & Treynor of Equity & Growth Schemes of Selected Mutual Funds with Growth Option as on January, 2011.



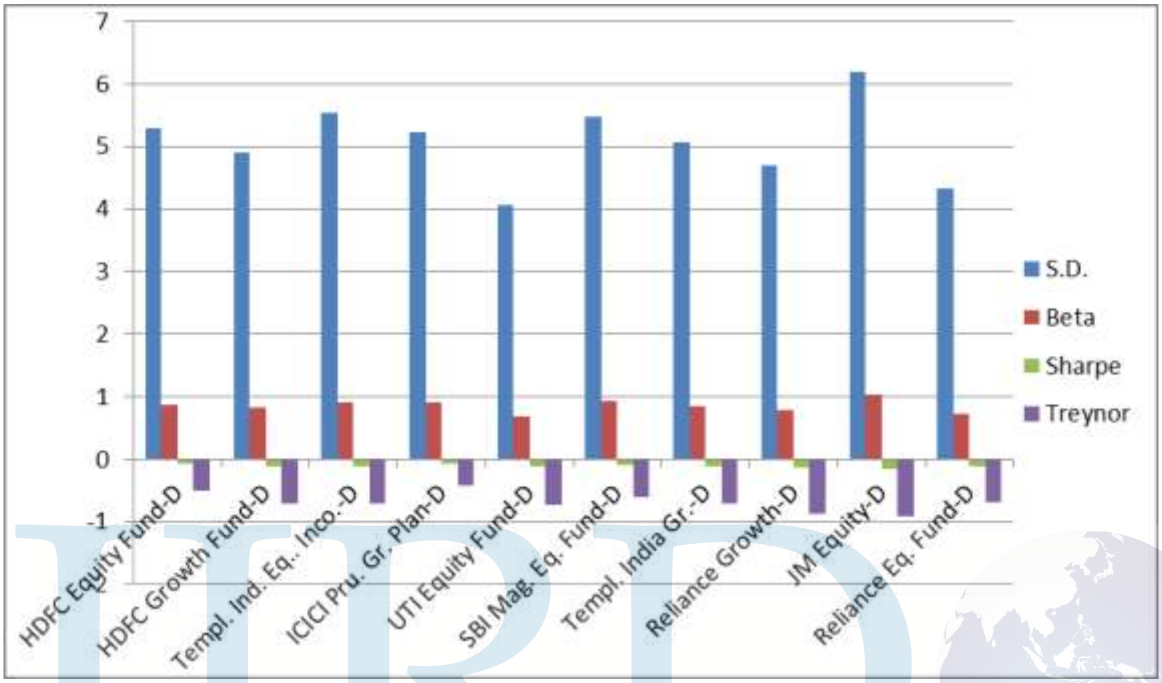
On the basis of measure of systematic risk, i.e., “Beta”, the pattern is almost similar to the previous one with two changes, i.e., 2 & 3 and 4 & 5 interchanges with each other. It means approximately all have equal proportion of diversifiable risk. Both, Sharpe and Treynor are negative. That shows that the returns are not good enough or commensurate to the risk taken by investors with investing in these.

COMPARE FUND

Scheme Name	S.D.	Beta	Sharpe	Treynor
HDFC Equity Fund - Dividend	5.29	0.87	-0.08	-0.51
HDFC Growth Fund - Dividend	4.90	0.82	-0.12	-0.71
Templeton India Equity Income Fund - Dividend	5.53	0.91	-0.11	-0.70
ICICI Prudential Growth Plan - Dividend	5.24	0.90	-0.07	-0.43
UTI Equity Fund - Dividend	4.07	0.68	-0.12	-0.74
SBI Magnum Equity Fund - Dividend	5.48	0.92	-0.10	-0.61
Templeton India Growth Fund - Dividend	5.06	0.85	-0.12	-0.71
Reliance Growth - Dividend	4.70	0.78	-0.14	-0.87
JM Equity - Dividend	6.19	1.03	-0.15	-0.92
Reliance Equity Fund - Dividend	4.33	0.73	-0.12	-0.69

On the basis of total risk measure “Standard Deviation”, the JM Equity-D is the most risky amongst the selected growth & equity schemes of these Mutual Funds with dividend option as on Jan., 2011. Templ. India Equity Income-D and SBI Mag. Equity Fund-D come next in risk in their descending order. In their descending order then comes HDFC Equity-D, ICICI Pru. Growth-D, Templeton India Growth-D, HDFC Growth-D, Reliance Growth-D, Reliance Equity-D, and UTI Equity-D. UTI Equity-D is least risky on overall risk basis.

Chart-R: S.D., Beta, Sharpe & Treynor of Equity & Growth Schemes of Selected Mutual Funds with Dividend Option as on January, 2011.



On the basis of measure of systematic risk, i.e., "Beta", the pattern is almost similar to the previous one with two changes, i.e., 2 & 3 and 4 & 5 interchanges with each other. It means approximately all have equal proportion of diversifiable risk. Both, Sharpe and Treynor are negative. That shows that the returns are not good enough or commensurate to the risk taken by investors with investing in these.

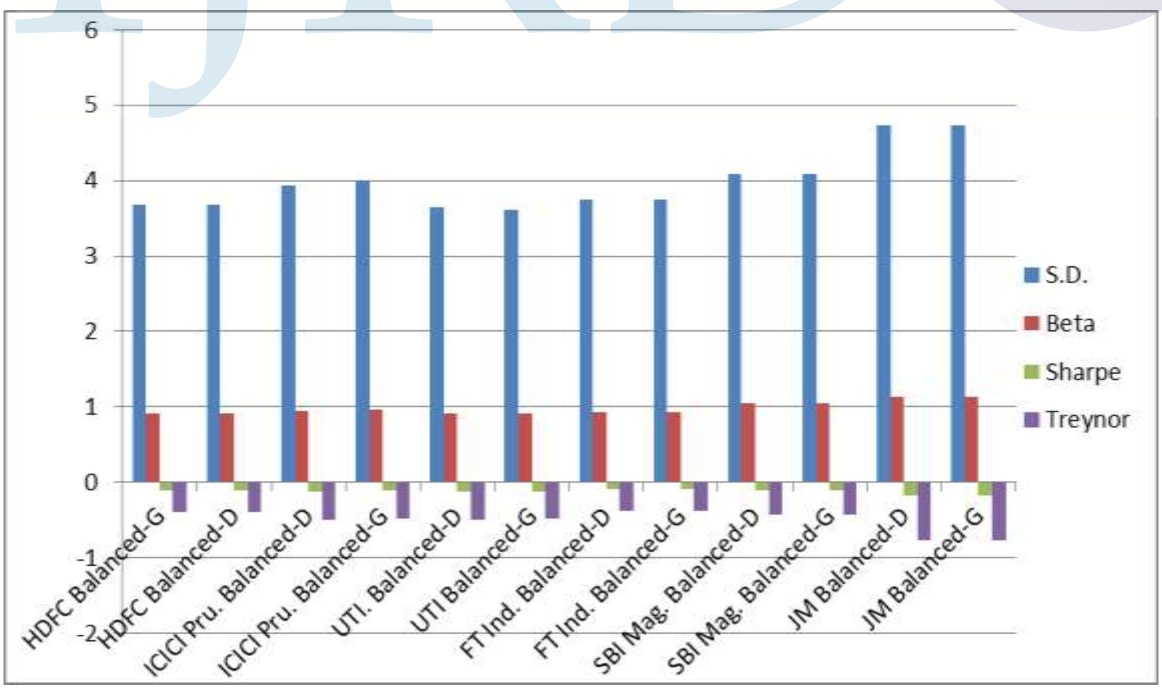
It means pattern of risk and risk-adjusted rate of return is almost similar of growth and equity schemes in both the options, i.e., growth and dividend.

COMPARE FUND

Scheme Name	S.D.	Beta	Sharpe	Treynor
HDFC Balanced Fund - Growth	3.68	0.91	-0.10	-0.40
HDFC Balanced Fund - Dividend	3.68	0.91	-0.10	-0.40

ICICI Prudential Balanced - Dividend	3.93	0.95	-0.12	-0.50
ICICI Prudential Balanced - Growth	4.01	0.96	-0.11	-0.48
UTI Balanced Fund - Dividend	3.64	0.91	-0.13	-0.50
UTI Balanced Fund – Growth	3.61	0.91	-0.12	-0.48
FT India Balanced Fund - Dividend	3.74	0.93	-0.09	-0.37
FT India Balanced Fund - Growth	3.74	0.93	-0.09	-0.37
SBI Magnum Balanced Fund - Dividend	4.08	1.05	-0.11	-0.42
SBI Magnum Balanced Fund - Growth	4.08	1.05	-0.11	-0.42
JM Balanced - Dividend	4.73	1.14	-0.18	-0.76
JM Balanced - Growth	4.73	1.14	-0.18	-0.76

Chart-T: S.D., Beta, Sharpe & Treynor of Balanced Schemes of Selected Mutual Funds with Dividend & Growth Option as on January, 2011.



On the basis of total risk measure “Standard Deviation”, the JM Balanced-D&G are the most risky amongst the selected balanced schemes of these Mutual Funds as on Jan., 2011. SBI Mag. Balanced Fund-D&G and ICICI Pru. Balanced-G come next in risk in their descending order.

In their descending order then comes ICICI Pru. Balanced-D, FT India Balanced-D&G, HDFC Balanced-D&G, UTI Balanced-D, and UTI Balanced-G. UTI Balanced-G is least risky on overall risk basis.

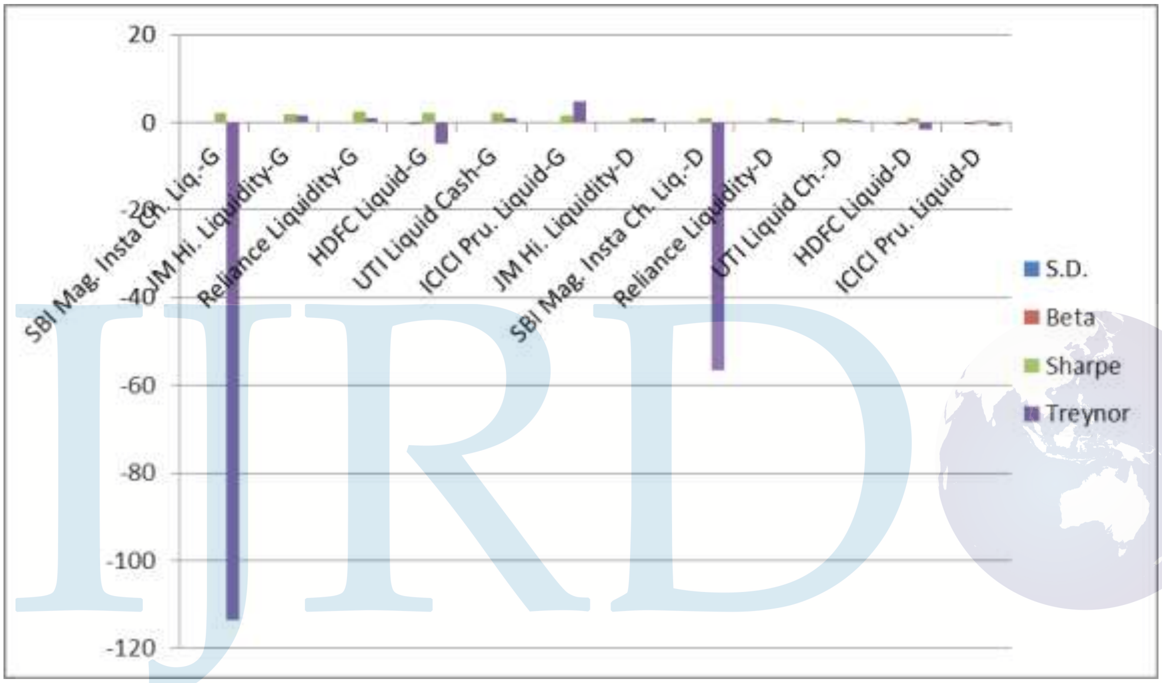
On the basis of measure of systematic risk, i.e., “Beta”, the pattern is almost similar to the previous one with one difference, i.e., both UTI Balanced-D&G are at the lowest beta. It means approximately all have equal proportion of diversifiable risk. Both, Sharpe and Treynor are negative. That shows that the returns are not good enough or commensurate to the risk taken by investors with investing in these.

COMPARE FUND

Scheme Name	S.D.	Beta	Sharpe	Treynor
SBI Magnum Insta Cash Fund - Liquid Floater - Growth	0.02	-0.00	2.30	-113.72
JM High Liquidity - Growth	0.02	0.03	2.05	1.51
Reliance Liquidity Fund - Growth	0.02	0.05	2.43	1.02
HDFC Liquid Fund - Growth	0.02	-0.01	2.30	-4.79
UTI Liquid Fund - Cash Plan - Growth	0.02	0.04	2.20	1.14
ICICI Prudential Liquid Plan - Growth	0.03	0.01	1.68	4.69
JM High Liquidity - Dividend	0.02	0.02	1.05	0.91
SBI Magnum Insta Cash Fund - Liquid Floater - Dividend	0.02	-0.00	0.96	-56.66
Reliance Liquidity Fund - Dly Dividend	0.02	0.05	1.13	0.45
UTI Liquid Fund - Cash Plan - Dly Dividend	0.02	0.03	0.91	0.57

HDFC Liquid Fund - Daily Div	0.02	-0.01	0.89	-1.64
ICICI Prudential Liquid Plan - Dly Div.	0.02	-0.01	0.46	-0.81

Chart-V: S.D., Beta, Sharpe & Treynor of Liquid Schemes of Selected Mutual Funds with Dividend & Growth Option as on January, 2011.



On the basis of total risk measure "Standard Deviation", we see that the risk is nominal and equal amongst all the selected liquid schemes of these Mutual Funds as on Jan., 2011. So there is no comparison on this basis.

On the basis of measure of systematic risk, i.e., "Beta", we see that as such the risk is nominal and an average near about 0.02. Reliance Liquidity is with the highest risk. All Sharpes are positive and Treynors are negative for five schemes because of negative beta. That shows that the returns are good or commensurate to the risk taken by investors with investing in these.

COMPARE FUND

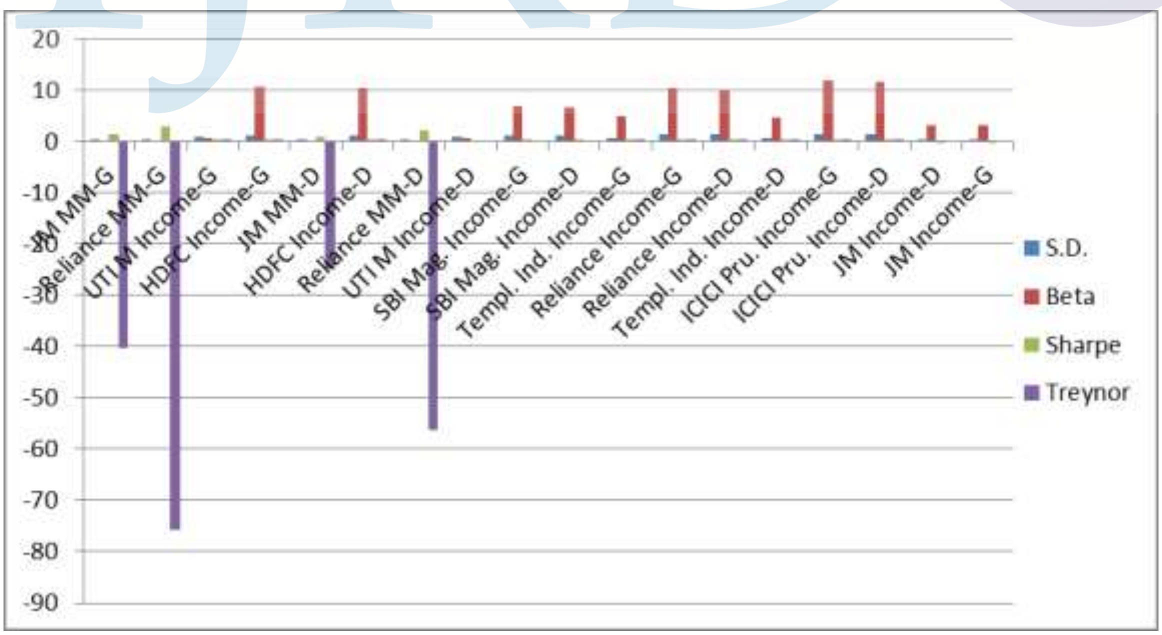
Scheme Name	S.D.	Beta	Sharpe	Treynor
JM Money Manager Fund - Reg - Growth	0.03	-0.00	1.32	-40.35
Reliance Money Manager Fund - R - Growth	0.02	-0.00	2.82	-75.89
UTI Monthly Income Scheme - Growth	0.75	0.64	0.02	0.02
HDFC Income Fund - Growth	1.20	10.62	0.18	0.02
JM Money Manager Fund - Reg - Dly Dividend	0.03	-0.00	0.82	-24.84
HDFC Income Fund - Dividend	1.19	10.46	0.17	0.02
Reliance Money Manager Fund - R - Dly Dividend	0.02	-0.00	2.07	-56.39
UTI Monthly Income Scheme - Dividend	0.77	0.65	-0.03	-0.03
SBI Magnum Income - Growth	1.03	6.73	0.02	0.00
SBI Magnum Income Fund - Dividend	1.03	6.70	0.02	0.00
Templeton India Income Fund - Growth	0.56	4.83	0.21	0.02
Reliance Income Fund - Retail - G P - Growth	1.30	10.24	0.22	0.03
Reliance Income Fund - Retail - Monthly	1.31	9.96	0.19	0.02
Templeton India Income Fund - Dividend	0.56	4.70	0.19	0.02
ICICI Prudential Income Fund -Growth	1.47	11.85	0.25	0.03
ICICI Prudential Income Fund - Dividend	1.48	11.59	0.24	0.03
JM Income - Dividend	0.48	3.21	-0.42	-0.06
JM Income - Growth	0.48	3.21	-0.42	-0.06

On the basis of total risk measure “Standard Deviation”, we find out that the ICICI Pru. Income-D&G are with the highest risk amongst all the selected income schemes of these Mutual Funds as on Jan., 2011. Reliance MM-D&G are with lowest risk. After that JM MM-D&G comes.

On the basis of measure of systematic risk, i.e., "Beta", we find out that ICICI Pru. Income-D&G are with the highest risk. HDFC Income-G&D, Reliance Income-G&D, and SBI Mag. Income-G&D then come next in their descending order of reducing risk. Reliance MM-D&G and JM MM-D&G are with least risk. All Sharpes are positive except JM Income-D&G and UTI M Income-D, The Treynors are negative for seven schemes. Reliance MM-G is the best one as per the Sharpe, and second best is the Reliance MM-D. JM MM-G and JM MM-D come next in their descending order. Treynor is a measure against systematic risk. The 1st best one is Reliance MM-G and the second best is Reliance MM-D. Third and fourth best schemes are JM MM-G and JM MM-D, respectively.

On the above mentioned analysis of four parameters, we find out that Reliance MM-D&G and JM MM-D&G are the best as per the S.D., Beta, Sharpe, and Treynor.

Chart-X: S.D., Beta, Sharpe & Treynor of Income Schemes of Selected Mutual Funds with Dividend & Growth Option as on January, 2011.



(4) <u>Conclusion</u> - This research work has find out the many facts and figures about the different aspects of the performance of selected Mutual Funds with respect to their major classes of

Mutual Funds Schemes on the basis of risk and risk-adjusted rate of return. On these facts and figures we conclude that:-

In Growth Schemes, ICICI Pru., HDFC Equity, SBI Magnum, and HDFC Growth & Templeton have performed comparatively well, but returns were not good enough or commensurate to the risk taken by investors with investing in these.

The same situation was in Dividend schemes.

In Income schemes, leading players were Templeton, JM Financial, UTI, SBI Magnum and HDFC, respectively. Templeton has also performed well with other on the same criteria, i.e. on the basis of risk and risk-adjusted rate of return.

In liquid / Money Market schemes, the situation was little bit different with the leading Mutual Funds, like in money market schemes Reliance MM and JM Money Market were leading on different parameters and in Liquid schemes SBI Magnum was leading, then ICICI Pru. and HDFC with growth option were leading to others. But all others, i.e., JM Financial, UTI, Reliance were also performing well.

In Balanced schemes, UTI, HDFC, Templeton, SBI Magnum and then ICICI Pru. have performed well, but returns were not good enough or commensurate to the risk taken by investors with investing in these.

Risk is highest with JM Financial, SBI & Templ. in Equity & Growth segment. But the Growth rate is highest with ICICI Pru., HDFC Equity & SBI Magnum.

SBI has given highest returns in liquid segment and Reliance and JM in Money Market segment.

But during the selected time duration, market scenario was not performing well. That’s why MFs schemes were also not performing well except liquid and income schemes in the short run.

So, in nutshell, we can say that Reliance was beneficial for investment in money market schemes in all aspects, and then JM is the next option. Templeton, JM Financial, UTI and SBI Magnum were best for income schemes. ICICI, HDFC, SBI Magnum, Templ. and UTI were good for growth, dividend and balanced schemes, but returns were not good enough or commensurate to the risk taken by investors with investing in these and SBI was best for liquid schemes.

These were best in respective schemes because these were best approximately in each and every aspect of these schemes.

Hence, we can say that the…

- Only the Liquid Schemes and Money Market Schemes have performed better, especially during the time of downside of the market, i.e., during the time of recession and recovery.
- Income Schemes have also performed well during the time of recession and recovery.
- The Mutual Funds generally perform better during the time of boom in the market.
- There wss not a huge difference among the performances of private sector and public sector Mutual Funds.
- The returns provided by the Mutual Funds are generally better in liquid / Money Market Schemes especially during the time of recession and recovery.
- The performance of Mutual Funds schemes in India was satisfactory in terms of deposit mobilization, scheme snapshot, asset allocation, risk-adjusted return except during the recession especially in growth schemes, investment in top portfolio holdings & their diversification, so as the investment skills of the fund managers.

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