

## A study on performance evaluation of mutual funds (with special reference to Canara Robeco mutual funds)

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### Abstract

Small investors save and investment in avenues like bank deposits, gold, share, debentures and real estate. Investment in financial assets demands more time, knowledge and risk taking attitude of investors. Lower per capital income, apprehensive loss of capital and economic insecurity significantly influence investment decision of investors. As most of the investors are not experts in choosing the right scrip sometimes they get their finger burnt due to financial decision, developing a state loss of interest in direct equity investment. Mutual fund were firstly started in 19<sup>th</sup> century in England. Mutual funds started in USA during 1900, but they picked up only after 1924 when a number of such funds started. After World War II Mutual funds expanded rapidly. Mutual fund are association or trusts of public members who wish to make investment in the financial instruments or assets of the business sector or corporate sector for the mutual benefits of its members. The researchers have attempted to carry out the study on the performance of mutual funds with the reference to can robeco mutual funds as the very purpose of investing in mutual funds is to enjoy indirectly all the benefits of equity investment. Since both public and private sector mutual funds are growing fast, so the researcher has attempted to study the performance of can robeco mutual fund schemes in term of different schemes and Net Asset Value of the schemes. Net Asset Value is analyzed on an average monthly basis for a better understanding of different schemes. Net Asset Value has been used for the study period of five years monthly data.

**Keywords:** Mutual funds, Canrobeco Mutual fund.

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### 1. Introduction

Financial system is of crucial significance for capital formation. The main function of capital market is the collection of savings and their distribution for industrial investment thereby stimulating further capital formation. Savings refer to the ability by which claims to resource are set aside and becomes available for productive purpose. Investment refers to the activity by which resources are actually committed to production. Savings and investment are promoted by the capital market to activate capital formation and economic growth of the country. Savings are sometime autonomous and sometimes induced by incentives like fiscal concessions, income or capital appreciation.

Small investors save and investment in avenues like bank deposits, gold, share, debentures and real estate. Investment in financial assets demands more time, knowledge and risk taking attitude of investors. Lower per capital income, apprehensive loss of capital and economic insecurity significantly influence investment decision of investors. As most of the investors are not experts in choosing the right scrip sometimes they get their finger burnt due to financial decision, developing a state loss of interest in direct equity investment.

With the emergence of capital market at the centre stage of Indian financial system, the Indian capital market witnessed a significant institutional development in the form of diversified structure mutual funds. A mutual fund is a special type of investment institution that acts as an investment conduit. It pools the savings particularly of small investor and invest them in a well-diversified portfolio of sound investment. Mutual funds issue securities to the investors (known as unit holders) in accordance with quantum of money invested by them.

Hence, it has been considered imperative to study the performance of mutual funds.

### Review of Literature

Alekhya (2012) <sup>[1]</sup>, studied the performance evaluation of public and private sectors mutual funds in Indian and comparative performance of public and private sector mutual funds scheme the Indian mutual fund industry has witnessed a structural transformation during the past few years. This paper has evaluated the performance of Indian mutual funds in equity scheme in three years, past data from (2009-2011). To appraise investment performance of mutual funds with risk adjustment the theoretical parameters has suggested by sharpe, treynor and jensen.

Gupta S L and Meenakshi Garg (April 2002-March 2013) <sup>[2]</sup>, has conducted a study on "A Study of Performance Evaluation of Selected Mutual Funds in India". This research work attempts to evaluate the performance of mutual fund industry in India under the regulated environment after the introduction of the SEBI (mutual funds) regulation-1996, enforcing uniformity in rules and regulations. Performance evaluation of mutual funds in this study is confined to three aspects namely, Financial, Investing public and Regulatory body. In financial aspect, the performance of mutual funds is evaluated from return incurred by them and their comparison with the stock market index. Investment performance of mutual funds is evaluated through a survey conducted on mutual fund investors considering their attitude, satisfaction and other aspects. Finally, the impact of regulatory measures taken from the time to time by regulatory authority on the performance of mutual funds. For evaluating the financial performance of selected

mutual funds, the period of the study is chosen from 2002-2003 to 2012-2013 i.e April 2002 to March 2013.

### Statement of the Problem

The researcher has attempted to carry out the study on the performance of mutual funds with the reference to growth plans, as the very purpose of investing in mutual funds is to enjoy indirectly all the benefits of equity investment. Since both public and private sector mutual funds are growing fast, so the researcher has attempted to study the performance of growth plans mutual funds in term of different schemes and Net Asset Value of the schemes. Net Asset Value is analyzed on a quarterly basis for a better understanding of different companies schemes. Net Asset Value has been used for the study period of five years monthly data.

### Objectives of the Study

The following have been the main objectives of the study:

- To measure and evaluate the performance of mutual funds in terms of return.
- To know the potential risk involved in each mutual fund scheme.
- To find out the best mutual fund scheme among the selected schemes in terms of risk and return.

### Research Methodology

Can Robecco Mutual Funds is a trust that pools the saving of a number of investors, who share a common financial goal. The money collected is then invested in the capital market instrument such as shares, debentures and other securities. Can Robecco Mutual Funds has been selected as the sample for the study owing to its continued percentage of its valued customers, stock holder, canara and leadership quality demonstrated by its leader in mutual funds scheme.

Following schemes have been studied:

- 1) Canara Robecco Income-regular plan growth.
- 2) Canara Robecco Monthly Income Plan-regular plan-monthly dividend.
- 3) Canara Robecco Emerging Equities-regular plan-growth.
- 4) Canara Robecco Treasury Advantage Plan- regular plan-growth.
- 5) Canara Robecco Emerging Equities-regular plan-dividend.

Secondary data relating to schemes undertaken has been collected from respective sites of mutual funds.

### Tools of Analysis

The tools used for the present study are:

#### ❖ Return and risk of selected schemes

The data relating to schemes undertaken has been collected from respective sites of mutual funds. The NAV value at the first quarter has been taken for calculation of return and risk.

#### ❖ Sharpe Ratio

For finding out the risk premium to the variability of return as measured by standard deviation of return, Sharpe ratio is calculated

#### ❖ Treynor Ratio

It is a ratio of reward to the volatility of return as measured by the portfolio beta.

#### ❖ Sortino Ratio

The Sortino ratio is used as a way to compare the risk-adjusted performance of programs with differing risk and return profiles. In general, risk-adjusted returns seek to normalize the risk across programs and then see which has the higher return unit per risk. The Sortino ratio is used to score a portfolio's risk-adjusted returns relative to an investment target using downside risk. This is analogous to the Sharpe ratio, which scores risk-adjusted returns relative to the risk-free rate using standard deviation. When return distributions are near symmetrical and the target return is close to the distribution median, these two measure will produce similar results. As skewness increases and targets vary from the median, results can be expected to show dramatic differences.

#### ❖ Coefficient of Correlation

To examine whether the past is an indicator of the future growth, the relationship between the NAV of the monthly rate of return was compared with that of its immediately previous monthly rate of return by calculating coefficient of correlation (r).

### 2. Results and Discussions

The results relating to the growth plans of mutual funds during the period from 2010 to 2014 have been categorized and presented as follows:

- a. Return Characteristics of the Selected Scheme
- b. Risk Characteristics of the Selected Scheme
- c. Result of Sharpe Ratio
- d. Result of Treynor Ratio
- e. Result of Sortino Ratio
- f. Result of Coefficient of Correlation

#### Average result of Treynor ratio

**Table 1:** Result of Treynor ratio of five schemes

Scheme Name	Average of Pf Return	Average Beta	Average Treynor	Average Bench Mark
Canararobeco income –regular plan- growth	1.30	-0.52	0.97	0.46
Canararobeco monthly income plan –regular plan-monthly dividend	0.82	0.13	-7.61	0.46
Canararobeco emerging equities –regular plan-growth	2.08	0.86	1.06	0.46
Canararobeco treasury advantage plan- regular plan-growth	480.03	13.03	4247.68	0.46
Canararobeco emerging-regular plan-dividend	168.65	18.73	2.41	0.46

Source: Secondary data

From the above table that the treynor ratio is negative in the scheme of canararobeco monthly income plan – regular plan – monthly dividend. The highest treynor ratio is 4247.68 in the scheme of canararobeco treasury advantage plan – regular plan – growth and lowest treynor ratio is -7.61 in the scheme of

canararobeco monthly income plan – regular plan – monthly dividend it is found that in the scheme canararobeco monthly income plan – regular plan – monthly dividend is over performed.

**Table 2:** Result of sortino ratio for five schemes

Scheme Name	Average of Pf Return	Average Market Return	Average Downside Risk	Average Sortion
Canararobeco income –regular plan- growth	1.30	2.97	2.97	0.59
Canararobeco monthly income plan –regular plan-monthly dividend	0.82	1.00	1.35	0.35
Canararobeco emerging equities –regular plan-growth	1.00	1.00	2.70	1.10
Canararobeco treasury advantage plan- regular plan-growth	480.30	1.00	3.88	25.38
Canararobeco emerging-regular plan-dividend	168.65	1.00	8.20	45.50

Source: Secondary data

From the above table show that sortino ratio is positive ratio in all five schemes. Highest sortino ratio of 45.50 in the scheme of canararobeco emerging equities – regular plan – dividend and lowest sortino ratio of 0.35 in canararobeco monthly income plan – regular plan – monthly dividend and highest downside risk is found in the scheme of canararobeco emerging equities-regular plan – dividend of 8.20 and lowest downside risk of 1.35 is found in the scheme of canararobeco monthly income plan – regular plan – monthly dividend.

### Summary of Findings

#### Risk and Return characteristics of selective schemes

The Monthly average net assets value of the different growth schemes shows an increase in 2010-2014.

An analysis of the percentage changes shows that, Net Assets value (NAV) shows a positive growth in all the years. The highest average return for this scheme is 480.03 in the scheme canra robeco treasury advantage plan- regular plan – growth and the lowest average return is 0.82 in the canara robeco monthly income plan – regular plan – monthly dividend the average unsystematic risk is high in the scheme of canara robeco treasury advantage plan- regular plan – growth in 1664.73 is found and lowest unsystematic risk is 3.67 in the scheme of canara robeco monthly income plan – regular plan – monthly dividend in average of systematic risk the highest risk is found in canara robeco treasury advantage plan – regular plan – growth is 4247.68 and lowest risk is -7.61 in the scheme canra robeco monthly income plan – regular plan – monthly dividend.

#### Results of Sharpe Ratio

The sharpe ratio there is no negative in average of market return. The highest average of sharpe ratio is 0.26 in the scheme of canararobeco emerging equities – regular plan – growth and the lowest ratio is -0.26 in the scheme of canararobeco monthly income plan – regular plan – monthly dividend. It is fond in the scheme of canararobeco income–regular plan – growth and canararobeco treasury adavantage plan – regular plan – growth were under performed.

The value of sharp reward to variability ratio for the schemes return and market return. It is excess return earned over risk-free return per unit of the risk involved. Sharpe ratio does not shows any negative returns and market return implying that, returns earned does not provide adequate cover for the risk taken.

#### Results of Treynor Ratio

The treynor ratio is negative in the scheme of canararobeco monthly income plan–regular plan–monthly dividend scheme. The highest treynor ratio is 4247.68 in the scheme of canararobeco treasury advantage plan–regular plan–growth and lowest treynor ratio is -7.61 in the scheme of canararobeco monthly income plan–regular plan–monthly dividend it is found that in the scheme canararobeco monthly income plan–regular plan–monthly dividend is over performed.

It shows the excess return earned over risk-free return per unit of systematic risk. The table shows the risk premium to the volatility of return as measured by the beta. Schemes treynors ratio does not shows negative returns during the study period. Schemes return and market return shows negative returns over the period of the study. On an overall, reward to volatility ratio shows that risk premium is low in the case of the scheme compared to that of market treynor ratio.

#### Result of Sortino Ratio

It is found that sortino ratio is positive ratio in all five schemes. Highest sortino ratio of 45.50 in the scheme of canrarobeco emerging equities – regular plan – dividend and lowest sortino ratio of 0.35 in canararobeco monthly income plan – regular plan – monthly dividend and highest downside risk is found in the scheme of canararobeco emerging equities- regular plan – dividend of 8.20 and lowest downside risk of 1.35 is found in the scheme of canararobeco monthly income plan – regular plan – monthly dividend.

It shows the excess return earned over risk- free return unit of down side risk. The table shows the risk premium to the volatility of return as measured by the downside risk. Schemes sortino ratio does not show any negative returns during the study period. On an overall, reward to volatility ratio shows that risk premium is low in the case of the scheme compared to that of market sortino ratio.

#### Result of Coefficient of Correlation

Correlation has been carried out to establish the significance between the average return of the selected five schemes. From the result it is clear that there exists positive correlation with 0.980 and significance between the average returns of canararobeco income-regular plan-growth and canararobeco emerging equities-regular plan-dividend at 1% level of significance with the significance value of 0.003.

Correlation has been carried out to establish the significance between the average return of the selected five schemes. From

the result it is clear that there exists positive correlation with 0.351 and significance between the average returns of canararobeco emerging equities-regular plan-growth and canararobeco monthly income plan- regular plan-monthly dividend, dividend @1% level of significance with the significance value of 0.562.

Correlation has been carried out to establish the significance between the average return of the selected five schemes. From the result it is clear that there exists positive correlation with 0.351 and significance between the average returns of canararobeco income-regular plan-growth and canararobeco emerging equities-regular plan-dividend at 1% level of significance with the significance value of 0.003.

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Correlation has been carried out to establish the significance between the average return of the selected five schemes. From the result it is clear that there exists positive correlation with 0.980 and significance between the average returns of canararobeco emerging equities-regular plan-dividend and canararobeco income- regular plan growth, dividend @1% level of significance with the significance value of 0.03.

There is a correlation coefficient of net assets value between five schemes in five years. The highest correlation was (0.980) under the average return of canararobeco income- regular plan-growth & canararobeco emerging equities- regular plan – dividend @ 1% evel of significance value is (0.003)and lowest correlation was (-291) under the scheme of canararobeco income-regular plan- growth & canararobeco treasury advantage plan-regular plan -growth and the net asset value of the schemes a positive correlation, with that of its immediate previous during the period of study except in the ending under all the growth schemes.

### 3. Conclusion

In India, mutual funds have a lot of potential to grow. Mutual fund company have to create and market innovation products and frame distinct marketing strategies. Product innovation will be one of the key determinants to success. The mutual fund industry has to bring many innovative concepts such as high yield bond funds principal protected funds, long short funds, arbitrate fund, etc., the penetration of mutual fund can be increased through investor education, providing investor oriented value added services and innovative distribution channels mutual have failed during the bearish market condition. They sell successfully during the bear market, there is need to educate investors about risk adjusted return and total portfolio return to enable them to take informed decision. Mutual fund need to develop a wide distribution network to increases its reach and tap investment from all corners and segments increased use of internet and development of alternative channels such as financial advisors can play a vital role increases the penetration of mutual funds. Mutual fund have come a long way, but a lot more can be done.

*“Mutual fund is established in the form of a trust by a sponsor, to raise monies by the trustees through the sale of units to the public, under one or more schemes, for investing in securities in accordance with these regulations”.*

- SEBI Regulation 1993

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