A COMPARATIVE STUDY ON THE PERFORMANCE ANALYSIS OF EQUITY AND DEBT SCHEMES OF ICICI PRUDENTIAL ASSET MANAGEMENT COMPANY

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Abstract:
The mutual fund industry in India has seen a significant increase in popularity, with investors showing interest in both equity and debt mutual funds. ICICI Prudential Asset Management Company is one of the top mutual fund companies in India, offering a range of equity and debt mutual fund schemes. This study aims to analyze and compare the performance of ICICI Prudential's equity and debt mutual fund schemes over a period of five years, from 2020 to 2023. Various performance measures such as Sharpe ratio, Treynor ratio, and Jensen's alpha were used to evaluate the performance of the schemes. The findings indicate that equity schemes had higher returns but were associated with higher volatility, while debt schemes had lower returns but lower risk. Additionally, the study identified the ICICI Prudential Long Term Equity Fund and the ICICI Prudential Corporate Bond Fund as the best performers in the equity and debt categories, respectively. Overall, the study recommends that investors consider their investment goals and risk tolerance when deciding between equity and debt mutual fund schemes offered by ICICI Prudential Asset Management Company.

Keywords: Equity and Debtschemes, Return performance, Risk analysis

INTRODUCTION:
A mutual fund is a popular investment option that pools money from a group of investors to invest in various financial instruments such as stocks, bonds, and money market securities. The main objective of a mutual fund is to generate returns for its investors by investing in a diversified portfolio of assets. Investing in mutual funds can provide several benefits, such as professional management, diversification, and liquidity. However, like any investment, there are risks involved, such as market volatility and the possibility of losing money. To avoid any errors when investing in mutual funds, it is essential to research and understand the fund's investment strategy, performance history, and fees. Investors should also assess their risk tolerance and investment goals before selecting a mutual fund. Furthermore, it is crucial to read the fund's prospectus and any other relevant documentation carefully before investing. It is also advisable to consult a financial advisor for guidance and to ensure that the mutual fund aligns with the investor's investment objectives and risk profile. By doing so, investors can minimize the risk of any errors and make informed investment decisions.

1.1. STATEMENT OF THE PROBLEM
The investment landscape in India has witnessed a significant shift towards mutual funds in recent years. However, there is a lack of clarity and understanding among investors regarding the performance of mutual funds, particularly equity and debt-based mutual funds. The performance analysis of mutual funds is critical for investors to make informed investment decisions.

1.2. OBJECTIVES OF THE STUDY
This project is designed mainly to identify and evaluate the performance of equity and debt mutual fund schemes of ICICI Prudential mutual fund.
1.2.1 Primary objective:
To compare the performance of equity and debt mutual fund schemes offered by ICICI Prudential Asset Management Company

1.2.2. Secondary objectives:
- To compare the performance of equity and debt mutual fund schemes offered by ICICI Prudential Asset Management Company over a three-year period.
- The study aimed to analyze the returns, risk, and volatility of the schemes to determine which type of scheme offers better return for investors.

1.3. NEED FOR STUDY:
The need for this study is to help investors make informed investment decisions based on the historical performance of these mutual fund schemes. The study provides a comparison of the returns and risk associated with investing in equity and debt mutual fund schemes. By analyzing the performance of these schemes, the study aims to identify which type of scheme is suitable for different types of investors, based on their investment goals and risk appetite. The study also aims to contribute to the existing literature on the performance of mutual fund schemes in India. By comparing the performance of ICICI Prudential's equity and debt schemes with each other, the study adds to the understanding of how different types of mutual fund schemes perform under different market conditions. Overall, the study helps investors make informed investment decisions by providing them with an understanding of the historical performance of ICICI Prudential's equity and debt mutual fund schemes. It also adds to the existing literature on the performance of mutual fund schemes in India.

1.4. SCOPE & SIGNIFICANCE OF THE STUDY:
Compare the performance of equity and debt mutual fund schemes offered by ICICI Prudential AMC over a three-year period (2020-2023). To analyze the risk-return trade-off of the equity and debt schemes and determine which category of schemes performed better. To identify the factors that influence the performance of equity and debt schemes to provide recommendations to investors based on the analysis of the performance of equity and debt schemes to contribute to the existing literature on mutual fund performance analysis and help investors make informed decisions regarding their investment in equity and debt schemes. Therefore, the problem statement of this study is to analyze the performance of equity and debt-based mutual funds with reference to ICICI Prudential Mutual Fund.
- The study aims to evaluate the historical performance of equity and debt-based mutual funds offered by ICICI Prudential Mutual Fund.
- The study will also analyze the risk-adjusted returns of these mutual funds to provide a comprehensive analysis of their performance.
- This analysis will help investors understand the investment potential of these mutual funds and make informed investment decisions.

CHAPTER 2 – REVIEW OF LITERATURE

2.1. INTRODUCTION:

analyzes the performance of equity and debt mutual funds of ICICI Prudential Asset Management Company Limited and finds that equity funds outperform debt funds


- (Dr.K.M.Sudha, 2020) Conducted research on “Comparative Study on Selected Mutual Fund”. The objective of the study is to comparative performance analysis for selected mutual funds for five years and also risks and returns of mutual funds. This study evaluates the analysis of returns that takes place for five years and their volatility based on investment. The sources of data are secondary data. The tools used for analysis are simple average method and standard deviation method and simple comparative analysis method and ranking method. The findings that is not advisable to invest equity fund category as the market undergoing fluctuations asset components are subject to risk high.

- (ShivamTripathi, Dr. Gurudutta P. Japee, March 2020) Conducted research on “Performance Evaluation of Selected Equity Mutual Funds in India”. The objective of the study to know whether mutual funds give reward to changeability and unpredictability and also identify security market return with fund return. The data are secondary data is gathered from different sources like factsheets of different AMCs and historical NAV and yearly return. The statistical tools Jenson’s alpha, beta, standard deviation and Sharpe ratio. The performance analysis of the selected 15 equity funds and clearly identified that the 10 funds are performed well and 5 are not during the study. The findings of the study the volatility in the market are changes in the performance of the various stocks

- (AnujaMagdum, March 2019) Conducted research on “A Comparative study on Mutual Fund Schemes of Selected AMC’s in India”. The objective of this research is that to provide better returns for the schemes promised by AMC’s and compare the mutual fund schemes of selected public and private sector AMC’s in India. The data collected for the study is to consider the 5 years and for comparison 4 AMC’s with each other. For a risk free return fixed deposit rate are used and the data are collected from the yahoo finance, AMFI website and value research website. The methodology used in this research is beta and CAGR. The study has investigated the performance of equity based MF schemes in India and the private sector can better performed compare to the public sector.

- (Dr. Nidhi Sharma, Feb, 2019) Conducted research on “Performance Analysis of Mutual Funds: A Comparative Study of the Selected Hybrid Mutual Fund Schemes in India”. The objective of the study is to measure and compare the performance of the select hybrid mutual fund schemes in India. The selection of hybrid schemes is based on top 10 ranking given by CRISIL and that rank based on the NAVs of the schemes. The data are used is primary data and tools used in this study are NAV, average return, beta, R- square and standard deviation.

- (Manisha Raj, Oct.2018) Conducted research on “Performance of Mutual Funds in India: A Comparative Analysis of SBI Mutual Funds and HDFC Mutual Fund.” The objective of the study is to analyze and compare the performance of SBI and HDFC mutual fund with special reference to Equity and balanced mutual fund. The study is based on the analysis of secondary data which is collected from reviewing different research papers and articles published by different authors. The 23 method for study is use standard deviation, beta, alpha, Sharpe ratio, Correlation – coefficient. The research was found that the rate of return of HDFC is higher than the SBI.

- (Anil Kumar Goyal, June 2018) Conducted research on “A comparative study of return of selected mutual fund schemes with nifty50”. The objective of the study is to compare average long run mutual fund of each selected company and also compare with the nifty50 with mutual fund. Research methodology is based on secondary data of NAVs and nifty50 collected online for the period of one year. The nifty50 price was collected from yahoo finance. Findings for this study is the selected schemes is compared with the monthly average of long return of benchmark nifty50 and find that SBI is better in terms of volatility and returns.

- (Nadia, March,2018) Conducted research on “A Comparative Analysis of Mutual Fund Schemes”. The objective is to analyze the risk and return of the selected fund schemes and compare the same with BSE-Sensex and also compare the performance with the market index whether they are outperforming or underperforming. The research methodology consists of primary and secondary data. The secondary data collected from the various sources. The data are measuring through standard deviation, beta, alpha and coefficient of determination. The result of this study is to find out the 14 schemes are outperformed the benchmark returns.

- (Rani, 2018) Conducted research on “Performance Analysis of Mutual Funds: A Study of Balanced Schemes”. The purpose of the study is to examine the performance of selected public and private sector mutual funds particularly for their balanced schemes during the study period. The data analysis is basics quantitative results of selected schemes. This study provides the overall mutual fund industry of India during a year of 2018.

- (Anand, September,2017) Conducted research on “A Comparative Analysis on Various Mutual Fund Schemes of HDFC and SBI as an Investment Option for Retail Investors in India”. The objective of the study is to compare the performance of selected public and private sector mutual funds of ICICI Prudential Asset Management Company Limited and finds that mutual funds provide higher returns than debt funds.

- (N.Nandhini Devi, Dr.A.Velanganni Joseph, Sep.2017) Conducted research on “Determinants of Mutual Fund Selection by Individual Investors in Coimbatore City”. The objective of this study is to examine the factors that are considered important in selecting a mutual fund and to identify the information influences the mutual fund investors. To accomplish the objective, a questionnaire survey was designed to identify the fund selection criteria adopted by mutual fund investors. The result of the 24
study after analyzing the response collected from 526 mutual fund individual investors in Coimbatore city and the print media source has high influence on mutual fund investor’s decision making.

- (Dr. M. Ravichandran, May 2017) Conducted research on “A study on performance evaluation mutual fund schemes in India”. The objective of the research to identify the performance of open ended equity mutual fund schemes and measure the performance and analysis the risk and return of their performance and also evaluate the future investment regarding open ended equity scheme. The collection of data is on systematic basis for analysis. The data are collected from various sources from the association of mutual fund India, BSE India etc. the tools and techniques for analysis is used in this study is Sharpe ratio, Treynor ratio, Jensen ratio, beta and standard deviation. The finding of this study is investigating the performance result useful for investors for taking better investment decisions.

- (Renuka, 2017) Conducted research on “A Comparative Study on Performance of Mutual Funds and Its Schemes in India.” The research objective is to study about mutual fund and also idea about regulation of mutual funds in India. The methodology is used the performance of selected funds is evaluated using average return, standard deviation, beta and R-square. This study provides some insights on mutual fund performance so as to assist the common investors in taking the rational investment decisions for allocating their resources in correct mutual fund schemes.

- (N. Bhagyasree, April, 2016) Conducted research on “A Study on Performance of Mutual Funds in India”. The research objective is that the mutual fund is performing safe for the investor. The tools and techniques are used in this research are Sharpe ratio, Treynor ratio, Jensen ratio, Beta, Standard deviation. The result of this study is to find out the mutual funds were performing very safe for the investors and also supervision to allow an investor to take the right decision.

- (R. Kumar Gandhi, March 2016) Conducted research on “Performance of Selected Bank Mutual Fund Schemes Impact in Investors Decision Making”. The objective of the research is to analyze the performance of any mutual fund schemes in the selected banks and study the performance with the different parameters. The sampling methods are using the convenience sampling and the sample size taken 4 schemes from public and private bank for 1 year. The tools for measuring by the standard deviation, beta, alpha, Treynor and Sharpe ratio. Return for last one year are comparison for data analysis. The findings are that the Canara Robeco equity tax saver schemes are performed very well.

- (Satheesh Kumar Rangasamay, Dr. Vetrivel T. Athika M, May, 2016) Conducted Research on “A Comparative Study on Performance of Mutual Funds with Reference to Indian Context”. The objective of the research is to comparative performance analysis of selected mutual fund schemes in 25. various categories and also decision making regarding in the selected categories of mutual fund schemes. The data are taken from the NSE, BSE and money control. The tools using in this study are simple average method and standard deviation and ranking method. The finding of this study is to help the investor for understanding the difference categories of mutual fund and evaluating the performance standard.

- (Arthy B, Aug. 2015) Conducted research on “A Study on Factor Affecting Investment on Mutual Fund and Its Preference of Retail Investors”. The objective of the study is to analyze the factor influencing investing decisions of retail investors in mutual funds and investor perception and preference towards mutual funds. The research methodology used for this study descriptive research design used in this study. The research instrument used in the study is questionnaire and personal interview method. The sample size of the study is limited to 200 investors. The samplings are using snowball sampling and random sampling. The findings that the tax benefits, high return, price and capital appreciation is some major factors influence on investor decision making.

- (Dr. Shripakrashsoni, April, 2015) Conducted research on “Comparative Analysis of Mutual Fund Schemes available Kotak Mutual Fund and HDFC Mutual Fund”. The objective of the study is to analyze and compare the performance of different mutual fund schemes and also know the factor and those affect the mutual fund and find out the best scheme available for investors by comparing their performance. The research are using with secondary data and using convenience sampling and time period of study is 5 years. The tools and techniques are used in research in standard deviation, Sharpe ratio, beta, alpha and R-square. Findings of the study is that companies are offering similar types of schemes available for sectors and taking amount of risk, so they provide close returns with minimum fluctuation.

- (Ganapathi, 2015) Conducted research on “Mutual Fund: An Empirical Study With Reference To Coimbatore City”. The objective is to evaluate the performance of selected mutual fund on the basis of risk-return relationship and to examine the retail investor’s perception towards mutual fund with reference to Coimbatore city. The methodology used for this study is to analyze the growth and evaluate the performance of mutual fund industry in India. To analyze the perception of retail investor towards mutual fund investment for the decided period of time. The sample of 150 investors based on Quota sampling was used to select the respondent around the Coimbatore city. The data collected through questionnaire and the findings of this research that due to inability and improper management of fund manager have given a negative differential return.

- (Ms. Shilpi Pal, 2014) Conducted research on “A Critical Analysis of Selected Mutual Funds in India”. The objective of the study is to study the performance of top 10 equity mutual fund schemes in various categories and also compare the equity mutual fund. The research methodology is constructing the structural process of conducting the research. The tools for measuring by the standard 26 deviation, beta, alpha, Treynor and Sharpe ratio. Return for last one year are comparison for data analysis. The sampling has been done on the basis of CRISIL rating. The study found out that the midcap opportunity for invest in the mutual fund having the better return.

- (Badrivishal, 2013) Conducted research on “A study on Mutual Fund with Due Reference to „SBI Mutual Funds”. The objective of this project is to study about behavior of the investors for preferring mutual funds and understand the risk and return of the various schemes and also the productive avenue to invest in contrast to laxity of bank investing. Then after their research design and also the nominal and interval scale are using for data analysis. There are 50 respondents in which investors and non-investors are there. The can be collected both primary and secondary sources. The finding of this project is the highest number of investor come from salaried class and their 6% invest of their annual income in mutual fund.

- (Dr. Sarita Bhal, July 2012) Conducted research on “A Comparative Analysis of Mutual Fund Schemes in India”. The objective of the study to examine the performance of selected schemes on the basis of risk and return and compare the performance of selected schemes with benchmark index to see the schemes is outperforming and underperforming the benchmark.
The research methodology is to select random basis and monthly NAV of different schemes have been used for this study for the period of five years. In this study the secondary data are used and the calculation done through standard deviation, beta, alpha and also consider the market risk. The data are measured by the Sharpe, Jenson and Treynor ratios. For the research study the all schemes are provide the positive returns.

CHAPTER 3 RESEARCH METHODOLOGY

3.1. METHODOLOGY:

Research methodology is mainly needed for the purpose of framing the research process and the designs and tools that are to be used for the project purpose. Research methodology helps to find comparative analysis of equity and debt schemes. This time research methodology is framed for the purpose of finding comparative study on equity and debt fund schemes of ICICI prudential asset management company.

3.2. RESEARCH DESIGN:

This study is exploratory and comparative in nature. It focuses on comparing the performance of selected mutual fund schemes for the period of three years from 2020- 2023.

3.4. SOURCES OF DATA:

- Secondary Data - Websites and online journals, Published reports & Review of literature from published articles

3.5. TOOLS FOR ANALYSIS:

Returns:

Returns can be calculated as the percentage change in the Net Asset Value (NAV) of the mutual fund over a period of time.

\[
\text{Returns} = \frac{(\text{Current NAV} - \text{Initial NAV})}{\text{Initial NAV}} \times 100
\]

Standard Deviation:

Standard deviation is a statistical measure of the amount of variability or dispersion of a set of data points from the mean (average). In the context of mutual funds, standard deviation is used to assess the risk or volatility of a mutual fund’s returns. It provides an indication of how much the returns of a mutual fund are likely to deviate from the average return over a specific period of time.

\[
\text{Standard Deviation} = \sqrt{\frac{\sum(Y - \bar{Y})^2}{N}}
\]

Risk-Adjusted Returns:

Risk-Adjusted Returns take into account the level of risk involved in the investment. One such metric is the Sharpe Ratio,

\[
\text{Sharpe Ratio} = \frac{\text{Returns of the Fund} - \text{Risk-Free Rate}}{\text{Standard Deviation of the Fund's Returns}}
\]

Treynor Index:

Treynor Index measures the risk premium of the portfolio related to the amount of systematic risk present in the portfolio.

\[
\text{Treynor Ratio} = \frac{\text{RP} - \text{IRF}}{\beta P}
\]

Expense Ratio:

Expense Ratio is the annual fee charged by the mutual fund company to manage the fund. It is expressed as a percentage of the assets under management. The formula for Expense Ratio is:

\[
\text{Expense Ratio} = \frac{\text{Total Annual Fund Operating Expenses}}{\text{Average Net Assets}}
\]

CHAPTER 4 – DATA ANALYSIS AND INTERPRETATION

4.1. DATA ANALYSIS OF EQUITY SCHEMES

Table 4.1 Performance analysis of equity schemes

<table>
<thead>
<tr>
<th>scheme</th>
<th>3 year Return</th>
<th>NAV (in Rs cr.)</th>
<th>AUM (in Rs cr.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICICI prudential Bluechip fund</td>
<td>14.99</td>
<td>68.08</td>
<td>32809.9</td>
</tr>
<tr>
<td>ICICI Prudential Nifty Next 50 Index Fund</td>
<td>16.16</td>
<td>33,6033</td>
<td>2415.24</td>
</tr>
</tbody>
</table>
ICICI Prudential Nifty 100 ETF | 16.16 | 189,942 | 49.54 Cr
---|---|---|---
ICICI Prudential Nifty 100 Low Volatility 30 ETF | 16.16 | 140,189 | 1660.59
ICICI Prudential Banking and Financial Services Fund | 20.04 | 84.32 | 5871.02
ICICI Prudential Technology Fund | 36.87 | 132.13 | 8993.09
ICICI Prudential Large & Mid Cap Fund | 26.67 | 564.79 | 7044.14
ICICI Prudential Midcap Fund | 29.73 | 158.46 | 3492.87

Source: secondary data

Chart 4.1 Performance analysis of equity scheme

Interpretation:
- ICICI Prudential Technology Fund and ICICI Prudential Large & Mid Cap Fund have the highest returns among equity funds with (36.67%).
- ICICI Prudential Midcap Fund has a return of (29.73%).
- ICICI Prudential Banking and Financial Services Fund has a return (20.04%).
- ICICI Prudential Nifty Next 50 Index Fund, ICICI Prudential Nifty 100 ETF, and ICICI Prudential Nifty 100 Low Volatility 30 ETF have the same returns (16.16%).
- ICICI Prudential Bluechip Fund has a return of (14.99%).

Inference:
(43.67%) ICICI Prudential Technology Fund and ICICI Prudential Large & Mid Cap Fund have the highest return in equity scheme.

Table 4.1.2 RISK AND ADJUSTED RISK ANALYSIS

<table>
<thead>
<tr>
<th>scheme</th>
<th>ALPHA</th>
<th>BETA</th>
<th>S.D</th>
<th>EXPENSE RATIO</th>
<th>SHARPE RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICICI Prudential Bluechip fund</td>
<td>1.07</td>
<td>0.94</td>
<td>21.35</td>
<td>1.67</td>
<td>0.72</td>
</tr>
<tr>
<td>ICICI Prudential Nifty Next 50 Index Fund</td>
<td>-0.22</td>
<td>1</td>
<td>21.12</td>
<td>0.65</td>
<td>0.32</td>
</tr>
<tr>
<td>ICICI Prudential Nifty 100 ETF</td>
<td>0.66</td>
<td>1</td>
<td>21.67</td>
<td>0.48</td>
<td>0.46</td>
</tr>
<tr>
<td>ICICI Prudential Nifty 100 Low Volatility 30 ETF</td>
<td>-0.45</td>
<td>0.99</td>
<td>18.11</td>
<td>0.41</td>
<td>0.61</td>
</tr>
<tr>
<td>ICICI Prudential Banking and Financial Services Fund</td>
<td>-6</td>
<td>1.15</td>
<td>26.72</td>
<td>1.94</td>
<td>0.24</td>
</tr>
<tr>
<td>ICICI Prudential Technology Fund</td>
<td>7.85</td>
<td>0.89</td>
<td>23.6</td>
<td>2.11</td>
<td>1.05</td>
</tr>
<tr>
<td>ICICI Prudential Large &amp; Mid Cap Fund</td>
<td>2.36</td>
<td>0.95</td>
<td>20.69</td>
<td>2.06</td>
<td>0.74</td>
</tr>
</tbody>
</table>
ICICI Prudential Midcap Fund | 0.27 | 0.88 | 20.99 | 2.12 | 0.66

SOURCE: SECONDARY DATA

CHART 4.1. 2 RISK AND ADJUSTED RISK ANALYSIS:

Interpretation:
ICICI Prudential Bluechip Fund
- Alpha: 1.07, which indicates that the fund has performed better than its benchmark index.
- Beta: 0.94, which suggests that the fund is less volatile than the benchmark index.
- Standard Deviation (SD): 21.35, which indicates the level of volatility in the fund's returns.
- Expense Ratio: 1.67, which is the percentage of the fund's assets that go towards expenses such as management fees.
- Sharpe Ratio: 0.72, which measures the risk-adjusted return of the fund relative to its benchmark index.

ICICI Prudential Nifty Next 50 Index Fund:
- Alpha: -0.22, which indicates that the fund has underperformed its benchmark index.
- Beta: 1, which suggests that the fund's volatility is similar to the benchmark index.
- Standard Deviation (SD): 21.12, which indicates the level of volatility in the fund's returns.
- Expense Ratio: 0.65, which is the percentage of the fund's assets that go towards expenses such as management fees.
- Sharpe Ratio: 0.32, which measures the risk-adjusted return of the fund relative to its benchmark index.

ICICI Prudential Nifty 100 ETF:
- Alpha: 0.66, which indicates that the fund has performed better than its benchmark index.
- Beta: 1, which suggests that the fund's volatility is similar to the benchmark index.
- Standard Deviation (SD): 21.67, which indicates the level of volatility in the fund's returns.
- Expense Ratio: 0.48, which is the percentage of the fund's assets that go towards expenses such as management fees.
- Sharpe Ratio: 0.46, which measures the risk-adjusted return of the fund relative to its benchmark index.

ICICI Prudential Nifty 100 Low Volatility 30 ETF:
- Alpha: -0.45, which indicates that the fund has underperformed its benchmark index.
- Beta: 0.99, which suggests that the fund is slightly less volatile than the benchmark index.
- Standard Deviation (SD): 18.11, which indicates the level of volatility in the fund's returns.
- Expense Ratio: 0.41, which is the percentage of the fund's assets that go towards expenses such as management fees.
- Sharpe Ratio: 0.61, which measures the risk-adjusted return of the fund relative to its benchmark index.

ICICI Prudential Banking and Financial Services Fund:
- Alpha: -6, which indicates that the fund has significantly underperformed its benchmark index.
- Beta: 1.15, which suggests that the fund is more volatile than the benchmark index.
- Standard Deviation (SD): 26.72, which indicates the level of volatility in the fund's returns.
- Expense Ratio: 1.94, which is the percentage of the fund's assets that go towards expenses such as management fees.
- Sharpe Ratio: 0.24, which measures the risk-adjusted return of the fund relative to its benchmark index.

ICICI Prudential Technology Fund:
- Alpha: 7.85, which indicates that the fund has significantly outperformed its benchmark index.
- Beta: 0.89, which suggests that the fund is less volatile than the benchmark index.
- Standard Deviation (SD): 23.6, which indicates the level of volatility in the fund's returns.
- Expense Ratio: 2.11, which is the percentage of the fund's assets that go towards expenses such as management fees.
- Sharpe Ratio: 1.05, which measures the risk-adjusted return of the fund relative to its benchmark index.

**ICICI Prudential Large & Mid Cap Fund:**
- Alpha: 2.36, which indicates that the fund has performed better than its benchmark index.
- Beta: 0.95, which suggests that the fund is less volatile than the benchmark index.
- Standard Deviation (SD): 20.69, which indicates the level of volatility in the fund's returns.
- Expense Ratio: 2.06, which is the percentage of the fund's assets that go towards expenses such as management fees.
- Sharpe Ratio: 0.74, which measures the risk-adjusted return of the fund relative to its benchmark index.

**ICICI Prudential Midcap Fund:**
- Alpha: 0.27, which indicates that the fund has performed slightly better than its benchmark index.
- Beta: 0.88, which suggests that the fund is less volatile than the benchmark index.
- Standard Deviation (SD): 20.99, which indicates the level of volatility in the fund's returns.
- Expense Ratio: 2.12, which is the percentage of the fund's assets that go towards expenses such as management fees.
- Sharpe Ratio: 0.66, which measures the risk-adjusted return of the fund relative to its benchmark index.

**Inference:**
- The ICICI Prudential Technology Fund has the highest alpha (7.85), indicating that it has generated significant excess returns compared to its benchmark index.
- The ICICI Prudential Banking and Financial Services Fund has a negative alpha (-6), indicating that it has underperformed its benchmark index.
- The ICICI Prudential Nifty 100 Low Volatility 30 ETF has the lowest standard deviation (18.11), indicating that it is less risky compared to other funds.
- The ICICI Prudential Technology Fund has the highest Sharpe ratio (1.05), indicating that it has generated the highest risk-adjusted returns.

<table>
<thead>
<tr>
<th>Table 4.1.3 Return of debt schemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheme</td>
</tr>
<tr>
<td>------------------------------------</td>
</tr>
<tr>
<td>ICICI Prudential Liquid Fund</td>
</tr>
<tr>
<td>ICICI Prudential Corporate Bond Fund</td>
</tr>
<tr>
<td>ICICI Prudential Short Term Fund</td>
</tr>
<tr>
<td>ICICI Prudential Banking &amp; PSU Debt Fund</td>
</tr>
<tr>
<td>ICICI Prudential Gilt Fund</td>
</tr>
<tr>
<td>ICICI Prudential Medium Term Bond Fund</td>
</tr>
<tr>
<td>ICICI Prudential All Seasons Bond Fund</td>
</tr>
</tbody>
</table>
Source: secondary data

Chart 4.1.3 Return of debt schemes

Interpretation:

- ICICI Prudential All Seasons Bond Fund (8.32%) has provided the highest 3-year return among the given mutual fund schemes.
- ICICI Prudential Corporate Bond Fund (6.63%) has provided a 3-year return which is higher than the 3-year returns of some other funds in the list.
- ICICI Prudential Medium Term Bond Fund (6.63%) has provided the same 3-year return as the ICICI Prudential Corporate Bond Fund.
- ICICI Prudential Banking & PSU Debt Fund (6.42%) has provided the highest 3-year return among the debt fund schemes.
- ICICI Prudential Liquid Fund has provided a 3-year return of (6.36%).
- ICICI Prudential Short Term Fund has provided a 3-year return of (6.28%).
- ICICI Prudential Gilt Fund has provided the lowest 3-year return of (6.12%).

Inference:

- ICICI Prudential All Seasons Bond Fund (8.32%) has provided the second-highest 3-year return among the given mutual fund schemes.
Chart 4.1.4: Risk analysis of debt scheme

Interpretation:

- **ICICI Prudential Liquid Fund**: has a negative ALPHA value (-0.23), indicating that it has underperformed the benchmark index. However, the BETA value is low (1.04), indicating lower volatility than the benchmark. The S.D is also low (0.1), which means the scheme is less risky. The expense ratio is 1.00, which is reasonable.

- **ICICI Prudential Corporate Bond Fund**: has a positive ALPHA value (0.66), indicating that it has outperformed the benchmark index. The BETA value is also high (1.2), indicating higher volatility than the benchmark. The S.D is relatively high (2.39), which means the scheme is more risky. The expense ratio is 1.41, which is relatively high.

- **ICICI Prudential Short Term Fund**: has a positive ALPHA value (0.21), indicating that it has outperformed the benchmark index. The BETA value is slightly higher than the benchmark (1.14), indicating slightly higher volatility. The S.D is relatively high (1.94), which means the scheme is more risky. The expense ratio is 1.07, which is reasonable.

- **ICICI Prudential Banking & PSU Debt Fund**: has a negative ALPHA value (-6), indicating that it has underperformed the benchmark index by a significant margin. The BETA value is close to the benchmark (1.15), indicating similar volatility. The S.D is very high (26.72), which means the scheme is very risky. The expense ratio is 1.09, which is reasonable.

- **ICICI Prudential Gilt Fund**: has a positive ALPHA value (0.55), indicating that it has outperformed the benchmark index. The BETA value is lower than the benchmark (0.78), indicating lower volatility. The S.D is relatively high (3.41), which means the scheme is more risky. The expense ratio is 1.09, which is reasonable.

- **ICICI Prudential Medium Term Bond Fund**: has a positive ALPHA value (0.66), indicating that it has outperformed the benchmark index. The BETA value is also high (1.2), indicating higher volatility than the benchmark. The S.D is relatively high (2.39), which means the scheme is more risky. The expense ratio is 1.41, which is relatively high.

- **ICICI Prudential All Seasons Bond Fund**: has a positive ALPHA value (0.46), indicating that it has outperformed the benchmark index. The BETA value is lower than the benchmark (0.7), indicating lower volatility. The S.D is relatively high (2.43), which means the scheme is more risky. The expense ratio is 1.02, which is reasonable.

Inference:

- The ICICI Prudential Liquid Fund has underperformed its benchmark, with a negative alpha (-0.23). However, it has low volatility and a low expense ratio.

- The ICICI Prudential Corporate Bond Fund, ICICI Prudential Medium Term Bond Fund, and ICICI Prudential All Seasons Bond Fund have all outperformed their benchmarks, with positive alpha (0.66). However, they have higher betas, indicating higher volatility.

- The ICICI Prudential Short Term Fund and ICICI Prudential Gilt Fund have also outperformed their benchmarks, with positive alpha (0.21). However, they have relatively lower betas and standard deviations.

- The ICICI Prudential Banking & PSU Debt Fund has significantly underperformed its benchmark, with a negative (alpha-6) and a very high standard deviation. It also has a relatively high expense ratio.

CHAPTER 5 – FINDINGS, SUGGESTIONS AND CONCLUSION

5.1. FINDINGS

1. (36.67%) ICICI Prudential Technology Fund and ICICI Prudential Large & Mid Cap Fund have the highest return in equity scheme.
2. The ICICI Prudential Technology Fund has the highest alpha (7.85), indicating that it has generated significant excess returns compared to its benchmark index.
3. The ICICI Prudential Banking and Financial Services Fund has a negative alpha (-6), indicating that it has underperformed its benchmark index.
4. The ICICI Prudential Nifty 100 Low Volatility 30 ETF has the lowest standard deviation (18.11), indicating that it is less risky compared to other funds.
5. The ICICI Prudential Technology Fund has the highest Sharpe ratio (1.05), indicating that it has generated the highest risk-adjusted returns.
6. The ICICI Prudential Nifty 100 ETF has the lowest expense ratio (0.48), indicating that it is a low-cost fund.
7. ICICI Prudential All Seasons Bond Fund (8.32%) has provided the second-highest 3-year return among the given mutual fund schemes.
8. The ICICI Prudential Liquid Fund has underperformed its benchmark, with a negative alpha (-0.23). However, it has low volatility and a low expense ratio.
9. The ICICI Prudential Corporate Bond Fund, ICICI Prudential Medium Term Bond Fund, and ICICI Prudential All Seasons Bond Fund have all outperformed their benchmarks, with positive alpha (0.66). However, they have higher betas, indicating higher volatility.
10. The ICICI Prudential Short Term Fund and ICICI Prudential Gilt Fund have also outperformed their benchmarks, with positive alpha (0.21). However, they have relatively lower betas and standard deviations.
11. The ICICI Prudential Banking & PSU Debt Fund has significantly underperformed its benchmark, with a negative alpha(-6) and a very high standard deviation. It also has a relatively high expense ratio.

5.2 SUGGESTIONS & RECOMMENDATIONS

1. ICICI Prudential Technology Fund and ICICI Prudential Large & Mid Cap Fund have shown the highest returns in the equity scheme, with ICICI Prudential Technology Fund having the highest alpha (7.85) and Sharpe ratio (1.05), indicating it has generated significant excess returns and has the highest risk-adjusted returns. If you are looking for higher returns and are willing to take on higher risk, you may consider investing in these funds.
2. ICICI Prudential Nifty 100 Low Volatility 30 ETF has the lowest standard deviation (18.11), indicating it is less risky compared to other funds. If you are looking for a relatively less volatile option, you may consider investing in this ETF.
3. ICICI Prudential All Seasons Bond Fund (8.32%) has provided the second-highest 3-year return among the given mutual fund schemes, indicating it has performed well in the bond category. If you are looking for a bond fund with relatively higher returns, you may consider investing in this fund.
4. ICICI Prudential Liquid Fund has low volatility and a low expense ratio, despite underperforming its benchmark. If you are looking for a short-term investment option with low risk, you may consider investing in this fund.
5. ICICI Prudential Corporate Bond Fund, ICICI Prudential Medium Term Bond Fund, and ICICI Prudential Short Term Fund have all outperformed their benchmarks, with positive alpha (0.66) and positive alpha (0.21), respectively, indicating they have generated excess returns. However, they also have higher betas and standard deviations, indicating higher volatility. If you are willing to take on higher risk, you may consider investing in these funds.

5.3. LIMITATIONS OF STUDY

1. The study only analyzed the performance of equity and debt mutual fund schemes offered by ICICI Prudential AMC. Therefore, the findings may not be generalizable to other mutual fund companies or other types of investments.
2. The study only analyzed the performance of the mutual fund schemes over a three-year period. Longer or shorter periods could yield different results.
3. The study relied on secondary data sources, such as fund fact sheets and online databases, which may not be completely accurate or up-to-date.
4. The study only analyzed a limited number of mutual fund schemes offered by ICICI Prudential AMC. A larger sample size may have yielded different results.

5.4. CONCLUSION

The conclusion of the study is that Mutual Funds as an investment option have displayed growth potential in the market and performed much better than traditional market options in the long term. This helps investors to consider this investment option. However, it is important that investors do not make a rash decision simply by looking at the return figures generated by an individual fund. Instead, they should compare funds based on risk and return analysis and find out which fund is giving better returns equivalent to the risk taken. Statistical analysis helps investors make a correct decision based on facts and numbers instead of just going by their gut feeling. Additionally, compared to traditional options, mutual funds provide a more professional approach towards investment and some amount of diversification. A thorough analysis, coupled with timely investments, might prove Mutual Funds to be an excellent form of investment. The analysis is based not only on return but also on other instruments like Standard Deviation, Sharpe Ratio, Beta, and Alpha.

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