Therefore, the investors have to think and choose the best alternative of investment. In case of mutual funds, the scheme which matches the need and objective of investors is very much essential to think.

Rao Papa and Murthy T N (2012) that the educated investors are able to analyse the advantages and disadvantages of investment in mutual funds and they also concede that they are able to get transparent information through television and magazines regarding mutual funds in India. In public sector mutual funds, the reduction of extra cost explains that the public sector mutual fund investments are risk free with transparent growth. Simple extra cost made the public sector mutual funds to announce innovative schemes and to perform well in the market. It is found that there is no significant difference in the opinion of public and private sector mutual fund investors about the characteristics of mutual funds. In fact, both the investors have identified the indispensability of the risk free and maximum returns. In the case of public sector mutual funds, capital appreciation has positive relationship with purposive investment, sales service, extra cost, risk free, innovative schemes and good performance. The private sector mutual fund investors feel that their investment yields better returns when there is no extra cost and risk. They expect good returns as well as safety of their capital with prompt service of private sector mutual funds

Alekhya P (2012) in a study on performance evaluation of public and private sector mutual funds in India, reports that public sector equity and balanced funds give comparable better returns than private funds.

VipparthiManasa&MargamAshwin (2012) reveals that the investors’ perception is dependent on the demographic profile and assesses that the investors Age, Marital status and occupation has direct impact on the investors’ choice of investment. The study further reveals that female segment are not fully tapped and even there is low target on higher income group people. Hence fund managers should take steps to tap the female segment and higher income group segment to enhance more investment in mutual fund Investment Avenue which would really help the industry to flourish. Further the findings of the research were on the factors influencing investors’ perception on public private MF’s. It reveals that Liquidity. Flexibility, Tax savings, Service Quality and Transparency are the factors which have a higher impact on perception of investors. These factors give them the required boosting in the
Chapter 1

Introduction

investment process. Therefore it becomes imperative on part of the fund managers to enhance these features for attracting more investors and also to retain the trust, the investors have in them.

De Bondt and Thaler (1985) while investigating the possible psychological basis for investor behaviour, argue that mean reversion in stock prices is an evidence of investor over reaction where investors overemphasize recent firm performance in forming future expectations.

Gupta (1994) made a household investor survey with the objective to provide data on the investor preferences on MFs and other financial assets. The findings of the study were more appropriate, at that time, to the policy makers and mutual funds to design the financial products for the future.

Madhusudhan V Jambodekar (1996) conducted a study to assess the awareness of MFs among investors, to identify the information sources influencing the buying decision and the factors influencing the choice of a particular fund. The study reveals among other things that Income Schemes and Open Ended Schemes are more preferred than Growth Schemes and Close Ended Schemes during the then prevalent market conditions. Investors look for safety of Principal, Liquidity and Capital appreciation in the order of importance; Newspapers and Magazines are the first source of information through which investors get to know about MFs/Schemes and investor service is a major differentiating factor in the selection of Mutual Fund Schemes.

Goetzman (1997) state that there is evidence that investor psychology affects fund/scheme selection and switching.

Shanmugham (2000) conducted a survey of 201 individual investors to study the information sourcing by investors, their perceptions of various investment strategy dimensions and the factors motivating share investment decisions, and reports that among the various factors, psychological and sociological factors dominated the economic factors in share investment decisions.
Private sector Mutual Funds”. The study will discuss whether the performance measures of Mutual funds vary significantly between Public and Private Mutual Funds. It will also measure the customer preferences towards Public and Private Mutual Funds using a Survey.

4. Relevance of the study

Today, more and more private sector mutual funds are coming into the foray. An average investor is unable to take a decision as to which bandwagon should he hop on to. As household sector’s share is much larger in the country’s savings it is utmost essential to guide their deployment in the right direction. Thus, there is a need for the present study to bring to light the performance of the mutual funds, which can help the retail investors to make valued judgment in terms of deploying their savings to the capital market through the mutual fund vehicle. With the growing institutionalization, retail investors are gradually keeping out of the primary and secondary market, and looking forward to mutual funds for their investments.

Among the mutual funds, it is expected that debt oriented schemes will continue to dominate the mutual fund industry satisfying the needs of yield, security and liquidity fairly well besides being attractive from the tax point of view. While equity oriented schemes will gain more significance in future, their popularity will depend on the conditions of the stock market and the kind of tax relief accorded to them. Hence, it is of utmost importance to study the performance of growth schemes of mutual fund industry, which is a near substitute for direct investment in shares. Analysis of risk-return of schemes and its relationship with the market will provide information on the performance of sample schemes, fund managers ability in selecting and timing
industry. Such a study would provide insights to the investors as to the performance of Public and Private Mutual Funds and the return and risk involved in these investments.

5. **Objectives of the study**

The present study has been designed with following objectives:

1. To study the competition in Mutual Fund industry.
2. To analyze the sources of funds in MF industry.
3. To study the introduction, investment pattern of Private Sector (ICICI & Kotak) and Public sector MF (SBI & LIC) and their relative markets.
4. To assess the Customer preferences of investment in Mutual Funds.
5. To examine the problems faced by MF companies in India.
6. Trend Analysis of NAVs in concerned years
7. To analyze the regulatory structure & support for functioning of Mutual Fund Industry.

6. **Hypothesis**

1. There is stiff competition in Mutual Fund Industry.
3. Investment pattern and market share are directly proportional.
4. Customers find relevant to invest in Mutual Fund.
5. Mutual Fund companies have no problems in India.
6. NAV has a declining trend during 2005 onwards.
7. There is a strong regulatory structure and support for functioning of Mutual Fund Industry.
Research Methodology

The research is analytical in nature. The sampling, data collection and the methodology of analysis to be carried out in the research is described below.

7.1 Sampling Frame and Sampling Plan

All equity, Balanced and Hybrid funds of 4 Mutual funds AMC’s will be selected for the study. For the purpose of analysis of perceptions of Mutual Fund investment, selected investors (100) from public and private sector mutual funds will be taken into consideration.

7.2 Data

The sources of data will be primary as well as secondary in nature. The data collected from the investor’s survey will constitute primary data. The data on mutual fund performance will comprise the secondary data. The data is for the reference period is 2000 to 2013. The risk free rate of return employed in the analysis was taken as 5% p.a. which is the approximate yield on a 10 year government bond.

The secondary data source will be www.valueresearchonline.com

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Table 1: No. of funds in each category
Three types of analysis will be carried out in the report on secondary data on mutual fund performance.

(1) The mutual Fund returns will be calculated using Percentage change in NAV and Annual Return. The annual Dividends of all fund categories will also be compared.

Data collected will be analyzed by using SPSS. ANOVA test will be carried out to check whether there is any significant difference in the returns between the public and private funds.

(2) The study will measure market risk in terms of R-Squared or Bogle's Ex-Marks and Beta.

(3) The mutual fund performance will be measured using:

(i) Sharpe Ratio, (ii) Treynor’s Ratio (iii) Jensen’s Ratio (iv) Tracking Error and (iv) Expense Ratio.

The ranking of funds in each category will be done using Sharpe and Treynor and Jensen’s ratio. Graphical representations of the data analysis will also be included, wherever needed.

7.4 Primary data analysis

Hypothesis testing will be done on primary data to check whether demographic profile influences the selection of public and private mutual funds and to identify the impact of various factors on the selection of Mutual funds.
Contents

1. Chronological development

2. Detailed theoretical background
   2.1 Mutual Funds: An overview
   2.2 Types of Funds
   2.3 Performance Measures of Mutual Funds
   2.4 Advantages of Mutual Funds for Investors
   2.5 Limitations of a Mutual Fund

3. Identification of the existing research gaps.
• First Phase – 1964-87  
(Emergence of UTI)

Unit Trust of India (UTI) was established on 1963 by an Act of Parliament. It was set up by the RBI and functioned under the Regulatory and administrative control of the RBI. In 1978 UTI was de-linked from the RBI and the 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 LIC and GIC. SBI Mutual Fund was the first non-UTI Mutual Fund established in June 1987 followed by Canbank Mutual Fund (Dec 87), Punjab National Bank Mutual Fund (Aug 89), Indian Bank Mutual Fund (Nov 89), Bank of India (Jun 90), Bank of Baroda Mutual Fund (Oct 92). LIC established its mutual fund in 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
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 place among different private sector funds, the mutual fund industry has entered its current phase of consolidation and growth.

2. Theoretical Background of Mutual Funds

2.1 Mutual Funds: An overview

Mutual funds seek to mobilize money from all possible investors. Various investors have different investment preferences. In order to accommodate these preferences, mutual funds mobilize different pools of money. Each such pool of money is called a mutual fund scheme.
Figure 1: Mutual Fund Flow Chart

Mutual fund schemes announce their investment objective and seek investments from the public. Depending on how the scheme is structured, it may be open to accept money from investors, either during a limited period only, or at any time. The investment that an investor makes in a scheme is translated into a certain number of 'Units' in the scheme. Thus, an investor in a scheme is issued units of the scheme. Under the law, every unit has a face value of Rs10. The number of units multiplied by its face value (Rs10) is the capital of the scheme – its Unit Capital.

The scheme earns interest income or dividend income on the investments it holds. Further, when it purchases and sells investments, it earns capital gains or incurs capital losses. These are called realized capital gains or realized capital losses as the case may be.

Investments owned by the scheme may be quoted in the market at higher than the cost paid. Such gains in values on securities held are called valuation gains. Similarly, there can be valuation losses when securities are quoted in the market at a price below
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a) Interest income
b) + Dividend income
c) + Realized capital gains
d) + Valuation gains
e) – Realized capital losses
f) – Valuation losses
g) – Scheme expenses

When the investment activity is profitable, the true worth of a unit goes up; when there are losses, the true worth of a unit goes down. The true worth of a unit of the scheme is otherwise called Net Asset Value (NAV) of the scheme.

When a scheme is first made available for investment, it is called a ‘New Fund Offer’ (NFO). During the NFO, investors may have the chance of buying the units at their face value. Post-NFO, when they buy into a scheme, they need to pay a price that is linked to its NAV.

The money mobilized from investors is invested by the scheme as per the investment objective committed. Profits or losses, as the case might be, belong to the investors. The investor does not however bear a loss higher than the amount invested by him.

Various investors subscribing to an investment objective might have different expectations on how the profits are to be handled. Some may like it to be paid off regularly as dividends. Others might like the money to grow in the scheme. Mutual funds address such differential expectations between investors within a scheme, by offering various options, such as dividend payout option, dividend re-investment option and growth option. An investor buying into a scheme gets to select the preferred option also.
such contributions from investors boost the AUM. Conversely, if the scheme pays any money to the investors, either as dividend or as consideration for buying back the units of investors, the AUM falls.

The AUM thus captures the impact of the profitability metric and the flow of unit-holder money to or from the scheme.

2.2 Types of Funds

This section introduces some funds to the reader. The risk aspects underlying these funds, and their suitability for different kinds of investors are discussed in later units.

- Open-Ended Funds, Close-Ended Funds and Interval Funds

**Open-ended funds** are open for investors to enter or exit at any time, even after the NFO. When existing investors buy additional units or new investors buy units of the open ended scheme, it is called a sale transaction. It happens at a sale price, which is equal to the NAV. When investors choose to return any of their units to the scheme and get back their equivalent value, it is called a re-purchase transaction. This happens at a re-purchase price that is linked to the NAV. Although some unit-holders may exit from the scheme, wholly or partly, the scheme continues operations with the remaining investors. The scheme does not have any kind of time frame in which it is to be closed. The ongoing entry and exit of investors implies that the unit capital in an open-ended fund would keep changing on a regular basis.

**Close-ended funds** have a fixed maturity. Investors can buy units of a close-ended scheme, from the fund, only during its NFO. The fund makes arrangements for the units to be traded, post-NFO in a stock exchange. This is done through a listing of the scheme in a stock exchange. Such listing is compulsory for close-ended schemes. Therefore, after the NFO, investors who want to buy Units will have to find a seller
an interval scheme might become open-ended between January 1 to 15, and July 1 to 15, each year. The benefit for investors is that, unlike in a purely close-ended scheme, they are not completely dependent on the stock exchange to be able to buy or sell units of the interval fund.

- **Actively Managed Funds and Passive Funds**

  **Actively managed** funds are funds where the fund manager has the flexibility to choose the investment portfolio, within the broad parameters of the investment objective of the scheme. Since this increases the role of the fund manager, the expenses for running the fund turn out to be higher. Investors expect actively managed funds to perform better than the market.

  **Passive funds** invest on the basis of a specified index, whose performance it seeks to track. Thus, a passive fund tracking the BSE Sensex would buy only the shares that are part of the composition of the BSE Sensex. The proportion of each share in the scheme’s portfolio would also be the same as the weightage assigned to the share in the computation of the BSE Sensex. Thus, the performance of these funds tends to mirror the concerned index. They are not designed to perform better than the market. Such schemes are also called index schemes. Since the portfolio is determined by the index itself, the fund manager has no role in deciding on investments. Therefore, these schemes have low running costs.

- **Debt, Equity and Hybrid Funds**

  A scheme might have an investment objective to invest largely in equity shares and equity-related investments like convertible debentures. Such schemes are called **equity schemes.**
- **Types of Debt Funds**

**Gilt funds** invest in only treasury bills and government securities, which do not have a credit risk (i.e. the risk that the issuer of the security defaults).

**Diversified debt funds** on the other hand, invest in a mix of government and non-government debt securities.

**Junk bond schemes** or high yield bond schemes invest in companies that are of poor credit quality. Such schemes operate on the premise that the attractive returns offered by the investee companies makes up for the losses arising out of a few companies defaulting.

**Fixed maturity plans** are a kind of debt fund where the investment portfolio is closely aligned to the maturity of the scheme. AMCs tend to structure the scheme around pre-identified investments. Further, like close-ended schemes, they do not accept moneys post-NFO. Thanks to these characteristics, the fund manager has little ongoing role in deciding on the investment options.

As will be seen in Unit 8, such a portfolio construction gives more clarity to investors on the likely returns if they stay invested in the scheme until its maturity. This helps them compare the returns with alternative investments like bank deposits.

**Floating rate funds** invest largely in floating rate debt securities i.e. debt securities where the interest rate payable by the issuer changes in line with the market. For example, a debt security where interest payable is described as ‘5-year Government Security yield plus 1%’, will pay interest rate of 7%, when the 5-year Government Security yield is 6%; if 5-year Government Security yield goes down to 3%, then only 4% interest will be payable on that debt security. The NAVs of such schemes
among all kinds of mutual fund schemes.

- Types of Equity Funds

**Diversified equity fund** is a category of funds that invest in a diverse mix of securities that cut across sectors.

**Sector funds** however invest in only a specific sector. For example, a banking sector fund will invest in only shares of banking companies. Gold sector fund will invest in only shares of gold-related companies.

**Thematic funds** invest in line with an investment theme. For example, an infrastructure thematic fund might invest in shares of companies that are into infrastructure construction, infrastructure toll-collection, cement, steel, telecom, power etc. The investment is thus more broad-based than a sector fund; but narrower than a diversified equity fund.

**Equity Linked Savings Schemes (ELSS),** as seen earlier, offer tax benefits to investors. However, the investor is expected to retain the Units for at least 3 years.

**Equity Income / Dividend Yield Schemes** invest in securities whose shares fluctuate less, and therefore, dividend represents a larger proportion of the returns on those shares. The NAV of such equity schemes are expected to fluctuate lesser than other categories of equity schemes.

**Arbitrage Funds** take contrary positions in different markets / securities, such that the risk is neutralized, but a return is earned. For instance, by buying a share in BSE, and simultaneously selling the same share in the NSE at a higher price. Most arbitrage funds take contrary positions between the equity market and the futures and options market.
The term 'Monthly Income' is a bit of a misnomer, and investor needs to study the scheme properly, before presuming that an income will be received every month.

**Capital Protected Schemes** are close-ended schemes, which are structured to ensure that investors get their principal back, irrespective of what happens to the market. This is ideally done by investing in Zero Coupon Government Securities whose maturity is aligned to the scheme’s maturity. Some of these schemes are structured with a minor difference – the investment is made in good quality debt securities issued by companies, rather than Central Government Securities. Since any borrower other than the government can default, it would be appropriate to view these alternate structures as Capital Protection Oriented Schemes rather than Capital Protected Schemes.

It may be noted that capital protection can also be offered through a guarantee from a guarantor, who has the financial strength to offer the guarantee. Such schemes are however not prevalent in the market.

- **Gold Funds**

These funds invest in gold and gold-related securities. They can be structured in either of the following formats:

**Gold Exchange Traded Fund**, which is like an index fund that invests in gold. The structure of exchange traded funds is discussed later in this unit. The NAV of such funds moves in line with gold prices in the market.

**Gold Sector Funds** i.e. the fund will invest in shares of companies engaged in gold mining and processing. Though gold prices influence these shares, the prices of these shares are more closely linked to the profitability and gold reserves of the companies. Therefore, NAV of these funds do not closely mirror gold prices.
• Food crops like wheat and Chana
• Spices like pepper and turmeric
• Fibres like cotton
• Industrial metals like copper and aluminium
• Energy products like oil and natural gas
• Precious metals (bullion) like gold and silver

The investment objective of commodity funds would specify which of these commodities it proposes to invest in.

As with gold, such funds can be structured as Commodity ETF or Commodity Sector Funds. In India, mutual fund schemes are not permitted to invest in commodities. Therefore, the commodity funds in the market are in the nature of Commodity Sector Funds, i.e. funds that invest in shares of companies that are into commodities. Like Gold Sector Funds, Commodity Sector Funds too are a kind of equity fund.

• International Funds

These are funds that invest outside the country. For instance, a mutual fund may offer a scheme to investors in India, with an investment objective to invest abroad. One way for the fund to manage the investment is to hire the requisite people who will manage the fund. Since their salaries would add to the fixed costs of managing the fund, it can be justified only if a large corpus of funds is available for such investment.
feeder fund in India will follow suit.

Such feeder funds can be used for any kind of international investment. The investment could be specific to a country (like the China fund) or diversified across countries. A feeder fund can be aligned to any host fund with any investment objective in any part of the world, subject to legal restrictions of India and the other country.

In such schemes, the local investors invest in rupees for buying the Units. The rupees are converted into foreign currency for investing abroad. They need to be reconverted into rupees when the moneys are to be paid back to the local investors. Since the future foreign currency rates cannot be predicted today, there is an element of foreign currency risk.

Investor's total return in such schemes will depend on how the international investment performs, as well as how the foreign currency performs. Weakness in the foreign currency can pull down the investors' overall return.

- **Fund of Funds**

The feeder fund was an example of a fund that invests in another fund. Similarly, funds can be structured to invest in various other funds, whether in India or abroad. Such funds are called fund of funds. These 'fund of funds' pre-specify the mutual funds whose schemes they will buy and / or the kind of schemes they will invest in. They are designed to help investors get over the trouble of choosing between multiple schemes and their variants in the market.
exchange. A feature of open-ended funds, which allows investors to buy and sell units from the mutual fund, is made available only to very large investors in an ETF.

Other investors will have to buy and sell units of the ETF in the stock exchange. In order to facilitate such transactions in the stock market, the mutual fund appoints some intermediaries as market makers, whose job is to offer a price quote for buying and selling units at all times.

If more investors in the stock exchange want to buy units of the ETF, then their moneys would be due to the market maker. The market maker would use the moneys to buy a basket of securities that is in line with the investment objective of the scheme, and exchange the same for chapters of the scheme from the mutual fund. Thus, the market maker can offer the units to the investors.

If there is more selling interest in the stock exchange, then the market maker will end up with units, against which he needs to make payment to the investors. When these units are offered to the mutual fund for extinguishment, corresponding securities will be released from the investment portfolio of the scheme. Sale of the released securities will generate the liquidity to pay the unit-holders for the units sold by them.

In a regular open-ended mutual fund, all the purchases of units by investors on a day happen at a single price. Similarly, all the sales of units by investors on a day happen at a single price. The market however keeps fluctuating during the day. A key benefit of an ETF is that investors can buy and sell their units in the stock exchange, at various prices during the day that closely track the market at that time. Further, the unique structure of ETFs, make them more cost-effective than normal index funds, although the investor would bear a brokerage cost when he transacts with the market maker.
Net Asset Value

Net Asset Value is the rate at which a mutual fund unit is brought or sold. It is the value of a fund's investments. For a mutual fund, the net asset value per share usually represents the fund's market price, subject to a possible sales or redemption charge. This is calculated as total assets minus all expenses and divided by the number of outstanding units. This is the main performance indicator for a mutual fund, especially when viewed in terms of appreciation over time.

Calculated as:

Net Asset Value (NAV) = (Assets – Debts) / (Number of Outstanding units)

Where,

Total Assets = Cash + Securities (Stock & Bond)
Debts = Liabilities + Accrued Expenses

The market value of stocks and debentures is taken as the closing price on the major stock exchange where it is listed.

Example:

If investor wants to invest Rs. 1000 & NAV is Rs. 10, Investor buys units of a scheme as per the current NAV value, then the investor will get 1000 Rs. /10 Rs. = 100 units of scheme.

Next day if the scheme declares NAV of Rs. 15, the investment value will be 100 unit x 15 Rs. = 1500

After a year if the investor wants to withdraw all units or we can say sell them back to company, and the value of NAV as per that day is Rs. 25. The fund company will pay 100 unit x 25 Rs. = 2500

- **Expected Return**

Expected Return is the return that an investor anticipates or expects to earn from an investment over some future period. The expected return is subjected to uncertainty or risk and may or may not occur.

- **Annual Return**

It is customary to represent return as percentage per annum. This makes it easier to compare returns of Index funds, for a standard holding period.
• **Risk Free Return**

Risk Free Return refers to the returns from investments where the level of risk is almost zero or negligible. The examples are Bank deposits. Similarly, investments in Treasury bills, Government Securities etc., are also risk free or least risky.

• **R-Squared or Bogle's Ex-Marks**

This measure compares the returns from a fund and the returns from a market index, over the same period, and measures the extent of sympathy in their movement. If the R-Squared of a fund is 1, the index fund’s returns would be in complete sympathy with the movement in the index that it seeks to track. Lower R-Squared refers to funds with lower levels of sympathy with market returns. A funds risk can be gauged by its ex-marks in comparison with the market index.

• **Beta**

Beta is a measure of a securities risk. Each security has a certain amount of risk attached to it. Beta tries to measure the risk involved with each security. Thus an investor should choose a security which gives the highest return for a given risk level. A beta of 1 indicates that the security’s price will move with the market. A beta less than 1 means that 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 is calculated using regression analysis.

\[ \beta = \frac{Cov (X, Y)}{Var (X)} \]
A ratio developed by Jack Treynor that measures returns earned in excess of that which could have been earned on a riskless investment per each unit of market risk. Risk free rate of return is generally taken to be the return on securities backed by the government, as there is no credit risk associated. In other words, the Treynor ratio is the risk-adjusted measure of return based on systematic risk.

**Treynor's Index (Ti) = (Ri - Rf)/Bi,**

where \( R_i \) is the average return of the portfolio, \( R_f \) is the average return of the risk free instrument and \( B_i \) is the beta of the portfolio.

- **The Sharpe Measure**

This index is a ratio of returns generated by the fund over and above risk free rate of return and the total risk associated with it. According to Sharpe, 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. Symbolically, it can be written as:

**Sharpe Index (Si) = (Ri - Rf)/Si,**

where \( R_i \) is the average return of the portfolio, \( R_f \) is the average return of the risk free instrument and \( S_i \) is the standard deviation of the portfolio.

- **Jenson Model (Alpha)**

This index involves evaluation of the returns that the fund has generated vs. the returns actually expected out of the fund given the level of its systematic risk. The surplus between the two returns is called Alpha, which measures the performance of a fund compared with the actual returns over the period. Required return of a fund at a given level of risk (\( B_i \)) can be calculated as:
- **Expense Ratio**

Expense ratio is defined as the ratio of total expenses of the fund to the net assets of the fund. An expense ratio of 1.45% means that the fund spends Rs. 1.45 per Rs. 100 of Net assets, towards operating expenses and fees to services providers and AMC.

- **Tracking Error**

It is a divergence between the price behaviour of a position or a portfolio and the price behaviour of a benchmark. Tracking errors are reported as a "standard deviation percentage "difference. It tells the difference between the return received and that of the benchmark.

### 2.4 Advantages of Mutual Funds for Investors

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*Figure 3: Advantages Of Mutual Funds for Investors*
Affordable Portfolio Diversification

Units of a scheme give investors exposure to a range of securities held in the investment portfolio of the scheme. Thus, even a small investment of Rs 5,000 in a mutual fund scheme can give investors a diversified investment portfolio.

With diversification, an investor ensures that all the eggs are not in the same basket. Consequently, the investor is less likely to lose money on all the investments at the same time. Thus, diversification helps reduce the risk in investment. In order to achieve the same diversification as a mutual fund scheme, investors will need to set apart several lakh of rupees. Instead, they can achieve the diversification through an investment of a few thousand rupees in a mutual fund scheme.

Economies of Scale

The pooling of large sums of money from so many investors makes it possible for the mutual fund to engage professional managers to manage the investment. Individual investors with small amounts to invest cannot, by themselves, afford to engage such professional management.

Large investment corpus leads to various other economies of scale. For instance, costs related to investment research and office space get spread across investors. Further, the higher transaction volume makes it possible to negotiate better terms with brokers, bankers and other service providers.

Liquidity

At times, investors in financial markets are stuck with a security for which they can’t find a buyer – worse; at times they can’t find the company they invested in! Such
of the scheme. Schemes where the money can be recovered from the mutual fund only on closure of the scheme, are listed in a stock exchange. In such schemes, the investor can sell the units in the stock exchange to recover the prevailing value of the investment.

**Tax Deferral**

The mutual funds are not liable to pay tax on the income they earn. If the same income were to be earned by the investor directly, then tax may have to be paid in the same financial year.

Mutual funds offer options, whereby the investor can let the moneys grow in the scheme for several years. By selecting such options, it is possible for the investor to defer the tax liability. This helps investors to legally build their wealth faster than would have been the case, if they were to pay tax on the income each year.

**Tax benefits**

Specific schemes of mutual funds (Equity Linked Savings Schemes) give investors the benefit of deduction of the amount invested, from their income that is liable to tax. This reduces their taxable income, and therefore the tax liability.

Further, the dividend that the investor receives from the scheme is tax-free in his hands.

**Convenient Options**

The options offered under a scheme allow investors to structure their investments in line with their liquidity preference and tax position.
Regulatory Comfort

The regulator, Securities & Exchange Board of India (SEBI) has mandated strict checks and balances in the structure of mutual funds and their activities. These are detailed in the subsequent units. Mutual fund investors benefit from such protection.

Systematic approach to investments

Mutual funds also offer facilities that help investor invest amounts regularly through a Systematic Investment Plan (SIP); or withdraw amounts regularly through a Systematic Withdrawal Plan (SWP); or move moneys between different kinds of schemes through a Systematic Transfer Plan (STP). Such systematic approaches promote an investment discipline, which is useful in long term wealth creation and protection.

2.5 Limitations of a Mutual Fund

Lack of portfolio customization

Some securities houses offer Portfolio Management Schemes (PMS) to large investors. In a PMS, the investor has better control over what securities are bought and sold on his behalf.

On the other hand, a unit-holder is just one of several thousand investors in a scheme. Once a unit-holder has bought into the scheme, investment management is left to the fund manager (within the broad parameters of the investment objective). Thus, the unit-holder cannot influence what securities or investments the scheme would buy.
within those schemes – make it difficult for investors to choose between them. Greater dissemination of industry information through various media and availability of professional advisors in the market should help investors handle this overload.

No control over costs

All the investor's moneys are pooled together in a scheme. Costs incurred for managing the scheme are shared by all the Unit-holders in proportion to their holding of Units in the scheme. Therefore, an individual investor has no control over the costs in a scheme.

SEBI has however imposed certain limits on the expenses that can be charged to any scheme. These limits vary with the size of assets and the nature of the scheme.

3. Identification of Research Gap

Literature study shows that there is voluminous study on Mutual Funds internationally. But there are not many studies on a comparison between Public and Private mutual fund in India. The existing "Behavioral Finance" studies are very few and very little information is available about investors perception & preferences. All efforts in this direction are fragmented.

This study therefore aims at comparing the returns, risk, NAV percentage change, Dividend patterns and expense ratio of Public and Private Mutual Funds. This is studied in connection with the customer preferences of Public and Private Mutual Funds, collected through a survey.