

A STUDY ON PERFORMANCE EVALUATION OF 5 EQUITY GROWTH MUTUAL FUND SCHEMES IN INDIA

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ABSTRACT

A mutual fund, which is another name for an investing business, is a type of financial instrument that pools the capital of multiple participants and uses it to purchase money market instruments and government securities. To put it simply, the management of the fund uses the funds raised to buy bonds and equities. The purchase of securities is known as the portfolio of the fund. Additionally, the investors split the revenue from this joint investment after subtracting any necessary taxes and levies. NAV is used to compute these costs and levies (Net Asset Value). The purpose of this study is to examine the performance of a five selective Indian mutual fund schemes during a three-year period from 2020 to 2023 using their daily Net Asset Value (NAV). The selected mutual considered for the study are private sector equity growth mutual fund schemes. The funds' performance is evaluated using the Sharpe index, Treynor index, and Jensen alpha, and the results will help investors make smarter investing decisions. The study aims to study the best performer among these 5 mutual funds i.e., HDFC, ICICI, AXIS, KVB and KOTAK MAHINDRA based on the study period.

NAV = Value of Securities – Liabilities / No. of units outstanding shares)

Keywords: Equity Growth Mutual Fund, performance, risk and return, banks in the private sector, Jensen's, Treynor's, and Sharpe's ratios.

INTRODUCTION:

Mutual funds offer a variety of market updates as well as recommendations to investors on how to make investments in various schemes. A mutual fund is a collective investment vehicle into which participants make contributions to be invested according to predetermined criteria. All investors share ownership of the fund since it is "mutual" in nature. An investor's ownership stake in the fund is determined by how much of their contribution there is relative to the overall amount of the fund. Mutual funds are trusts that take investor money and use them to invest in a variety of financial products in accordance with the goals outlined in the trust deed. The ultimate goal is to minimize risk and

optimize income and capital growth for member distribution. A mutual fund is a business, and the fund manager's job is to properly oversee the investor-provided capital and generate returns on it after taking into account appropriate management costs.

REVIEW OF LITERATURE:

An integral component of any research project is the literature review. It aids in defining the research gap and, thus, the goals of the study. Numerous research on mutual funds from various angles have been conducted in India and beyond in the past few decades. very few are discussed here which studies done in the area of Mutual fund performance analysis.

A study on the performance of mutual funds was conducted by **Dr. Bhadrappa Haralayaa** (2022), who examined a few diversified equities mutual funds available in India. It's an analysis of the performance of a few Indian diversified equity mutual funds. The calculation is based on secondary data and is based on both the Treynor and Sharpe ratios. The Chi-square test and ANOVA are needed tools, and the study methodology used is qualitative.

Chawala, P. S. (2014) in his study Performance evaluation of mutual funds: A study of selected diversified equity mutual funds in India concluded that Majority of funds selected for study have outperformed under Sharpe Ratio as well as Treynor Ratio.

Malakar (2021) conducted research with the primary goal of comparing the performance of a few public and private mutual funds as well as the equity, balance, and income schemes of mutual funds. The performance of the Indian mutual fund industry was examined during a ten-year period, from 2010 to 2019, encompassing five Public Sector mutual funds and five Private Sector mutual funds. stated that while public sector mutual funds perform somewhat better than private sector mutual funds in debt schemes, private sector mutual funds perform better in the equities and hybrid scheme segments.

Rana, D. (2013) conducted a study on Preferences of investors for investment in mutual funds in India., and identified High return and tax benefits are preferred factors. | Bank is the main factor as distribution channel for investment.

Revathy, S. Santhi, V. (2013) in her 'A Study on Performance Evaluation of Selected Banks Equity Mutual Funds', identified that the HDFC fund has outperformed | The benchmark from sundram growth funds.

NEED FOR THE STUDY:

The aim of this research is to determine the "Performance evaluation on 5 Equity Growth schemes of private sector companies in India." The findings of this study would be useful to investors who are evaluating or investing in mutual fund schemes. Additionally, to comprehend the role mutual funds play in the expansion and advancement of the economy as a whole. Because they are highly affordable and simple to invest in, mutual funds are regarded as some of the greatest options for investments. By reducing risk and optimizing returns, mutual funds offer the greatest diversification benefit. Investors must be familiar with various investment patterns beforehand. Numerous mutual fund schemes are available in the market today, but investors must make informed decisions in order to minimize risk and maximize rewards. Understanding the risk-adjusted performance of particular mutual fund schemes is the goal of the current study.

OBJECTIVES OF THE STUDY:

- To analyze the risk-return profile of particular Equity Growth Mutual Fund schemes.
- To evaluate the performance of the KOTAK MAHINDRA Equity Growth, AXIS Equity Growth, HDFC Equity Growth, ICICI Equity Growth, and KARUR VYSYA Equity Growth mutual fund schemes in India.
- To use Treynor's and Sharpe's measures to determine the mutual fund performance of particular equity growth mutual funds.

METHODOLOGY:

The performance of five Indian Equity Growth Mutual Funds is examined and evaluated in this survey. The mutual funds underwent a comprehensive analysis between April 2020 and March 2023. The study's secondary data came from a variety of sources, including websites and reference books. Various statistical and financial tools need to be utilized to evaluate the success of these mutual fund schemes. Sharpe and Treynor measures are among the instruments and methods employed in the study.

SCOPE OF THE STUDY:

- The Schemes were categorized and selected for evaluating their performance and relative risk.
- The scope of the study mainly concentrated on the 5 Equity Growth Performing Schemes i.e.,

HDFC Mutual Funds: HDFC Equity Fund Direct Plan-Growth

ICICI Mutual Funds: Prudential equity arbitrary fund-Direct plan -Growth

KOTAK MAHINDRA Mutual Funds: Kotak Equity Opportunities Fund Direct Growth.

AXIS Mutual Funds: Axis long Term Equity Fund Direct Plan-Growth

KVB Mutual Funds: Karur Vysya mid cap Equity fund direct plan – Growth

SOURCES OF DATA COLLECTION:

The study is based on secondary sources of data. The data was employed to compute the chosen schemes' monthly net asset values. Every month, the RBI and the Money Control Website provide the risk-free value. This information is gathered for a study on five equity growth mutual fund schemes.

POPULATION AND SAMPLING UNIT: In India, there are more than 2,500 mutual fund schemes and 44 asset management companies (AMCs).

SAMPLING SIZE and METHOD: Convenient sampling techniques used for the selection of 5 Equity Growth Mutual Fund Scheme AMC's operating in India and selected based on the optimal returns of HDFC Mutual Funds: HDFC Equity Fund Direct Plan-Growth, ICICI Mutual Funds: Prudential equity arbitrary fund-Direct plan -Growth, KOTAK MAHINDRA Mutual Funds: Kotak Equity Opportunities Fund Direct Growth, AXIS Mutual Funds: Axis long Term Equity Fund Direct Plan-Growth and KVB Mutual Funds: Karur Vysya mid cap Equity fund direct plan – Growth.

DATA ANALYSIS TECHNIQUES: In this study, Risk Adjustment Performance measure has been used to analyze the Performance of Equity Growth Mutual Fund Scheme using Sharpe's, Treynor's measure.

LIMITATIONS OF THE STUDY

- ✓ There are more than 30 funds and huge number of schemes offered by various financial as well as non-financial companies. It is not possible to compare all the fund
- ✓ The study is limited to only 5 companies for selected Equity mutual fund scheme only
- ✓ The "Performance evaluation of 5 Equity Growth mutual funds schemes" has covered in a period of 3 years i.e., 2020 to 2023 only.
- ✓ The study is confined to mostly on secondary data

DATA ANALYSIS:

This study has been analyzed used financial tools such as Sharpe's ratio, Treynor's ratio and Jensen's measures of mutual fund evaluation.

TABLE 1: SHOWING OF 5 EQUITY GROWTH MUTUAL FUND SCHEMES BASED ON RESULTS

2020-2021	RETURN	STANDARD DEVIATION	BETA
HDFC	4.9236	7.9883	1.1592
ICICI	4.2148	9.2662	1.0015
KM	4.0831	11.0229	1.1636
AXIS	4.7174	9.5795	1.0336
KVB	11.6066	21.9051	2.4169
2021-2022	RETURN	STANDARD DEVIATION	BETA
HDFC	0.2914	5.1282	1.1223
ICICI	1.9239	7.4080	1.0781
KM	0.4632	6.5699	0.5601
AXIS	-0.2472	6.2914	0.7192
KVB	-1.4554	8.2765	0.2909
2022-2023	RETURN	STANDARD DEVIATION	BETA
HDFC	-0.2981	4.3176	0.8047
ICICI	1.1254	7.0121	1.4729
KM	-0.5209	6.2060	1.0877
AXIS	1.0753	9.5259	1.7694
KVB	6.6992	12.9396	2.0694

FORMULAS:

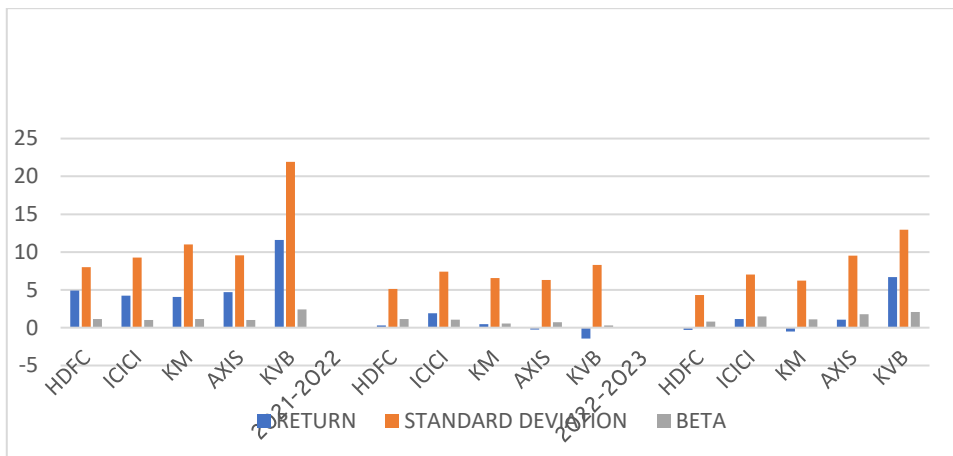
- Return = (Closing price – Opening Price)/Opening Price *100

- Average, $A = \sum R/N$;

- Standard Deviation (SD) = $\sqrt{\text{Variance}}$

$\text{Cov}_{i,m}$

- Beta = $\frac{\text{Cov}_{i,m}}{\sigma_m^2}$



INTERPRETATION:

HDFC: It is evident from the above table that the return is showing a declined trend. On the other-hand standard deviation which is a measure of total risk is also in declined trend. Beta which is a measure of systematic risk was high in the year 2020-2021, and low in the year 2022-2023.

ICICI: It is evident that the above table that the return is showing a declined trend. On the other hand, standard deviation which is a measure of total risk is also decreased Beta which is a measure of systematic risk was high in the year 2022-2023 and low in the year 2020-2021.

KM: It is evident from the above table that return is showing a declined trend. On the other hand, standard deviation which is the measure of total risk is decreased. Beta which is the measure of systematic risk was high in the year 2020-2021 and low in the year 2021-2022.

AXIS: It is evident from the above table that the return is showing declined trend for the first two years and decreased for the next year. On the other hand, Standard deviation which is a measure of total risk also decreased in the first two years and later showing the increasing value. Beta which is a measure of systematic risk is high in the year 2020-2021 and low in the year 2021-2022.

KVB: It is evident from the above table that return is showing a declined trend for the first two years and increased for the next year. On the other hand, Standard deviation which is a measure of total risk also decreased in the first two

years and later showing the increasing value. Beta which is a measure of systematic risk is high in the year 2020-2021 and low in the year 2021-2022

TABLE 2: SELECTED 5 EQUITY GROWTH MUTUAL FUND SCHEMES BASED ON TREYNOR'S RATIO

FUND NAME	TREYNOR'S RATIO	RISK PREMIUM	RANKING
2020-2021			
HDFC- EQUITY GROWTH	3.9893	4.62	3
ICICI -EQUITY GROWTH	3.9089	3.91	4
KM -EQUITY GROWTH	3.2512	3.78	5
AXIS -EQUITY GROWTH	4.2738	4.41	2
KVB- EQUITY GROWTH	8.8897	11.30	1
2021-2022			
HDFC- EQUITY GROWTH	-0.0075	-0.12	3
ICICI -EQUITY GROWTH	1.5062	1.62	1
KM -EQUITY GROWTH	0.2913	0.16	2
AXIS -EQUITY GROWTH	-0.7608	-0.57	4
KVB- EQUITY GROWTH	-2.0483	-1.75	5
2022-2023			
HDFC- EQUITY GROWTH	-0.7432	-0.59	4
ICICI -EQUITY GROWTH	0.5603	0.82	2

KM GROWTH	-EQUITY	-0.7547	-0.81	5
AXIS GROWTH	-EQUITY	0.4381	0.77	3
KVB-GROWTH	EQUITY	4.3298	6.39	1

Treynor's Measure: The Treynor measure, also known as the Treynor Ratio or Treynor Index, is a financial metric used to evaluate the risk-adjusted performance of an investment or portfolio. It was developed by Jack L. Treynor and is similar to the Sharpe ratio, but it uses a different risk measure in its calculation.

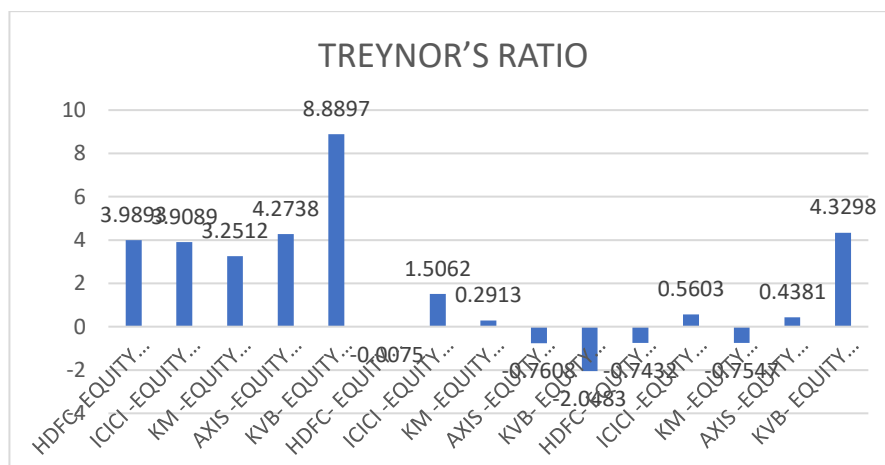
Formula= $R_p - R_f / \text{Beta}$

Where R_p = Expected Portfolio Return

R_f =Risk Free Rate of Return

Beta = Systematic Risk

Chart.2.



INTERPRETATION: The above graph signifies the Sharpe's ratio for a period of 3 years from 2020 to 2023 which indicate the measures of high-risk premium per unit of total risk performance. Karur Vysya Equity Growth and ICICI Equity Growth Schemes has been performed high level of risk in 3 years, Axis and HDFC Equity Growth schemes Performance was satisfactory and KM Equity Growth Scheme performance was poor when compared to other five schemes.

TABLE 3: SHOWING OF 5 EQUITY GROWTH MUTUAL FUND SCHEMES BASED ON JENSON'S RATIO

FUND NAME	JENSON'S RATIO	RISK PREMIUM	RANKING
2020-2021			
HDFC- EQUITY GROWTH	-0.0307	4.62	3
ICICI -EQUITY GROWTH	-0.1071	3.91	4
KM -EQUITY GROWTH	-0.8898	3.78	5
AXIS -EQUITY GROWTH	0.2666	4.41	2
KVB- EQUITY GROWTH	1.6006	11.30	1
2021-2022			
HDFC- EQUITY GROWTH	-0.6923	-0.12	3
ICICI -EQUITY GROWTH	0.9668	1.62	1
KM -EQUITY GROWTH	0.3608	0.16	2
AXIS -EQUITY GROWTH	-0.9855	-0.57	5
KVB- EQUITY GROWTH	-1.9339	-1.75	4
2022-2023			
HDFC- EQUITY GROWTH	-0.0214	-0.59	4
ICICI -EQUITY GROWTH	1.8810	0.82	3
KM -EQUITY GROWTH	-0.0414	-0.81	5
AXIS -EQUITY GROWTH	2.0434	0.77	2
KVB- EQUITY GROWTH	7.8823	6.39	1

JENSONS MEASURE: The Jensen's measure, or Jensen's alpha, is a risk-adjusted performance measure that represents the average return on a portfolio or investment, above or below that predicted by the capital asset pricing model (CAPM), given the portfolio's or investment's beta and the average market return. This metric is also commonly referred to as simply alpha.

Formula: $R(i) - (R(f) + B \times (R(m) - R(f)))$

$R(i)$ = the realized return of the portfolio or investment

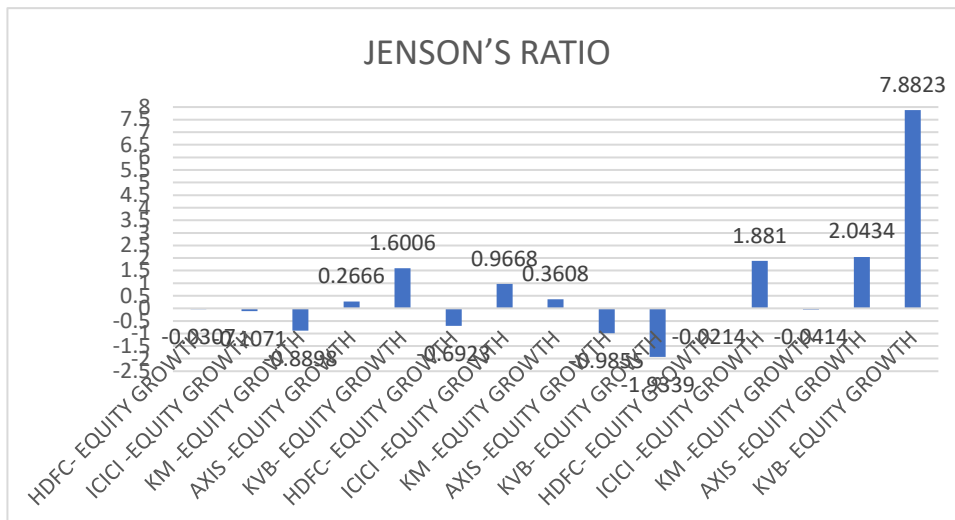
$R(m)$ = the realized return of the appropriate market index

$R(f)$ = the risk-free rate of return for the time period

B = the beta of the portfolio of investment

with respect to the chosen market index

Chart.3:



INTERPRETATION: The above graph signifies the Sharpe's ratio for a period of 3 years from 2020 to 2023 which indicate the measures of high-risk premium per unit of total risk performance. Jensen's alpha indicates KVB has performed better followed by the other four equity growth mutual fund schemes. Axis and HDFC Equity Growth schemes Performance was satisfactory and KM Equity Growth Scheme performance was poor when compared to other five schemes. In the year 2020-2021, all the schemes showed negative alpha, which indicates that the schemes performance was poor than the market and all the schemes have underperformed

FINDINGS:

1. The average return of KVB scheme is higher followed by ICICI, AXIS, HDFC and KM. The return for ICICI increased in the year 2021-2022 whereas the return of HDFC & KM is showing a declined trend
2. The average Standard deviation of KVB is more closely followed by the other four equity growth mutual fund schemes.
3. The average BETA which measures Systematic Risk is more for KVB followed by ICICI, AXIS, HDFC & KM which implies HDFC & KM is slightly more volatile than ICICI & HDFC
4. Sharpe's ratio indicates that KVB has performed better followed by ICICI, AXIS, HDFC & KM.
5. Treynor's ratio indicate that KVB has performed better followed by ICICI, AXIS, HDFC & KM
6. Jensen's alpha indicates KVB has performed better followed by the other four equity growth mutual fund schemes. In the year 2020-2021, all the schemes showed negative alpha, which indicates that the schemes performance was poor than the market and all the schemes have underperformed

SUGGESTIONS:

- ✓ Karur Vysya equity Growth Scheme has the best performer among the respective mutual funds of this study and may be expected to continue in the future.
- ✓ ICICI & AXIS equity growth schemes performance was satisfactory. The scheme performance was better than HDFC & KM-Growth schemes but it was poor when compared to KVB Scheme
- ✓ HDFC & KM Growth Scheme performance was not satisfactory to the other schemes selected for the study. Hence the fund manager should take steps to it improve performance by revisiting the portfolio
- ✓ Therefore, the equity mutual funds of KVB occupies 1st position, ICICI occupies 2nd position, AXIS occupies 3rd position, HDFC occupies 4th position and the Kotak Mahindra occupies 5th position based on their performance. Hence it is advised to the investor to choose accordingly.

CONCLUSION:

- ✓ A Mutual Fund is a Powerful investment option that has the potential to generate long-term wealth for investors. Also, Mutual Funds have schemes for all types of life goals right from creating a pool of wealth to retirement. It has benefits of diversification, low cost, flexibility to invest in smaller amounts and professional fund management. Even though there are many investment avenues where mutual fund industry is growing at a faster rate. Hence this study was done to understand the performance of private sector mutual fund schemes.

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