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The Effect of Changes in Economy on Expense Ratio of Selected Mutual Fund Schemes

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A B S T R A C T

The research paper investigates the effect of changes in Expense Ratio of 25 Mutual funds of Different categories (small cap funds, mid cap funds, large cap funds, multi cap funds and large & mid cap funds) due to change in GDP Rate & Repo Rate by the government for the period of June 2018 to September 2019. In the year 2018, small cap funds and large & mid cap funds shows negative relationship with respect to changes in Repo rate. In the paper research done on top performing 25 mutual funds as on September 2019. The data collection is considered on taking the average of daily expense ratios of per month. Interpretation and analysis of 25 mutual funds is done by taking average of beta of category-wise mutual funds and analysis on performance of the mutual funds with rise or fall in GDP Rate & Repo Rate. From the study the results are defined category-wise, in small cap funds, large cap funds and large & mid cap funds shows positive relationship between Expense Rate and GDP rate in both the years 2018 & 2019. In the case of Repo rate mid cap, large cap and multi cap funds shows positive relationship between Expense Rate and Repo rate in both the years 2018 & 2019. In the year 2018, small cap funds and large & mid cap funds shows inverse relationship with respect to changes in Repo rate. In the year 2018, mid cap funds and multi cap funds shows inverse relationship with respect to changes in GDP rate.

Keywords: BETA, GDP BETA, REPO RATE BETA, MUTUAL FUND and EXPENSE RATE.

1. INTRODUCTION

Strong growth of existing financial services organisation and the new entities in the market is the new agenda of India`s financial sector. Indian financial sector includes commercial banks, financial institution, funding entities like mutual funds, pension funds etc. India`s financial sector is predominantly dominated by the commercial banks sector with 64% of the total assets. The government of India, through Reserve bank of India (RBI) launched many financial reforms to support and enhance the existing system. Micro small and medium enterprises (MSME) are getting facilitated by RBI`s new reforms.

2. REVIEW OF LITERATURE

Author/Affiliation	Topic/Area	Sample Size/Methodology	Contribution
Rajesh Kumar & Rituraj Chandrakar (2012)	A review of 29 open-ended, growth-oriented equity plans' performance from April 2005 to March 2011.	Analysis of 29 open ended, growth-oriented equity schemes	29 sample mutual fund schemes were examined, and 14 of them beat the benchmark return. 15 plans underperformed, and they are now having difficulty of diversifying.
Dr. R. Narayansamy & V. Rathnamani (2013)	Analyses the performance of a few large-cap equities mutual fund schemes in terms of the connection between risk and return.	Performance study is conducted using five big cap equity funds.	Except for Reliance Vision, all the funds have done well throughout the extremely erratic market movement.
Suchit Shukla (2015)	analysed the risk-return connection of a few different mutual fund schemes' performance.	Three mutual funds were divided into five groups for examination.	The mutual fund related to infrastructure fund in 2013 provided superior returns than the benchmark over the noted period.
Dr. S. Narayana (2003)	A relative performance index is used to assess how well Indian mutual funds performed during the bad market.	75 mutual funds were selected for examination.	By providing surplus returns over anticipated returns based on both low grades for systematic risk and overall risk, 58 out of 75 were able to meet investors' expectations.

Sahil Jain (2012)	examines the effectiveness of equity-based mutual funds provided by two commercial and two public sectors.	45 equity-based mutual funds are available through 2 public and 2 private companies.	According to analysis, HDFC and ICICI have been the top performers, UTI has been averaging, and LIC has been the worst, giving returns that were lower than predicted given the risk-return connection.
Tej Singh & Priyanka (2014)	Compared to public sector mutual funds, the private sector of mutual funds is gaining more in terms of the amount of money mobilised.	For study, 48 mutual funds from the private sector were selected.	According to the survey, private sector mutual funds are benefiting more from the magnitude of fund mobilisation than the public sector. From 31% in 1998-1999 to 81 percent in 2003-04, the difference eventually narrowed to 54% in 2009-2010.
Tripathy (2007)	Examine the numerous difficulties that mutual funds may face in the future.	For study, 25 mutual funds were selected.	She came to the conclusion that the perception of investors' confidence in the company as a whole is the key to the mutual fund sector's success.
Khurana & Panjwani (2010)	By analysing the performance of fifteen (15) open-ended hybrid mutual fund schemes using Sharpe, Treynor, and Jensen measures	There were fifteen open-ended hybrid mutual fund schemes examined.	With the exception of ICICI Prudential Balanced Fund-G and Principal Balanced Fund-G, all of the schemes have outperformed the market in terms of the majority of the study's metrics.
Rao and Daita (2011)	examined how fundamental elements including the economy, industry, and firm affected the success of mutual funds.	They attempted to determine the link between actual economic factors and their effect on the performance of mutual funds using the correlation matrix, the Augmented Dicky-Fuller (ADF) test, and the Granger casualty test.	The study found that investing in mutual funds is not considerably influenced by genuine economic factors.
Zaheeruddin, Sivakumar & Reddy (2013)	three mutual funds from the financial services industry had their performance evaluated.	For the purpose, they looked at HDFC Mutual Fund, Birla Sunlife Mutual Fund, and ICICI Prudential Mutual Fund from July 2009 to April 2012.	They came to the conclusion that ICICI Prudential Mutual Fund outperformed HDFC and Birla Sunlife Mutual Fund in terms of Sharpe, Treynor, and Jensen metrics.

2.1 RESEARCH STATEMENT

From the past review of the literature, it is revealed that mutual funds' performance and its factors responsible for their outperformance and underperformance in different periods. In this study, the focus is given on the effect of change of economy on expense ratio of the mutual funds scheme. So, the study is undertaken with the following objectives:

2.2 OBJECTIVES OF THE STUDY:

- To find out the use of expense ratios in different types of mutual funds.
- To study the impact of changes in the GDP & repo rate affect the performance of funds.
- To analyze the performance of top performing Mutual Fund.
- To compare top-performing mutual funds based on related financial ratios.

2.3 METHODOLOGY

The data required for this study is collected from the secondary sources i.e., Paisabazar, Moneycontrol, Wikipedia etc. For this study we have taken 5 top performing mutual funds sectors i.e., Small Cap Funds, Mid Cap Funds, Large Cap Funds, Multi-Cap Funds, and Large & Mid Cap Funds. And in each sector, we have taken 5 top performing mutual funds. The tools used for analysis and interpretation of the data are Beta value by using Microsoft Excel.

3. ANALYSIS & INTERPRETATION

Analysis and interpretation of five mutual funds from different sectors given below:

1. SMALL CAP MUTUAL FUNDS

Table 1 showing the detail of small cap mutual funds in 2018 & 2019

				2018		**2019**	
Funds Name	**NAV**	**Fund Size**	**Total Expenses ratio**	**GDP Beta**	**Repo Rate Beta**	**GDP beta**	**Repo Rate Beta**
Aditya Birla Sunlife Small Cap	29.3753	2237.27	2.40%	0.28	-0.61	-0.03	-0.09
Axis small cap	30.28	1037.25	2.48%	0.02	-0.12	0.06	0.13
DSP small Cap	49.31	4773.08	2.01%	0.04	-0.07	0.08	0.15
Franklin India smaller Companies	48.1127	7004.97	1.88%	0.11	-0.19	0.09	0.15
HDFC Small Cap	37.625	8844.54	2.10%	-0.03	0.22	0.14	0.23
Average				**0.08**	**-0.15**	**0.07**	**0.12**

Source: - Paisabazar, moneycontrol

- **Small-Cap Funds.**

1. From the analysis of the data, the average beta of GDP in the year 2018 and 2019 is .08 and .07 which means the expense rate is directly proportionate to the changes in GDP rate.
2. As there is a decrease in GDP Rate, the expense rate is also decreased. As there is a decrease in expense rate, the investors get benefit in returns.
3. The GDP is changed due to changes in some policies and regulations by the government like the unemployment rate, macro-economic fluctuations in the country.
4. The average beta of the funds in the year 2018 is -0.15 which is inversely proportionate to the Repo rate. In the year 2019 average beta of the funds is 0.12% which is directly proportionate to the Repo rate.
5. In the year 2018, the repo rate is constant but the repo rate beta is -0.15 which means as there is no change in repo rate, due to changes in other factors, the expense ratio is decreased. In 2019 repo rate is decreased constantly due to that average beta is at 0.12 which means changes in other economic factors affect the changes in prices of the expense ratio of mutual funds.

1. MID CAP MUTUAL FUNDS

Table showing the detail of mid cap mutual funds in 2018 & 2019

Funds Name	**NAV**	**Fund Size**	**Total Expense Ratio**	2018		2019	
				GDP Beta	**Repo Rate Beta**	**GDP Beta**	**Repo Rate Beta**
Aditya Birla Sunlife Mid Cap	260.33	2295.97	2.32%	0.34	1.57	-0.06	-0.02
Axis Mid Cap	37.92	3199.73	2.17%	0.09	-0.19	0.07	0.17
Baroda Mid Cap	8.55	46.43	2.60%	-0.08	1.21	4.25	0.55
BNP Paribus Mid Cap	30.57	732.66	2.33%	0.04	0.28	-0.01	0.03
DSP Mid Cap	53.249	6348	1.95%	-0.47	1.57	0.01	0.09
Average				**-0.02**	**0.89**	**0.85**	**0.16**

Source: - Paisabazar, moneycontrol

- **Mid Cap Funds.**

1. From the analysis of the data, the average beta of GDP in the year 2018 and 2019 is -.02 and .85 which means in the year 2019 expense rate is directly proportionate to the changes in GDP rate. In 2018 the expense rate is inversely proportionate to the changes in GDP rate.
2. As there is a decrease in GDP Rate, the expense rate is also decreased and affects the performance of mutual funds. As there is a decrease in expense rate, the investors get benefit in returns.
3. The GDP rate changes due to change in some policies and regulations by the government like the unemployment rate, macro-economic fluctuations in the country.
4. The average repo rate beta of the funds in the year 2018 is 0.89 which is directly proportionate to the Repo rate and has a good impact on funds. In the year 2019 average beta of the funds is 0.16 which is directly proportionate to the Repo rate.
5. In the year 2018, the repo rate is constant but the repo rate beta is 0.89 which means as there is no change in repo rate, due to changes in other factors and the beta shows positive signs and favorable for funds. In 2019 repo rate is decreased constantly due to that average beta is at 0.16 which means changes in other economic factors affect the changes in prices of the expense ratio of mutual funds.

3. LARGE CAP MUTUAL FUNDS

Table showing the detail of large cap mutual funds in 2018 & 2019

Funds Name	**NAV**	**Fund Size**	**Total Expense Ratio**	2018		2019	
				GDP Beta	**Repo Rate Beta**	**GDP Beta**	**Repo Rate Beta**
Aditya Birla Sunlife Frontline Equity	218.25	20692.22	1.82%	4.67	-1.81	0.14	0.31
Axis Blue-chip Fund	30.91	8049.93	2%	0.12	-0.03	0.04	0.13
Baroda Large Cap	14.51	31.45	2.59%	-0.14	0.90	0.26	0.44
BNP Paribus Large Cap	93.75	787.62	2.33%	0.00	0.36	-0.02	0.00
Canara Robecco Blue-chip Equity Fund	25.6	238.23	2.65%	-0.97	3.03	0.13	0.32
Average				**0.74**	**0.49**	**0.11**	**0.24**

Source: - Paisabazaar, money control

- Large Cap Funds
- From the analysis of the data, the average beta of GDP in the year 2018 and 2019 is .74 and .11 which means the expense rate is directly proportionate to the changes in GDP rate.
- As there is a decrease in GDP Rate, the expense rate is also decreased. As there is a decrease in the expense rate, the investors get benefits in returns.
- The GDP rate changes due to change in some policies and regulations by the government like the unemployment rate, macro-economic fluctuations in the country.
- The average beta of the funds in the year 2018 is 0.28 which is directly proportionate to the Repo rate. In the year 2019 average beta of the funds is 0.12 which is directly proportionate to the Repo rate.

In the year 2018, the repo rate is constant but the repo rate beta is 0.28 which means as there is no change in repo rate, due to changes in other factors, the expense ratio is decreasing. In 2019 repo rate is decreased constantly due to that average beta is at 0.12 which means changes in other economic factors affect the changes in prices of the expense ratio of mutual funds.

4. MULTI CAP MUTUAL FUNDS

Table showing the detail of multi cap mutual funds in 2018 & 2019

Funds Name	NAV	Fund Size	Total Expense Ratio	2018		2019	
				GDP Beta	**Repo Rate Beta**	**GDP Beta**	**Repo Rate Beta**
Aditya Birla Sunlife Equity	705.81	11246.99	1.96%	0.36	-1.96	0.06	0.17
Axis Multicap Fund	12.35	4574.56	2.06%	0.11	-0.10	0.10	0.19
Baroda Multicap Fund	95.38	790.89	2.54%	-0.11	0.88	0.13	0.22
BNP Paribus Multicap Fund	46.99	705.77	2.34%	0.03	0.36	-0.05	-0.06
Canara Robecco Equity Diversified Fund	134.28	1437.73	2.37%	-0.69	2.20	0.00	0.08
Average				**-0.06**	**0.28**	**0.05**	**0.12**

Source: - Paisabazar, moneycontrol

- **Multi-Cap Funds**
- From the analysis of the data, the average beta of GDP in the year 2018 and 2019 is -.06 and .05 which means in the year 2018 the GDP beta is inversely proportionate and shows a highly negative correlation as compared to the funds. In 2019 expense rate is directly proportionate to the changes in GDP rate but shows less correlation as compared to the funds, which means in 2019 as changes in GDP rate do not affect much as compared to the expense rate of the funds.
- As there is a decrease in GDP Rate, the expense rate is also decreased. As there is a decrease in expense rate, the investors get benefit in returns.
- The GDP is changed due to changes in some policies and regulations by the government like the unemployment rate, macro-economic fluctuations in the country.
- The average beta of the funds in the year 2018 is 0.49 and in 2019 the average beta of the funds is 0.24 which is directly proportionate to the Repo rate and has a good impact on funds.
- In the year 2018, the repo rate is constant but the repo rate beta is 0.49 which means as there is no change in repo rate, due to changes in other factors, the expense ratio is decreases and beta shows a positive sign for the funds. In 2019 repo rate is decreased constantly due to that average beta is at 0.24 which means changes in other economic factors affect the changes in prices of the expense ratio of mutual funds.

5. LARGE CAP AND MID CAP MUTUAL FUND

Table showing the detail of large cap and mid cap mutual funds in 2018 & 2019

Funds Name	NAV	Fund Size	Total Expense Ratio	2018		2019	
				GDP Beta	**Repo Rate Beta**	**GDP Beta**	**Repo Rate Beta**
Aditya Birla Sunlife Equity Advantage Fund	393.68	4899.75	2.08%	0.38	-1.99	-0.03	0.03
BOI AXA Large and Midcap Fund	33.79	167.1	2.85%	0.16	-0.51	0.10	0.18
Canara Robecco Emerging Equities Fund	90.4	4979.7	2.09%	-0.50	2.02	-0.01	0.04
DSP Equities Opportunities Fund	221.097	5488.64	1.95%	0.02	-0.06	0.00	0.08

Edelweiss Large and Midcap	31.263	456.45	2.48%	0.13	-0.50	0.12	0.31
Average				**0.04**	**-0.21**	**0.04**	**0.13**

Source: - Paisabazaar, money control

- **Large and Mid-Cap Funds**
- From the analysis of the data, the average beta of GDP in the year 2018 and 2019 is .04 and .04 which means the expense rate is directly proportionate to the changes in GDP rate. In both years the average beta is the same.
- As there is a decrease in GDP Rate, the expense rate is also decreased. As there is a decrease in expense rate, the investors get benefit in returns.
- The GDP is changing due to changes in some policies and regulations by the government like the unemployment rate, macro-economic fluctuations in the country.
- The average beta of the funds in the year 2018 is -0.21 which is inversely proportionate to the Repo rate. In the year 2019 average beta of the funds is 0.13 which is directly proportionate to the Repo rate.
- In the year 2018, the repo rate is constant but the repo rate beta is -0.21 which means as there is no change in repo rate, due to changes in other factors, the expense ratio is decreasing and negatively correlated to the expense rate. In 2019 repo rate is decreased constantly due to that average beta is at 0.13 which means changes in other economic factors affect the changes in prices of the expense ratio of mutual funds.

4. CONCLUSION

From the analysis of the data, in Small Cap mutual fund the average beta of GDP in the year 2018 and 2019 is 0.8 and 0.9 which means the expenses rate is directly proportionate to the changes in GDP rate. In Mid cap mutual fund, the average beta in the year 2018 and 2019 is -0.2 and 0.85 which means in the year 2019 expenses rate is directly proportionate to the changes in GDP rate. In 2018 the expenses rate is inversely proportionate to the changes in GDP rate. In Large Cap Mutual fund, the average beta of GDP in the year 2018 and 2019 is -0.6 and 0.05 which means in the year 2018 the GDP beta is inversely proportionate and shows a highly negative correlation as compared to the funds. In 2019 expenses rate is directly proportionate to the changes in GDP rate. In Multi Cap Mutual funds the average beta of GDP in the year 2018 and 2019 is 0.74 and 0.11 which means the expenses rate is directly proportionate to change in GDP rate. In Large Cap and Mid Cap Mutual Fund, the average beta of GDP in the year 2018 and 2019 is 0.04 and 0.04 which means the expense rate is directly proportionate to the changes in GDP rate. As there is a decrease in GDP Rate, the expense rate will also decrease. As there is a decrease in expense rate, the investors get benefit in returns.

So, if GDP and Repo rate increase, the Expenses ratio will also increase and customer have to pay more expenses for brokerage and commission fee, and if the GDP and Repo rate decrease, the Expenses ratio will also decrease and the customer have to pay less brokerage and commission fee.

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