Are Mutual Fund Managers Able to Create Return Better than Benchmark? : An Empirical Study across the World

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Abstract

Mutual fund managers are facing issues to provide return better than benchmark due to lack of knowledge of using techniques like the Sharp portfolio construction method. Benchmark is nothing but the measurement average against the show of a mutual fund. Some well-known benchmarks are the BSE Sensex and NSE Nifty. The mainly large-cap oriented equity funds benchmark themselves against the Sensex or the Nifty. Other benchmarks are CNX midcap, CNX Small-cap, S&P BSE 200, etc. The fund manager's primary task is generating risk-adjusted returns compared to their Benchmark (Alpha). To quantitatively measure the performance of the mutual fund manager across the world and how the sharps portfolio construction method helps the manager to provide return better than the benchmark. The research majorly focuses on the study of the measuring mutual fund manager unable to deliver return better than benchmark from 2014 to 2018 across the world. The Study focuses on 4 developed and 2 developing countries by Comparing indexes return with the portfolio return. With the help of using sharps construction portfolio method. Sharps portfolio construction method is used to create and manage investment portfolios by using a beta, alpha, standard deviation, residential variance, risk-free rate, and market risk.

Key Words: *Mutual Fund, Benchmark, Indexes, Sharps portfolio construction method, alpha, beta*

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Introduction to the Mutual Fund Industry

India is an emerging country. The 1st mutual fund came into India in 1964 but it was completely monopoly sector because of the public sector till 1987. In 1994 the mutual fund industry started developing. Since 2003 in the market the public as well private sector started playing in the regulatory of security and exchange board of India (SEBI). there were only 44 assets management companies in 2014 with USD 134360 million assets under management investment companies constitute (2015) 'net assets value (NAV India)' the data has been submitted to SEBI whatever in rank arise from the Indian mutual fund industry. It provides information on 241 unique fund managers' organization various mutual fund schemes.

What is the Benchmark?

Benchmark is nothing but the measurement average against the show of a mutual fund. In 2012 SEBI is ready it compulsory for fund houses to say publicly a benchmark index. Benchmark is the self-governing and is based on the objectives of your fund. Some Well-known benchmarks are the BSE Sensex and NSE Nifty. The mainly large-cap oriented equity funds benchmark themselves against the Sensex or the Nifty. Other benchmarks are CNX Midcap, CNX Small-cap, S&P BSE 200, etc.

Mutual Fund Managers and Benchmark Returns

Fund manager's primary task is generating risk-adjusted returns compared to their Benchmark (Alpha).However, generating alpha becomes difficult when a stock market matures falling alpha in the developed markets is a case in point.

So maybe, it is because our markets are maturing or perhaps, it is due to the recent increase in mutual funds AUM, the benchmark generated by Indian large-cap active funds has been decreasing. According to Morningstar, in the 46%, their benchmark has significantly reduced the number of large-cap deposits that the Index has sponsored. In other words, 54% of the large-cap funds actively handled will lose their benchmark indicators. Alpha calculates the use of benchmark returns on a monthly shift minus using three-year roles of funds.

Literature Review

The studies of mutual fund managers require to develop a new portfolio because investors always want the better to maximize return but here managers are unable to give return and evaluate the performance of the mutual fund, some study shows under-performance while some show the out-performance. Mutual fund overall performance is divided into the two-parts, the skill of fund selection, and the ability of marketing timing selection. Skill means the fund manager's ability to identify and select those stocks that undervalue and overvalue in the market and invests in that equity which gives high-risk premiums. Select and identify means they invest in only rewarding securities. But given literature says, mutual fund managers are negative market timing performers and also give less return.

Detailed Literature Review

- **Julien Cujean (2020)**

  The study used an equilibrium model to measure the reasons why mutual fund managers are not providing better returns. Which information helps to generate higher returns, from where all this information is to generate, which statistical tool is used to analyze the gathered data and how to used it to generate better returns. All this information can be collected from different sources to meet the customers' expectations and providing better returns by mutual fund managers.

- **InderjitKaur (2017)**

  This thesis analyzes those fund managers who have primary management instruction degree not only who can perform superior but furthermore can provide consistent performance to investors by collecting data from Net Asset value on record of mutual funds in India by CapitaLine.

- **George Comer & Norris Larrymore& Javier Rodriguez**

  This paper analyzed that mixed funds the same as a cluster do not add rate and because of this deficit, it does not come out to be ambitious by the poor act of

not in subsistence funds. Though these funds act upon considerably greater than the style benchmark under weak vs hard stock market situation by using data on hybrid funds, The time-honored mutual fund performance, and the Shapes ratio.

- **Sanjay Sehgal&Sonal Babbar**

  This paper analyzed that the provisional side of the Carhart (1997) model is originated to be chiefly suitable in act benchmark in the Indian scaffold. The success of restricted models over ill-equipped models highlights that fund managers strongly manage their portfolios by using data on Treynor and Sharpe ratios, regressing excess stock return, price to book ratio.

- **DrososKoutsokostas& Spyros Papathanasious (2017)**

  This paper analyzed that the mutual funds underperformed the General Index, because the managers do not have the capacity in market timing. Moreover, puny suggestions for short period act meticulousness had been familiar by using data on daily basis data, Athens stock exchange general index, Average daily a typical return.

- **HalilKiymas&Koray D. Simsek (2018)**

  This paper analyzed that branch out rising market funds make some insignificant alphas for their investors during that study period. Rising market bond funds, on the other hand, do not bid any main positive alphas; frequently alphas are negative by using data on alpha for worldwide equity funds, portfolio turnover, Sharpe ratio, information ratio.

Research Methodology

Need for the Study

To quantitatively measure the performance of the mutual fund managers across the world and how Sharps portfolio construction method helps managers to provide return

better than benchmark. The index is already providing a better return but mutual fund managers are not able to generate a good amount of return from their portfolio compare to index return.

Objectives

The objective of this study is to assess the mutual fund manager unable to deliver return better than benchmark: an empirical study across the world. Keeping that above on thought, the present study has been directed with the accompanying objectives.

- Focus on 4 developed and 2 developing countries by Comparing indexes return with the portfolio return.
- With the help of using the Sharps construction portfolio method.
- Why mutual fund managers are not able to meet the expectations of investors, although the index is already providing better returns.

Research Design

Exploratory research

- Secondary research: research paper, website, journal, project report, yahoo finance, Proquest, yahoo finance, NSE, Dow Jones, Straits times, FTSE100, DAX and CAC 40

Problem Statement

The research majorly focuses on the study of the measuring mutual fund manager unable to deliver return better than benchmark from 2014 to 2018 across the world.

The Hypothesis to be Tested

$H_0(1)$: There is no significant difference between sharps portfolio construction method and index across the world.

$H_0(2)$: There is no significant difference between sharps portfolio construction method and index in India.

$H_0(3)$: There is no significant difference between sharps portfolio construction method and index in Singapore.

H_0(4): There is no significant difference between sharps portfolio construction method and index in USA.

H_0(5): There is no significant difference between sharps portfolio construction method and index in Great Britain.

H_0(6): There is no significant difference between sharps portfolio construction method and index in Germany.

H_0(7): There is no significant difference between sharps portfolio construction method and index in France.

Sample Size

The sample size is 200 of 6 countries from the year 2014 to 2018 is selected for this.

Types	Country
Developed	The United States of America
Developed	Great Britain
Developed	France
Developed	Germany
Developing	India
Developing	Singapore

Data Analysis and Interpretation

Sharps portfolio construction method

Sharps portfolio construction method is used to create and manage investment portfolios by using a beta, alpha, standard deviation, residential variance, risk-free rate, and market risk.

SR = (Rp – Rf) / 6p

Where;

Rp = Return of the portfolio

Rf = Risk-free rate of return

6p = Standard deviation of the portfolio

Index Return

Index return shows the capital gain of a group of companies stock which is listed on the stock market.

IR = Total Value/value of all number of stocks in the index * 100

Paired Samples t-Test for the Across the World

Here we used the Paired Sample t-test to measure the difference between two variables of the same subject. Six different countries are taken into the study to measure the Index return.

Table 1 Paired Samples t-Test to across the World

	Mean	T	Sig. (2-tailed)
SPR – IR	1.17458	2.181	.031

(Source: SPSS)

Interpretation

The P-value is 0.031 which is less than 0.05 which means hypothesis 1 is rejected. Hence, there is any significant impact of the mutual fund manager is beat the benchmark across the world.

Paired Samples t-Test to in India

Table 2 Paired Samples t-Test to in India

	Mean	T	Sig. (2-tailed)
SPR – IR	-1.26061	-0.904	0.375

(Source: SPSS)

Interpretation

The P-value is 0.375 which is greater than 0.05 which mean hypothesis 2 does not reject. Hence, there isn't any significant impact of the mutual fund manager does not beat the benchmark in India.

Paired Samples t-Test to in Singapore

Table 3 Paired Samples t-Test to in Singapore

	Mean	T	Sig. (2-tailed)
SPR – IR	1.37883	1.198	0.243

(Source: SPSS)

Interpretation

Here, is also the P-value is 0.243 which is greater than 0.05 which mean hypothesis 3 is accepted. Hence, there isn't any significant impact of the mutual fund manager does not beat the benchmark in Singapore.

Paired Samples t-Test to in the United State of America

Table 4 Paired Samples t-Test to in the USA

	Mean	T	Sig. (2-tailed)
SPR – IR	0.94358	3.338	0.003

(Source: SPSS)

Interpretation

Here, is the P-value is 0.003 which is less than 0.05 which mean hypothesis 4 is rejected. Hence, there is a significant impact of mutual fund manager is beat the benchmark in USA.

Paired Samples t-Test to in Great Britain

Table 5 Paired Samples t-Test to in Great Britain.

	Mean	T	Sig. (2-tailed)
SPR – IR	1.78341	1.565	0.131

(Source: SPSS)

Interpretation

Here, is the P-value is 0.131 which is greater than 0.05 which means hypothesis 5 is not rejected. Hence, there isn't a significant impact of the mutual fund manager is not beat the benchmark in Great Britain

Paired Samples t-Test to in Germany

Table 6 Paired Samples t-Test to in Germany

	Mean	T	Sig. (2-tailed)
SPR – IR	0.51780	0.494	0.626

(Source: SPSS)

Interpretation

Here, is also the P Value is 0.626 which is higher than 0.05 that mean hypothesis 6 is accepted. Hence, there isn't significant impact of mutual fund manager is not beat the benchmark in Germany.

Paired Samples t-Test to in France

Table 7 Paired Samples t-Test to in France

	Mean	T	Sig. (2-tailed)
SPR – IR	3.68448	1.737	0.096

(Source: SPSS)

Interpretation

The P-value is 0.096 which is higher than 0.05 which means hypothesis 7 is accepted. Hence, there isn't a significant impact on the mutual fund manager does not beat the benchmark in France.

Findings

- The major findings along with a discussion of the research are mutual fund managers are able to give more returns than the benchmark in 6 various countries.
- There are 200 companies from 6 indexes from USA, UK, India, China, France and Germany. The secondary data was taken from Yahoo finance of the duration of 1st January 2014 to 31st December 2018 and their returns have been checked according to indexes and benchmark returns after and before.

- The 5-year data was collected but the last 3 years' returns of the same as all countries were calculated.
- For this study, the paired T-test was considered to describe the relation and differences between index return and sharp portfolio construction method.
- It was found that the sharp portfolio return gives more than the index return.
- By using a sharp portfolio method investors can get better returns.
- Moreover, the USA is a country which gives the highest return beating its benchmark among rest of 5 countries.

Conclusion

The objective of the study is to measure the performance of mutual fund managers and index returns. Why mutual fund managers are not providing return or beat the returns that index is already providing. Is a sharp portfolio construction method useful for the mutual fund managers to provide better returns to their customers?

As per the research, it can be concluded that the benchmark return is higher for at least, last 3 years compare to mutual fund managers. Now after this research of all 6 countries we concluded one common result is that indexes are perfectly providing better returns, though mutual fund managers are not able to give return due to many reasons. It may not invest in well and strong equities. Lack of skill and knowledge on index and stock market it turns into lesser amount than their returns to investors.

Though, here what we find the way by sharp portfolio construction method to solve this issue. So by this method mutual fund managers can increase their wealth maximise. So not only big investors but also other laymen can take benefit out of it with max returns.

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