

# **Internship Report on**

"Comparative Performance Evaluation of Close ended Mutual Funds: A Case of DSE"

### **Prepared for:**

Ahmed Abir Choudhury
Lecturer
BRAC Business School,
BRAC University

# Prepared by:

Muhammad Saaquib Ali

Student ID: 14104024

BRAC Business School, BRAC University



Date of Submission: 6<sup>th</sup>April, 2018

**Comparative Performance Evaluation of Close ended Mutual Funds: A Case of DSE** 





# Table of Contents

Letter of Transmittal	4
Acknowledgment	5
Background	6
Introduction	7
Overview and Structure of Mutual Fund in Bangladesh	7
Regulatory Framework of a Mutual Fund	8
Methodology	9
I. Scope of the study	9
II. Sources of Data	9
III. Tools	9
Analysis of data	9
A. Average Returns	9
B. The Sharpe Measure	9
C. The Treynor's Performance Index	10
Close End Mutual Funds	11
Fund under Management (FUM)	13
Interpretation of Data	15
Portfolio Comparison	19
Recommendations	22
Conclusion	22
Bibliography	23





#### Letter of Transmittal

To

Ahmed Abir Choudhury

Lecturer

**BRAC Business School** 

**BRAC** University

**Subject:** Submission of internship report "Comparative Performance Evaluation of Close ended Mutual Funds: Case of DSE"

Dear Sir,

This is my great pleasure and delight to submit my internship report of my three months long Internship placement on the Research team at The City Bank Capital Resources Limited. The tittle of the report is "Comparative Performance Evaluation of Close ended Mutual Funds: Case of DSE."

This report is prepared to fulfill the requirement of my internship program at my assigned organization in The City Bank Capital Resources limited. I have put my best effort to make this report a complete and successful one. My experience in this organization has been a joyous and enlightening one. My work at the organization was a great learning experience which further helped me to conduct this type of study. I hope to conduct similar type of study in the future with a broader horizon.

I would like to express my sincere gratitude to you for your kind supervision & recommendations in preparing the report. It would be my immense pleasure if you find this report useful & informative to have an apparent perspective on the issue. I shall be happy to provide any further explanation regarding this report if required & please do not hesitate to contact me if you have any query on this report or any other relevant matters.

Sincerely, Muhammad Saaquib Ali





## Acknowledgment

The completion of this report is the outcome of immense effort and input of a number of people, specifically those who have spared their valuable time and thoughts to improve this report. At the very start I would like to express my gratitude towards Almighty Allah for giving me the strength and diligence to complete the report in due time.

I would like to thank my supervisor, **Mehedee Hasan, CIO & Head of Research**, The City Bank Capital Resources Limited, for giving me his valuable time and various insights which was a key resource for the completion of this report.

I am also thankful to my other mentors in the research team **Afeef Ahmed, Nahid Hasan & Moinul Amin**, without their constant guidance and support this report would have been impossible to finish. I would also like to thank my internship supervisor **Mr. Ahmed Abir Chowdhury** for the constant feedbacks and guidance in writing the report.





### Background

The report aims to analyze the return of the listed mutual funds in the prime bourse of the country, Dhaka Stock Exchange (DSE). Mutual funds are an investment vehicle that share a common goal among investors and help investors diversify into different stock class in different industries. Mutual fund companies help investors to mobilize funds of small investors. When an investor invests in a mutual fund they are buying units of the mutual funds and becomes the stakeholder of the fund.

According to (Deb, 2008) Indian fund managers were not able to beat their benchmarks and stated fund managers weaknesses based on different statistical tools. Further Sarker & Mazumder (1995) found out after evaluation of five close end growth funds that the funds were performing below the alpha value and also the funds possessed high risk.

On the other hand (Dr Vikas Choudhary, 2014) examines that seven out of eight diversified mutual fund schemes in India have outperformed the market return and had shown a better risk adjusted performance.

(Agrawal & Patidar, 2009) In their research on how fund managers allocated their funds and how successful they were, found out that the performance is affected by the savings and investment habits of the people and also the confidence and loyalty of the fund manager and rewards.

In a recent paper Fama & French (2010) concluded based on return and Sharpe's ratio that an average fund manager lack skills. The research found that very few managers in the upper tail of performing better but they concluded that the skill is economically weak. In this paper we have tried to examine the performances of the listed close ended funds using their risk and return factors and also based on the Sharpe and Treynor ratios. Funds performed differently on different measures thus giving an absolute rank to their performances was not possible.





#### Introduction

The capital market for an economy plays an imperative role for the development of an economy. As Bangladesh moves from a LDC economy, tougher challenges are to follow. Thus, developing of a fully functional and robust capital market is essential for an economy like Bangladesh. Sadly, the capital market of Bangladesh lacks both the transparency and a proper watchdog to regulate the market.

The capital market in Bangladesh is comparatively very small with only 340 listed equities and mutual funds in the market. Development of an active mutual funds market is also very important for a capital market. In Bangladesh the mutual funds market is very dull and is often not considered by the general investor to park their funds.

Investment Corporation of Bangladesh (ICB) launched by the government of Bangladesh was the first ever mutual fund in the capital market. Mutual fund reduces overall risk of small investors (Shukla & Malusare, 2016) who is intending to invest in different securities in the market. The mutual fund industry was made open to the private sector in 1999. Since then the number of Asset Management Company's (AMC) has grown proportionately with over 80% of the funds being managed by the AMC's. Currently the asset under management of the entire close end mutual fund is around 64,29.60 million as at market price. The mutual fund industry is currently trading at a trailing P/E of 10.8x and P/BV of 0.7.

### Overview and Structure of Mutual Fund in Bangladesh

Mutual fund is an investment vehicle made up by pool of funds collected from many investors for the purpose of investing in securities. Mutual funds are operated by professional fund managers who is in charge of allocating the fund in different securities and is in charge to grow the size of the fund. The average mutual fund holds many securities which means than an investor can gain diversification at a very low price. The value and performance of the mutual fund depends on how the individual securities are performing in the market.

There are two types of mutual fund namely:

**Open ended mutual fund-** Open ended mutual fund is a type of mutual fund where there is no restriction on the number of shares/units the fund will issue. An open ended mutual fund has no fixed period that is





the fund has a perpetual lifetime. Open ended mutual funds buy back shares when the investors wish to sell its units/shares back. Open ended mutual funds are not traded in the secondary market.

Close ended mutual funds— close ended mutual funds is a type of mutual fund that is publicly traded meaning that the funds are secondarily traded. Close end funds raise a fixed amount of capital through IPO issue. The maturity period of close end funds are 10 years after that the fund manager may decide to continue operations of the funds as an open ended fund or redeem the units of the funds at current market price. Investors in a close ended fund have to sell their units to a different investor in the secondary market. It may be at a "premium" to net asset value (meaning that it is higher than net asset value) or, more commonly, at a "discount" to net asset value (meaning that it is lower than net asset value).

### Regulatory Framework of a Mutual Fund

#### Key players involved in mutual fund operation

As per the সেকুরিতিজ ও এক্সচেঞ্জ কমিশন (মিউচুল ফাল্ড) বিধিমালা, ২০০১ there are four parties involved in floatation of a mutual fund;

- 1. **Sponsor** Any bank or financial institution or any other limited company who initiates the fund by subscribing minimum 10% of total fund size.
- 2. **Trustee** Any bank or financial institution or any other limited company registered by the SEC to act as Trustee.
- 3. **Asset Management Company** any bank or financial institution or any other limited company registered by the SEC to act as an Asset Management Company.
- 4. **Custodian** any bank or financial institution or depository or any other limited company registered by the SEC to act as Custodian; with special permission by the SEC the Trustee and the Custodian can be the same institution.





# Methodology

#### *I.* Scope of the study

The period of the study is for about 5 years from (2013-2017). The study uses all the 37 close end mutual funds. Some funds data is taken from inception till data as few funds are newly listed in the Dhaka Stock Exchange and has not completed the five year period.

#### II. Sources of Data

Secondary data was used for this research from different sources. Price data of the market and Net Asset Value (NAV) was collected from the research archives of The City Bank Capital Resources research ream. The portfolio statements and some other data was collected from the websites of the AMC's. Further, the weekly yields of the treasury bills were collected from the Bangladesh Bank's website.

#### III. Tools

To analyze the performance of the mutual funds against the benchmark performance average weekly returns were calculated for analyzing the return on mutual funds and the market index. To measure risk of the funds standard deviation (total risk) was calculated and Beta (systematic risk) was calculated.

## Analysis of data

#### A. Average Returns

The core basis of performance evaluation for the funds is done by comparing average returns of the mutual funds. The study focuses on weekly return annualized for a better view of the returns. The average returns of the mutual fund is calculated using the weekly NAV published by the AMC's and later annualized.

### B. The Sharpe Measure

The Sharpe ratio measurer the funds excess return per unit of its risk. The ratio indicates the relationship between the portfolio's additional return over the risk free return and total risk of the portfolio. A high





and positive Sharpe ratio indicates a superior risk adjusted performance of a fund while a negative and low Sharpe ratio indicates an unfavorable performance of the fund. The ratio takes into consideration and evaluates funds on the basis of reward per unit of total risk, written as;

$$\mathsf{S}_{\mathsf{p}^{=}} \frac{R_{p} \cdot R_{f}}{\sigma_{p}}$$

Where,

 $S_p$  stands for Sharpe ratio of the mutual funds schemes.

 $R_{\mbox{\scriptsize p}}$  Stands for average return of the portfolio.

 $R_f$  Stands for average risk-free rate of return.

 $\sigma_p$  Stands for total risk or standard deviation of the returns of portfolio.

#### C. The Treynor's Performance Index

Treynor ratio measures the relationship between funds additional return over risk free and market risk which is measured by Beta. The larger the value of Treynor ratio the better the portfolio has performed. The treynor ratio uses beta rather than the standard deviation, we are assuming that the portfolio is a well-diversified one.

$$\mathsf{T}_{\mathsf{p}^{=}}\frac{R_{\mathcal{p}}\text{-}R_{f}}{\beta_{\mathcal{p}}}$$

Where,

 $T_p$  stands for Treynor ratio of the mutual funds schemes.

 $R_{\mbox{\scriptsize p}}$  Stands for average return of the portfolio.

 $R_f$  Stands for average risk-free rate of return.

 $eta_p$  Stands for sensitivity of funds return to market return





# Close End Mutual Funds

There are currently thirty seven closed end mutual funds listed with the prime bourse the Dhaka stock exchange. These funds are managed by nine asset management companies, with **RACE** asset Management Company having the most number (10) of closed end funds. All the funds and their respective asset management companies are listed below.

Ticker	Name of the Unit Funds	Fund Managers
FBFIF	First Bangladesh Fixed Income Fund	RACE
ABB1STMF	AB Bank 1st Mutual fund	RACE
<u>IFIC1STMF</u>	IFIC Bank 1st Mutual Fund	RACE
POPULAR1MF	Popular Life First Mutual Fund	RACE
TRUSTB1MF	Trust Bank 1st Mutual Fund	RACE
EBLNRBMF	EBL NRB Mutual Fund	RACE
PHPMF1	PHP First Mutual Fund	RACE
1JANATAMF	First Janata Bank Mutual Fund	RACE
EXIM1STMF	EXIM Bank 1st Mutual Fund	RACE
SEMLIBBLSF	SEML IBBL Shariah Fund	SEML
SEMLLECMF	SEML Lecture Equity Management Fund	SEML
LRGLOBMF1	LR Global Bangladesh Mutual Fund One	LR Global
NCCBLMF1	NCCBL Mutual Fund-1	LR Global
AIBL1STIMF	AIBL 1st Islamic Mutual Fund	LR Global
ICBAGRANI1	ICB AMCL First Agrani Bank Mutual Fund	ICB AMCL
ICB3RDNRB	ICB AMCL Third NRB Mutual Fund	ICB AMCL
MBL1STMF	MBL 1st Mutual Fund	LR Global
GREENDELMF	Green Delta Mutual Fund	LR Global
DBH1STMF	DBH First Mutual Fund	LR Global
CAPMBDBLMF	CAPM BDBL Mutual Fund 01	CAPM
RELIANCE1	"Reliance One" the 1st scheme of Reliance Insurance MF	AIMS
ATCSLGF	Asian Tiger Sandhani Life Growth Fund	Asian Tiger
PF1STMF	Phoenix Finance 1st Mutual Fund	ICB AMCL
PRIME1ICBA	Prime Bank 1st ICB AMCL Mutual Fund	ICB AMCL
IFILISLMF1	IFIL Islamic Mutual Fund-1	ICB AMCL
VAMLBDMF1	Vanguard AML BD Finance Mutual Fund One	VAML
ICBEPMF1S1	ICB Employees Provident MF 1: Scheme 1	ICB AMCL
ICBAMCL2ND	ICB AMCL Second Mutual Fund	ICB AMCL
VAMLRBBF	Vanguard AML Rupali Bank Balanced Fund	VAML





GRAMEENS2	Grameen One : Scheme Two	AIMS
EBL1STMF	EBL First Mutual Fund	RACE
ICB2NDNRB	ICB AMCL 2nd NRB Mutual Fund	ICB AMCL
NLI1STMF	NLI First Mutual Fund	VIPB
ICBSONALI1	ICB AMCL Sonali Bank Limited 1st Mutual Fund	ICB AMCL
SEBL1STMF	Southeast Bank 1st Mutual Fund	VIPB
CAPMIBBLMF	CAPM IBBL Islamic Mutual Fund	CAPM
1STPRIMFMF	Prime Finance First Mutual Fund	ICB AMCL

Source-CBCRL Research





# Fund under Management (FUM)

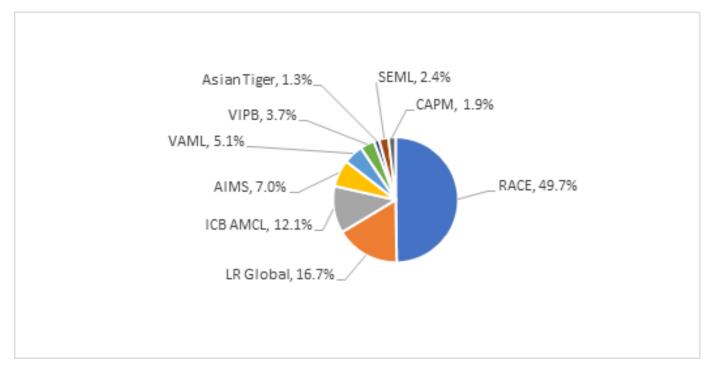
The following table shows the list of Asset management companies (AMC), the total number of close end funds the AMC is currently managing and the total Fund under management (FUM) of the corresponding AMC at market price. RACE asset Management Company is the largest in terms of FUM at market price and also the number of active funds they manage. State owned ICB AMCL has around 10 active close ended funds under management with FUM of 12.10% of the total FUM at market price.

Fund Managers /AMCs	No of Funds	% of Total FUM at M Price	FUM (NAV) at M Price (Corpus)
RACE	10	49.70%	31,968.70
LR Global	6	16.70%	10,716.40
ICB AMCL	10	12.10%	7,803.30
AIMS	2	7.00%	4,481.00
VAML	2	5.10%	3,278.30
VIPB	2	3.70%	2,404.00
Asian Tiger	1	1.30%	860.3
SEML	2	2.40%	1,562.10
CAPM	2	1.90%	1,205.50
Total	37	100.00%	64,279.60

Source-CBCRL Research







#### **CBCRL** Research





# Interpretation of Data

Ticker	Fund Manager	Average Weekly	Risk (standard	Annualized weekly return
		Return	deviation)	
SEMLLECMF	SEML	0.07%	1.18%	3.45%
LRGLOBMF1	LR Global	0.06%	1.33%	3.23%
GREENDELMF	LR Global	0.12%	1.30%	6.52%
EBLNRBMF	RACE	0.02%	1.53%	0.98%
PHPMF1	RACE	0.09%	1.52%	4.71%
IFIC1STMF	RACE	0.02%	1.56%	0.86%
EBL1STMF	RACE	0.004%	2.12%	0.21%
POPULAR1MF	RACE	0.07%	1.50%	3.78%
VAMLBDMF1	VAML	0.05%	1.34%	2.75%
TRUSTB1MF	RACE	0.04%	1.60%	1.95%
1JANATAMF	RACE	0.10%	1.53%	5.07%
DBH1STMF	LR Global	0.11%	1.51%	5.83%
FBFIF	RACE	0.02%	1.32%	0.85%
ABB1STMF	RACE	0.04%	1.49%	2.09%
NCCBLMF1	LR Global	0.05%	1.53%	2.52%
MBL1STMF	LR Global	0.12%	1.52%	6.48%
AIBL1STIMF	LR Global	0.09%	1.50%	4.64%
RELIANCE1	AIMS	0.16%	1.54%	8.84%
ATCSLGF	Asian Tiger	0.11%	1.79%	6.09%
SEBL1STMF	VIPB	0.13%	1.65%	6.82%
NLI1STMF	VIPB	0.16%	1.69%	8.43%
GRAMEENS2	AIMS	0.22%	4.79%	12.31%
1STPRIMFMF	ICB AMCL	0.07%	2.74%	3.65%
ICB2NDNRB	ICB AMCL	0.08%	2.38%	4.37%
ICB3RDNRB	ICB AMCL	0.16%	2.19%	8.73%
ICBAMCL2ND	ICB AMCL	0.17%	2.33%	9.51%
ICBEPMF1S1	ICB AMCL	0.16%	2.39%	8.50%
ICBSONALI1	ICB AMCL	-0.44%	7.06%	-20.52%
IFILISLMF1	ICB AMCL	0.16%	2.20%	8.40%
PF1STMF	ICB AMCL	0.15%	2.17%	8.04%
PRIME1ICBA	ICB AMCL	0.14%	2.29%	7.27%
CAPMBDBLMF	CAPM	0.05%	1.03%	2.77%
VAMLRBBF	VAML	0.20%	1.14%	10.78%
SEMLIBBLSF	SEML	-0.49%	3.70%	-22.36%
ICBAGRANI1	CB AMCL	-0.21%	1.14%	-10.39%
CAPMIBBLMF	CAPM	-0.03%	0.17%	-1.71%

Table 1: weekly return, risk and annualized return of the MF





#### The benchmark average weekly market return (DSEX) for the same period is:

Market		Average weekly return	Total Risk (SD)	Annualized Return
DSEX	Benchmark	0.15%	2.03%	7.93%

Table 1 shows the average weekly returns of the different closed ended mutual funds and their fund managers. GRAMEENS2 manages by AIMS AMC outperformed all funds and generated 12.31% return annually, it is followed by ICBAMCL2ND managed by ICB AMCL. The worst performing fund as per the annualized return was the ICBSONALI1 of ICB AMCL which gave a negative (-) 20.52% return. Most funds (26) performed below the benchmark (DSEX) average annualized market return of 7.93%.

Based on total risk (standard deviation), CAPMBDBLMF managed by CAPM had the lowest total risk of 1.03% on the other hand GRAMEENS2 manages by AIMS AMC had the highest total risk of 4.79% rightly justifying the fact that high risk gives higher return. We can observe a different scenario here for total risk as most funds were less risky compared to the benchmark total risk meaning total risks of most funds were below 2.03%. Thus, supporting the claim that mutual funds diversifies risk of the investment.

### Analysis based on Treynor's Ratio

SI.	TICKER	Treynor Ratio
1	RELIANCE1	0.450
2	EBLNRBMF	0.108
3	ICB3RDNRB	0.089
4	ICBAMCL2ND	0.056
5	ATCSLGF	0.034
6	SEMLIBBLSF	0.031
7	ICBAGRANI1	0.021
8	FBFIF	0.015
9	PHPMF1	0.010
10	GRAMEENS2	0.010





11	VAMLRBBF	0.008
12	TRUSTB1MF	0.007
13	ABB1STMF	0.006
14	VAMLBDMF1	0.005
15	IFIC1STMF	0.003
16	SEMLLECMF	0.003
17	NCCBLMF1	0.002
18	1STPRIMFMF	0.001
19	CAPMBDBLMF	0.000
20	LRGLOBMF1	-0.001
21	POPULAR1MF	-0.003
22	AIBL1STIMF	-0.005
23	GREENDELMF	-0.005
24	SEBL1STMF	-0.006
25	PRIME1ICBA	-0.006
26	1JANATAMF	-0.008
27	DBH1STMF	-0.017
28	EBL1STMF	-0.022
29	ICB2NDNRB	-0.023
30	ICBSONALI1	-0.040
31	PF1STMF	-0.041
32	IFILISLMF1	-0.055
33	ICBEPMF1S1	-0.121
34	NLI1STMF	-0.136
35	MBL1STMF	-0.141

Table 2: Funds performance based on Treynor ratio

Table 2 shows the performance of the close ended mutual funds based on Treynor's ratio in chronological order. Funds having a positive higher ratio had performed superior than other funds. RELIANCE1 of AIMS AMC outperformed all the funds in the market with a ratio 0.450. The performance based on the Treynor's





ratio is chronologically arranged in the above table 2. MBL1STMF's performance was the poorest among all the mutual funds with a ratio of -0.141, this fund is managed by LR global. Overall as a sector it performed par, as around 19 mutual funds were able to generate a positive Treynor ratio.

# **Analysis based on Sharpe Ratio**

Sl	TICKER	Sharpe Ratio
1	ICBEPMF1S1	0.122
2	1STPRIMFMF	0.069
3	POPULAR1MF	0.058
4	1JANATAMF	0.050
5	ICB3RDNRB	0.049
6	PRIME1ICBA	0.047
7	ICB2NDNRB	0.044
8	LRGLOBMF1	0.042
9	ICBSONALI1	0.042
10	DBH1STMF	0.042
11	SEMLLECMF	0.042
12	AIBL1STIMF	0.035
13	TRUSTB1MF	0.034
14	PF1STMF	0.034
15	CAPMBDBLMF	0.032
16	VAMLRBBF	0.025
17	ATCSLGF	0.021
18	NCCBLMF1	0.020
19	SEBL1STMF	0.010
20	FBFIF	0.009
21	RELIANCE1	0.007
22	GREENDELMF	0.004
23	EBLNRBMF	0.003
24	PHPMF1	-0.004
25	IFILISLMF1	-0.005
26	IFIC1STMF	-0.006
27	VAMLBDMF1	-0.012
28	GRAMEENS2	-0.013
29	ICBAGRANII	-0.025
30	ICBAMCL2ND	-0.025
31	SEMLIBBLSF	-0.026





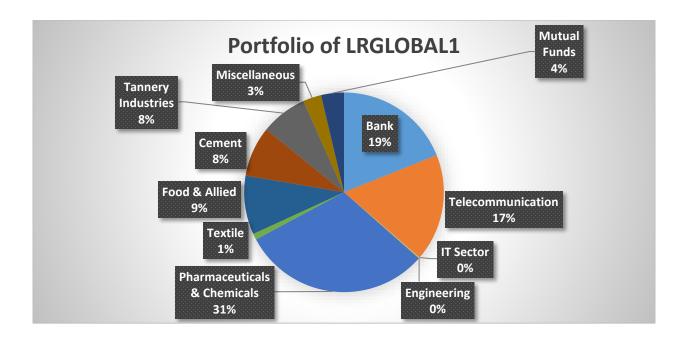
32	ABB1STMF	-0.031
33	EBL1STMF	-0.071
34	NLI1STMF	-0.147
<i>35</i>	MBL1STMF	-0.235

Table 3: sharpe ratio of MF

Table 3 shows the performance of the different funds based the Sharpe's ratio. Funds having a greater Sharpe ratio indicates a superior performance compared with others. ICBEPMF1S1 managed by ICB AMC outperformed all funds based on the Sharpe ratio. On the contrary MBL1STMF managed by LR Global AMC was worse off than all the funds. Overall sector wise 23 funds managed to achieve a positive Sharpe ratio.

### Portfolio Comparison

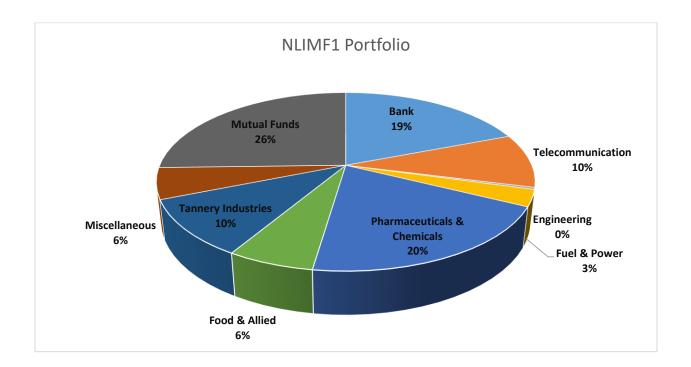
The fund manager's main challange is to allocate funds in sectors and equities that possess fundamental capabilities thus, it is essential for investors to go through the portfolio statement of the funds to get an in-depth analysis of the funds asset holding. We would look into three fund's portfolio from three different fund managers to get a hint of their asset selection.







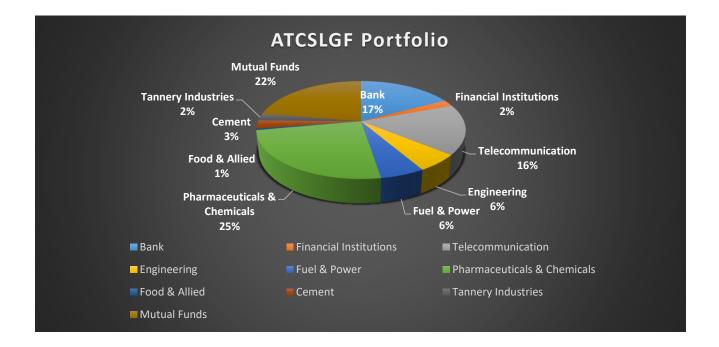
The above figure shows the fund allocation of LRGLOBAL1 mutual fund's portfolio managed my LRGLOBAL as at 31 December 2017. Most of the funds asset allocation was on the Pharma sector (31%) and next being the banks (19%). The funds asset is well diversified into nine sectors.



The above figure shows the fund allocation of VIPB's NLI mutual fund based on the market price as at 31 December 2017. Most allocation of the funds was in the mutual funds sector of around 26% and second being the pharma sector 20%. The funds robust and outstanding performance last year was because of this rigid yet diverse fund allocation by the fund manager.







The very last portfolio we would look into is of ATCSLGF managed by Asian tiger. Similar to the above funds this fund also puts most of its asset on the pharma sector (25%) and next prominent sector being the mutual funds (22%).

The aim of the above analysis was to identify how different fund managers prefer different sectors to put their funds. But the result largely varies from funds to funds depending on their risk and return. Most fund managers prefer Pharma and Telco sector as their prominent invest due to its growth prospect and also because of a lower risk. The challenge remains for managers to predict the growth prospect of individual sector and move their funds promptly to that sector from the less prominent ones and thus generate a higher return and alpha.





#### Recommendations

Mutual funds in the eyes of a general investor has lost its faith due to number of malpractices from fund managers. Most mutual funds are now trading at a discount due to this practices of fund managers. We recommend the fund managers following;

- Proper allocation and use of funds. We recommend the fund managers to allocate the funds properly and in equities that is fundamentally strong.
- More aggressive fund management to generate a greater alpha. Fund managers are very rigid
  when it comes to fund management and is also very sluggish. We recommend fund managers to
  be more pro-active in fund management thus generating a greater return and also a greater
  alpha.
- Adapting quickly to market and economic changes to protect funds. Fund managers must be prompt to forecast changes in economic conditions and also the market conditions. This would allow managers to protect their investment in the market.
- Hedging of risks using different financial tools and techniques.

#### Conclusion

It is of upmost priority now that our capital market performs well and thus the contribution of an active mutual fund market is key. As our securities market lack investment tools developing our mutual fund sector will not only boost the confidence of our investors but also allow them to take the benefits of mutual funds. In this report I tried to bring forward the performance of the mutual funds based on different statistical tools. Though, it is tough to conclude which mutual is performing the best, investors should further look into how the fund managers have selected the equities and asset class by reviewing the funds quarterly portfolio statement. At the end of the day it is the ultimate decision of the investors based on their risk return analysis about choosing the best investment for their hard earned capital.





# **Bibliography**

- Agarwal, S., & Mirza, N. (2017). A STUDY ON THE RISK-ADJUSTED PERFORMANCE OF MUTUAL FUNDS INDUSTRY IN INDIA. *REVIEW OF INNOVATION AND COMPETITIVENESS*, *3*(1).
- Agrawal, D., & Patidar, D. (2009, October). A COMPARATIVE STUDY OF EQUITY BASED MUTUAL FUND OF RELIANCE AND HDFC. 3, 145-154. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1524154
- Deb, S. G. (2008). performance of Indian equity Mutual funds Vis-a-Vis their style benchmarks. *Icfai University Press*, *14*(8).
- Dr Vikas Choudhary, a. P. (2014). Performance Evaluation of Mutual Funds: A. *International Conference on Business, Law and Corporate Social Responsibility*.
- Islam, R. (2015). Mutual Fund Performance: An analysis of Mutual Funds' return compare to the Market Return (DSEX).
- Shukla, S., & Malusare, R. (2016). A Study on Performance of Indian Mutual Fund Schemes Investing in Overseas Securities. *IOSR Journal of Business and Management*, 86-93.

The City Bank Capital Resources Research data



