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AN ANALYTICAL STUDY ON THE PERFORMANCE OF MUTUAL FUNDS IN PUBLIC AND PRIVATE SECTOR SCHEMES

A PROJECT REPORT

Submitted by

V.ANSELM

Reg. No. 0820400002

In partial fulfilment of the requirements

for the award of the degree

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Bonafide Certificate

DEPARTMENT OF MANAGEMENT STUDIES

KUMARAGURU COLLEGE OF TECHNOLOGY (AUTONOMOUS)

COIMBATORE

BONAFIDE CERTIFICATE

Certified that this project titled **"AN ANALYTICAL STUDY ON THE PERFORMANCE OF MUTUAL FUNDS IN PUBLIC AND PRIVATE SECTOR SCHEMES "** is the bonafide work of Mr.V.ANSELM (REG NO 0820400002)who carried out this project under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

14/06/2010

MR.A.SENTHIL KUMAR

Faculty Guide

A. SENTHIL KUMAR MBA,PGDCA,M.Phill, Ph.D,
Senior Lecturer in Management Studies,
KCT Business School,
Kumaraguru College of Technology,
Coimbatore - 641 006.

PROF Dr. S.V.DEVANATHAN

Director

Evaluated and viva-voce conducted on ...11.6.2010.....

Examiner I

Examiner II

June 2010

CERTIFICATE

This is to certify that **Mr. V ANSELM (Reg. No. 0820400002)** a study of Master of Business Administration from KCT BUSINESS SCHOOL, Coimbatore has completed his project work on **"AN ANALYTICAL STUDY ON THE PERFORMANCE OF MUTUAL FUNDS IN PUBLIC AND PRIVATE SECTOR SCHEMES"**. Coimbatore Head Office, for a period of three months during March – May 2010.

During his Internship, we have found him to be diligent and honest in his work and we wish him all success in his future endeavors.

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COIM[illegible]RE - 641 037.
PHONE : 0422-4514323-42.

Authorized Signature

DECLARATION

I hereby state that the dissertation report entitled "**AN ANALYTICAL STUDY ON THE PERFORMANCE OF MUTUAL FUNDS IN PUBLIC AND PRIVATE SECTOR SCHEMES**" submitted in partial fulfillment for the award of **MASTER OF BUSINESS ADMINISTRATION** to the Anna University, is a record of independent research work carried out by me under the guidance of **Mr.A.SENTHIL KUMAR**, Senior Lecturer, Department of Management Studies, Kumaraguru College Of Technology, Coimbatore. I also declare that this dissertation report is result of my own effort and has not been submitted earlier for the award of any other Degree / Diploma / Associate ship and prize by Anna University or any other university.

Place: Coimbatore

Date: 14.6.2010

V.ANSELM

(REG NO 0820400002)

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EXECUTIVE SUMMARY:

Stock markets are highly risky and volatile. It's very difficult to predict the stock market. Very minute changes in stock market affects the share prices of an organization to a very large extent. Therefore, investment in stock market involves a high amount of risk. In order to reduce the risk involved in stock market, Mutual Fund came into existence. In Mutual Fund, investment is diversified by investing in several types of investments like shares, debt market instruments, money market instrument and so on. Depending upon the entry and exist criterion mutual funds can be divided into Open ended and Close ended funds. It becomes necessary to evaluate the Risk and Return involved in mutual fund to guide the clients with better ideas to make them invest in the right fund depending on their risk taking capability. In this study, with the help of variables like Alpha, Beta, Sharpe's index, Treynor's index, Jensen index and Appraisal ratio, better performing mutual funds schemes have been arrived for all categories of funds. The Rank Statement gives the ranks the above performing measures . This would be very much helpful for the clients to make the right investment and also acts as an indicator to choose the right funds.

Table of Contents

TABLE OF CONTENTS

List of Tables

LIST OF TABLES

Chapter 1

Introduction

CHAPTER 1

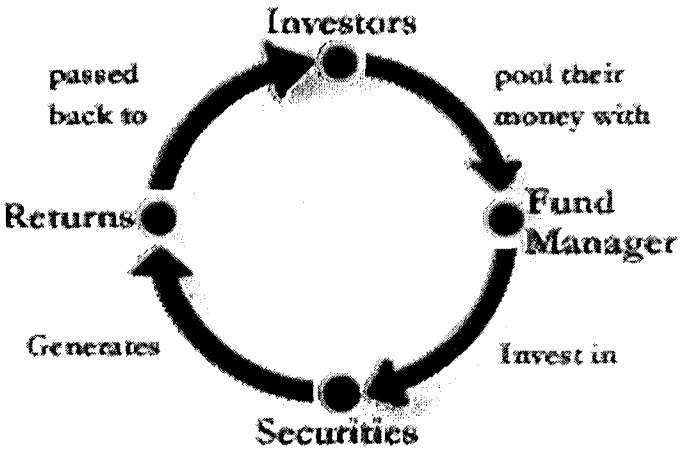
1. INTRODUCTION

1.1BACKGROUND OF STUDY

Stock market is highly volatile and risky. In order to reduce the risk involved in the stock market mutual funds came into existence. Mutual funds can be classified into open ended mutual funds and close ended mutual funds depending on the mode of entry and exit into them. They further be categorised into debt based mutual funds, equity based mutual funds and balanced mutual funds based on areas of investment. The risk and return varies based on different categories of mutual funds. This study gives an insight about the risk and return involved in top 5 mutual funds in public and private sectors.

1.2 INDUSTRY PROFILE:

A Mutual Fund is a trust that pools the savings of a number of investors who share a common financial goal. The money thus collected is then invested in capital market instruments such as shares, debentures and other securities. The income earned through these investments and the capital appreciation realised are shared by its unit holders in proportion to the number of units owned by them. Thus a Mutual Fund is the most suitable investment for the common man as it offers an opportunity to invest in a diversified, professionally managed basket of securities at a relatively low cost. The flow chart below describes broadly the working of a mutual fund:



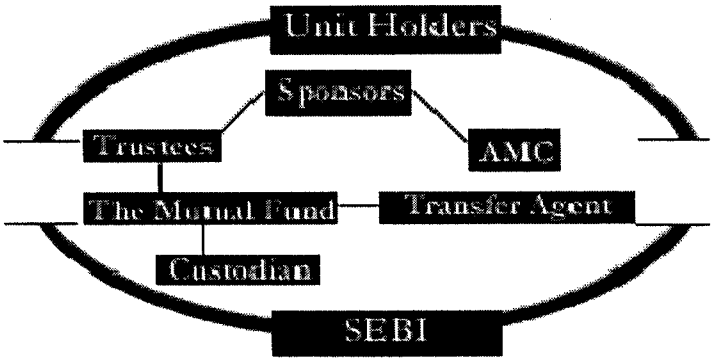
Source: AMFI **Mutual Fund Operation Flow Chart**

A mutual fund is the ideal investment vehicle for today's complex and modern financial scenario. Markets for equity shares, bonds and other fixed income instrument real estate, derivatives and other asset have became mature and information driven. Prices changes in these assets are driven by global events occurring in faraway places. A typical individual is unlikely to have the knowledge, skill, inclination and time to keep track of events, understand their implications and act speedily. An individual also find it difficult to keep track of ownership of his asset, investment, brokerage dues and bank transaction etc.

A mutual fund is the answer to all these situations. If appoints professionally qualified and experienced staff that manages each of these functions on a full time basis. The large pool of money collected in the fund allows it to hire such staff at a very low cost to each investor. If effects, mutual fund vehicle exploit economies of scale in all three areas – research, investment and transaction processing while the concept of individual coming together to invest money collectively is not new, the mutual funds gained popularity only after second world war. Globally these are thousands of mutual funds with different investment objectives. Today mutual funds collectively manage almost as much as or more money as compared to bank.

1.2.1ORGANISATIOFAMUTUALFUND

There are many entities involved and the diagram below illustrates the organisational set up of a mutual fund:



Source: AMFI **Organisation of a Mutual Fund**

1.2.3 ADVANTAGES OF MUTUAL FUNDS

The advantages of investing in a Mutual Fund are:

Diversification: The best mutual funds design their portfolios so individual investments will react differently to the same economic conditions. For example, economic conditions like a rise in interest rates may cause certain securities in a diversified portfolio to decrease in value. Other securities in the portfolio will respond to the same economic conditions by increasing in value. When a portfolio is balanced in this way, the value of the overall portfolio should gradually increase over time, even if some securities lose value.

Professional Management: Most mutual funds pay topflight professionals to manage their investments. These managers decide what securities the fund will buy and sell.

Regulatory oversight: Mutual funds are subject to many government regulations that protect investors from fraud.

Liquidity: It's easy to get your money out of a mutual fund. Write a check, make a call, and you've got the cash.

Convenience: You can usually buy mutual fund shares by mail, phone, or over the Internet.

Low cost: Mutual fund expenses are often no more than 1.5 percent of your investment. Expenses for Index Funds are less than that, because index funds are not actively managed. Instead, they automatically buy stock in companies that are listed on a specific index

Transparency

Flexibility

Choice of schemes ,Tax benefits, Well regulated

1.2.4 DRAWBACKS OF MUTUAL FUNDS

Mutual funds have their drawbacks and may not be for everyone:

- **No Guarantees:** No investment is risk free. If the entire stock market declines in value, the value of mutual fund shares will go down as well, no matter how balanced the portfolio. Investors encounter fewer risks when they invest in mutual funds than when they buy and sell stocks on their own. However, anyone who invests through a mutual fund runs the risk of losing money.

- **Fees and commissions:** All funds charge administrative fees to cover their day-to-day expenses. Some funds also charge sales commissions or "loads" to compensate brokers, financial consultants, or financial planners. Even if you don't use a broker or other financial adviser, you will pay a sales commission if you buy shares in a Load Fund.

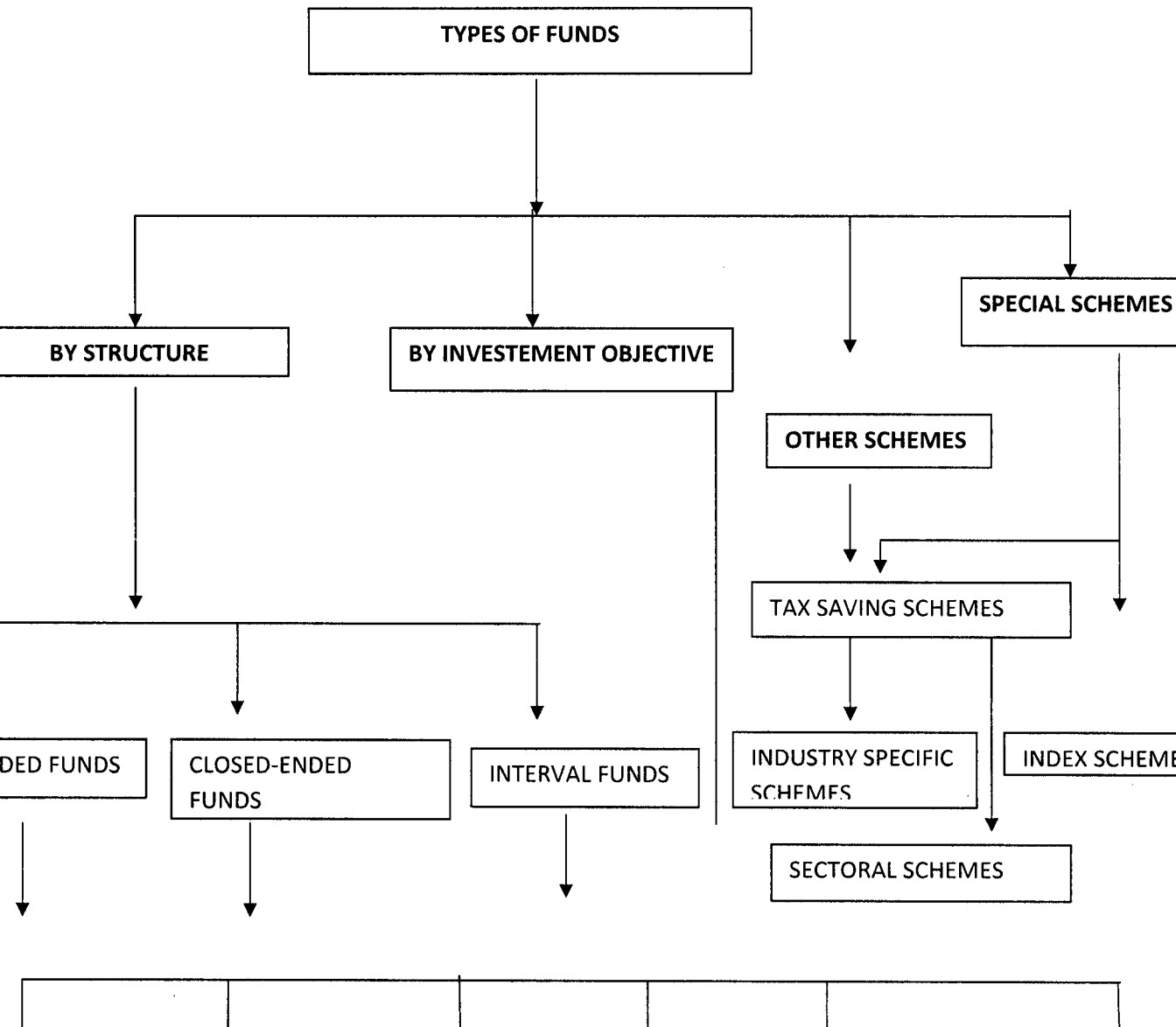
- **Taxes:** During a typical year, most actively managed mutual funds sell anywhere from 20 to 70 percent of the securities in their portfolios. If your fund makes a profit on its sales, you will pay taxes on the income you receive, even if you reinvest the money you made.

- **Management risk:** When you invest in a mutual fund, you depend on the fund's manager to make the right decisions regarding the fund's portfolio. If the manager does not perform as well as you had hoped, you might

not make as much money on your investment as you expected. Of course, if you invest in Index Funds, you forego management risk, because these funds do not employ managers.

1.2.5TYPES OF MUTUAL FUNDS SCHEMES IN INDIA

Wide variety of Mutual Fund Schemes exist to cater to the needs such as financial position, risk tolerance and return expectations etc. The table below gives an overview into the existing types of schemes in the Industry



BY STUCTURE:

Open-ended funds

An open-end fund is one that is available for subscription all through the year. These do not have a fixed maturity. Investors can conveniently buy and sell units at Net Asset Value ("NAV") related prices. The key feature of open-end schemes is liquidity.

Closed-ended funds

A closed-end fund has a stipulated maturity period which generally ranging from 3 to 15 years. The fund is open for subscription only during a specified period. Investors can invest in the scheme at the time of the initial public issue and thereafter they can buy or sell the units of the scheme on the stock exchanges where they are listed. In order to provide an exit route to the investors, some close-ended funds give an option of selling back the units to the Mutual Fund through periodic repurchase at NAV related prices. SEBI Regulations stipulate that at least one of the two exit routes is provided to the investor.

Interval funds

Interval funds combine the features of open-ended and close-ended schemes. They are open for sale or redemption during pre-determined intervals at NAV related prices.

BY INVESTMENT OBJECTIVE:

Growth Funds

The aim of growth funds is to provide capital appreciation over the medium to long- term. Such schemes normally invest a majority of their corpus in equities. It has been proven that returns from stocks, have outperformed most other kind of

investments held over the long term. Growth schemes are ideal for investors having a long-term outlook seeking growth over a period of time.

Income Funds

The aim of income funds is to provide regular and steady income to investors. Such schemes generally invest in fixed income securities such as bonds, corporate debentures and Government securities. Income Funds are ideal for capital stability and regular income.

Balanced Funds

The aim of balanced funds is to provide both growth and regular income. Such schemes periodically distribute a part of their earning and invest both in equities and fixed income securities in the proportion indicated in their offer documents. In a rising stock market, the NAV of these schemes may not normally keep pace, or fall equally when the market falls. These are ideal for investors looking for a combination of income and moderate growth.

Money Market Funds

The aim of money market funds is to provide easy liquidity, preservation of capital and moderate income. These schemes generally invest in safer short-term instruments such as treasury bills, certificates of deposit, commercial paper and inter-bank call money. Returns on these schemes may fluctuate depending upon the interest rates prevailing in the market. These are ideal for Corporate and individual investors as a means to park their surplus funds for short periods.

Load Funds

A Load Fund is one that charges a commission for entry or exit. That is, each time you buy or sell units in the fund, a commission will be payable. Typically entry and exit loads range from 1% to 2%. It could be worth paying the load, if the fund has a good performance history.

No-Load Funds

A No-Load Fund is one that does not charge a commission for entry or exit. That is, no commission is payable on purchase or sale of units in the fund. The advantage of a no load fund is that the entire corpus is put to work.

OTHER SCHEMES:

Tax Saving Schemes

These schemes offer tax rebates to the investors under specific provisions of the Indian Income Tax laws as the Government offers tax incentives for investment in specified avenues. Investments made in Equity Linked Savings Schemes (ELSS) and Pension Schemes are allowed as deduction u/s 88 of the Income Tax Act, 1961. The Act also provides opportunities to investors to save capital gains u/s 54EA and 54EB by investing in Mutual Funds.

SPECIAL SCHEMES

Industry Specific Schemes

Industry Specific Schemes invest only in the industries specified in the offer document. The investment of these funds is limited to specific industries like InfoTech, FMCG, and Pharmaceuticals etc.

Index Schemes

I ndex Funds attempt to replicate the performance of a particular index such as the BSE Sensex or the NSE 50

Sectoral Schemes

Sectoral Funds are those, which invest exclusively in a specified industry or a group of industries or various segments such as 'A' Group shares or initial public offerings

1.2.6 FREQUENTLY USED TERMS

NetAssetValue(NAV)

Net Asset Value is the market value of the assets of the scheme minus its liabilities. The per unit NAV is the net asset value of the scheme divided by the number of units outstanding on the Valuation Date.

SalePrice

Is the price you pay when you invest in a scheme. Also called Offer Price. It may include a sales load.

RepurchasePrice

Is the price at which a close-ended scheme repurchases its units and it may include a back-end load. This is also called Bid Price.

RedemptionPrice

Is the price at which open-ended schemes repurchase their units and close-ended schemes redeem their units on maturity. Such prices are NAV related.

SalesLoad

Is a charge collected by a scheme when it sells the units. Also called, 'Front-end' load. Schemes that do not charge a load are called 'No Load' schemes.

Repurchaseor'Back-end'Load

Is a charge collected by a scheme when it buys back the units from the unit holders.

1.2.7 RISK AND RETURN INVOLVED IN MUTUAL FUND

Risk can be understood in a Mutual Fund in two ways:

- The investors expect a certain percentage or return from the fund. Their expectation is mostly based on historical returns of the funds. The investors may or may not get this return. This is because mutual funds returns are very volatile. It is due to the volatility of return of a mutual fund that different investors experience different returns from investment in the same mutual funds.

- Recall that mutual funds represent a pool of investor's money, which is invested in marketable debt and equity securities. These markets may fall and there for the value of securities in which a mutual fund has invested money may fall.

Risk involved in mutual fund investing can be discussed under following heads.

- **Market risk** : If the overall stoke or bond markets fall on account of microeconomics factors, the value of the stock or bond holding in the fund's portfolio can drop thereby impacting the NAV. The changes in the return performance of a fund may be attributed largely to changes in the market factors, rather than any factor specific to the companies in the fund's portfolio. It is also known as systematic risk. The examples of market risk or systematic risk are the government changing the interest rate policy, the inflation rate increasing, the government withdraws tax on dividend payments by companies.
- **Unique risk**: This risk arises from the uncertainties of individual securities. It is also called as unsystematic risk. These uncertainties are diversifiable if a large numbers of securities are combined to form well-diversified portfolios. Uncertainties of individual securities in a portfolio cancel out each other. Thus unique risk can be reduced through diversification. The examples of unique or unsystematic risk are the company workers declare strike, the R&D expert leaves the company.

- **Non-market risk**: Bad news about an individual company can pull down its stock price, which can affect, negatively, funds holding a large quantity of that stock. This risk can be reduced by having a diversified portfolio that consists of a wide variety of stocks drawn from different industries.

- **Interest risk:** Bond prices and interest rates move in opposite directions. When interest rates rise, bond prices fall and this decline in underlying securities affects the NAV negatively. The extent of the negative impact is dependent on factors such as maturity profile, liquidity, etc.

- **Credit risk**: Bonds are debt obligations. So when funds invest in corporate bonds, they run risk of the corporate defaulting on their interest payment and the principal payment obligations and when that risk crystallizes, it leads to a fall in the value of the bonds causing the NAV of the fund to take a beating.

- **Inflation risk**: inflation rate fluctuation affects bith debt market and stock market. The investment made by the fund manager of the mutual fund in the debt and stock market subjected to great amount of risk due to inflation. The NAV change therefore is also affected by inflation factor.

- **Price risk**: it refers to the possibility of adverse changes in the value of an investment because of changing market conditions, a change in the financial situation of the issuing firm, or a change in the public attitude towards a particular investment. When interest rate rise, bond prices declaim. Rising interest rates also usually cause stock prices to fall. A change in the price of golden often accompanies a change in the value of the U.S. dollar. A bond's price will fall it standard and poor's lowers its bond rating. Stock prices tend to move as a group, so even though a particular firm may be very healthy, a large drop in the Dow Jones industrial average will probably cause its stock to fall in value as well. All of these events are examples of price risk.

- **Convenience risk**: Convenience risk may not manifest itself directly in the value of a security. Convenience risk refers to a loss of managerial time rather than a loss of money. The level of convenience risk also may not be the same for the various security holders. One example of convenience risk lies in the call provision that many bonds have. This feature permits the issuer to call in the debt early, meaning that a bond-holder will have to replace the called bond with some other investment. This involves some research time probably some added brokerage fee. For a portfolio manager with many accounts, replacing called bonds is a time- consuming nuisance.

Return is the ultimate objective in any investment programme. A general definition of return is " the benefit associated with an investment." People invest money to get a return on it. An investor in mutual funds earns return from two sources.

- ❖ Income from dividend paid by the mutual fund.
- ❖ Capital gain arising out of selling the unit at a price higher than the acquisition price.

Since the mutual fund does not commit any specific rate at which dividends will be paid, the rate of return is not known in advance. The mutual fund also does not specify any particular tenor for its products. The investor is free to enter and exit the fund at any time. However, he would do so at a price that depends on the NAV at the time of entry and exit. Since the NAV itself changes continuously, the investor would not know in advance whether there would be a capital gain or a loss from his investment. Therefore there is nothing like pre-specified rate of return on investment in a mutual fund.

The mutual fund invests the funds mobilized from the investor, in a portfolio of marketable securities. Since the value of these securities can change over time, the mutual fund cannot assure a rate of return. There is no technique by which the fund manager can accurately predict how the market prices will behave in the future. Therefore, mutual fund cannot provide assure return to the investor. In case the market value of the securities fall, if assured return have to be provided, the short fall has to be made good by another entity. SEBI regulations do not permit the sale of assured return product by mutual funds, unless the sponsor or AMC provide an explicit guarantee that they would make good the shortfall, if the value of the portfolio falls below that of the assured levels.

1.2.8 In order to ensure uniformity and comparability across funds, SEBI has stipulated some norms for return data that is published by mutual funds. These are:

1. Only standard methods of computing returns can be used by mutual funds. These include measures like annual dividend on face value, annual yield on purchase price, and annual compounded rate of return.

2. For return of period less than a year, returns can be shown only on absolute basis. The return cannot be annualized. However a liquid fund can annualize return provided the returns are not misleading.
3. For returns of period more than a year, CAGR has to be used.
4. Return calculations for funds with payouts should assume that dividends are reinvested at the ex-dividend NAV.
5. Every mutual fund should highlight CAGR for the past 1,3 and 5 years of the scheme, or since inception, whichever is lower.

1.3 REVIEW OF LITERATURE

Wermers,Russ[1] in their paper used a new database to perform a comprehensive analysis of the mutual fund industry. We find that funds hold stocks that outperform the market by 1.3 percent per year, but their net returns under perform by one percent. Of the 2.3 percent difference between these results, 0.7 percent is due to the underperformance of nonstock holdings, whereas 1.6 percent is due to expenses and transactions costs .Thus, funds pick stocks well enough to cover their costs. Also, high-turnover funds beat the Vanguard Index 500 fund on a net return basis. Our evidence supports the value of active mutual fund management.

Redman, Arnold L.; Gullett, Nell.S[2] in their paper examine the factors that influence risk-adjusted returns for bondmutual funds. The data set is divided into two

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[1] Wermers, Russ. "Mutual fund performance:An empirical decomposition into Stock-picking talent, style, Transactions costs, and expenses" Journal of Finance, Aug2000, Vol. 55 Issue 4, p1655-1695.

[2]Redman, Arnold L.; Gullett, Nell S. "Impact of fund, management and market characteristics on bond mutual fund performance" Journal of Asset Management, Mar2007, Vol. 7 Issue 6, p429-442.

roups: taxable bond funds and municipal bond funds. The factors are grouped into three categories: fund or portfolio characteristics, management-controlled factors, and bond market variables. Taxes, fund age, and operating expenses significantly affect the risk-adjusted returns for taxable bond funds. Portfolio concentration is statistically significant for municipal bond funds, but has a minor influence on taxable fund returns. Fund expenses and the average duration of the bonds in the portfolios are key determinants of municipal bond fund returns. It is concluded that portfolio managers can enhance bond fund shareholder returns.

Sehgal , Sanjay, Jhanwar, Manoj[3] in their paper examine if there is any short-term persistence in mutual funds performance in the Indian context. We find no evidence that confirms persistence using monthly data. Using daily data, we observe that for fund schemes sorted on prior period four-factor abnormal returns, the winners portfolio does provide gross abnormal returns of 10% per annum on post-formation basis. The economic feasibility of zero-investment trading strategies that involve buying past winners and selling past losers is however in doubt. This is owing to the fact that these strategies generate low gross returns and that the winners portfolios involve higher investment costs than losers portfolios, thus eliminating a major portion of extra-normal returns. Our empirical findings are consistent with the efficient market hypothesis and have implications for hedge funds and other managed portfolios who rely on innovative investment styles, including the "fund of funds" trading strategies that implicitly assume short-term persistence.

Chun-An Li, Hung-Cheng Lai[4] in their paper examine the relationship between corporate ownership and fund performance in Taiwan. Using the panel regression after controlling for fund attributes, the proportional share held by foreign institutional investors is positively correlated with fund performance. Furthermore, we also find a negative relationship between the number of board members and the

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[3] Sehgal , Sanjay; Jhanwar, Manoj. Short-Term Persistence in Mutual Funds Performance: Evidence from India Journal of Accounting, Business & Management, Apr2008, Vol. 15 Issue 1, p90-108.

[4]Chun-An Li; Hung-Cheng Lai. CORPORATE OWNERSHIP AND MUTUAL FUND PERFORMANCE: EVIDENCE FROM TAIWAN Corporate Ownership & Control, Summer2008, Vol. 5 Issue 4, p128-134.

eturn gap measure of fund performance, but ownership concentration are not effect on fund performance. Our results imply that foreign institutional shareholders are now playing a significant monitoring role of fund companies in Taiwan.

Babalos, Vassilios, Caporale, Guglielmo maria, Kostakis, Alexandros[5] in their study examines a series of performance measures with the aim of solving the ex-post verification problem. These measures are employed to test the performance persistence hypothesis of domestic equity funds in Greece, during the period 1998–2004. Correctly adjusting for risk factors and documented portfoliostrategies explains a significant part of the reported persistence. The intercept of the augmented Carhart regression is proposed as the most appropriate performance measure. Using this measure, weak evidence for persistence, only before 2001, is documented. The growth of the fund industry, the direction of flows to past winners and the integration in the international financial system are suggested to be the reasons for the absence of performance persistence.

Bernhardt, Dan,Davies, Ryan J.Candian[6] in their paper develop a model of mutual fund manager investment decisions near the end of quarters.We show that when investors reward better performing funds with higher cash flows, near quarter-ends a mutual fund manager has an incentive to distort new investment toward stocks in which his fund holds a large existing position. The short-term price impact of these trades increase the fund's reported returns. Higher returns are rewarded by greater subsequent fund inflows which, in turn, allow for more investment distortion the next quarter. Because the price impact of trades is short term, each subsequent quarter begins with a larger return deficit. Eventually, the deficit cannot be overcome. Thus, our model leads to the empirically observed short-run persistence and long-

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[5] Babalos, Vassilios; Caporale, Guglielmo Maria; Kostakis, Alexandros; Philippas, Nikolaos. *Testing for persistence in mutual fund performance and the ex-post verification problem: evidence from the Greek marke European Journal of Finance*, Dec2008, Vol. 14 Issue 8, p735-753

[6] Bernhardt, Dan; Davies, Ryan J. *Canadian* "Smart *fund* managers? Stupid money?" *Journal of Economics*, May2009, Vol. 42 Issue 2, p719-748.

un reversal in fund performance. In doing so, our model provides a consistent explanation of many other seemingly contradictory empirical features of mutual fund performance. JEL classification

Patgiri, Rajdeep[7] in their study the impact of contractual incentives on the performance of mutual funds. We find that high-incentive contracts induce managers to take more risk and reduce the funds' probability of survival. Yet, funds with high-incentive contracts deliver higher risk-adjusted return, and the superior performance remains persistent. The top incentive quintile of funds outperforms the bottom quintile by 2.70% per year.Moreover, high-incentive winner funds from one year have a positive alpha of 0.41% per month in the following year. Focusing on funds' holdings, we show that active portfolio rebalancing is the main channel through which incentives increase performance.

Nitish, Beehary; Sawkut, Rojid; Boopen, Seetanah; Vinesh, Sannassee; Suraj, Fowdur[8] in their paper analyzes the performance of Mauritian mutual funds by initially investigating the performance of the mutual funds on a risk-adjusted basis and then on an individual basis with respect to their respective benchmarkmperformances.The results show that the rankings obtained by applying both the Sharpe and Treynor rules are almost the same, implying that the funds appearto be well-diversified. Moreover, the majority of funds selected are reported tohave a relatively high Sharpe ratio, thus indicating a pretty good performance.However, the positive Jensen's alpha indicates that fund managers throughtheir stock picking skills, privileged information or intuition have 'beaten themarket'. Individual analysis revealed that funds are heavily dependent on theperformance of the local stock market, that is,

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[7] Patgiri, Rajdeep "Incentives and Mutual Fund Performance: Higher Performance or Just Higher Risk Taking". *Review of Financial Studies*, May2009, Vol. 22 Issue 5, p1777-1815.

[8] By: Nitish, Beehary; Sawkut, Rojid; Boopen, Seetanah; Vinesh, Sannassee; Suraj, Fowdur. "Analyzing ***Mutual Funds Performance***: The Case of Emerging Mauritian Economy". ICFAI Journal of Financial Economics, Jun2009, Vol. 7 Issue 2, p47-60.

they move in line with the marketindex. Interestingly, those mutual funds investing heavily in the local stockmarket are reported to 'beat the market'.

Chakraborty, Madhumita, Jain, P.K,Kallianpur, Vinay[9] in their study attempts to evaluate the performance of mutual funds on the hasis of rate of retum as well as risk-adjusted methods. The performance of tlie mutual funds are compared with the risk'free returns as well as the henchmark index (BSE 100), which is taken as a proxy for market returns. T/xe rate of retum analysis performed on the sample of equity funds showed that all the mutual funds except one in the sample, earned returns in excess of tlie risk-free rate of retum offered Í7)r 364'day Treasury Bill (Thill). The comparison of rates of retum of the henchmark index and üie sample of mutual funds indicates that majority of the equity mutual funds (included in the sample) have outperformed the henchmark. However, when the mean retum of the entire sample is corisidered, it does not show significantly different retum from that of the henchmark BSE 100 index. An analysis hased on risk-adjusted performance, however, shows a different picture where most of the funds (around 70%) in the sample have posted positive and hetter Sharpe as well as Treynor's ratio compared to tJie herichmark BSE 100 index. The study, thus, although provides some evidence of satisfactory performance in terms of returnsgenerated per unit of risk, yet, a conclusive statement regarding the capahilities of mutual fund managers is still elusive.

Fortin, Rich; Michelson[10] in their study is to examine the performance persistence of a large sample of mutual funds over time. Specifically do mutual fund managers show positive (negative) performance year after year? Alternatively, is mutual fund performance from one year to the next basically a random event? Our tests show that there is performance persistence in mutual fund returns. This outcome is true for both the lowest performing and highest performing mutual funds. Our tests encompass nine categories of mutual funds, including Aggressive Growth

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[9] Chakraborty, Madhumita; Jain, P. K.; Kallianpur, Vinay. "Mutual Fund Performance: An Evaluation of Select Growth Funds in India South Asian" Journal of Management, Oct-Dec2008, Vol. 15 Issue 4, p79-92.

[10] Fortin, Rich; Michelson, Mutual Fund Performance Persistence:Still True? Stuart. Summer Internet Proceedings, Jun2009, Vol. 11, p13-13

and Growth (AGG), Growth/Income and Equity/Income (GIEI), International Stock (IS), Balanced Funds (AAB), Corporate Bond (CB), Government Bond (GB), Municipal bond (MB), Small Company Equity (SCE), and Specialty Equity (SP) categories. The tests show this result for all fund categories, except GB and CB funds. These results are important for individual investors. Funds that performed poorly during a prior year are likely to continue their poor performance during the next year and likewise a superior performing fund is likely to continue to perform well during the next year.

Maria, Filip Angela; Georgeta, Beju Daniela[11] in their study is to examine Romanian capital market seems to continue a positive process of convergence to other European markets in terms of market indicators and market infrastructure as it benefits from harmonized regulation to best standards and practices, which stimulate growth. Mutual funds represent a very strong investment vehicle by offering investors access to the stock-exchange growth and the monetary market with less effort, money and risks than the direct investment. These investment vehicles raise a great number of questions, most of them related to their performance evaluation. The main question is whether actively managed mutual funds managers are able to add value for their investors. We will analyse in this paper Romanian mutual funds performance indicators and their evolution during the last years. Romanian mutual funds industry is poorly developed, mutual funds assets detaining an insignificant percent in the GDP.

O'Hara, H. Thomas; Samuelson, Shawn T[12] in their study Value Line has expanded their publishedresearch from only securities to include various types of mutual funds, using the same unbiased statistical principles that they applied to stock evaluation. In this research, we analyze the 15 year performance consistency as well as the risk of the 700 equity mutual funds covered in the monthly editions of *The Value Line Mutual Fund Survey*. In our previous research papers and publications, we have concluded that there is a strong correlation between stock

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[11] By: Maria, Filip Angela; Georgeta, Beju Daniela. "Indicators Of Romanian Mutual Funds Performance" Annals of the University of Oradea, Economic Science Series, 2008, Vol. 17 Issue 3, p248-253.

[12] O'Hara, H. Thomas; Samuelson, Shawn T. "An Analysis of the Performance of Value Line's Mutual Fund Rankings" Proceedings of the Northeast Business & Economics Association, 2009, p158-161.

price performance and consistency of earnings and cash flow over a long term timeframe, during which earnings and cash flow have increased each year for the most recent 17 years. Therefore, it seems reasonable that we should extend this long term consistency analysis to a universe of mutual funds. It appears that this would be the first such research paper to be developed along these lines, and, it might open up a series of academic research activity with mutual funds. Finally, we are particularly concerned with mutual fund performance over the strong market of 2002-2007 and in the weak market of 2007-2009.

1.4 STATEMENT OF THE PROBLEM

As the stock market is highly volatile and risky mutual funds came into existence to reduce risk. It becomes necessary to evaluate the risk and return involved in mutual funds to guide the clients with better ideas for their investment. A risk and return of the mutual funds help the investor to fit the mutual fund in their appropriate risk and return relationship category. Hence the same is taken as a problem to be studied upon.

1.5 OBJECTIVES OF THE STUDY

- To analyse the risk and return involved in mutual fund investment
- To analyse the performance of selected mutual fund schemes using various performance measures.

1.6 SCOPE OF THE STUDY

The scope of the is to give better ideas about the risk and return involved in mutual funds to the clients in the orders to make them invest appropriately.

1.7 METHODOLOGY

1.7.1 TYPE OF STUDY

In analytical research, the researcher has to use facts or information already available, and analyse these to critical evaluation of the material. This is an analytical study.

1.7.2 SAMPLING DESIGN

A systematic process that connects all the details of the sampling, right from the determination of sample size of the collection of the data.

Method of Sampling

Sampling method can be broadly classified as probability sampling, where every element of the population enjoys equal chance of being selected into the sample and non probability sampling, where all the elements of the population do not get equal chance of being selected into the sample. The present study adopts the probability sampling.

Sampling Technique

Under probability sampling, stratified random sampling where the sample is selected at random from each of the homogeneous layers or stratums of the population. The stratified random sampling can be further classified into proportionate stratified random sampling, where the selection from every stratum is in equal proposition and disproportionate stratified random sampling, where the selection from every stratum is not in equal proposition.The sampling technique chosen for the study is Disproportionate Stratified Random Sampling. The public and private mutual fund schemes from the two primary stratums, amongst them the equity , debt, and balanced schemes from the sub- stratum for study.

[13]As on date in India, there are 137 public mutual fund schemes that include 64 equity schemes, 66 debt schemes, and 5 balanced schemes. As there are 735 private mutual funds schemes that include 339 equity schemes, 380 debt schemes, and 16 balanced schemes. A sample of top- performing(NAV- based) 5 schemes all the 6 sub-stratum have been taken for the study.

[13] www.mutualfundsindia.com

1.7.3 METHOD OF DATA COLLECTION

The data used for the study is secondary data it is collected through print media and internet. The data was obtained from Amfi India website (www.amfiindia.com).

1.7.4 Time period covered

The daily closing Net Asset Values(NAV) for 3 years covering 1st April 2007 to 31st March 2010 were used for study.

The monthly average closing were calculated and used for analysis.

1.7.5 TOOLS FOR ANALYSIS:

Average monthly return:

Return is the benefit arising out of an investment. The rate of return measures the rate at which investor's wealth increase or decrease. Since the investment, decision relates to the future, the expected rate of return is calculated for an asset. Monthly return has been calculated for each selected fund and selected benchmark index. The average monthly return of selected funds and benchmark index calculated.

$$\text{Mean} = \frac{\sum X}{n}$$

n- Number of years

X-Return of the fund

Standard Deviation:

The variability of rates of return may be defined as the extent of the deviations of the individual rates of return from the average rate of return. The standard deviation of selected fund and benchmark index were calculated for analysis. Financial analysts and statisticians prefer to use a quantitative risk surrogate called the clash

of return. The standard deviation and variance are equally acceptable and equivalent quantitative measures of an asset's total risk.

Standard Deviation (σ_p) = $\frac{(\text{mean} - X)^2}{n}$

Beta value:

Beta is the measure of the mutual fund systematic risk. Betas for different mutual fund schemes are calculated for the present study by regressing fund return. Beta is a measure of a portfolio's volatility, or systematic risk in comparison to the market or market segment as opposed to distinct element of risk associated with a specific security. Systematic risk cannot be diversified away; it can only be hedged. A beta less than 1 means the security will be less volatile than the market. A beta greater than 1 indicates that the security's price will be more volatile than the market.

$$\beta = \frac{cov(i, m)}{\sigma m^2}$$

Cov(i,m)- Covariance of individual, market

σm^2 – Variance of Market

Sharpe's Performance Measure

Sharpe developed a composite performance measure to evaluate mutual funds, which followed especially the capital market line. In this model, performance of the fund is evaluated based on Sharpe Ratio, which is a ratio of return generated by the fund over and above risk free rate of return and the total risk associated with it. According to sharpe measure, it is the total risk of the fund that the investors are concerned about. So, the model evaluates funds on the basis of reward per unit of total risk.

Sharpe's index = $\frac{R_p - R_f}{\sigma_p}$

R_p = Return free Portfolio

σ_p = Standard Deviation of Portfolio

reynor's Performance Measure

reynor measure based on the systematic risk of the mutual fund shows the rates of eturn above risk-free rates during a given time period. This is called reward to olatility ratio. Developed by Jack Treynor, this performance measure evaluates unds on the basis of systematic risk. This Index is a ratio of return generated by the und over and above risk free rate of return, during a given period and systematic isk associated with it (beta).

All risk-averse investor would like to maximize this value. While a high and positive Treynor's Index shows a superior risk-adjusted performance of a fund, a low and negative Treynor's Index is an indication of unfavourable performance.

$$\textbf{Treynor's index} = \frac{R_p - R_f}{\beta}$$

Where, R_p = Return free Portfolio

R_f = Risk free return

β = Unsystematic Risk factor

Jensen Measure:

Jensen has given a different dimension to the portfolio performance. This measure indicates that the realized rate of return is a linear function of risk free rate of return during the given period. Jenson's model proposed another risk adjusted performance measure. This measure was developed by Michael Jenson and is sometimes referred to as the Differential Return Method. This measure involves evaluation of the return that the fund has generated vs the return actually expected out of the fund given the level of it systematic risk. The surplus between the two returns is called Alpha, which measures the performance of a fund compared with the actual return over the period.

ρ – Rf = αρ +βρ (Rm-Rf)+□ρ

ρ- Observed return of the Portfolio

f- Risk Free Return

m- Return of the market index

□ρ- Error term

αρ, βρ- Parameters of the model

Appraisal Ratio

Another measure that could be used for performance evaluation is the appraisal ratio. The appraisal ratio reflects the extra return per unit of unsystematic risk and thus could be used for ranking purposes to understand the relative performance of funds. The appraisal ratio for the market portfolio would be zero. Thus the performance of mutual funds could be compared against the benchmark.

$$\text{Appraisal Ratio} = \frac{\alpha}{\sigma 2}$$

σ_2 = Residual Variance of Portfolio

α = Alpha of the market

1.8 Limitations of the study:

- Due to time constraint only 30 mutual funds was taken for the study
- Analysis was carried with the help of data over a period of only 3 years and less than 3 years in certain cases.
- As the stock market is highly risky and volatile the analysis results cannot be used for longer period.

Chapter 2

Organisation Profile

CHAPTER 2

Organisation profile – India Infoline Limited (IIL)

2.1 History

India Infoline Limeted was founded in 1995 by Mr. Nirmal Jain (Chairman and Managing Director) as an independent business research and information provider. We gradually evolved into a one-stop financial services solutions provider. Our strong management team comprises competent and dedicated professionals.

India Infoline Limeted a pan-India financial services organization across 1,361 business locations and a presence in 428 cities. Our global footprint extends across geographies with offices in New York, Singapore and Dubai. We are listed on the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE).

India Infoline Limeted offer a wide range of services and products comprising broking (retail and institutional equities and commodities), wealth management, credit and finance, insurance, asset management and investment banking.

India Infoline Limeted are registered with the BSE and the NSE for securities trading, MCX, NCDEX and DGCX for commodities trading, CDSL and NSDL as depository participants. We are registered as a Category I merchant banker and are a SEBI registered portfolio manager. We also received the FII license in IIFL Inc.

IIFL Securities Pte Ltd received approval from the Monetary Authority of Singapore to carry out corporate advisory and dealing in securities operations. Two subsidiaries – India Infoline Investment Services and Moneyline Credit Limited – are registered with RBI as non-deposit taking non-banking financial services companies. India infoline Housing Finance Ltd, the housing finance arm, is registered with the National Housing Bank.

MILESTONES

1995

Incorporated as an equity research and consulting firm with a client base that included leading FIIs, banks, consulting firms and corporates.

1999

Restructured the business model to embrace the internet; launched archives.indiainfoline.com mobilised capital from reputed private equity investors.

2000

Commenced the distribution of personal financial products; launched online equity trading; entered life insurance distribution as a corporate agent. Acknowledged by Forbes as 'Best of the Web' and '...must read for investors'.

2004

Acquired commodities broking license; launched Portfolio Management Service.

2005

Listed on the Indian stock markets

2006

Acquired membership of DGCX; launched investment banking services.

2007

Launched a proprietary trading platform; inducted an institutional equities team; formed a Singapore subsidiary; raised over USD 300 mn in the group; launched consumer finance business under the 'Moneyline' brand.

2008

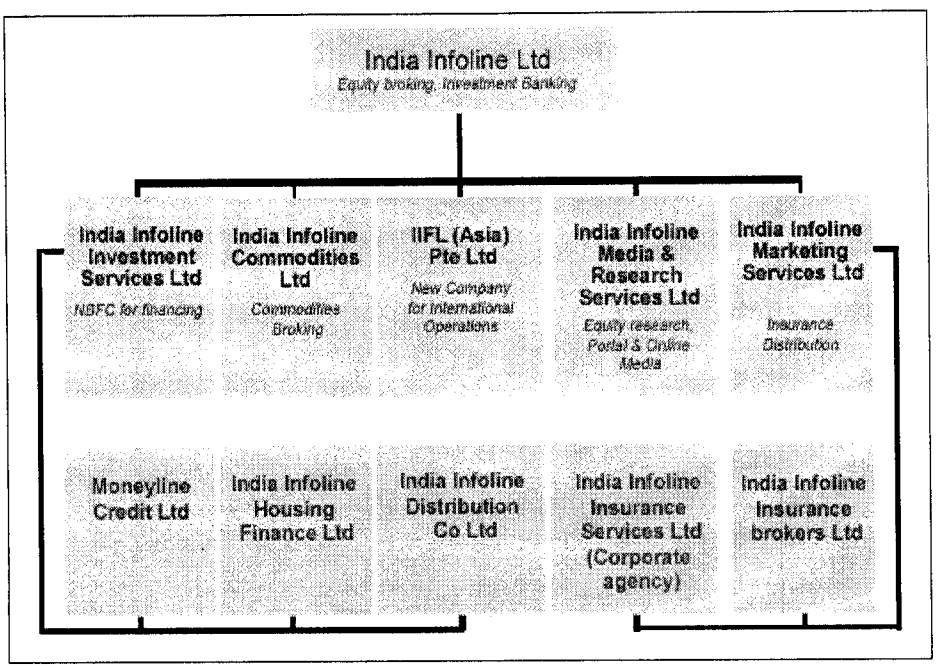
Launched wealth management services under the 'IIFL Wealth' brand; set up India Infoline Private Equity fund; received the Insurance broking license from IRDA; received the venture capital license; received inprinciple approval to sponsor a mutual fund; received 'Best broker- India' award from FinanceAsia; 'Most Improved Brokerage- India' award from Asiamoney.

2009

Received registration for a housing finance company from the National Housing Bank; received 'Fastest growing Equity Broking House - Large firms' in India by Dun & Bradstreet.

COMPANY STRUCTURE

India Infoline Limited is listed on both the leading stock exchanges in India, viz. the Stock Exchange, Mumbai (BSE) and the National Stock Exchange (NSE) and is also a member of both the exchanges. It is engaged in the businesses of Equities broking, Wealth Advisory Services and Portfolio Management Services. It offers broking services in the Cash and Derivatives segments of the NSE as well as the Cash segment of the BSE. It is registered with NSDL as well as CDSL as a depository participant, providing a one-stop solution for clients trading in the equities market. It has recently launched its Investment banking and Institutional Broking



A SEBI authorized Portfolio Manager; it offers Portfolio Management Services to clients. These services are offered to clients as different schemes, which are based on differing investment strategies made to reflect the varied risk-return preferences of clients.

India Infoline Media and Research Services Limited.

The content services represent a strong support that drives the broking, ommodities, mutual fund and portfolio management services businesses. Revenue eneration is through the sale of content to financial and media houses, Indian as ell as global.

It undertakes equities research which is acknowledged by none other than orbes as 'Best of the Web' and '...a must read for investors in Asia'. India Infoline's esearch is available not just over the internet but also on international wire services ke Bloomberg (Code: IILL), Thomson First Call and Internet Securities where India nfoline is amongst the most read Indian brokers.

ndia Infoline Commodities Limited.

India Infoline Commodities Pvt Limited is engaged in the business of commodities broking. Our experience in securities broking empowered us with the requisite skills and technologies to allow us offer commodities broking as a contra-cyclical alternative to equities broking. We enjoy memberships with the MCX and NCDEX, two leading Indian commodities exchanges, and recently acquired membership of DGCX. We have a multi-channel delivery model, making it among the select few to offer online as well as offline trading facilities.

India Infoline Marketing & Services

India Infoline Marketing and Services Limited is the holding company of India Infoline Insurance Services Limited and India Infoline Insurance Brokers Limited

(a) India Infoline Insurance Services Limited is a registered Corporate Agent with the Insurance Regulatory and Development Authority (IRDA). It is the largest Corporate Agent for ICICI Prudential Life Insurance Co Limited, which is India's largest private Life Insurance Company. India Infoline was the first corporate agent to get licensed by IRDA in early 2001

(b) India Infoline Insurance Brokers Limited is a newly formed subsidiary which will carry out the business of Insurance broking. We have applied to IRDA for the insurance broking licence and the clearance for the same is awaited. Post the grant of license, we propose to also commence the general insurance distribution business.

ndia Infoline Investment Services Limited

Consolidated shareholdings of all the subsidiary companies engaged in loans nd financing activities under one subsidiary. Recently, Orient Global, a Singapore-ased investment institution invested USD 76.7 million for a 22.5% stake in India nfoline Investment Services. This will help focused expansion and capital raising in he said subsidiaries for various lending businesses like loans against securities, SME financing, distribution of retail loan products, consumer finance business and nousing finance business. India Infoline Investment Services Private Limited consists of the following step-down subsidiaries.

(a) India Infoline Distribution Company Limited (distribution of retail loan products)
(b) Moneyline Credit Limited (consumer finance)
(c) India Infoline Housing Finance Limited (housing finance)

IIFL (Asia) Pte Limited

IIFL (Asia) Pte Limited is wholly owned subsidiary which has been incorporated in Singapore to pursue financial sector activities in other Asian markets. Further to obtaining the necessary regulatory approvals, the company has been initially capitalized at 1 million Singapore dollars.

2.2 Management Team

Mr. Nirmal Jain - Chairman & Managing Director

Mr. R Venkataraman - Executive Director

The Board of Directors

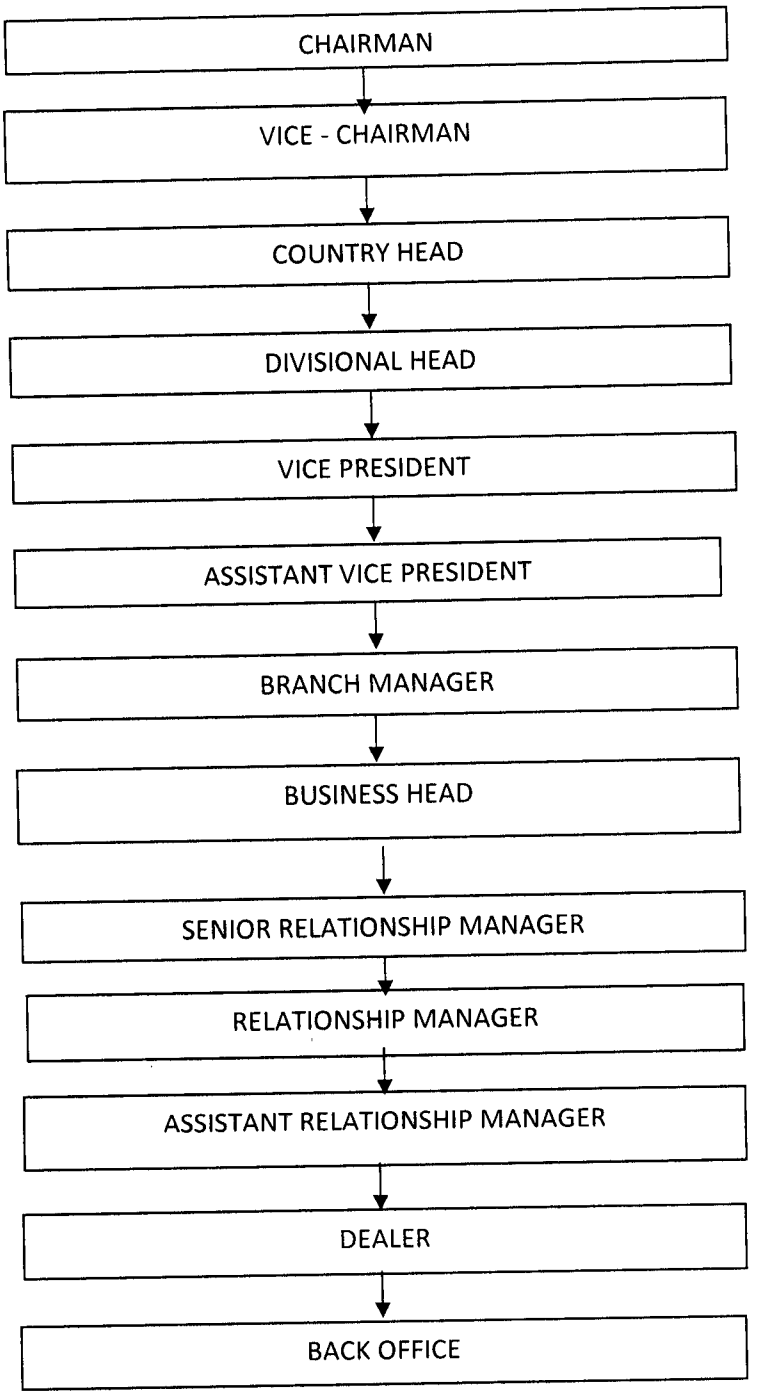
Mr Nilesh Vikamsey

Mr Sat Pal Khattar

Mr Kranti Sinha

Mr Arun K. Purvar

3 ORGANISATION STRUCTURE



Chapter 3

Macro Micro Analysis

Chapter -3

Macro-Micro Analysis

This section describes recent U.S. mutual fund developments ,with $9.6 trillion in assets, the U.S. mutual fund industry remained the largest in the world at year-end 2008. Nevertheless, total net assets fell $2.4 trillion from year-end 2007's level, largely reflecting the sharp drop in equity prices experienced worldwide in 2008. Investor demand for mutual funds slowed in 2008 with net new cash flow to all types of mutual funds amounting to $411 billion, less than half the pace seen in 2007. Investor demand for certain types of mutual funds appeared to be driven in large part by deteriorating financial market conditions, especially in the second half of 2008. Stock mutual funds suffered substantial outflows, while inflows to U.S. government money market funds reached a record high.

U.S. Mutual Fund Assets

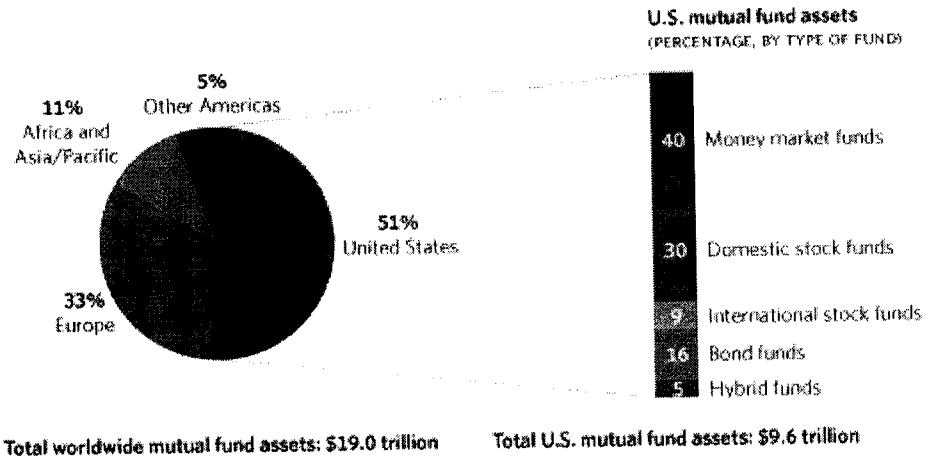
The U.S. mutual fund market, with $9.6 trillion in assets under management as of year-end 2008, remained the largest in the world, accounting for 51 percent of the $19.0 trillion in mutual fund assets worldwide (Figure 2.1).

Investor demand for mutual funds is influenced by a variety of factors, not least of which is funds' ability to assist investors in achieving a wide variety of investment objectives. In particular, U.S. households' reliance on stock, bond, and hybrid mutual funds reflects investor desire to meet long-term personal financial objectives such as preparing for retirement. Furthermore, U.S. households, businesses, and other institutional investors use money market funds as cash management tools because they provide a high degree of liquidity and competitive, short-term yields.

FIGURE 2.1

U.S. HAD THE WORLD'S LARGEST MUTUAL FUND MARKET

Percentage of total net assets, year-end 2008



Sources: Investment Company Institute, European Fund and Asset Management Association, and other national mutual fund associations

Investors' reactions to U.S. and worldwide economic and financial conditions—from year to year and over longer periods—also play an important role in determining demand for specific types of mutual funds and for mutual funds in general.

Money market funds accounted for 40 percent of U.S. mutual fund assets at year-end 2008 (Figure 2.1). Stock mutual funds made up 39 percent of U.S. mutual fund assets, the smallest share since 1994. In 2008, domestic stock funds—those that invest primarily in shares of U.S. corporations—held 30 percent of total industry assets; international stock funds—those that invest primarily in foreign corporations—accounted for another 9 percent. Bond funds (16 percent) and hybrid funds (5 percent) held the remainder of total U.S. mutual fund assets.

Approximately 600 sponsors managed mutual fund assets in the United tates in 2008. Long-run competitive dynamics have prevented any single firm or roup of firms from dominating the market. For example, of the largest 25 fund omplexes in 1985, only 10 remained in this top group in 2008. Another measure is he Herfindahl-Hirschman index, which weighs both the number and relative size of rms in the industry to measure competition. Index numbers below 1,000 indicate hat an industry is unconcentrated. The mutual fund industry has a Herfindahl-Hirschman index number of 433 as of December 2008

In this past decade, however, the percentage of industry assets at larger fund complexes has increased. This is due in part to the acquisition of smaller fund complexes by larger ones. The share of assets managed by the largest 25 firms increased to 75 percent in 2008 from 68 percent in 2000 (Figure 2.2). In addition, the share of assets managed by the largest 10 firms in 2008 was 53 percent, up from the 44 percent share managed by the largest 10 firms in 2000. Nevertheless, the composition of fund complexes within these groups has changed significantly over the period of 2000 to 2008.

FIGURE 2.2

SHARE OF ASSETS AT LARGEST MUTUAL FUND COMPLEXES

Percentage of industry total net assets, year-end, selected years

	1985	1990	1995	2000	2005	2007	2008
Largest 5 complexes	37	34	34	32	37	38	38
Largest 10 complexes	54	53	47	44	48	50	53
Largest 10 complexes	78	75	70	68	70	71	75

Sources: Investment Company Institute, European Fund and Asset Management Association, and other national mutual fund associations

Strong inflows to money market funds, which are fewer in number and have fewer fund sponsors than long-term mutual funds, helped push several fund complexes that specialize in money market funds into the largest groups.

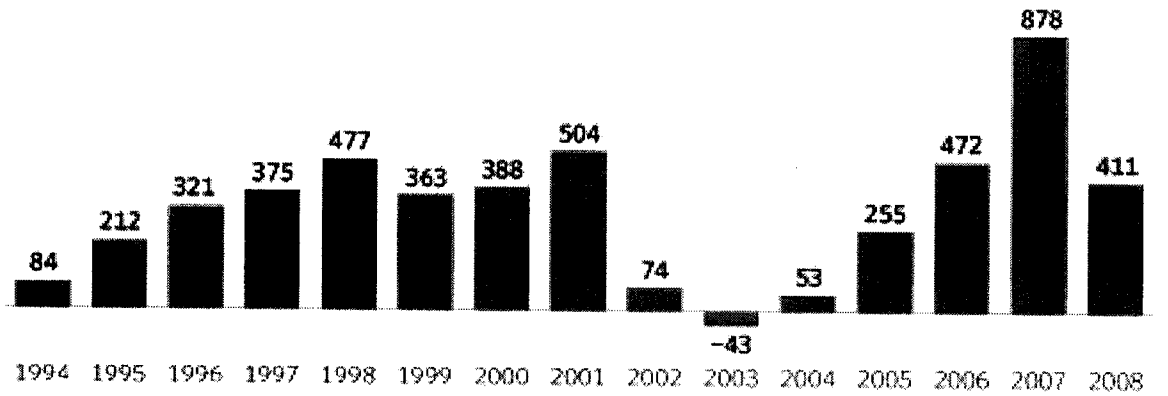
Developments in Mutual Fund Flows

Investor demand for mutual funds slowed substantially in 2008. Net new cash flow to all mutual funds—the dollar value of new fund sales minus redemptions, combined with net exchanges—was $411 billion, less than half the frenetic record pace set in 2007, but comparable to that of 2006 (Figure 2.3). Outflows from stock mutual funds and reduced inflows to taxable bond mutual funds accounted for much of the deceleration.

FIGURE 2.3

Net NEW CASH Flows to Mutual Funds

Billions of dollars, 1994–2008



Sources: Investment Company Institute, European Fund and Asset Management Association, and other national mutual fund associations

Investors withdrew $226 billion, on net, from stock, bond, and hybrid funds in 2008 (Figure 2.4), the first such annual outflow in long-term mutual funds since 1988. Net outflows from load funds amounted to $146 billion with the bulk withdrawn from

front-end-load and back-end-load shares. Back-end-load shares had net outflows for the eighth consecutive year. No-load share classes of stock, bond, and hybrid mutual funds also saw net outflows in 2008, but at a lower rate of $53 billion. Outflows from no-load share classes may have been tempered by mutual fund sales to investors in employer-sponsored retirement plans, which account for a large portion of no-load fund sales, and sales of funds of funds, which often invest in underlying no-load funds.

FIGURE 2.4

Net New Cash Flow to Long-Term Funds by Load Structure

Billions of dollars, 2002–2008

	2002	2003	2004	2005	2006	2007	2008
All long-term funds	$121	$216	$210	$192	$227	$223	-$226
Load	20	48	44	29	33	14	-146
Front-end load1	13	33	49	47	48	20	-98
Back-end load2	-18	-19	-38	-48	-48	-44	-39
Level load3	23	27	21	19	21	25	-12
Other load4	2	8	13	11	12	13	4
No-load5	102	126	130	145	170	185	-53
Retail	53	83	94	78	77	59	-102
Institutional	50	43	36	67	93	126	49
Variable annuities	-2	42	36	18	24	25	-27

Sources: Investment Company Institute, European Fund and Asset Management Association, and other national mutual fund associations

Mutual funds are often classified according to the class of shares that fund sponsors offer to investors, primarily load or no-load classes. Load classes generally serve investors who own fund shares purchased through financial advisers; no-load fund classes usually serve investors who purchase shares without the assistance of a financial adviser or who choose to compensate the financial adviser separately. About two-thirds of all mutual funds offer two or more share classes. Funds that

typically sell through financial advisers offer more than one share class to provide investors with several ways to pay for the services of financial advisers.

Load Share Classes

Load share classes—front-end-load, back-end-load, and level-load shares—usually include a sales load and/or a 12b-1 fee. The sales load and 12b-1 fees are used to compensate financial advisers and other investment professionals for their services.

Front-end-load shares, which are predominantly Class A shares, represent the traditional means of paying for securities-related assistance. Front-end-load shares generally charge a sales load at the time of the purchase, which is a percentage of the sales price or offering price. Front-end-load shares also often have a 12b-1 fee of about 0.25 percent. Front-end-load shares are sometimes used in employer-sponsored retirement plans, but fund sponsors typically waive the sales load for purchases made through such retirement plans.

Back-end-load shares, which are primarily Class B shares, typically do not have a front-end load. Investors using back-end-load shares pay for services provided by financial advisers through a combination of an annual 12b-1 fee and a contingent deferred sales load (CDSL). The CDSL is triggered if fund shares are redeemed before a given number of years of ownership. The CDSL decreases the longer the investor owns the shares and reaches zero typically after shares have been held six or seven years. After six to eight years, back-end-load shares usually convert to a share class with a lower 12b-1 fee. For example, Class B shares typically convert to Class A shares after a specified number of years.

Level-load shares, which include Class C shares, generally do not have a front-end load. Investors in this kind of share class compensate financial advisers with a combination of an annual 12b-1 fee (typically 1 percent) and a CDSL (also often 1 percent) that shareholders pay if they sell their shares within the first year after purchase.

No-Load Share Classes

No-load share classes have no front-end load or CDSL, and have a 12b-1 fee of 0.25 percent or less. Originally, no-load share classes were offered by mutual fund sponsors that sold directly to investors. Now, investors can purchase no-load funds through employer-sponsored retirement plans, mutual fund supermarkets, discount brokerage firms, and bank trust departments as well as directly from mutual fund sponsors. Some financial advisers who charge investors separately for their services rather than through a load or 12b-1 fee also use no-load share classes

HISTORY OF THE INDIAN MUTUAL FUND INDUSTRY:

The mutual fund industry in India started in 1963 with the formation of Unit Trust of India, at the initiative of the Government of India and Reserve Bank. The history of mutual funds in India can be broadly divided into four phases

First Phase – 1964-87

Unit Trust of India (UTI) was established on 1963 by an Act of Parliament. It was set up by the Reserve Bank of India and functioned under the Regulatory and administrative control of the Reserve Bank of India. In 1978 UTI was de-linked from the RBI and the Industrial Development Bank of India (IDBI) took over the regulatory and administrative control in place of RBI. The first scheme launched by UTI was Unit Scheme 1964. At the end of 1988 UTI had Rs.6,700 crores of assets under management.

Second Phase – 1987-1993 (Entry of Public Sector Funds)

1987 marked the entry of non- UTI, public sector mutual funds set up by public sector banks and Life Insurance Corporation of India (LIC) and General Insurance Corporation of India (GIC). SBI Mutual Fund was the first non- UTI Mutual Fund established in June 1987 followed by Can bank Mutual Fund (Dec 87), Punjab National Bank Mutual Fund (Aug 89), Indian Bank Mutual Fund (Nov 89), Bank of

ndia (Jun 90), Bank of Baroda Mutual Fund (Oct 92). LIC established its mutual fund n June 1989 while GIC had set up its mutual fund in December 1990. At the end of 1993, the mutual fund industry had assets under management of Rs.47, 004 crores

Third Phase – 1993-2003 (Entry of Private Sector Funds)

With the entry of private sector funds in 1993, a new era started in the Indian mutual fund industry, giving the Indian investors a wider choice of fund families. Also, 1993 was the year in which the first Mutual Fund Regulations came into being, under which all mutual funds, except UTI were to be registered and governed. The erstwhile Kothari Pioneer (now merged with Franklin Templeton) was the first private sector mutual fund registered in July 1993. The 1993 SEBI (Mutual Fund) Regulations were substituted by a more comprehensive and revised Mutual Fund Regulations in 1996. The industry now functions under the SEBI (Mutual Fund) Regulations 1996. The number of mutual fund houses went on increasing, with many foreign mutual funds setting up funds in India and also the industry has witnessed several mergers and acquisitions. As at the end of January 2003, there were 33 mutual funds with total assets of Rs. 1,21,805 crores. The Unit Trust of India with Rs.44,541 crores of assets under management was way ahead of other mutual funds.

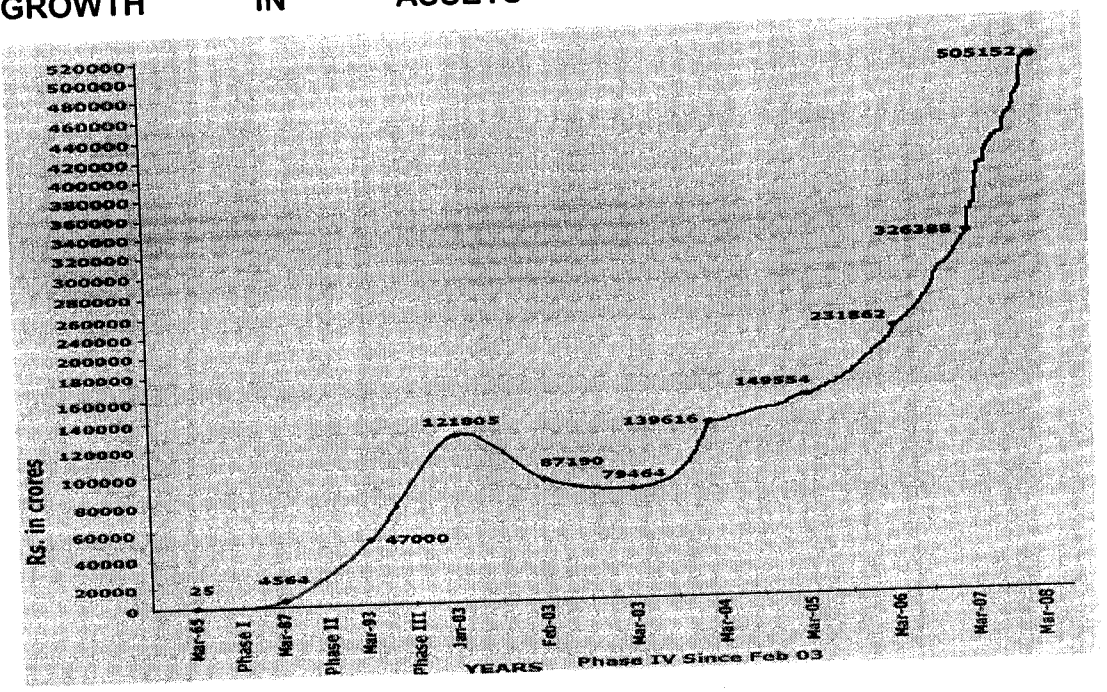
Fourth Phase – Since February 2003

In February 2003, following the repeal of the Unit Trust of India Act 1963 UTI was bifurcated into two separate entities. One is the Specified Undertaking of the Unit Trust of India with assets under management of Rs.29,835 crores as at the end of January 2003, representing broadly, the assets of US 64 scheme, assured return and certain other schemes. The Specified Undertaking of Unit Trust of India, functioning under an administrator and under the rules framed by Government of India and does not come under the purview of the Mutual Fund Regulations. The second is the UTI Mutual Fund Ltd, sponsored by SBI, PNB, BOB and LIC. It is registered with SEBI and functions under the Mutual Fund Regulations. With the bifurcation of the erstwhile UTI which had in March 2000 more than Rs.76,000 crores of assets under management and with the setting up of a UTI Mutual Fund, conforming to the SEBI Mutual Fund Regulations, and with recent mergers taking

lace among different private sector funds, the mutual fund industry has entered its current phase of consolidation and growth.

The graph indicates the growth of assets over the years.

GROWTH IN ASSETS UNDER MANAGEMENT



Source: AMFI

Chapter 4

Data Analysis and Interpretation

CHAPTER-4

DATA ANALYSIS AND INTERPRETATION

.1 PUBLIC EQUITY SCHEMES

'able No.4.1.1 Beta Value of public equity schemes

FUND	BETA	RANK
SBI Magnum Multiplier Plus 93 - Growth	0.412	4
UTI Masterplus Unit Scheme 91 - Growth	0.135	2
SBI Magnum Tax Gain Scheme 93 - Growth	0.3367	3
UTI Growth Sector Fund - Services - Growth	0.1233	1
SBI Magnum Sector Umbrella - Contra Fund - Growth	0.4387	5

INTERPRETATION

The above table 4.1.1 interprets that, UTI Growth Sector Fund - Services - Growth has the lowest value of 0.1233 and holds 1st position. UTI Masterplus Unit Scheme 91 - Growth rank value of 0.135 and holds2nd position when compared to other funds. SBI Magnum Tax Gain Scheme 93 - Growth has the beta value of 0.3367 which holds 3rd rank. SBI Magnum Multiplier Plus 93 - Growth holds rank 4th with the beta value of 0.00382157. SBI Magnum Sector Umbrella - Contra Fund - Growth rank 5th position with the beta value of 0.4387.

INFERENCE

The above table infers that while analyzing the beta value for the funds under public equity schemes all the funds had a minimal risk. Out of the lot the UTI Growth Sector Fund - Services - Growth Option had the lowest risk of 0.1233 and tops the ranking. This suggests the fact that this particular fund has beenwell diversified when compared to others.

able No.4.1.2 SHARPE RATIO Value of public equity schemes

FUND	SHARPE	Rank
SBI Magnum Multiplier Plus 93 - Growth	0.1671	2
UTI Masterplus Unit Scheme 91 - Growth	0.0601	4
SBI Magnum Tax Gain Scheme 93 - Growth	0.0908	3
UTI Growth Sector Fund - Services - Growth	0.0461	5
SBI Magnum Sector Umbrella - Contra Fund - Growth	0.1723	1

INTERPRETATION

From the above table 4.1.2 it is interpreted that SBI Magnum Sector Umbrella - Contra Fund - Growth holds the 1st rank with the Sharpe Ratio of 0.1723 which implies the superior performance of the fund when compared to other funds. SBI Magnum Multiplier Plus 93 - Growth has the ratio of 0.1671 and is ranked 2 among others. SBI Magnum Tax Gain Scheme 93 - Growth 3rd with the Sharpe Ratio of 0.0908 which implies that average performance of fund. UTI Masterplus Unit Scheme 91 - Growth has the Sharpe ratio of 0.0601 and occupies the 4th position. UTI Growth Sector Fund - Services - Growth occupies the last position as the sharpe ratio of 0.0461 with the 5th rank

INFERENCE

The above table infers that while analyzing the Sharpe Ratio for the funds under public Equity schemes, SBI Magnum Sector Umbrella - Contra Fund - Growth has a higher return of 0.1723 for a given level of risk and leads the way when compared with other funds in the sector

Table No.4.1.3 TREYNOR RATIO Value of public equity schemes

FUND	TREYNOR	RANK
SBI Magnum Multiplier Plus 93 - Growth	0.0339	3
UTI Masterplus Unit Scheme 91 - Growth	0.036	2
SBI Magnum Tax Gain Scheme 93 - Growth	0.229	1
UTI Growth Sector Fund - Services - Growth	0.0333	5
SBI Magnum Sector Umbrella - Contra Fund - Growth	0.0336	4

INTERPRETATION

From the above table 4.1.3 it is interpreted that SBI Magnum Tax Gain Scheme 93 - Growth hold the 1st rank with the Treynor ratio of 0.229 which implies that performance was good when compared to other funds. UTI Masterplus Unit Scheme 91 - Growth with the ratio of 0.036 holds 2nd rank. SBI Magnum Multiplier Plus 93 - Growth with the Treynor ratio of 0.0339 ranks 3rd. SBI Magnum Sector Umbrella - Contra Fund - Growth holds 4th rank with Treynor ratio of 0.0336 has the little less performance when compared to other fund. UTI Growth Sector Fund - Services - Growth holds the 5th rank and has the Treynor ratio of 0.0333.

INFERENCE

The above table infers that while analyzing the Treynor Ratio for the funds under publis Equity schemes, SBI Magnum Tax Gain Scheme 93 - Growth gives a much higher return of 0.229 for a given level of risk and is on the top of other funds in the sector.

Table No.4.1.4 JENSEN RATIO Value of public equity schemes

FUND	JENSEN	RANK
SBI Magnum Multiplier Plus 93 - Growth	0.0078	2
UTI Masterplus Unit Scheme 91 - Growth	0.0028	3
SBI Magnum Tax Gain Scheme 93 - Growth	0.0026	4
UTI Growth Sector Fund - Services - Growth	0.0022	5
SBI Magnum Sector Umbrella - Contra Fund - Growth	0.0082	1

INTERPRETATION

From the above table 4.1.4 it is interpreted that SBI Magnum Sector Umbrella - Contra Fund - Growth has the highest Jenson Ratio of 0.0082 and ranks 1st when compared to other fund. SBI Magnum Multiplier Plus 93 - Growth has the Jenson Ratio of 0.0078 and holds the 2nd rank. Similarly other funds and their ranks.

INFERENCE

The table above portrays the fact that funds taken under the -public Equity schemes all have positive returns over the market portfolio. Among the five funds SBI Magnum Sector Umbrella - Contra Fund - Growth has the highest return and tops the rankings.

Table No.4.1.5 APPRAISAL RATIO Value of public equity schemes

FUND	APPRAISAL	RANK
SBI Magnum Multiplier Plus 93 - Growth	1.2388	1
UTI Masterplus Unit Scheme 91 - Growth	0.625	3
SBI Magnum Tax Gain Scheme 93 - Growth	0.5051	4
UTI Growth Sector Fund - Services - Growth	0.4448	5
SBI Magnum Sector Umbrella - Contra Fund - Growth	1.2295	2

INTERPRETATION

From the above table 4.1.5 it is interpreted that SBI Magnum Multiplier Plus 93 - Growth has the highest Appraisal Ratio of 1.2388 and holds the 1st position which implies that the funds return performance is greater than the market performance. SBI Magnum Sector Umbrella - Contra Fund - Growth hold the 2nd position with the ratio of 1.2295. UTI Masterplus Unit Scheme 91 - Growth has the Appraisal Ratio of 0.625and holds 3rd rank. SBI Magnum Tax Gain Scheme 93 - Growth with the appraisal ratio of 0.5051had occupied 4th rank when compared to others. UTI Growth Sector Fund - Services - Growth has the Appraisal Ratio of 0.4448 which implies funds performance is lower than the other funds.

INFERENCE

The above table infers that while analyzing the Appraisal Ratio for the funds under public Equity schemes, SBI Magnum Multiplier Plus 93 - Growth have the highest appraisal ratio of 1.2388 when compared to other funds in this sector.

4.2 PUBLIC DEBT SCHEMES

Table No.4.2.1 BETA Value of public debt schemes

FUND	Beta	Rank
UTI Treasury Advantage Fund - Growth	-0.0273	5
UTI Floating Rate Fund - STP - Growth	-0.0101	4
LIC Monthly Income Plan - Cumulative	0.0799	2
Canara Robeco Monthly Income Plan - Growth	0.1241	3
UTI Bond Fund - Growth	0.0139	1

INTERPRETATION

From the above table 4.2.1 It can be interpreted that UTI Bond Fund - Growth has the lowest Beta value 0.0139 which implies that the Systematic risk is lower. LIC Monthly Income Plan - Cumulative of 0.0799 and holds the 2nd position when compared to other funds. Similarly the other fund's rank and beta values are given.

INFERENCE

The above table 4.2.1 infers that while analyzing the beta value for the funds under public debt schemes all the funds had a lower risk. Out of the lot UTI Bond Fund - Growth had the lowest risk of 0.0139 and tops the ranking. This suggests the fact that this particular fund has been well diversified when compared to others and thus provides lower risk.

Table No.4.2.2 SHARPE RATIO of public debt schemes

FUND	SHARPE RATIO	RANK
UTI Treasury Advantage Fund - Growth	0.0608	5
UTI Floating Rate Fund - STP - Growth	0.4229	1
LIC Monthly Income Plan - Cumulative	0.3589	2
Canara Robeco Monthly Income Plan - Growth	0.1835	4
UTI Bond Fund - Growth	0.2358	3

INTERPRETATION

From the above table 4.2.2. it can be interpreted that UTI Floating Rate Fund - STP - Growth has the higher Sharpe Ratio of 0.4229 and holds 1st rank and followed by LIC Monthly Income Plan – Cumulative with a Sharpe ratio of 0.3589 holds 2nd rank . Similarly the other fund's rank and Sharpe ratios are given.

INFERENCE

The above table infers that while analyzing the Sharpe Ratio for the funds under public debt schemes , UTI Floating Rate Fund - STP - Growth has a higher return of 0.4229 for a given level of risk and ranks 1st when compared with other funds in the sector.

Table No.4.2.3 TREYNOR RATIO of public debt schemes

FUND	TREYNOR RATIO	RANK
UTI Treasury Advantage Fund - Growth	-0.1765	4
UTI Floating Rate Fund - STP - Growth	-0.4176	5
LIC Monthly Income Plan - Cumulative	0.0786	2
Canara Robeco Monthly Income Plan - Growth	0.0426	3
UTI Bond Fund - Growth	0.3043	1

INTERPRETATION

From the above table 4.2.3., it can be interpreted that UTI Bond Fund - Growth has the highest positive Treynor Ratio of 0.3043 and followed by LIC Monthly Income Plan - Cumulative with a Treynor ratio of 0.0786. Similarly the other fund's rank and Treynor ratios are given.

INFERENCE

The above table infers that while analyzing the Treynor Ratio for the funds under public debt schemes, UTI Bond Fund - Growth gives a much higher return of 0.3043 for a given level of risk and is on the top of other funds in the sector.

Table No.4.2.4 JENSEN RATIO of public debt schemes

FUND	JENSEN RATIO	RANK
UTI Treasury Advantage Fund - Growth	0.0052	1
UTI Floating Rate Fund - STP - Growth	0.0043	3
LIC Monthly Income Plan - Cumulative	0.005	2
Canara Robeco Monthly Income Plan - Growth	0.0034	5
UTI Bond Fund - Growth	0.004	4

INTERPRETATION

From the above table 4.2.4. It can be interpreted that UTI Treasury Advantage Fund - Growth has the positive Jenson ratio of 0.0052 and LIC Monthly Income Plan - Cumulative fund has a Jenson ratio of 0.005 and holds the 2nd position when compared to other funds. Similarly the other fund's rank and Jenson ratios are given.

INFERENCE

The table above portrays the fact that funds taken under the public debt schemes all have positive returns over the market portfolio. Among the five funds UTI Treasury Advantage Fund - Growth has the highest return and tops the rankings.

Table No.4.2.5 APPRAISAL RATIO of public debt schemes

FUND	APPRAISALRATIO	RANK
UTI Treasury Advantage Fund - Growth	1.0729	5
UTI Floating Rate Fund - STP - Growth	58.2969	1
LIC Monthly Income Plan - Cumulative	21.0604	2
Canara Robeco Monthly Income Plan - Growth	8.6844	4
UTI Bond Fund - Growth	16.876	3

INTERPRETATION

From the above table 4.2.5. It can be interpreted that UTI Floating Rate Fund - STP - Growth has the positive appraisal ratio of 58.2969 and holds 1st positon and LIC Monthly Income Plan - Cumulative has an appraisal ratio of 21.0604 and holds the 2nd position when compared to other funds. Similarly the other fund's rank and appraisal ratios are given.

INFERENCE

The above table infers that while analyzing the Appraisal Ratio for the funds under public debt schemes , UTI Floating Rate Fund - STP - Growth have the appraisal ratio of 58.2969 where as other fund have the less values. So this fund ranks top when compared to other fund

4.3 PUBLIC BALANCED SCHEMES

Table No.4.3.1 BETA value of public balanced schemes

FUND	BETA	RANK
UTI Balanced Fund - Growth	0.2884	1
Canara Robeco Balance - Growth	0.4682	5
LIC Balanced - Plan C (Growth)	0.3301	3
SBI Magnum Balanced Fund - Growth	0.3353	4
Baroda Pioneer Balance Fund - Growth	0.3187	2

INTERPRETATION

From the above table 4.3.1. It can be interpreted that UTI Balanced Fund - Growth has the lowest Beta value of 0.2884 which implies that the Systematic risk is lower. Baroda Pioneer Balance Fund - Growth of 0.3187 and holds the 2nd position when compared to other funds. Similarly the other fund's rank and beta values are given.

INFERENCE

The above table 4.3.1 infers that while analyzing the beta value for the funds under public balanced schemes all the funds had a lower risk. Out of the lot the UTI Balanced Fund - Growth had the lowest risk of 0.2884 and tops the ranking. This suggests the fact that this particular fund has been well diversified when compared to others and thus provides lower risk.

Table No.4.3.2 SHARPE RATIO of public balanced schemes

FUND	SHARPE RATIO	RANK
UTI Balanced Fund - Growth	0.1675	2
Canara Robeco Balance - Growth	0.1889	1
LIC Balanced - Plan C (Growth)	0.1104	4
SBI Magnum Balanced Fund - Growth	0.1611	3
Baroda Pioneer Balance Fund - Growth	0.0891	5

INTERPRETATION

From the above table 4.3.2. it can be interpreted that Canara Robeco Balance - Growth has the Sharpe Ratio of 0.1889 has hold 1st position and followed by UTI Balanced Fund - Growth with a Sharpe ratio of 0.1675 old hold second position . Similarly the other fund's rank and Sharpe ratios are given.

INFERENCE

The above table infers that while analyzing the Sharpe Ratio for the funds under public balanced schemes, Canara Robeco Balance - Growth has a higher return of 0.1889 for a given level of risk and ranks 1st when compared with other funds in the sector.

Table No.4.3.3 TREYNOR RATIO of public balanced schemes

FUND	TREYNOR RATIO	RANK
UTI Balanced Fund - Growth	0.0353	1
Canara Robeco Balance - Growth	0.0324	3
LIC Balanced - Plan C (Growth)	0.0239	4
SBI Magnum Balanced Fund - Growth	0.0334	2
Baroda Pioneer Balance Fund - Growth	0.0197	5

INTERPRETATION

From the above table 4.3.3., it can be interpreted that UTI Balanced Fund - Growth has the highest Treynor Ratio of 0.0353 and followed by SBI Magnum Balanced Fund - Growth with a Treynor ratio of 0.0334. Similarly the other fund's rank and Treynor ratios are given.

INFERENCE

The above table infers that while analyzing the Treynor Ratio for the funds under public balanced schemes, UTI Balanced Fund - Growth gives a much higher return of 0.0353 for a given level of risk and is on the top of other funds in the sector.

Table No.4.3.4 JENSEN RATIO of public balanced schemes

FUND	JENSEN RATIO	RANK
UTI Balanced Fund - Growth	0.0058	3
Canara Robeco Balance - Growth	0.0081	1
LIC Balanced - Plan C (Growth)	0.0029	4
SBI Magnum Balanced Fund - Growth	0.0062	2
Baroda Pioneer Balance Fund - Growth	0.0015	5

INTERPRETATION

From the above table 4.3.4. It can be interpreted that Canara Robeco Balance - Growth has the positive Jenson ratio of 0.0081 and SBI Magnum Balanced Fund - Growth has a Jenson ratio of 0.0062 and holds the 2nd position when compared to other funds. Similarly the other fund's rank and Jenson ratios are given.

INFERENCE

The table above portrays the fact that funds taken under the public balanced schemes all have positive returns over the market portfolio. Among the five funds Canara Robeco Balance - Growth has the highest return and tops the rankings.

Table No.4.3.5 APPRAISAL RATIO of public balanced schemes

FUND	APPRAISAL RATIO	RANK
UTI Balanced Fund - Growth	0.8659	3
Canara Robeco Balance - Growth	1.3865	2
LIC Balanced - Plan C (Growth)	0.7693	4
SBI Magnum Balanced Fund - Growth	1.4796	1
Baroda Pioneer Balance Fund - Growth	0.5055	5

INTERPRETATION

From the above table 4.3.5. It can be interpreted that SBI Magnum Balanced Fund - Growth has the positive appraisal ratio of 1.4796 and Canara Robeco Balance - Growth has an appraisal ratio of -1.3865 and holds the 2nd position when compared to other funds. Similarly the other fund's rank and appraisal ratios are given.

INFERENCE

The above table infers that while analyzing the Appraisal Ratio for the funds under public balanced schemes , SBI Magnum Balanced Fund - Growth have the appraisal ratio of 1.4796 where as other fund have the negative values. So this fund ranks top when compared to other funds.

4.4 PRIVATE EQUITY SCHEMES :

Table No.4.4.1 BETA of Private equity schemes

FUND	BETA	RANK
Benchmark Derivative Fund - Growth	-0.0074	5
Reliance Growth - Institutional Plan - Growth	0.3824	1
Reliance Growth - Growth	0.4615	3
Franklin India Prima Fund - Growth	0.4797	4
Birla Sun Life Equity Fund - Growth	0.4171	2

INTERPRETATION

From the above table 4.4.1. It can be interpreted that Reliance Growth - Institutional Plan - Growth has the lowest Beta value of 0.3824 and Birla Sun Life Equity Fund - Growth has the next beta value of 0.4171 and holds the 2nd position when compared to other funds. Similarly the other fund's rank and beta values are given.

INFERENCE

The above table infers that while analyzing the beta value for the funds under private equity schemes all the funds had a minimal risk. Out of the lot the Reliance Growth - Institutional Plan - Growth had the lowest risk of 0.3824 and tops the ranking. This suggests the fact that this particular fund has been well diversified when compared to others and thus provides lowest risk.

Table No.4.4.2 SHARPE RATIO of Private equity schemes

FUND	Sharpe Ratio	RANK
Benchmark Derivative Fund - Growth	1.421	1
Reliance Growth - Institutional Plan - Growth	-0.0762	5
Reliance Growth - Growth	0.1948	2
Franklin India Prima Fund - Growth	0.1264	4
Birla Sun Life Equity Fund - Growth	0.1458	3

INTERPRETATION

From the above table 4.4.2 interprets that Benchmark Derivative Fund - Growth has the highest ratio 1.421 which ranks 1st position when compared to other funds. Reliance Growth - Growth which holds 2nd rank with Sharpe Ratio of 0.1948 and 3rd position is occupied by the Birla Sun Life Equity Fund - Growth with the Sharpe Ratio of 0.1458. Franklin India Prima Fund - Growth has the Sharpe Ratio of 0.1264 with 4th rank when compared to other fund. Last the Reliance Growth - Institutional Plan - Growth which has the negative Sharpe Ratio of -0.0762 and holds the 5th Position.

INFERENCE

The above table infers that while analyzing the Sharpe Ratio for the funds under private equity schemes, Benchmark Derivative Fund - Growth has a higher return of 1.421 for a given level of risk and ranks 1st when compared with other funds in the sector.

Table No.4.4.3 TREYNOR RATIO of Private equity scheme

FUND	Treynor Ratio	RANK
Benchmark Derivative Fund - Growth	-0.4472	5
Reliance Growth - Institutional Plan - Growth	-0.0407	4
Reliance Growth - Growth	0.0384	1
Franklin India Prima Fund - Growth	0.0255	3
Birla Sun Life Equity Fund - Growth	0.0313	2

INTERPRETATION

From the above table 4.4.3 interprets that Benchmark Derivative Fund - Growth has the highest Sharpe Ratio of 0.0384 and holds the 1st rank. Birla Sun Life Equity Fund - Growth occupies the 2nd rank with the Treynor Ratio of 0.0313 and 3rd position occupies by Franklin India Prima Fund - Growth with Treynor Ratio of 0.0255. Similarly the other fund's rank and Treynor ratios are given.

INFERENCE

The above table infers that while analyzing the Treynor Ratio for the funds under private equity schemes Benchmark Derivative Fund - Growth gives a much return of 0.0384 for a given level of risk and is on the top of other funds in the sector.

Table No.4.4.4 JENSEN RATIO of Private equity schemes

FUND	Jensen Ratio	RANK
Benchmark Derivative Fund - Growth	0.0034	4
Reliance Growth - Institutional Plan - Growth	-0.0213	5
Reliance Growth - Growth	0.0108	1
Franklin India Prima Fund - Growth	0.0051	3
Birla Sun Life Equity Fund - Growth	0.0068	2

INTERPRETATION

From the above table 4.4.4 interprets that Reliance Growth - Growth holds the 1st position with Jenson Ratio 0.0108. Birla Sun Life Equity Fund - Growth which holds Jenson Ratio of 0.0068 and occupies the 2nd rank. Similarly the other fund's rank and beta values are given.

INFERENCE

The table above portrays the fact that funds taken under the private equity schemes all have positive returns over the market portfolio. Among the five funds Reliance Growth - Growth has the highest return and tops the rankings.

Table No.4.4.5 APPRAISAL RATIO of Private equity schemes

FUND	Appraisal Ratio	RANK
Benchmark Derivative Fund - Growth	895.6617	1
Reliance Growth - Institutional Plan - Growth	-0.4645	5
Reliance Growth - Growth	1.4024	2
Franklin India Prima Fund - Growth	0.6214	4
Birla Sun Life Equity Fund - Growth	0.9561	3

INTERPRETATION

From the above table 4.4.5., it can be interpreted that Benchmark Derivative Fund - Growth has the highest Appraisal ratio of 895.6617 and Reliance Growth - Growth has the next value of 1.4024 and holds the 2nd position when compared to other funds. Similarly the other fund's rank and beta values are given.

INFERENCE

The above table infers that while analyzing the Appraisal Ratio for the funds under Equity tax saving sector , DSP Merrill Lynch Technology Fund-Gowth have the appraisal ratio of 1.885122018 where as other fund have the minimum values. So this fund ranks top when compared to other funds

4.5 PRIVATE DEBT SCHEMES

Table No.4.5.1 BETA VALUE of Private debt schemes

FUND	BETA	RANK
Templeton India Short Term Income Plan - Growth	0.0085	2
IDFC Savings Advantage Fund - Growth	-0.0028	3
DSP BlackRock Money Manager Fund - Growth	-0.0029	4
Reliance Money Manager Fund - Retail - Growth	0.0007	1
Tata Treasury Manager Fund - RIP - Growth	-0.0031	5

INTERPRETATION

From the above table 4.5.1 interprets that Reliance Money Manager Fund - Retail - Growth has the lowest Beta value of 0.0007 and Templeton India Short Term Income Plan - Growth has the next beta value of 0.0085 and holds the 2nd position when compared to other funds. Similarly the other fund's rank and beta values are given.

INFERENCE

The above table infers that while analyzing the beta value for the funds under private debt schemes all the funds had a minimal risk. Out of the lot the Reliance Money Manager Fund - Retail - Growth had the lowest risk of 0.0007 and tops the ranking. This suggests the fact that this particular fund has been well diversified when compared to others and thus provides lowest risk.

Table No.4.5.2 SHARPE RATIO of Private debt schemes

FUND	Sharpe ratio	RANK
Templeton India Short Term Income Plan - Growth	1.2793	5
IDFC Savings Advantage Fund - Growth	2.1158	2
DSP BlackRock Money Manager Fund - Growth	2.0919	3
Reliance Money Manager Fund - Retail - Growth	3.4688	1
Tata Treasury Manager Fund - RIP - Growth	2.0773	4

INTERPRETATION

From the above table 4.5.2 interprets that Reliance Money Manager Fund - Retail - Growth has the highest Sharpe ratio of 3.4688 and holds the 1st position which implies that the funds return performance is greater than the market performance. IDFC Savings Advantage Fund - Growth which holds the Sharpe ratio of 2.1158 and occupies the 2nd rank. Similarly the other fund's rank and Sharpe ratios are given.

INFERENCE

The above table infers that while analyzing the Sharpe ratio for the funds under private debt schemes , Reliance Money Manager Fund - Retail - Growth have the Sharpe ratio of 3.4688 where as other fund have the minimum values. So this fund ranks top when compared to other funds

Table No.4.5.3 TREYNOR RATIO of Private debt schemes

FUND	Treynor ratio	RANK
Templeton India Short Term Income Plan - Growth	0.8329	2
IDFC Savings Advantage Fund - Growth	-1.0406	3
DSP BlackRock Money Manager Fund - Growth	-1.3443	4
Reliance Money Manager Fund - Retail - Growth	4.0272	1
Tata Treasury Manager Fund - RIP - Growth	-1.4424	5

INTERPRETATION

From the above table 4.5.3 it interprets that Reliance Money Manager Fund - Retail - Growth has the highest Treynor ratio of 4.0272 and holds the 1st position which implies that the funds return performance is greater than the market performance. Templeton India Short Term Income Plan - Growth which holds the Treynor ratio of 0.8329 and occupies the 2nd rank. Similarly the other fund's rank and Treynor ratios are given.

INFERENCE

The above table infers that while analyzing the Treynor ratio for the funds under private debt schemes , Reliance Money Manager Fund - Retail - Growth have the Treynor ratio of 4.0272 where as other fund have the minimum values. So this fund ranks top when compared to other fund

Table No.4.5.4 JENSEN RATIO of Private debt schemes

FUND	Jensen ratio	RANK
Templeton India Short Term Income Plan - Growth	0.0069	1
IDFC Savings Advantage Fund - Growth	0.0029	4
DSP BlackRock Money Manager Fund - Growth	0.0038	3
Reliance Money Manager Fund - Retail - Growth	0.0028	5
Tata Treasury Manager Fund - RIP - Growth	0.0045	2

INTERPRETATION

From the above table 4.5.4 it interprets that Templeton India Short Term Income Plan - Growth has the highest Jensen ratio of 0.0069 and holds the 1st position which implies that the funds return performance is greater than the market performance. Tata Treasury Manager Fund - RIP - Growth which holds the Jensen ratio of 0.0045 and occupies the 2nd rank. Similarly the other fund's rank and Jensen ratios are given.

INFERENCE

The above table infers that while analyzing the Jensen ratio for the funds under private debt schemes , Templeton India Short Term Income Plan - Growth have the Jensen ratio of 0.0069 where as other fund have the minimum values. So this fund ranks top when compared to other funds

Table No.4.5.5 APPRAISAL RATIO of Private debt schemes

FUND	Appraisal ratio	RANK
Templeton India Short Term Income Plan - Growth	273.73	5
IDFC Savings Advantage Fund - Growth	2276.8	2
DSP BlackRock Money Manager Fund - Growth	1587.26	3
Reliance Money Manager Fund - Retail - Growth	6199.83	1
Tata Treasury Manager Fund - RIP - Growth	1244.555	4

INTERPRETATION

From the above table 4.5.5 interprets that Reliance Money Manager Fund - Retail - Growth has the highest Appraisal Ratio of 6199.83 and holds the 1st position which implies that the funds return performance is greater than the market performance. IDFC Savings Advantage Fund - Growth which holds the Appraisal ratio of 2276.8 and occupies the 2nd rank. Similarly the other fund's rank and appraisal ratios are given.

INFERENCE

The above table infers that while analyzing the Appraisal Ratio for the funds under private debt schemes , Reliance Money Manager Fund - Retail - Growth have the appraisal ratio of 6199.83 where as other fund have the minimum values. So this fund ranks top when compared to other funds.

4.6 PRIVATE BALANCED SCHEMES

Table No.4.6.1 BETA VALUEof Private balanced schemes

FUND	Beta	RANK
Birla Sun Life 95 - Growth	0.3128	4
HDFC Prudence Fund - Growth	0.0095	1
Tata Balanced Fund - Growth	0.3207	5
Escorts Balanced Fund - Growth	0.3056	3
DSP BlackRock Balanced Fund - Growth	0.2284	2

INTERPRETATION

From the above table 4.6.1 interprets that HDFC Prudence Fund - Growth has the lowest Beta value of 0.0095and DSP BlackRock Balanced Fund - Growth has the next beta value of -0.2284 and holds the 2nd position when compared to other funds. Similarly the other fund's rank and beta values are given.

INFERENCE

The above table infers that while analyzing the beta value for the funds under private balanced schemes all the funds had a minimal risk. Out of the lot the HDFC Prudence Fund - Growth had the lowest risk of 0.0095 and tops the ranking. This suggests the fact that this particular fund has been well diversified when compared to others and thus provides lowest risk.

Table No.4.6.2 SHARPE RATIO of Private balanced schemes

FUND	Sharpe ratio	RANK
Birla Sun Life 95 - Growth	0.2118	3
HDFC Prudence Fund - Growth	0.3174	1
Tata Balanced Fund - Growth	0.2022	4
Escorts Balanced Fund - Growth	0.1297	5
DSP BlackRock Balanced Fund - Growth	0.2395	2

INTERPRETATION

From the above table 4.6.2 interprets HDFC Prudence Fund - Growth has the highest Sharpe ratio of 0.3174 and holds the 1st position which implies that the funds return performance is greater than the market performance. DSP BlackRock Balanced Fund - Growth which holds the Sharpe ratio of 0.2395and occupies the 2nd rank. Similarly the other fund's rank and Sharpe ratio are given.

INFERENCE

The above table infers that while analyzing the Sharpe ratio for the funds under private balanced schemes , HDFC Prudence Fund - Growth have the Sharpe ratio of 0.3174 where as other fund have the minimum values. So this fund ranks top when compared to other funds

Table No.4.6.3 TREYNOR RATIO of Private balanced schemes

FUND	Treynor ratio
Birla Sun Life 95 - Growth	0.0476
HDFC Prudence Fund - Growth	0.3816
Tata Balanced Fund - Growth	0.0429
Escorts Balanced Fund - Growth	0.0318
DSP BlackRock Balanced Fund - Growth	0.0499

INTERPRETATION

From the above table 4.6.3 interprets that HDFC Prudence Fund - Growth has the highest Treynor ratio of 0.3816 and holds the 1st position which implies that the funds return performance is greater than the market performance. DSP BlackRock Balanced Fund - Growth which holds the Treynor ratio of 0.0499 and occupies the 2nd rank. Similarly the other fund's rank and Treynor ratio are given.

INFERENCE

The above table infers that while analyzing the Treynor ratio for the funds under private debt schemes , Reliance Money Manager Fund - Retail - Growth have the Treynor ratio of 4.0272 where as other fund have the minimum values. So this fund ranks top when compared to other funds

Table No.4.6.4 JENSEN RATIO of Private balanced schemes

FUND	Jensen ratio
Birla Sun Life 95 - Growth	0.0102
HDFC Prudence Fund - Growth	0.0034
Tata Balanced Fund - Growth	0.00089
Escorts Balanced Fund - Growth	0.00051
DSP BlackRock Balanced Fund - Growth	0.01

INTERPRETATION

From the above table 4.6.4 interprets that Birla Sun Life 95 - Growth has the highest Jensen ratio of 0.0102 and holds the 1st position which implies that the funds return performance is greater than the market performance. DSP BlackRock Balanced Fund - Growth which holds the Jensen ratio of 0.01 and occupies the 2nd rank. Similarly the other fund's rank and Jensen ratio are given.

INFERENCE

The above table infers that while analyzing the Jensen ratio for the funds under private balanced schemes , Birla Sun Life 95 - Growth have the Jensen ratio of 0.0102 where as other fund have the minimum values. So this fund ranks top when compared to other funds

Table No.4.6.5 APPRAISAL RATIO of Private balanced schemes

FUND	Appraisal ratio
Birla Sun Life 95 - Growth	2.2665
HDFC Prudence Fund - Growth	37.4608
Tata Balanced Fund - Growth	2.1491
Escorts Balanced Fund - Growth	1.0975
DSP BlackRock Balanced Fund - Growth	3.0769

INTERPRETATION

From the above table 4.6.5 interprets that HDFC Prudence Fund - Growth has the highest Appraisal Ratio of 37.4608 and holds the 1st position which implies that the funds return performance is greater than the market performance. DSP BlackRock Balanced Fund - Growth which holds the Appraisal ratio of 3.0769 and occupies the 2nd rank. Similarly the other fund's rank and appraisal ratios are given.

INFERENCE

The above table infers that while analyzing the Appraisal Ratio for the funds under private balanced schemes , HDFC Prudence Fund - Growth have the appraisal ratio of 37.4608 where as other fund have the minimum values. So this fund ranks top when compared to other funds.

Chapter 5

Conclusion

Chapter 5

Findings

5.1 public equity schemes

1. Beta Value

An analysis of the funds under the public equity schemes reveals the findings that UTI Growth Sector Fund - Services - Growth has the lowest beta value, meaning the lowest systematic risk vis-à-vis other funds and tops the list.

2. Appraisal Ratio

The funds in the public equity schemes are analysed using the Appraisal ratio technique and among the funds SBI Magnum Multiplier Plus 93 - Growth performed the best with a higher ratio. Meaning the alpha is higher than residual variance vis-à-vis other funds and tops the list.

3. Sharpe Ratio

Using the Sharpe technique an analysis of the funds reveals the fact that SBI Magnum Sector Umbrella - Contra Fund - Growth has topped the rankings vis-à-vis other funds in the sector. Meaning the excess return is higher than the total risk vis-à-vis other funds and top the list.

4. Treynor Ratio

The SBI Magnum Tax Gain Scheme 93 - Growth fund has again performed over and above the other funds under the analysis of Treynor Ratio and tops the table. Meaning the excess return is higher than the systematic risk vis-à-vis other funds and top the list.

5. Jenson Ratio

The funds in the public equity schemes are analysed using the Jenson ratio technique and among the funds SBI Magnum Sector Umbrella - Contra Fund - Growth performed the best with a higher ratio. Meaning the constant return is higher than the various funds and top the list.

5.2 public debt schemes

1. Beta Value

An analysis of the funds under the public debt schemes reveals the findings that UTI Bond Fund - Growth has the lowest beta value, meaning the lowest risk vis-à-vis other funds and tops the list.

2. Appraisal Ratio

The funds in the public debt schemes are analysed using the Appraisal ratio technique and among the funds UTI Floating Rate Fund - STP - Growth performed the best with a higher ratio. Meaning the alpha is higher than residual variance vis-à-vis other funds and tops the list.

3. Sharpe Ratio

Using the Sharpe technique an analysis of the funds reveals the fact that UTI Floating Rate Fund - STP - Growth has topped the rankings vis-à-vis other funds in the sector. Meaning the excess return is higher than the total risk vis-à-vis other funds and top the list.

4. Treynor Ratio

The UTI Bond Fund - Growth has again performed over and above the other funds under the analysis of Treynor Ratio and tops the table. Meaning the excess return is higher than the systematic risk vis-à-vis other funds and top the list.

5. Jenson Ratio

The funds in the public debt schemes are analysed using the Jenson ratio technique and among the funds UTI Treasury Advantage Fund - Growth performed the best with a higher ratio. Meaning the constant return is higher than the various funds and top the list.

5.3 public balanced schemes

1. Beta Value

An analysis of the funds under the public balanced schemes reveals the findings that UTI Balanced Fund - Growth has the lowest beta value, meaning the lowest risk vis-à-vis other funds and tops the list.

2. Appraisal Ratio

The funds in the public balanced schemes are analysed using the Appraisal ratio technique and among the funds SBI Magnum Balanced Fund – Growth performed the best with a higher ratio. Meaning the alpha is higher than residual variance vis-à-vis other funds and tops the list.

3. Sharpe Ratio

Using the Sharpe technique an analysis of the funds reveals the fact that Canara Robeco Balance - Growth has topped the rankings vis-à-vis other funds in the sector. Meaning the excess return is higher than the total risk vis-à-vis other funds and top the list.

4. Treynor Ratio

The UTI Balanced Fund - Growth has again performed over and above the other funds under the analysis of Treynor Ratio and tops the table. Meaning the excess return is higher than the systematic risk vis-à-vis other funds and top the list.

5. Jenson Ratio

The funds in the public balanced are analysed using the Jenson ratio technique and among the funds Canara Robeco Balance - Growth performed the best with a higher ratio. Meaning the constant return is higher than the various funds and top the list.

5.4 Private equity scheme:

Beta Value

An analysis of the funds under the private equity schemes reveals the findings that Reliance Growth - Institutional Plan - Growth has the lowest beta value, meaning the lowest risk vis-à-vis other funds and tops the list.

2. Appraisal Ratio

The funds in the private equity schemes are analysed using the Appraisal ratio technique and among the funds Benchmark Derivative Fund - Growth performed the best with a higher ratio. Meaning the alpha is higher than residual variance vis-à-vis other funds and tops the list.

3. Sharpe Ratio

Using the Sharpe technique an analysis of the funds reveals the fact that Benchmark Derivative Fund - Growth has topped the rankings vis-à-vis other funds in the sector. Meaning the excess return is higher than the total risk vis-à-vis other funds and top the list.

4. Treynor Ratio

The Reliance Growth - Growth has again performed over and above the other funds under the analysis of Treynor Ratio and tops the table. Meaning the excess return is higher than the systematic risk vis-à-vis other funds and top the list.

5. Jenson Ratio

The funds in the Private equity scheme are analysed using the Jenson ratio technique and among the Reliance Growth - Growth funds performed the best with a higher ratio. Meaning the constant return is higher than the various funds and top the list.

5.5 Private debt schemes:

Beta Value

An analysis of the funds under the private debt schemes reveals the findings that Reliance Money Manager Fund - Retail - Growth has the lowest beta value, meaning the lowest risk vis-à-vis other funds and tops the list.

2. Appraisal Ratio

The funds in the private debt schemes are analysed using the Appraisal ratio technique and among the funds Reliance Money Manager Fund - Retail - Growth performed the best with a higher ratio. Meaning the alpha is higher than residual variance vis-à-vis other funds and tops the list.

3. Sharpe Ratio

Using the Sharpe technique an analysis of the funds reveals the fact that Reliance Money Manager Fund - Retail - Growth has topped the rankings vis-à-vis other funds in the sector. Meaning the excess return is higher than the total risk vis-à-vis other funds and top the list.

4. Treynor Ratio

The Reliance Money Manager Fund - Retail - Growth has again performed over and above the other funds under the analysis of Treynor Ratio and tops the table. Meaning the excess return is higher than the systematic risk vis-à-vis other funds and top the list.

5. Jenson Ratio

The funds in the private debt schem are analysed using the Jenson ratio technique and among the funds UTI Bond Fund – Growth performed the best with a higher ratio. Meaning the constant return is higher than the various funds and top the list.

5.6 Private balanced schemes:

Beta Value

An analysis of the funds under the private balanced schemes reveals the findings that HDFC Prudence Fund - Growth has the lowest beta value, meaning the lowest risk vis-à-vis other funds and tops the list.

2. Appraisal Ratio

The funds in the private balanced schemes are analysed using the Appraisal ratio technique and among the funds HDFC Prudence Fund - Growth performed the best with a higher ratio. Meaning the alpha is higher than residual variance vis-à-vis other funds and tops the list.

3. Sharpe Ratio

Using the Sharpe technique an analysis of the funds reveals the fact that HDFC Prudence Fund - Growth has topped the rankings vis-à-vis other funds in the sector. Meaning the excess return is higher than the total risk vis-à-vis other funds and top the list.

4. Treynor Ratio

The HDFC Prudence Fund - Growth has again performed over and above the other funds under the analysis of Treynor Ratio and tops the table. Meaning the excess return is higher than the systematic risk vis-à-vis other funds and top the list..

5. Jenson Ratio

The funds in the private debt schemes are analysed using the Jenson ratio technique and among the funds Birla Sun Life 95 - Growth performed the best with a higher ratio. Meaning the constant return is higher than the various funds and top the list.

5.7 SUGGESTIONS:

s.no	Techniques	High risk taker Equity schemes	Medium risk taker Balanced schemes	Lower risk taker Debt schemes
1	Beta	UTI Growth Sector Fund - Services - Growth	HDFC Prudence Fund - Growth	Reliance Money Manager Fund - Retail
2	Sharpe	Benchmark Derivative Fund - Growth	HDFC Prudence Fund - Growth	Reliance Money Manager Fund - Retail
3	Treynor	SBI Magnum Tax Gain Scheme 93 - Growth	HDFC Prudence Fund - Growth	Reliance Money Manager Fund - Retail
4	Jensen	Reliance Growth - Growth	Birla Sun Life 95 - Growth	Templeton India Short Term Income Plan
5	Appraisal	Benchmark Derivative Fund - Growth	HDFC Prudence Fund - Growth	Reliance Money Manager Fund - Retail

Beta Value Indicates the volatility and the risk associated with the security or the portfolio in comparison to the performance of the market. It is appropriate to suggest the high risk taking investors to invest their funds in the UTI Growth Sector Fund - Services - Growth. Similarly the HDFC Prudence Fund - Growth form a rosy picture for the Medium risk taking investors and Reliance Money Manager Fund - Retail funds can be preferred by the lower risk taking investor.

The Sharpe ratio tells us whether a portfolio's returns are due to smart investment decisions or a result of excess risk. The greater a portfolio's Sharpe ratio, the better its risk-adjusted performance has been. It is reasonable to suggest the high risk taking investors to invest their funds in the Benchmark Derivative Fund - Growth . Similarly the HDFC Prudence Fund - Growth form a rosy picture for the Medium risk taking investors and Reliance Money Manager Fund - Retail can be preferred by the investors averting risk

Jenson ratio gives the overall return of the portfolio and also the risk associated with it. On basis of the Jenson Ratio analysis, the high risk taking investors are suggested to make investments in Reliance Growth - Growth; and the medium risk taking investors are suggested to invest in Birla Sun Life 95 - Growth and similarly Templeton India Short Term Income Plan are advisable for risk averse investors.

The Treynor ratio is a risk-adjusted measure of return based on systematic risk. To

make suggestions based on the analysis of the Treynor ratio, risk taking investors are suggested to invest in SBI Magnum Tax Gain Scheme 93 - Growth , while medium risk taking investors are advised to invest in HDFC Prudence Fund - Growth whereas Reliance Money Manager Fund - Retail are advised for risk averse investors.

Appraisal ratio is used to measure the quality of a fund's investment picking ability and it compares the fund's alpha to the portfolio's unsystematic risk or residual standard deviation. It is advisable for investors who are ready to take higher risk to invest in funds under the Benchmark Derivative Fund - Growth. For investors who prefer moderate risk, HDFC Prudence Fund - Growth are more attractive and similarly for risk averting investors the Reliance Money Manager Fund - Retail.

5.8 CONCLUSION

Mutual funds are often regarded as on alternative to equity investment. Both the public and private sector schemes are floated in the market. Hence a study to assure the performance of private and public sector mutual funds have been conducted with 30 funds representing the public and private domains selected through the equity, debt, and balanced schemes.

Benchmark Derivative Fund – Growth is having high systematic risk but having low total risk so that the excess return is more dominating the risk and so the investor could yield much affordable return from the Benchmark Derivative Fund – Growth.

HDFC Prudence Fund - Growth is having high sharpe ratio, Jensen ratio, and appraisal ratio, by this it is clear that the excess return is much dominating than risk, so the medium risk taker could able to earn medium return from HDFC prudence Fund, Since because it is the balanced schems.

Reliance Money Manager Fund – Retail having the systematic risk of 0.0007 and the total risk of 0.0008 from this it is clear that the systematic risk is more dominating on the total risk by this sharpe and treynor ratio holds first among debt schemes, because excess return is higher than risk, so low risk taker could get better return from reliance money manager fund-retail.

It is noteworthy to observe that out of all the public and private sector mutual fund schemes, study favours only the private sector schemes. None of the public sector schemes fated well during the study period.

So it can be concluded that while selecting the investments that is Mutual Funds or Shares the investors should watch the market volatility and its risk and return. The risk and return will fluctuate based on the demand and supply in the market. So all the investors should aware about the market conditions based on the risk and return before selecting any investment

5.9 Further scope of research:

The study reveals that the public sector funds have not performed well in the market. The question of why they have not performed well is outside the scope of this study. Hence, the further research can take this on a research gap and pursue further.

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