FINANCIAL PERFORMANCE EVALUATION OF MUTUAL FUNDS IN NEPAL

A Thesis
Submitted
By

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CERTIFICATION OF AUTHORSHIP

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as a part of requirements for a degree except as fully acknowledge within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the reference section of the thesis.

.....

Yashu Thapa

Date:

RECOMMENDATION LETTER

It is certified that thesis entitled **PERFORMANCE EVALUATION OF SELECTED MUTUAL FUNDS IN NEPAL** submitted by Yashu Thapa is an original piece of research work carried out by the candidate under my supervision. Literary presentation is satisfactory and the thesis is in a form suitable for publication. Work evinces the capacity of the candidate for critical examination and independent judgment. Candidate has put in at least 60 days after registering the proposal. The thesis is forwarded for examination.

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APPROVAL SHEET

We, the undersigned, have examined the thesis entitled **PERFORMANCE EVALUATION OF SELECTED MUTUAL FUNDS IN NEPAL** presented by **Yashu Thapa**, a candidate for the degree of **Master of Business Studies (MBS-Semester)** and conduced the viva voce examination of the candidate. We hereby certify that the thesis is worthy of acceptance.

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This research study entitled "Performance evaluation of selected mutual funds in Nepal" is written in prescribed form and completed for the partial fulfillment of the requirement for the degree of Master of Business Studies under the faculty of management Tribhuvan University Nepal.

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Yashu Thapa

Reseacher

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LIST OF ABBREVIATIONS

CAPM	=	Capital Asset Pricing Model
CIT	=	Citizen Investment Trust
CUS	=	Citizen Unit Scheme
GIMES-1	=	Global IME Samunnat Scheme-1
HPR	=	Holding Period Return
LVF-1	=	Laxmi Value Fund-1
NAV	=	Net Assets Value
NCM	=	Nepal Capital Market
NEPSE	=	Nepal Stock Exchange
NIBSF-1	=	NIBL Samriddhi Fund-1
NIDC	=	Nepal Industrial Development Corporation
NMBSF-1	=	NMB Sulav Investment-1
SEBON	=	Securities Board of Nepal
SEOS	=	Siddhartha Equity Oriented Scheme

ABSTRACT

A mutual fund is an investment vehicle made up of money collected from many investors for the purpose of investing in securities such as stocks, bonds, money market instrument and other assets. Mutual Fund is one of the most effective instruments for the small & medium investors for investment and offers opportunity to them to participate in capital market with low level of risk. It also provides the facility of diversification i.e. investors can invest across different types of schemes. Mutual funds are operated by professional money managers, who allocate the fund's investments and attempt to produce capital gains and income for the fund's investors.

The development of the mutual fund industry is the greatest investment success story of the twentieth century in United States and this industry also emerged as the most dynamic segment of the Indian financial system on that time. But the history of mutual fund in Nepal started only with the establishment of "NCM Mutual Fund 2050" in 1993. Currently there are thirteen mutual fund schemes listed and traded in Nepal Stock Exchange that provide investment opportunities for investors in mutual funds market whereas only five mutual funds are taken into the consideration for this study.

In this context, the purpose of this paper is to evaluate the performance of the selected mutual fund schemes in Nepal from May 2016 to November 2018. This study is based on secondary data. Different statistical and financial tools have been used for data analysis. Moreover various absolute and relative performance measures like Sharpe measure, Treynor measure, Jensen Alpha is being used to evaluate the performance. The study finds that overall all the schemes provide higher and better average return than market except GIMES-1 whereas NIBSF-1 performance is low with high risk among all the selected mutual funds. Laxmi Value Fund-1 is found to be good performer among the selected mutual funds by having highest value of Sharpe, Treynor and Jensen measure. This research report may be useful to investor to make their investment decisions and suggest to fund managers to adopt such strategies that could provide maximum benefit to the investors. This report may also provide a mechanism for identifying strengths and weakness of fund managers which help them to take corrective actions.

CHAPTER-I
INTRODUCTION

1.1 Background of the study

Economic growth can be achieved through the development of a capital market which can meet the financial requirements of the country. One of vital components of financial system is financial institutions which can serve the dual purpose- generating savings from the public and providing funds for investment purpose. The mutual fund industry is one such financial institution which raises funds through the sale of the small units to public and provides funds for investment among various sectors (Rani & Hooda, 2017).

A mutual fund is an investment vehicle made up of money collected from many investors for the purpose of investing in securities such as stocks, bonds, money market instrument and other assets. Mutual funds are operated by professional money managers, who allocate the fund's investments and attempt to produce capital gains and income for the fund's investors. A mutual fund's portfolio is structured and maintained to match the investment objectives stated in its prospectus. Mutual funds give small or individual investors access to professionally managed portfolios of equities, bonds and other securities. Each shareholder, therefore participates proportionally in the gains or losses of the fund. Mutual funds invest in a wide amount of securities and performance is usually tracked as the change in the total market cap of the fund, derived by aggregating performance of the underlying investments. Mutual fund units or shares can typically be purchased or redeemed as needed at the fund's current net asset value (NAV) per share which is sometimes expressed as NAVPS. A fund's NAV is derived by dividing the total value of the securities in the portfolio by the total amount of shares outstanding (Chen, 2018).

Mutual fund is basically a company that pools the money from a group of investors (its shareholders) to buy financial securities, building a less risky portfolio than an individual investor would do (Kolosov & Soltanmammedov, 2011). In other words, a mutual fund is a pool of small investments collected from various investors, which are then invested into different financial instruments such as Stocks, Bonds, Preference Shares, Fixed deposits(as prescribed by the Mutual Fund Regulation,

2067). The decisions are made by the fund manager and the profit is distributed at the year-end in the form of cash dividend. A mutual fund's portfolio is structured and maintained to match the investment objectives stated in its prospectus. People who buy shares of a mutual fund are its owners or shareholders. Their investments provide the money for the mutual fund to buy securities. The present worth of investment can be known from the weekly/monthly NAV published by the company. NAV stands for the Net Assets Value. The company also publishes a monthly balance sheet every month which makes the mutual fund fully transparent. An investor can easily trace which company are chosen by the mutual fund. Since the total fund is invested in diversified sectors by the team of expert, it is one of the least risky form of investment. This being highly liquid, one can easily sell it in the secondary market. The investors doesn't only get a regular return, but also get a capital gain on their investment. Thus, this can be a best form of investment both for the experienced as well as new investors. A mutual fund can make money from its securities in two ways: a security can pay dividends or interest to the fund or a security can rise in value. A fund can also lose money and drop in value. The reduced risk of portfolio comes from the benefits of diversification provided by mutual fund managers for investors. Managers charge small amount of fees for their services and for covering the costs associated with trading securities. However, these charges are smaller than those that individual investors would pay if they tried to build on their own similar portfolio of securities. This is because of the economies of scales in transaction costs (Howells & Bain, 2005). Mutual funds today are one of the most studied areas in developed countries due to their efficient and effective role in reducing risk and enhancing return through professional management of funds. These funds boost the incomes of small investors as well as reduce their exposure to unsystematic risks which needs to be taken into consideration for accurate results (Gohar et al., 2011).

To measure the mutual fund performance, some numerical indexes have been devised in literature and these are widely used to in practice. The well-known measure like reward to volatility ratio (Sharpe, 1966) and reward to variability ratio (Treynor, 1965) are indicates the expected return of mutual funds and the risk of the funds. Treynor index, adjusted Sharpe index, Jensen index, and adjusted Jensen index were used to measure the funds' performances. Mutual fund is a suitable investment for the

common man as it offers an opportunity to invest in a diversified, professionally managed basket of securities at a relatively low cost.

The first mutual fund was established in Europe around 1774. Although the mutual fund industry is pretty big in the developed countries but the mutual fund is recent phenomenon in the developing countries. The growth has been robust which in turn has led to the creation of various types of mutual funds. When we look at the time frame, the concept of mutual fund seems to be originated 244 (Soltanmammedov, 2011) years ago but in the context of Nepal the mutual fund came into existence only 25 years ago. Therefore, introduction of mutual fund seems new for Nepalese investors. With the flotation of NCM Mutual Fund in 2050 B.S. (1993 A.D.), the Nepali market entered into the era of mutual funds. It was an open-ended scheme with a collected fund of just Rs.100 Million. These days, merchant bankers are coming up with funds 5 to 10 times larger than that, which have become a pivotal part of the Nepali stock market. Currently, there are 13 mutual fund schemes running in the Nepali stock market. These mutual funds have to be approved by Securities Board of Nepal (SEBON under Mutual fund Regulation Act 2010 and Directives 2012) first to publish the offer letter and accept the funds as initial public offerings. When the fund units are allotted, they are listed in NEPSE (Nepal Stock Exchange) where they can be freely bought and sold. NEPSE is Nepal's only stock exchange market.

In the current scenario, mutual funds are less attraction compared to shares of commercial banks, insurance, development banks, finances and microfinances. The various schemes/options that are available to investors worldwide are not available to local investors in Nepal. In spite of the recent growth in the Nepalese securities market, the success and performance of mutual funds is not noticeable in the country. However, these available mutual funds in Nepal have not only provided alternative avenues of investment to the benefits of investor but also source of raising funds to the benefits of corporate investor.

1.2 Problem Statement and Research Question

In the securities market, there are different financial instruments which are frequently traded to the demand and supply. The driving force for making any decision depends upon investors experiences, fundamental and technical analysis, different

psychological factors, advices from friends and families, risk etc. NEPSE is the only stock exchange Nepal which was established in 1993. Trading on the floor of the NEPSE is restricted to listed corporate securities and government bonds (Rauniyar, 2016).

Mutual Funds globally are trying to accelerate growth with continuation of a number of current trends – such as focus on product development, regulation, and risk management. (Deloitte) It's (Deloitte, 2016) been seen that all those studies have many mutual funds in their dataset. But in Nepal there are only few listed mutual funds and the only information that an investor get is the monthly balance sheet and weekly NAV. We might question the mutual fund manager that is this information enough for investors and unit holders. Obviously, we will jump into conclusion that more analysis in-depth analysis is needed about the mutual funds. So Performance evaluation and doing comparative analysis can help investor to find returns of individual scheme and also establish relationship between different attributes.

Hence this study contributes in the literature of developing countries about the management effectiveness of mutual fund.

Thus the study has tried to address the following research question:

1. What is the financial performance of selected mutual fund?
2. Which mutual fund is best mutual fund scheme among all mutual funds based on different ratio?

1.3 Purpose of the study

The purpose of this study is to performance evaluation of selected mutual funds in Nepal in the period of study. This study evaluated the management effectiveness of selected mutual fund in Nepal for the purpose of benefiting mutual fund manager and investors. The objectives of study are as follows:

1. To analyze the financial performance of selected mutual fund.
2. To identify the best mutual fund scheme among all the mutual funds based on different ratio.

1.4 Significance of the study

In Nepal, there has been no comprehensive mutual fund study has been done so far. This will be the first attempt to do a comparative analysis. There are thirteen mutual funds trading in NEPSE, where only five mutual funds are considered for this study. The mutual fund is very developed in other markets but in the context of Nepal this study will give an insight about mutual fund industry of developing country and also will help in the management effectiveness of upcoming mutual funds.

Moreover, mutual funds are new in the context of Nepal and investors may not have sufficient knowledge and information about the mutual fund which directly influence the mutual fund market. This study not only help to evaluate the performance of selected mutual funds but also help to provide the information about of mutual funds.

Evaluating historical performance of mutual funds is important both for investors as well as portfolio managers. It enables an investor to access as to how much return has been generated by the portfolio manager and what risk level has been assumed in generating such returns. Further, an investor can also appraise the comparative performance of different fund managers. Similarly fund managers would also be able to know their performance over time and also vis-avis that of other competitors in the industry. The evaluation also provides a mechanism for identifying strengths and weaknesses of fund managers in the investment process, which helps them to take corrective actions.

This study give and insight about mutual fund industry of developing country and also help in the management effectiveness upcoming mutual funds. This study is significant in following way:

1. It will show which investment company is better than another one in terms of return and its consistency. It will be also useful for public investors.
2. It also provide encouragement and insight to handle the problems to mutual fund managers.
3. It also provide information to investor and literature to the researcher

1.5 Limitations of the study

The concept of mutual funds is new in Nepal in compare to other developed and developing countries. This study is not broad, it is the mini research conducted only for clear knowledge about the financial performance of the selected mutual fund companies in Nepal. In the context of Nepal, like it's been mentioned before that there are only 13 mutual funds. So, the data available is limited and number of observation is small. There are many factors affect the financial performance of the company. Since it is not possible to cover all these factors, only few financial tools and technique taken for analysis.

1. The study principally based on the secondary data. So, the calculation and conclusion of the study fully dependent on the accuracy of the data provided by the organization.
2. Performance evaluation of all mutual funds was not possible because of non availability of sufficient data.
3. This study undertake as partial fulfillment of the requirement for the degree of master of business studies. So its analysis tools and research are based on academic course.
4. The study limited to the necessity importance, situation and comparative analysis of selected mutual funds in Nepal. Nevertheless, effort undertake to present the latest data for the availability as far as possible.

1.6 Chapter Plan

The research is divided into five chapters**.**

Chapter I: Introduction

The first chapter deals with the background of the study, statement of the problem, objectives of the study, significance of the study, limitations of the study and organization of the study.

Chapter II: Review of the Literature

This chapter includes theoretical review of the study. This chapter is related to theoretical analysis, it includes conceptual review about mutual fund, Empirical review it includes review of journals and articles and review of related thesis and research gap.

Chapter III: Research Methodology

The third chapter consists of Research Design, Population and Sample, Sources and Nature of Data, Data Gathering Procedure, Data Collection Technique and Tools, Data Presentation and Analysis.

Chapter IV: Data Presentation and Analysis

It includes presentation and analysis of data has been gathered. This chapter is the major part of the whole study in which all collected relevant data are analyzed and interpreted. In this chapter major finding of the study is explained.

Chapter V: Summary

This chapter includes the research with necessary summary, conclusion, implication and recommendations.

Bibliography and appendix section have also been enclosed at the end of the study.

CHAPTER-II
LITERATURE REVIEW

The study deals with the role of mutual funds, its performance in the security market in the context of Nepal. In order to have an understanding of all the variables involved in the study and to gain knowledge on the subject matter, this chapter has been divided into following parts:

2.1 Conceptual Review

This part of literature review focuses on the conceptual review of mutual fund (investment companies) investment companies undertake the task of pooling the fund and investing in securities. Investment Company are specialized financial intermediaries that collect money by selling units to the investors and invest in portfolio of securities. The units are securities issued by investment companies to raise funds from the investors. They provide professional services to the investors and take management fee for the services provided. The managers of the funds are paid fixed management fees and any advantage that accrue through appreciation on the value of the securities pass to the investor. So, we can say that an investment company is simply a corporation that invests in marketable securities and other categories of investment such as real assets. Most popular form of Investments Company is mutual fund (Aryal, 2012).

a. Open end and Closed end Mutual Fund

There are two types of mutual fund, they are closed end fund and open end fund. A closed end fund is an investment model under which fixed number of units of mutual funds are issued but it is redeemable after fixed duration. An open end fund is an investment model under which number of units of mutual funds can be issued and redeemed any time.

b. Mutual Fund Scheme

It is defined by MF regulation that “Scheme" means the scheme that has obtained approval pursuant to Regulation 24 from the SEBON. (SEBON) The objective of

these scheme is to provide fixed income or dividend for fixed period to its unit holders.

c. NEPSE

Secondary market is the financial market where investors purchase shares from other investors, rather than from issuing companies. In Nepal NEPSE Index is the only secondary market for trading of stocks. As on April 4, 2013, the numbers of listed companies are 407, which include Commercial Banks, Hydro Power Companies, Insurance Companies and Finance Companies among others. The Exchange has 50 registered brokers as of April 2013.

d. Mutual Fund Performance

Jack Treynor (1965) used the first formal technique to combine both risk and return in a single performance measure. Then William Sharpe (1966) introduced alternative technique which used the ratio of risk premium of the portfolio, divided by the standard deviation of the portfolio return. Michael C. Jensen (1968) developed third measure which used risk adjusted excess return in measuring the performance of mutual fund and Jensen alpha is used for assessing the additional return or loss earned by the portfolio after adjusting for systematic risk .These three techniques are based upon Capital Asset Pricing Model (CAPM) and still widely used for measuring the performance of mutual funds.

e. Liquidity

“Liquidity at a bank is a measure of its ability to readily find the cash it may need to meet demands upon it. Liquidity can come from direct cash holdings in currency or on account at the Federal Reserve or other central bank.” (Elliott) For this study liquidity is cash balance available at the end of month which is recorded from the monthly balance sheet of individual mutual fund. Since the study is about closed mutual fund, they don’t have to hold cash for redemption like open-end mutual fund.

2.1.1 History of Mutual Funds in Nepal

In Nepal, NCM Mutual fund-2050 was established by NIDC Capital Market as the first mutual fund in 1993/94. It floated units of Rs 10 par value in the beginning. The fund was of an open-end type. The fund performed well in the beginning, when there was a boom in the stock market. However, its performance deteriorated in 1995 and its trading had to be suspended due to excessive selling pressure. The fund was restructured into a close-end fund to bring it back into operation in the name of "NCM Mutual Fund, 2059" on August 9, 2002. The previous unit holders were offered two options- either to refund or to participate in this new scheme. The fund has 10 million unit with Rs 10 face value. Out of the total units, it distributed 1.5 million units to its management and trustee, 1.33 million to the unit holders of the previous mutual fund scheme and the remaining 7.17 million units issued to the public.

Similarly, Citizen Unit Scheme (CUS) was operated by Citizen Investment Trust (CIT) as a second collective investment scheme in 1994/95. It was incorporated under the Citizen Investment Trust Act, 1990. It was established as an open-ended scheme with the face value of Rs 100 per unit. CIT puts Rs 5 million as seed capital in the beginning.

1. NCM MUTUAL FUND, 2050

In Nepal the practice of Mutual Fund started on Ashad 19, 2050 BS (1993). Initially it was issued as an open-ended fund but after financial problem. It is converted into close-ended fund. NCM First Mutual Fund, 2050 was started with the objectives of providing expert investment services with par value of Rs 10 per unit was issued in multiple of 100 by NIDC Capital Markets in the year 1993. After two years of the introduction, its buying and selling was stopped due to excessive selling pressure. In order to revive the fund and provide liquidity, by means of repurchase, Nepal Rastra Bank and NIDC injected an amount of Rs. 45 million and Rs. 15million respectively in the 1995. The custodian and the trustee of the scheme was NCML. The fund manager of the scheme was NIDC Capital Market Ltd. Thereafter, the fund was converted to close-end fund and listed in the NEPSE. By the end of FY 1999/2000, the fund was in operation in the market with per unit NAV of Rs. 22.15. The scheme was terminated by the end of fiscal year 2000/2001.

2. NCM MUTUAL FUND, 2059

During the termination of NCM First Mutual Fund, 2050, the fund holders were given option to refund or to participate in another new scheme called " NCM Mutual Fund, 2059". All the assets and liabilities of NCM First Mutual Fund, 2050 was valued on 2058/06/29 and was transferred to NCM First Mutual, 2059. SEBON approved this new mutual fund on August 9, 2002. It basic features are as follows (Prospectus of NCM Mutual Fund, 2059) :

a. The scheme is limited to 1 crore units and shall be managed as close-end fund.
b. The par value of each unit shall be of Rs.10
c. The units issued under this scheme are listed in NEPSE in accordance to Securities Exchange Act 2040.
d. The scheme is managed by NCML and the trustee in NIDC.
e. The management company and the trustee has brought 7.5% each, collectively 15% of the total issued units and has invested as seed capital in the fund.
f. In order to revive the fund and provide liquidity NRB and NIDC injected an amount of Rs. 45 million respectively in the 1995, after valuation of assets of NCM First Mutual Fund, 2050.
g. NCML has returned the fund of NRB. While the funds provided by NIDC as kitty fund has been transferred to NCM Mutual Fund, 2059 and new units has been issued.

3. CITIZEN UNIT SCHEME, 2052

Citizen Unit Scheme, 2052 with a par value of RS. 100 came into operation in the year 1995. CIT has been managing this scheme. The schemes is in operation on income cum growth concept. It is an open-end scheme and provides regular income in the form of dividend to the unit holders. Its essential features are: Prospectus of CIT, 2052)

a. In order to sustain and increase the confidence of investors and to simplify the operation of the scheme, unit and unless the fund of the scheme does not reach to a self-sustained position, only a minimum amount of dividend shall be distributed.

b. In order to maintain liquidity, the scheme itself has been maintaining the provision of repurchase. The repurchase price is based on NAV of the scheme. But unit and unless the scheme does not reach to self sustained position, the repurchase price will be equal to par value.
c. Since it is a regular income scheme, awhile investing the funds, proper consideration has been taken regarding value added income and regular income.
d. As for then, maximum of 30% of the investment shall be on organized institutions.
e. Unless and until there are not sufficient instrument bearing fixed and regular income in the capital market, the funds allocated to invest on such instrument shall be mobilized towards advancing short-term loan. But such investment on advancing short-term loan shall not exceed the funds invested in the government securities.
f. Most of the income earn from the CUS shall be distributed as dividends.
g. For the calculation of income, the increase in the value of securities has been converted into income either by handing over or selling it (Thapa & Rana, 2017).

2.1.2 Types of Mutual Funds:

Every fund has a particular investment objectives and each fund is expected to do its best to conform to its stated investment policy and objectives. Some of the more important fund types, classified by investment policy are as follows:

1. Money market funds: Money market mutual funds invest in the short-term securities sold in the money market. These are generally the safest, most stable securities available, including Treasury bills, certificate of deposit of large banks and commercial paper.
2. Equity funds: These funds invest primarily in stocks and hold the fixed income or other type of securities. Funds Company will hold at least some money market securities to provide liquidity necessary to meet potential redemption of shares.

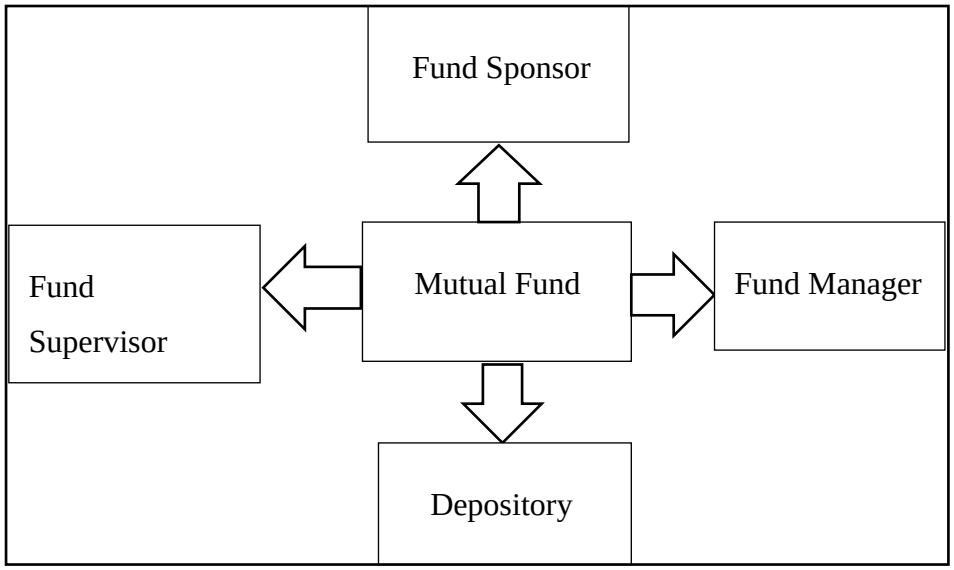
3. Fixed income funds: These funds specialize in the fixed income securities. Various funds are concentrating on corporate bonds, Treasury bonds, mortgage backed securities or municipal bonds.
4. Hybrid funds: It is a fund that combines a stock component, a bond component and sometimes a money market component, in a single portfolio. Generally, these hybrid funds stick to a relatively fixed mix of stocks and bonds that reflect either a moderate (higher equity component) or conservative (higher fixed-income component) orientation.
5. Asset allocation funds: it is a mutual fund that provides investors with a portfolio of a fixed or variable mix of the three main asset classes- stocks, bonds and cash equivalents-in a variety of securities. Some asset allocation funds maintain a specific proportion of asset classes over time, while others vary the proportional composition in response to changes in the economy and investment markets.
6. Index funds: It is a type of mutual fund with a portfolio constructed to match or track the component of market index, such as the Standard & Poor's 500 Index (S&P 500). An index mutual fund is said to provide broad market exposure, low operating expenses and low portfolio turnover.
7. Specialized sector funds: It is a mutual fund investing primarily in the securities of a particular industry, sector, type of security or geographic region. Because of the lack of diversification, specialized funds are higher risk but potentially higher reward than most other type of mutual funds (Thapa & Rana, 2017)

2.1.3 Structure of Mutual Fund in Nepal

There may be different organizational structures of Mutual Funds in different jurisdictions. In case of Nepal, Mutual Funds Regulation, 2067 has conceptualized the structure of mutual fund with Sponsor, Fund Supervisor, Fund Manager and Depository. This Regulation has also stated the roles of each of these parts of the mutual fund. The following picture can bring clarity about the Mutual Fund structure in Nepal:

Figure-2.1

Mutual Fund Structure in Nepal



1 .FUND SPONSER

A commercial bank which obtained “A” class license to operate banking business in Nepal from Nepal Rastra Bank (NRB) can be the sponsor of mutual fund. The bank shall also meet other requirements as prescribed by the regulation. The bank as a fund sponsor is required to register the mutual fund with Securities Board of Nepal (SEBON). For example Siddhartha Bank Limited has registered Siddhartha Mutual Fund at SEBON under the Mutual Fund Regulation, 2010. Siddhartha Bank limited is the fund sponsor of Siddhartha Mutual Fund.

2. FUND MANAGER

Fund Manager is the company having at least 51 percent ownership of the Fund Sponsor. Siddhartha Capital Limited is the fund manager of Siddhartha Mutual Fund in which Siddhartha Bank has 51 percent ownership.

Fund manager brings various mutual fund schemes into operation. With its research base and investment expertise, fund manager puts its efforts to properly manage the risk and invest wisely so that it can provide maximum possible benefits to the investors.

3. DEPOSITORY

Depository is the institution established for the purpose of safekeeping of the assets, keeping records of the unit holders of the scheme, transferring ownership, distributing dividends of the scheme etc.

As per mutual fund regulation 2010, the fund manager can also act as depository. For example Siddhartha Capital Limited acts as the depository for the Siddhartha Mutual Fund.

4. FUND SUPERVISOR

A group of minimum five different reputed professionals having qualification in the area of economics, commerce, management, corporate law, finance and accounts with experience in the areas of commerce and industry, securities markets, financial sectors, corporate law and management and fulfill other requirement as per the mutual fund regulation are fund supervisors. Fund supervisors are appointed by fund sponsor by taking approval from the SEBON. Their major responsibilities as prescribed by law are to, approve the operation of the scheme, monitor the activities of the fund manager and depository, monitor reporting of the scheme and protect the interest of the unit holders of the scheme in case of any violation of laws by the fund manager and the depository. As per the Mutual Fund Regulation, two third of the persons should be independent (Thapa & Rana, 2017)

2.1.4 Current Mutual Fund Scheme in Nepal

Currently, there are 13 mutual fund schemes running in the Nepali stock market. Four mutual funds are upcoming and are in the pipeline to be approved. These mutual funds have to be approved by SEBON (Securities Board of Nepal) first to publish the offer letter and accept the funds from general public as initial public offerings. When the fund units are allotted, they are listed in NEPSE (Nepal Stock Exchange) where they can be freely bought and sold. NEPSE is Nepal's only stock exchange market (Eldrum, 2018) Mutual fund schemes trading in Stock Market in Nepal are as follows:

Table 2.1

Current Mutual Fund Schemes in Nepal

S.N.	Stock Name	Scheme Manager	Stock Symbol
1.	Citizens Mutual Fund-1	CBIL Capital Limited	CMF-1
2.	Global IME Samunnat Scheme-1	Global IME Capital Limited	GIMES1
3.	Laxmi Equity Fund	Laxmi Capital Market Limited	LEMF
4.	Laxmi Value Fund-1	Laxmi Capital Market Limited	LVF1
5.	Nabil Equity Fund	Nabil Investment Banking Limited	NEF
6.	NIBL Pragati Fund	NIBL Ace Capital Limited	NIBLPF
7.	NIBL Samriddhi Fund-1	NIBL Ace Capital Limited	NIBSF
8.	NIC Asia Growth Fund	NIC Asia Capital	NICGF
9.	NMB Hybrid Fund-1	NMB Capital Limited	NMBHF
10.	NMB Sulav Investment Fund-1	NMB Capital Limited	NMBSF-1
11.	Sanima Equity Fund	Sanima Capital Limited	SAEF
12.	Siddhartha Equity Fund	Siddhartha Capital Limited	SEF
13.	Siddhartha Equity Oriented Scheme	Siddhartha Capital Limited	SEOS

Source: www.nepalstock.com/company

2.2 Review of Articles in Journals

Sharpe (1966) has developed a composite measure that considered return and risk, which is popularly known as Sharpe's reward to variability ratio. He evaluated the performance of 34 open-ended mutual funds during the period 1954-63 by the measure developed by him. His study concluded that out of 34 funds selected 19 had outperformed the benchmark in terms of total risk. He concluded that the average mutual fund performance was distinctly inferior to an investment in the Dow Jones

Industrial Average. It was also revealed in his study that good performance was associated with low expense ratio and only low relationship was discovered between fund size and performance.

Treynor and Mazuy (1966) in their study developed a model that tested the mutual funds historical success while anticipating returns. They also tested this model on 57 open ended funds during the ten year period and found no statistical evidence that investment manager of 57 funds were not able to guess the market movements in advance. This study suggests that an investor in mutual funds was totally dependent on fluctuations in the general market. The study revealed that the improvement in rate of return was due to the fund managers' ability to identify underpriced shares in the market.

Jensen (1968) developed an absolute measure of performance that is based on CAPM. In this model the excess returns of the fund were were regressed upon the excess returns of the market to estimate the characteristic line of regression. He also evaluated the ability of the fund managers in selecting the undervalued securities. He concludes that for the sample 115 mutual funds, the fund managers were not able to forecast security prices well enough to recover research expenses and fees.

Kon (1983) evaluated performance in terms of selectivity and timing parameters over a period, January 1960 to June 1976. The sample had 37 funds. The study concluded that individually few funds have shown positive selectivity and timing skills but collectively mutual funds failed to perform satisfactorily. He proposed an empirical methodology for measuring the market-timing performance of an investment manager and provided evidence for a sample of mutual funds. The results indicated that at the individual fund level there was an evidence of significant superior timing ability and performance. The multivariate test also produced results consistent with efficient market hypothesis. That is, fund managers as a group had no special information regarding the formation of expectations on returns of market portfolio.

Grinblatt and Titman (1994) empirically contrasts the Jensen Measure, the Positive Period Weighting Measure, developed in Grinblatt and Titman (1989b), and a measure developed from the Treynor-Mazuy (1966) quadratic regression on a sample of 279 mutual funds and 109 passive portfolios, using a variety of benchmark

portfolios. The study finds that the measures generally yield similar inferences when using the same benchmark and that inferences can vary, even from the same measure, when using different benchmarks. This paper also analyzes the determinants of mutual fund performance. Tests of fund performance that employ fund characteristics, such as net asset value, load, expenses, portfolio turnover, and management fee are reported. These tests surprisingly suggest that turnover is significantly positively related to the ability of fund managers to earn abnormal returns.

Carhart (1997) using a sample freed from survivor bias, incontestable that common factors available returns and investment expenses virtually fully explained persistence in equity mutual funds' mean and risk-adjusted returns. On the idea of information collected from 1892 varied equity funds for the amount January 1962 to Gregorian calendar month 1993, the study found that the sole important persistence not explained by the study was focused in sturdy underperformance by the worst- come back mutual funds. The results failed to support the existence of hot or wise investment company portfolio managers.

Dahlquist et al (2000) studies the relation between fund performance and fund attributes in the Swedish market. Performance is measured as the alpha in a linear regression of fund returns on several benchmark assets, allowing for time-varying betas. The estimated performance is then used in a cross-sectional analysis of the relation between performance and fund attributes such as past performance, flows, size, turnover, and proxies for expenses and trading activity. The results show that good performance occurs among small equity funds, low fee funds, funds whose trading activity is high and, in some cases, funds with good past performance.

Sorros (2003) has conducted in the Greek financial market ,the sample of mutual funds were ranked on the basis of their return, total risk, coefficient of variation, systematic risk, and the techniques of Treynor, and Sharpe. Four mutual funds achieved lower return than the General Index and all sixteen mutual funds showed lower total risk, and risk-return coefficient than the General Index of the Athens Stock Exchange. In all mutual funds the beta coefficient was statistically significant at 5 % level of significance.

Keswani and Stolin (2008) employed a British information set of monthly fund inflows and outflows differentiated between individual and institutional investors. They documented a sturdy good cash impact within the United Kingdom. The impact was caused by shopping for (but not selling) selections of each people and establishments. The worth of active investment management is historically measured by alpha, beta, trailing error, and therefore the Sharpe and knowledge ratios. These are basically static characteristics of the marginal distributions of returns at one purpose in time, and don't incorporate dynamic aspects of a manager's investment method.

Sondhi and Jain (2010) examined the market risk and investment performance of equity mutual funds in India. The study used a sample of 36 equity fund for a period of 3 years. The study examined whether high beta of funds have actually produced high returns over the study period. The study also examined that open-ended or close-ended categories, size of fund and the ownership pattern significantly affect risk-adjusted investment performance of equity fund. The results of the study confirmed with the empirical evidence produced by Fama (1992) that high beta funds (market risks) may not necessarily produce high returns. The study revealed that, the category, size and ownership have been significant determinants of the performance of mutual fund schemes.

Nafees et al. (2011) evaluated the performance of close and open end mutual funds in Pakistan. It provides guidance to the investors on how risk-adjusted performance evaluation of mutual funds can be done and how they can use performance analysis at the time of investment decision making. The risk adjusted performances of both types of mutual funds have been measured through traditional measures such as Sharpe, Sortino, Treynor, Jensen differential measure and Information measure. The results of all measures indicated that mutual fund industry is below as compared to market portfolio performance.

Bansal et al. (2012) evaluated the performance of 12 selected mutual fund schemes with the application of Sharpe model and also brings out which scheme is outperforming or underperforming during the study period from May-2005 to April-2009. The result shows that three out of twelve selected mutual fund schemes have more standard deviation than market index and only three mutual fund schemes, out

of twelve, shows positive value of Sharpe Index. On the basis of the study it can be concluded that most of the selected mutual fund schemes during the study period are underperforming.

Abbasi et al. (2012) examined the effect of fund size on the performance of Iranian mutual funds. The research was carried out on all Iranian mutual funds during 2007 to 2011.There are several aspects and dimensions in evaluating the performance of mutual funds, but this study focused on five aspects: namely Sharpe measure; Jensen differential measure; Treynor measure; Sortino measure and Information measure. Correlation coefficients between all the parameters were computed to assess the degree of relationship between fund size and performance of mutual funds. The findings highlighted no significant relationship between fund size and performance, whether Fixed Income Instruments or Big and Small Cap Stock mutual funds.

Poornima and Sudhamathi (2013) described the mutual fund industry in India was started in the year 1963 with the formation of Unit Trust of India. This industry was privatized in the year 1993. This led to growth of mutual fund companies from 1 to 42 companies in number. The wide variety of schemes floated by these mutual fund companies gave wide investment choice for the investors. Among wide variety of funds equity diversified fund is considered as substitute for direct stock market investment. In this research paper an attempt is made to analyze about the performance of the growth oriented equity diversified schemes by using Sortino ratio. 102 growth oriented equity diversified schemes which were performing during the period April 2006 to March 2011 were selected for the study. The analysis using Sortino ratio depicts that out of 102 funds, 97 funds were able to produce return more than minimum acceptable rate of return. Whereas 5 funds were found to produce return less than minimum acceptable rate of return. This research paper clearly reveals the fact that careful evaluation using appropriate performance measure will lead the investor in selecting the best funds.

Bajracharya (2016) has written on ‘Mutual fund Performance in Nepalese Mutual fund Units: An analysis of Monthly Returns’ with the objective of evaluating the performance of mutual funds and along with to present an extensive analysis the factors which impact the price. He has used secondary data including six mutual funds of Nepal and analyzed performance of mutual funds using various ratios such as

Jenson measure, Sharpe measure and Treynor measure by comparing present return and risk of six mutual funds along with market return and risk.

From analysis, he mentioned that the mutual funds have not performed better than their benchmark indicators. Some of the funds have performed better than the benchmark of its systematic risk but with respect to volatility most of the funds have not performed better. In the sample, funds are not highly diversified unless few mutual funds and because of their high diversification they have reduced total risk of portfolio whereas, other mutual funds have low diversified portfolio and have more risk.

Despite bright prospects of mobilizing saving and providing investment opportunities to small savers and the ability to meet different risk profiles through providing a wide range of products, one major factor as to why the mutual funds have not emerged as a preferred saving mode is the lack of availability of quality shares and the underdeveloped state of the capital market.

Rakhal (2017) concluded mutual fund companies, development mutual funds and review of empirical studies on mutual funds as preliminary discussion, and includes current mutual fund schemes; funds sizes, maturity periods, market price, net asset value and dividend income of mutual fund schemes on analytical section.

2.3 Review of Previous Thesis

Neupane (2001) in his dissertation entitled "A study of mutual fund performance in Nepal". With due consideration to the problems; the objectives of the study has been set as to find out the performance of the mutual fund currently operating in the country in terms of risk adjusted returns, to figure out whether the funds have been able to outperform the market portfolio in terms of risk adjusted returns and to find out as to which of the two funds performed better during the period studied in terms of risk-adjusted returns.

His study resulted that the NCM mutual fund is not as efficient as the market portfolio. CIT seems to be a better performing fund then the NCM Mutual Fund on the basis of the annual rates of returns. In addition he camp up with several

deficiencies in the practice of mutual funds in Nepal. The deficiencies rang from passive investment strategy adopted by funds manager to the repurchase of unites at par value rather than at NAV. He also concluded that it has been far from satisfactory level in comparison to the market portfolio.

Manato (2002) made a study on the topic of "Risk and return analysis of investing in mutual fund". The main purpose of her study was to know the risk and return of mutual fund in Nepal and its performance she used NEPSE index as a basis and data of 44 months (2055-2057) for evaluating the performance of Mutual fund in Nepal. In her study, she used statistical and financial measure to find out risk-adjusted and evaluate the performance of Mutual Fund: Sharpe Index, Treynor Index, Jensen Alpha, Reward to Volatility Ratio and Reward to Variability Ratio

In conclusion, she found out that the NCM mutual fund is higher than the market but total risk of the market (S.D.) is less than NCM mutual fund. It means that NCM mutual fund is riskier than the market.

In her consideration, there exist several deficiencies in the practice of mutual fund in Nepal. Since the return is comparatively low as the risk is higher, as a result, investors are hesitating to invest their money in mutual fund. Thus, investors prefer investing in stock to mutual fund. She even believes that one of the major reasons for the failure of mutual fund might be due to the lack of proper knowledge.

Hada (2004) made a study on a topic of mutual fund; "An Emerging Trend in Nepalese Financial Market". The main objective of his study was to examine the need and significance of mutual fund for Nepalese economy and to explore the current problems being faced by the mutual fund and its performance in Nepalese market.

In his study, he has examined the trading trend of NCM mutual fund in NEPSE index .The projected and actual NAV of NCM mutual fund has been analyzed with trend analysis.

After analysis, he has concluded that NCM mutual fund has underperformed or could not perform efficiently. He has also added that Nepalese capital market which is an

important sector or Nepalese economy could not develop sufficiently to sustain the financial institutions like mutual fund companies.

Rai (2005) made a study on a topic of "problems and prospects of Mutual fund companies in Nepal". The main purpose of his study was to study the existing situation of mutual funds in Nepal and to find out the problems and prospects of a mutual fund companies in Nepal. After his study he found that monthly market return was more of fluctuating then fund. He also found there was gap between average rate of return and market rate of return. Most of investment focused on share and debenture. The issuance of security in Nepalese capital market is dominated by government debt securities which are not traded through organized stock market. He also concluded that the most of people don't have knowledge of mutual fund. Nepalese securities market is not enough develop for mutual fund because of the unavailability of sufficient types of securities for portfolio management. He also found that the existing mutual funds schemes are not sufficient for investor and investors don’t invest their money in mutual funds because of the lack of sufficient knowledge.

Adhikari (2006) made a study on a topic of "problems and prospects of Mutual fund companies of Nepal". From his study, he found that the portfolio performance of CUS is better than NCM without adjusting NAV, if the CUS do not give attention to improve its NAV, It would not be able to provide higher return to investors ad would become financial crisis in future because NAV is actual value of unit and it is lower than par value of unit of CUS.

From the primary data analysis, He concluded that citizen investment scheme is new concept in Nepal so many people do not have knowledge about mutual fund. On the other hand, Nepalese mutual fund are doing struggle because of various challenges of external and internal factors such as investors do not have knowledge about mutual fund, unstable political environment, passive investors are still in majority , inefficient management, etc.

Aryal (2012) carried out a study on Performance Evaluation of Mutual Funds in Nepal with main objective of the study are to performance evaluation of mutual funds in Nepal. It tries to analyzes the prospects and problems of mutual fund during the

period studied. The study is based on empirical and analytical research design and analyzed with financial tools, statistical tools and performance evaluation tools such as Sharpe Index, Treynor Index, Jensen Alpha.

She concluded that still there are lots of things to be done in mutual fund business. Mutual fund's management should adopt dynamic investment strategy and efficient portfolio management. The fund should try to invest most of its assets into the primary shares of the bank and other financial institutions for the possibility of capital gain in addition to the current yields. The portfolio manager of the funds should be made dynamic. It should restructure the portfolio by removing the securities yielding low return with the securities that yield high return.

From the overall analysis it seems that an overall practice of mutual fund in Nepal is not in satisfactory condition. Investors are not so much interested towards the mutual fund because of less return and high risk in comparison to the market. That's why investing in share is better than the fund. One of the major reasons for the failure of mutual fund might be due to the lack of information and efficient decision making.

Rauniyar (2016) has done a study on "Performance Evaluation of Nepalese Mutual Funds" by using secondary and primary data. The main objective of the study is to evaluate and compare the performance of closed end mutual fund scheme. Six running mutual funds schemes are included as sample schemes in this study. This study uses Treynor ratio return as dependent variable and assets, expenses, turnover, age, liquidity and lag of Treynor ratio return as independent variables. The result indicates that among various fund attributes lagged return, liquidity and asset have significant impact on mutual fund performance.

Table 2.2

Summary of Empirical Review

Author & year	Title	Objectives	Methodology	Findings
1 Sharpe, W.F. (1966)	Mutual fund performance	To evaluate the performance of 34 open-ended mutual fund during the period 1954-63	Sample size-34 Tools- Sharpe Measure	Good performance was associated with low expenses ratio and only low relationship was discovered between fund size and performance.
2 Treynor, J.L and Mazuy, K.K. (1966)	Can mutual und outguess the markets	To test their model on 57 open ended funds during the ten year period	Sample size-57 Tools- Treynor measure	Investment manager were not able to guess the market movements in advance.
3 Jensen, M.C. (1968)	The performance of mutual funds 1945-1964	To evaluate the ability of 115 fund managers in selecting securities during the period 1945-64	Sample size-115 Tools- Regression	The fund managers were not able to forecast security price well enough to recover research expenses and fees.
4 Kon, S.J. (1983)	The Market-timing performance of mutual fund managers	Measuring the market-timing performance of an investment manager and provided evidence for a sample of mutual fund	Sample size-37 Tools- Jensen model of risk adjusted performance	Fund managers as a group have no special information regarding the formation of expectations on the returns of market portfolio.

5 Grinblatt, M. and Titman, S. (1994)	A study of monthly mutual fund returns and performance evaluation techniques	To examine the determinants of mutual funds performance	Tools- Quadratic Regression	Fund performance is positively related to portfolio turnover but not to the size of the mutual funds or to the expenses that the funds generate.
6 Carhart, M.M. (1997)	On persistence in the mutual fund performance	Mutual fund persistance	Fama-Mac Beth Cross-Sectional Regression	Expenses ratios, portfolios, turn over and load fees are significantly and negatively related to performance.
7 Dahlquist, M., Engstrom, S., and Soderlind, P. (2000)	Performance and characteristics of Swedish mutual fund	The relation between fund performance and fund attributes in the Swedish market	Sample size- 55 Tools- Linear Regression	Good performance occurs among small equity funds, low fee funds, funds whose trading activity is high and in some cases funds with good past performance
8 Sorros, J.N. (2003)	Return and risk analysis: a case study in equity mutual funds operating in the Greek Finacial market	Evaluate the performance of sixteen equity mutual funds operating in the Greek financial market over the period 1/1/1995-31/12/1999	Sample size- 16 Tools- Treynor measure and Sharpe measure	Four mutual funds achieved lower return than the General Index and all sixteen showed lower total risk and risk-return co-efficient than the General Index of the Athens Stock Exchange.

9 Keswan, I.A. and Stolin, D. (2008)	'Which money is smart? Mutual fund buys and sells of individual and institutional Investors'	To understand how different types of investor make their fund buying and selling decision	Tools- Fama-Macbeth approach and Cross-sectional regression	Money is comparably smart in the United Kingdom.
10 Sondhi, H.J. and Jain, P.K. (2010)	Market risk and investment performance of equity mutual unds in India: some empirical evidence	To evaluate the performance of equity schemes of selected mutual funds during the recent nine year period from Janauary 1, 2002 to May 31, 2010	Tools- Sharpe measure, Treynor measure, Jensen Alpha and FAMA measure	Equity schemes have succeeded in providing a fair rate of return to the investor.
11 Nafees, B., Muhammad, S., Shah, A., Khan, S. (2011)	Performance evaluation of open end and close end mutual funds in Pakistan	To evaluate the performance of close end and open end mutual funds in Pakistan	Tools- Sharpe measure, Sortino measure, Treynor measure, Jensen differential measure and information measure	The mutual fund industry is below as compared to market portfolio performance.
12 Bansal, S., Kumar, S. and Gupta, S. (2012)	Test of Sharpe Ratio on selected mutual fund schemes	To evaluate the performance of twelve selected mutual fund schemes with the application of Sharpe Model and to compare the	Tools- Sharpe Model	Most of the selected mutual fund schemes during the study period are underperforming.

		performance of mutual fund on the basis of benchmark index		
13 Abbasi, M., Kalantari, E. and Abbasi, H. (2012)	Effect of fund size on the performance of mutual funds evidence from Iran	To examine the effect of fund size on the performance of Iranian mutual funds	Tools- Sharpe measure, Jensen differential measure, Treynor measure, Sortino measure, Information measure, Pearson Correlation Coefficient	No significant relationship between fund size and performance whether fixed income instruments or big and small cap stock mutual funds.
14 Poornima, S. and Sudhamathi, R.K. (2013)	Performance analysis of growth oriented equity diversified mutual fund schemes using Sortino Rati	To analyze about the performance of the growth oriented equity diversified schemes by using Sortino Ratio	Sample size – 102 Tools – Sortino ratio	Careful evaluating by using appropriate performance measure will lead the investor in selecting the best funds and 97 funds were able to produce return more than minimum acceptable rate of return whereas 5 funds were found to produce return less.

15 Bajracharya, R.B. (2016)	Mutual fund performance in Nepalese mutual fund units	Evaluating the performance of five mutual funds of NEPSE on the basis of monthly returns compared to benchmark return	Tools- Jensen measure, Treynor measure, Sharpe measure, Regression	Some of the fund have performed better than the benchmark of its systematic risk but with respect to volatility most of the funds have not performed better.
16 Rauniyar, A. (2016)	Performance Evaluation of Nepalese mutual funds	Evaluate and compare the performance of closed and mutual fund schemes	Tools- Treynor Ratio, Pearson Correlation, Ordinary Least Square, Generalized Least Sqaure	Among various fund attributes tagged return, liquidity and assets have significant impact on mutual fund performance.
17 Rakhal, D. (2017)	Current status of mutual fund scheme in Nepal	Provide necessary facts and figures related to the mutual fund schemes in Nepal based on secondary data	Tools- Mathematical tools, average and percentage	Among 10 mutual funds schemes a market price of six mutual fund scheme is higher than par value and the market price of four schemes is lower than par value.

2.4 Research Gap

Research is a never ending process. It is the process of finding out something new again and again. From the above literature review we can conclude that there are various studies on the topic mutual fund.

In this research study, the gaps that are identified from the earlier literatures particularly in the Nepalese context have been addressed. Accordingly, the objectives of the study have been presented in chapter one. As mentioned in the said objectives, attempts have been made here to bring out the performance of the selected mutual fund schemes over the period starting from May 2016 to November 2018. The study consists of five schemes. In this study, the risk-adjusted performance, risk-return performance and overall performance based models proposed by Sharpe measure, Treynor measure and Jensen measure.

So this study will be helpful to stakeholders, scholars, businessmen, teacher and government for academically as well as policy perspectives.

CHAPTER- III
METHODOLOGY

Research methodology is the way to systematically solve the research problem. It includes the various steps that are adopted by the researcher to solve the problem along with the logic behind them.

3.1 Research Design

A research design is a plan of the proposed research work. A research model or design represents a compromise dictated by mainly practical considerations. The study is based on descriptive research design. It seeks to assess the selected mutual funds and to describe and evaluate the performance of these mutual funds. Various statistical and financial tools have been used to analyze the subject matter.

3.2 Population and Sample

Since the concept of mutual fund is still in practice in Nepalese financial market. It has been not able to cover a wide range. There are thirteen mutual funds trading in NEPSE market (Eldrum, 2018). Hence, Global IME Samunnat Scheme-1, Laxmi Value Fund-1, NMB Sulav Investment Fund-1, NIBL Samriddhi Fund-1, Siddhartha Equity Oriented Scheme are considered as convenience sample. These five mutual fund monthly sample have been taken from the period of May-2016 to November 2018.

3.3 Sources of Data

This study is mainly based on secondary data which is collected from published and unpublished sources. Secondary data have been collected in order to achieve the real and factual result out of this research. All possible and useful data available have been collected. The secondary sources of data are the information received from books, journal and article concerned with the study, annual reports and their websites.

3.4 Data Collection and Procedure

The data collections a major part of this study since it plays a key role in the analysis. This study is totally based on the secondary data so, the accuracy in result depends upon the accuracy of secondary data. This research was conducted by collecting secondary data from the website of respective mutual fund scheme manager .The data were recorded from their monthly balance sheet. The sample of this study are five mutual funds of Nepal.

To find the structure, performance and other theoretical Information secondary data has been used. The major sources of data are as follows:

1. Website of Nepal Stock Exchange
2. Annual report of selected mutual funds
3. Prospectus and Bulletins of Nepal Rastra Bank.
4. Course books and materials.
5. Various financial Journals.
6. Finance websites.
7. Others

3.5 Data Processing Procedure

The basic structure of this research is descriptive and analytical as well. In order to make the study more precise, the data are presented in the tabular from Multi line Charts and diagrams are used to clarify and verify the data presented. Various financial and statistical tools are used to evaluate the performance of selected mutual funds.

After the collection of research data, an analysis of those data and its interpretation of the result are required. The facts and figures collected are to be processed with a view to reduce them to the manageable proportions. Once such processing is done, the statistical treatment and meaningful Interpretation leads to formulation of the theory of finding thus the data processing comprises of editing, coding, categorization and tabulation was carried out.

For the analytical analysis the following financial and statistical tools are used.

3.6 Data Analysis Tools and Techniques

Basically financial and statistical tools have been used for data analysis.

A. Financial Tools

Financial tools are used to evaluate the financial performance of selected mutual fund in the capital market. By using financial tools we can measure the performance and efficiency of the Fund In the financial market.

1. Net Asset Value per Share

It can be calculated by taking the current market value of the fund's net assets (securities held by the fund minus any liabilities) and divided by the no of share outstanding.

$$\text{Net Assets Values (NAV)} = \frac{\text{Assets} - \text{Liabilities}}{\text{No.of Shares}}$$

2. Holding Period Return

Close-end funds are essentially marketable shares of common stock. As a result, their one - period rates of return are calculated like common stock return which is given below:

$$HPR = \frac{(P_{t+1} - P_t) + Div_{t+1}}{P_t}$$

Where, P_{t+1} = Unit price at the end of the period.

P_t = Unit price at the beginning of the period.

B. Statistical Tools

The statistical tools are indispensable measure for evaluating the performance of the fund. Hence, some of the statistical tools used in this study are explained below:

1. Average Rate of Return

The Average rate of return is the sum of the various one-period rate of return divided by the number of period. It is denoted as

$$\left(\bar{r}_i\right) = \frac{\sum r_i}{n}$$

Where, r_i = return of security i

n = number of month

2. Standard Deviation

Standard Deviation (SD) is defined as the positive square rest of the mean of square of the deviation taken from the arithmetic mean. It is statistical tools that measure the variability of distribution of return around its means or average return.

It is mainly used to find out the total risk of the fund. It is defined as:

$$\sigma = \sqrt{\frac{\sum [r_i - \bar{r}_i]^2}{n}}$$

Where, σ = Standard deviation.

r_i = Rate of return

$\bar{r}_i$ = Average rate of return

n = No. of periods.

3. Co-variance

Co-variance of two securities measures their co-movement. The portfolio variance (or standard deviation) is affected by it-

$$COV\left(r_j r_i\right) = \frac{\sum \left[r_i - \bar{r}_i\right]\left[r_j - \bar{r}_j\right]}{n}$$

Where, r_j = return of security j

r_i = return of security i

3. Beta

Beta is used to measure non diversifiable risk. It is an index of the degree of movement of an assets return in response to a change in the market return. It shows the relationship between market return and asset's return. Beta of market return is always equal to 1. If an asset has a beta greater than 1, the means that the returns of assets are more volatile than return of the market. If the beta of particular assets is less than 1, it means that the returns of the assets are less volatile then market return.

The beta of an asset is defined as:

$$\beta_j = \frac{COV_{jm}}{\sigma_m^2} = \frac{P_{jm} \times \sigma_j \times \sigma_i}{\sigma_m^2}$$

Where,

β_j = Beta coefficient of securities j

COV_{jm} = Co-variance between asset's return of j and market return

σ_m^2 = Variance of market return

P_{jm} = Correlation between security j and market

σ_m = Standard deviation of market return

σ_j = Standard deviation of return security j.

4. Market Variance

By using market variance we can find the market return fluctuate which is calculated by using following formula.

$$\sigma m^2 = \frac{\sum \left(R_m - \overline{R_m}\right)^2}{n}$$

Where, R_m = rate of return of market

$\overline{R_m}$ = Average rate of return of market.

C. Performance Evaluation Tools

When considering a portfolio's performance it is important to consider both returns and risk. There are various methods applied to measure the portfolio performance. Three measures are used to evaluate the risk adjusted performance of mutual fund. They are as follows:

1. Sharpe's Measure

It Measure the reward to (total) variability trade off. Sharpe Index measures the risk premium of the portfolio relative to the total amount of risk in the portfolio. The risk premiums the additional return over and above the risk less rate that is paid to induce investors to assume risk. It defines a single parameter portfolio performance Index that is calculated from both the risk and return statistics. The Sharpe Index in given by:

$$S_i = \frac{\bar{r}_i - \overline{R_f}}{\sigma_i}$$

Where, S_i = Sharpe Index of portfolio performance.

$\bar{r}_i$ = Average return on portfolio i during a specified time period.

$\overline{R_i}$ = Average risk-free rate during the same time period.

σ_i = Standard deviation of portfolio 'i'

2 Treynor's Measure

It measures the risk premium of the portfolio where risk premium equals the difference between the return of the portfolio and the risk less rate. This risk premium is related to the amount of systematic risk assumed in the portfolio so, the Treynor or Index sums up the risk and return of a portfolio in a single numbers, while categorizing the performance of the portfolio. It is given by

$$T_i = \frac{\overline{r_i} - \overline{r_f}}{\beta_i}$$

Where,

T_i = Treynor Index

$\bar{r}_i$ = The average rate of return for portfolio 'i' during a specified time period.

$\bar{r}_f$ = The average rate of return on a risk-free investment during the same time period.

β_i = The slope of the fund's line characteristic line during that time period.

3. Jensen Alpha

Michael Jensen has also developed a method for evaluating a portfolio's or asset's performance. Jensen's measure is the average return on the portfolio over and above that predicted CAPM, given the portfolio's beta and the average market return. Jensen's measure is the portfolio's alpha value. A simplified version of his basic model is given by:

Jensen Alpha = R(i) - (R(f) + B x (R(m) - R(f)))

Where,

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

CHAPTER-IV

RESULTS

This chapter is aimed to display and evaluate the collected data regarding the objectives. It deals with the presentation, analysis and interpretation of relevant data which is in the raw form has been organized and arranged for analysis. This part is the man body of the study. This part is mainly concerned about both primary and secondary data, which were collected, analyzed, and evaluated with help of various financial tools. Secondary data of selected mutual funds were collected and interpreted in order to meet the objective of the research with the help of this analysis, efforts have been made to highlight of performance evaluation of selected mutual funds. For the purpose of simplification and understanding, data presentation and analysis has been categorized into two sections as follows:

4.1 Data Presentation and Analysis

4.1.1 Comparative Statement of NAV for Selected Mutual Funds:

A mutual fund's net asset value per share (NAV) is equal to the total market value of all the mutual fund's holding minus liabilities divided by the fund's total number of outstanding shares on a particular day. Since mutual funds hold a number of securities, the NAV must be calculated at the end of day as daily basis.

Appendix-I shows the NAV of selected mutual funds which are Global IME Samunnat Scheme-1, Laxmi Value Fund, NMB Sulav Investment Fund-1, NIBL Samriddhi Fund-1 and Siddhartha Equity Oriented Scheme from May 2016 to November 2018. NAV of the NMBSF-1 is the highest in 2016 whereas GIMES is the lowest. NMBSF-1 lead as mutual fund having highest NAV in 2017 and 2018 too.

Figure 4.1

Net Asset Value of Selected Mutual Funds

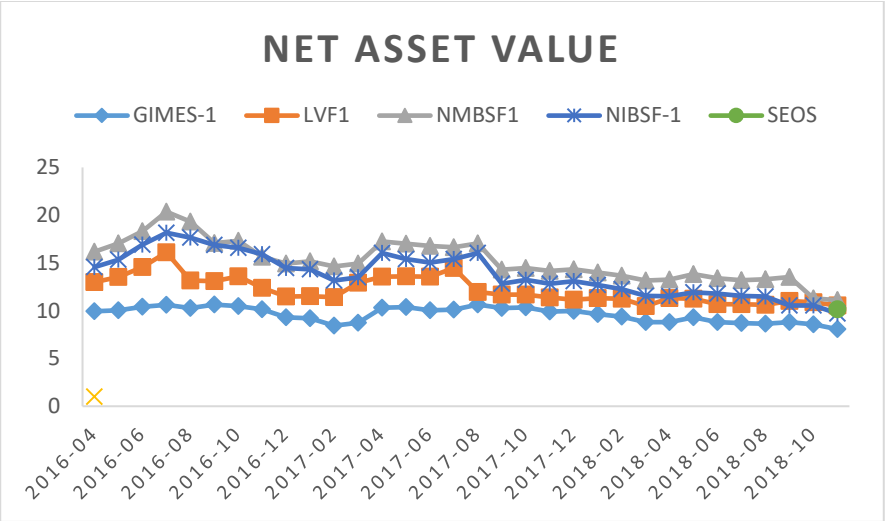


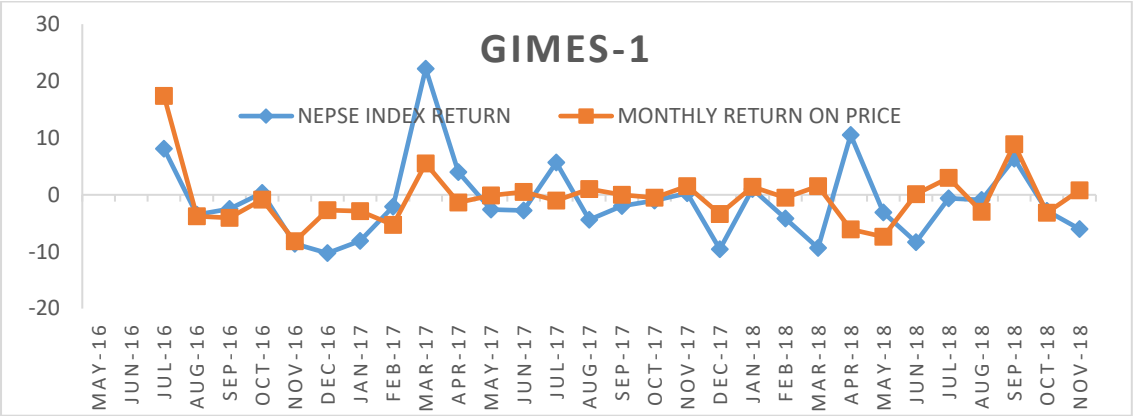
Figure 4.1 shows that NMBSF-1 has the highest NAV during the period of study whereas GIMES-1 has the lowest NAV. From the above figure, it can clearly see that LVF-1 and GIMES-1 NAV moves parallel and NMBSF-1, SEOS, NIBSF-1 moves close to each other. The highest NAV from May 2016 to November 2018 is NMBSF-1 NAV which is 20.36 and lowest NAV is 8.45.

4.1.2 Comparative Analysis between Monthly Return on Price and NEPSE Index Return

Monthly return of each mutual fund is calculated by using the closing price of each month and Index return is calculated by using month end index similarly. This gives an idea about whether the NEPSE index or Mutual fund price has outperformed or underperformed in the stock market.

Figure 4.2

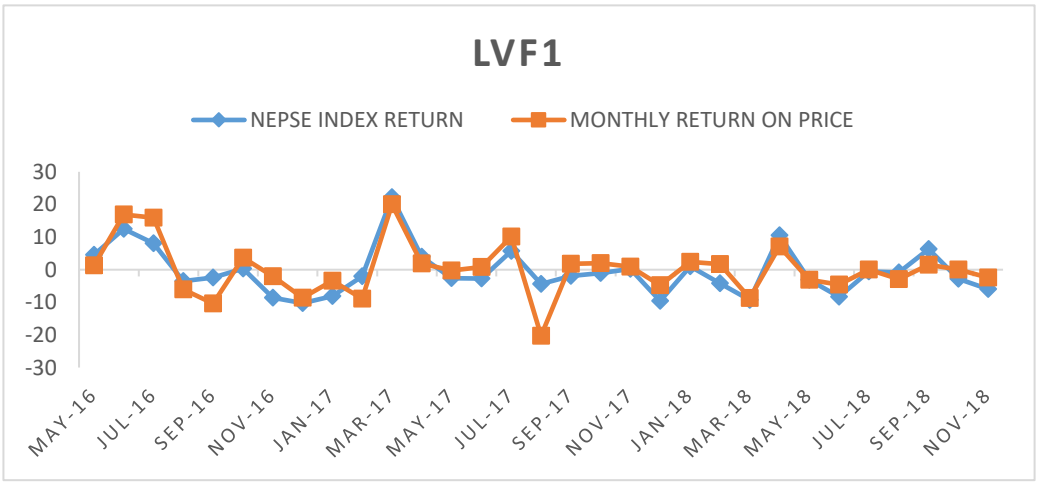
GIMES-1 monthly return on price and Index return



In figure 4.2,it can be seen that monthly return of GIMES-1 has outperformed NEPSE index return on September 2016, October 2016, February 2017, March 2017, April 2017, July 2017, April 2018 and May 2018 whereas in other point of time monthly return is mostly lower than NEPSE index return.

Figure 4.3

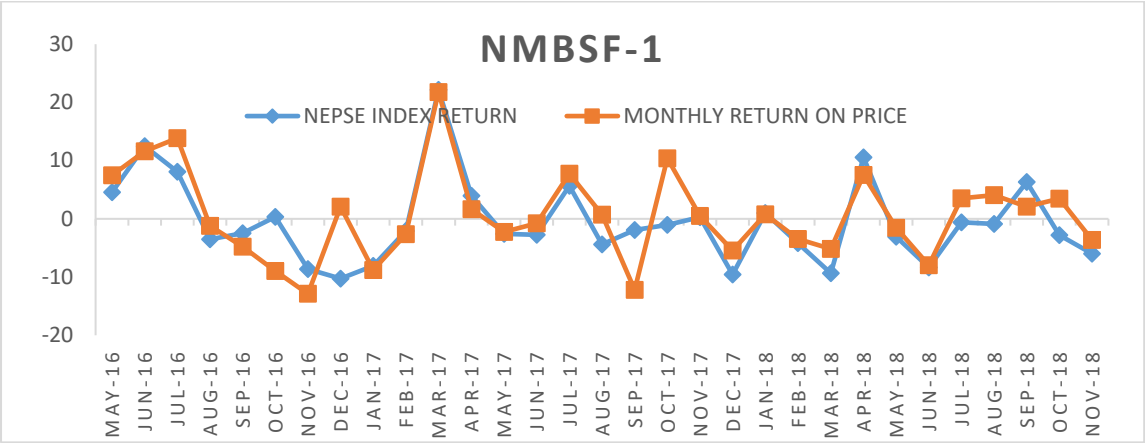
LVF-1 monthly return and Index return



In figure 4.3, it can be seen that monthly return of LVF1 has outperformed NEPSE index return on August 2016, September 2016, March 2017, August 2017, April 2018, August 2018 and September 2018 whereas in other point of time monthly return is mostly lower than NEPSE index return.

Figure 4.4

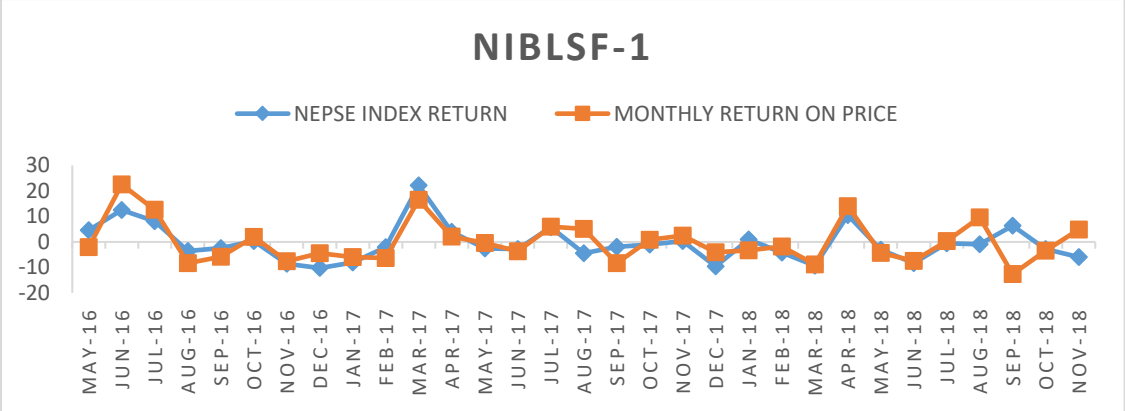
NMBSF-1 monthly return and Index return



In figure 4.4,it can be seen that monthly return of NMBSF-1 has outperformed NEPSE index return on September 2016, October 2016, November 2016, September 2017, April 2018 and September 2018 whereas in other point of time monthly return is mostly lower than NEPSE index return.

Figure 4.5

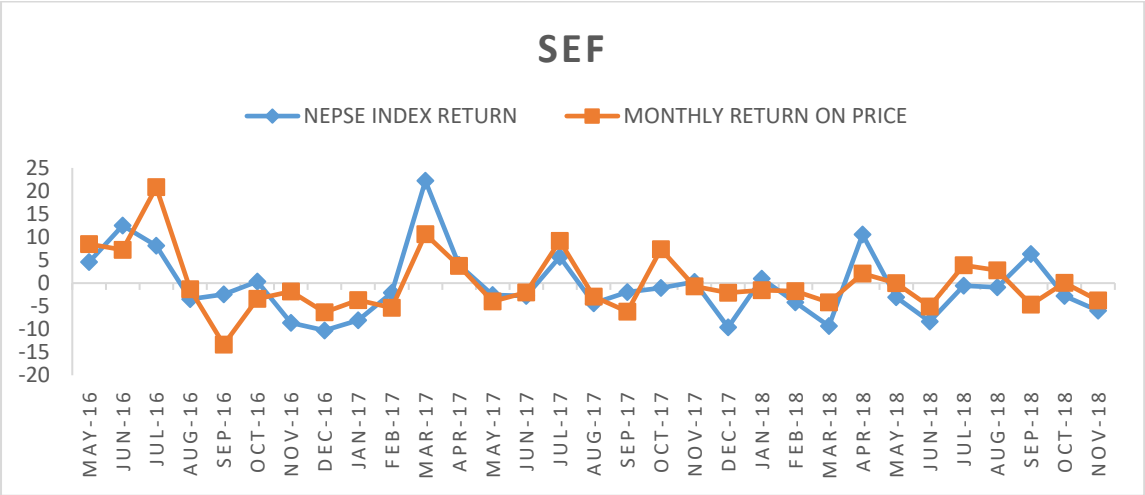
NIBLSF-1 monthly return and Index return



In figure 4.5, it can be seen that monthly return of NIBSF-1 has outperformed NEPSE index return on August 2016, September 2016, March 2017, January 2018 and September 2018 whereas in other point of time monthly return is mostly lower than NEPSE index return.

Figure 4.6

SEOS monthly return and Index return



In figure 4.6,it can be seen that monthly return of SEF has outperformed NEPSE index return September 2016, October 2016, March 2017, January 2018, April 2018 and September 2018 whereas in other point of time monthly return is mostly lower than NEPSE index return.

4.1.3 Performance Analysis based on Mean Return, Standard Deviation and Beta of Selected Mutual Funds

The performance of selected funds is evaluated using average return, standard deviation, Beta. Return alone should not be considered as the basis of measurement of the performance of a mutual fund scheme, it should also include the risk taken by the fund manager because different funds will have different levels of risk attached to them. Risk associated with a fund, in a general, can be defined as variability or fluctuations in the returns generated by it. The higher the fluctuations in the returns of a fund during a given period, higher will be the risk associated with it.

For the basic analysis of schemes regarding their return & risk, mean return, standard deviation & beta were calculated & used to extract their performance.

Table 4.1

Mean Return, Standard Deviation and Beta of Mutual Funds

Schemes	Mean Return	Standard Deviation	Beta
Global IME Samunnat Scheme-1	-0.56	5.00	0.30
Laxmi Value Fund-1	0.61	6.89	0.72
NMB Sulav Investment Fund-1	0.16	6.65	0.40
NIBL Samriddhi Fund-1	0.15	7.36	0.46
Siddhartha Equity Oriented Scheme	0.14	6.75	0.36
NEPSE Index	-0.54	7.19	1

Source: Monthly NAV

Figure 4.7

Mean Return, Standard Deviation, Beta of Selected Mutual Funds

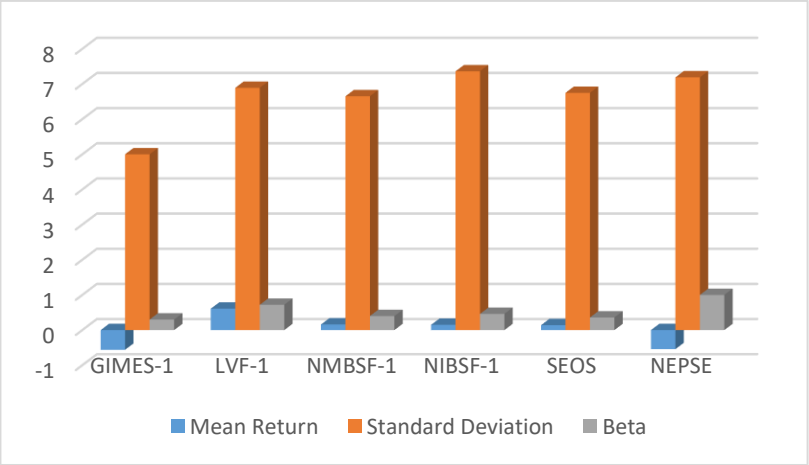


Figure 4.7 shows the average return earned by the various schemes. For calculation of average return earned by the schemes Growth in the value for each month over the previous month has been divided by the value of the previous month. Then the average of the full series has been taken.

Figure 4.7 shows mean return, standard deviation and beta of five selected mutual funds for the period May 2016 to November 2018. The result of table 4.1 shows that besides GIMES-1, all the mutual fund under study are providing higher return as compare to the market. In this comparative analysis it is observed that Laxmi Value Fund-1 indicates high return among the selected funds and in comparison to market return whereas SEOS is having the lowest return. GIMES-1 indicates low return among the selected funds and in comparison, to other funds and the market risk, it also has the lowest risk. In the context of Beta, it is observed from the table that five out of five mutual funds have beta value less than one which indicates they belong to low risk category. LVF-1 performance has been best in terms of return and NIBSF-1 performance is low with high risk in comparative manner.

4.1.4 Performance Analysis based on Sharpe Ratio

The Sharpe Ratio measures the fund's excess return per unit of its risk (i.e. total risk). This ratio indicates the relationship between the portfolio's additional return over risk-free return and total risk of the portfolio, which measured in terms of standard deviation. The results of the Sharpe Ratios of the selected mutual fund and NEPSE have been presented in Table 4.2 and Figure 4.8:

Table 4.2

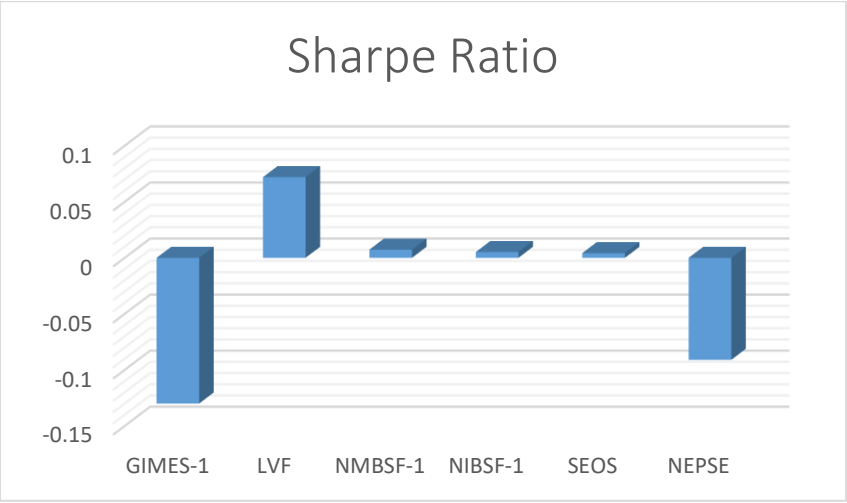
Sharpe Ratio of Selected Mutual Funds

Schemes	Sharpe Ratio
Global IME Samunnat Scheme-1	-0.13
Laxmi Value Fund-1	0.072
NMB Sulav Investment Fund-1	0.0073
NIBL Samriddhi Fund-1	0.0052
Siddhartha Equity Oriented Scheme	0.0042
NEPSE	-0.091

Source: Monthly NAV

Figure 4.8

Sharpe Ratio of Selected Mutual Funds



Top performing fund as per Sharpe ratio is Laxmi Value Fund-1 followed by NMB Sulav Investment Fund-1, NIBL Samriddhi Fund-1, Siddhartha Equity Oriented Scheme respectively. Table 4.2 and figure 4.8 reveal that among the selected funds, Global IME Samunnat has low Sharpe ratio than others and as well as the only fund having negative Sharpe ratio. In the study besides Global IME Samunnat-1, the Sharpe ratio is positive for all funds which shows that funds are providing returns greater than risk free rate. Laxmi Value Fund-1 performed the best according to Sharpe ratio because of its risk premium per unit of total risk is highest among all.

Based on Sharpe Ratio, all of the selected mutual funds revealed the superior performance than the fund that tracks NEPSE except GIMES-1. Sharpe ratio for LVF, NMBSF-1, NIBSF-1, SEOS are higher than the NEPSE.

4.1.5 Performance Analysis based on Treynor Ratio

Treynor ratio measures the relationship between fund's additional return over risk-free return and market risk is measured by beta. The higher the value of Treynor Ratio, the better is the performance of portfolio. Excess return in this sense refers to the return earned above the return that could have been earned in risk free investment. Although there is no true risk-free investment, Treasury bills are often used to represent the risk-free return in the Treynor ratio.

Table 4.3

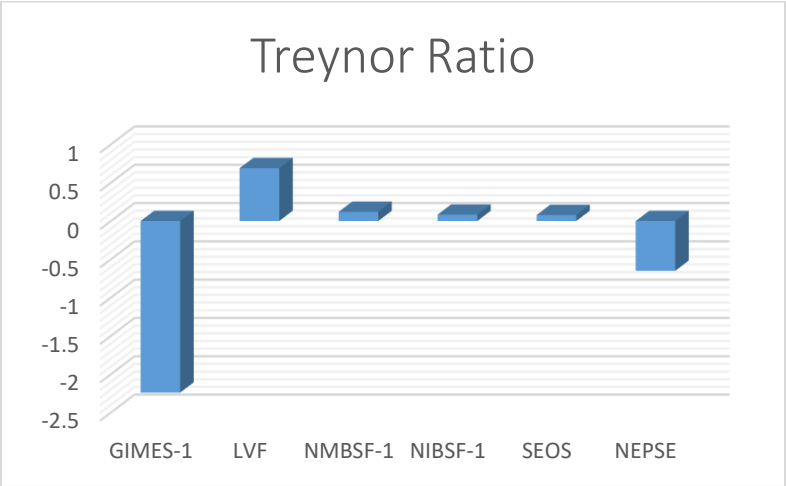
Treynor Ratio of Selected Mutual Funds

Schemes	Treynor Ratio
Global IME Samunnat Scheme-1	-2.24
Laxmi Value Fund-1	0.69
NMB Sulav Investment Fund-1	0.12
NIBL Samriddhi Fund-1	0.083
Siddhartha Equity Oriented Scheme	0.078
NEPSE	-0.65

Source: Monthly NAV

Figure 4.9

Treynor Ratio of Selected Mutual Funds



As per Treynor ratio, it is observed that Laxmi Value Fund-1 is again at top followed by NMB Sulav Investment-1, NIBL Samriddhi Fund-1 and Siddhartha Equity Oriented Scheme. Global IME Samunnat Scheme-1 has again low Treynor ratio than other selected funds.

Besides GIMES-1, all of the selected mutual funds revealed the superior performance than the fund that tracks NEPSE based on Treynor Ratio. LVF, NMBSF-1, NIBSF-1, SEOS's Treynor ratio is higher than the NEPSE. Laxmi Value Fund-1 performed the best according to Treynor ratio because of its risk per unit of systematic risk is highest among all of the selected mutual funds.

Based on Treynor Ratio, all of the selected mutual funds revealed the superior performance than the fund that tracks NEPSE except GIMES-1. Treynor ratio for LVF, NMBSF-1, NIBSF-1, SEOS are higher than the NEPSE

4.1.6 Performance Analysis based on Jensen Ratio

To accurately analyze the performance of an investment manager, an investor must look not only at the overall return of a portfolio, but also at the risk of that portfolio to see if the investment's return compensates for the risk it takes. Jensen's measure is one of the ways to determine if a portfolio is earning the proper return for its level of risk. If the value is positive, then the portfolio is earning excess return. In other words, a

positive value for Jensen's alpha means a fund manager has "beat the market" with his stock picking skills.

Table 4.4

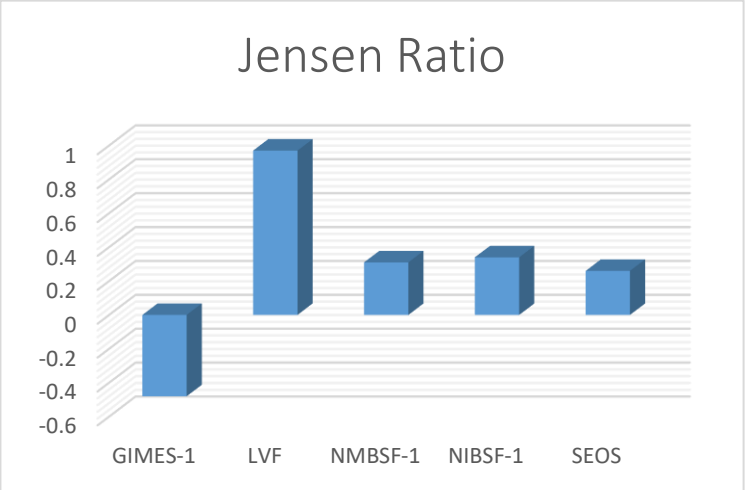
Jensen Ratio of Selected Mutual Funds

Scheme	Jensen Ratio
Global IME Samunnat Scheme-1	-0.48
Laxmi Value Fund-1	0.97
NMB Sulav Investment Fund-1	0.31
NIBL Samriddhi Fund-1	0.34
Siddhartha Equity Oriented Scheme	0.26

Source: Monthly NAV

Figure 4.10

Jensen Ratio of Selected Mutual Funds



In Jensen measure reveal that besides GIMES-1 all schemes shows positive value which indicate superior performance of the schemes and has outperformed the market on risk-adjusted and market adjusted basis. Among the all selected funds higher value

of Jensen ratio is followed with again Laxmi Value Fund-1 followed by NMB Sulav Investment Fund-1, NIBL Samriddhi Fund-1, Siddhartha Equity Oriented Schemes.

Global IME schemes has got lowest and negative value of Jensen ratio which indicate inferior performance and failed to offer rate of return equal to their CAPM required return.

4.2 Major Findings

Major findings of the study can be presented as follows.

1. According to monthly Net Assets Value, NMB Sulav Investment Fund-1 have the highest Net Assets Value than other schemes from May 2016 to November 2018. The highest NAV in the period of studied is 20.36 on July 2016 which is held by NMB Sulav Investement Fund-1.
2. Statistical parameters used to analyze the performance of the selected mutual fund scheme. Laxmi Value Fund-1 has the higher superior average return i.e. 0.61, GIMES-1 has low standard deviation i.e. 5.00 and all the mutual funds have beta less than one and positive which imply that they were less risky than the market portfolio. Rani & Hooda (2017), concluded that scheme which have the highest return also have the lowest risk which is contradictory with this finding.
3. Among all the selected mutual funds, Laxmi Value Fund-1 have the highest Sharpe ratio whereas Global IME Samunnat Scheme-1 have the lowest. Using Sharpe measure, Laxmi Value Fund-1 outperformed the market because it offers higher risk premium per unit of total risk than the market as (SL= 0.072 > SM=-0.091). This finding is supportive with Rani & Hooda (2017) which study concluded that the scheme having the highest return also have the highest Sharpe ratio which indicates superior performance.
4. Laxmi Value Fund-1 again have the highest Treynor ratio and Global IME Samunnat Scheme-1 have the lowest among all the selected mutual funds. Using Treynor's measure, Laxmi Value Fund-1 outperformed the market because it offer higher risk per unit of systematic risk than the market as (TL=0.69> TM=-0.65). Hence, this finding is supportive with Rani & Hooda

(2017) where their study have concluded that the scheme having the highest return also have the highest Treynor ratio which indicates superior performance.

5. Laxmi Value Fund-1 have the highest Jensen ratio and Global IME Samunnat Scheme-1 have the lowes and negative among all the schemes. Using Jensen's measure, Laxmi outperformed the market because it offers the positive excess rate of return above the CAPM required return that is (JL= 0.97 > JM=0). Rani & Hooda (2017) concluded that the scheme having highest return also have the highest and positive Jensen ratio which is supportive with this finding.

CHAPTER-V
CONCLUSIONS

This final chapter involves summary, conclusions and implications of the research work:

5.1 Discussion

With the flotation of NCM Mutual Fund in 2050 B.S. (1993 A.D.), the Nepali market entered into the era of mutual funds. It was an open-ended scheme with a collected fund of just Rs. 100 Million. These days, merchant bankers are coming up with funds 5 to 10 times larger than that, which have become a pivotal part of the Nepali stock market. Currently, there are 13 mutual fund schemes running in the Nepali stock market. Four mutual funds are upcoming and are in the pipeline to be approved. These mutual funds have to be approved by SEBON (Securities Board of Nepal) first to publish the offer letter and accept the funds from general public as initial public offerings. When the fund units are allotted, they are listed in NEPSE (Nepal Stock Exchange) where they can be freely bought and sold. NEPSE is Nepal's only stock exchange market.

Mutual funds have emerged as the best in terms of variety, flexibility, diversification, liquidity as well as tax benefits. Mutual funds investors can gain access to investment opportunities that would otherwise be unavailable to them due to limited knowledge and resources. Mutual funds have the capability to provide a solution to most investors' requires, however the key is to do proper selection and have a process for monitoring and controlling. In Nepal, the mutual fund industry is at a growing stage and it is incorporating a higher number of new funds every year.

This research is amide at studying the performance of selected mutual fund in Nepal in the period of study. The main purpose is to find whether the fund has under or outperformed.

The study based on empirical and analytical research design with the help of secondary data. Selected mutual fund has also been evaluated on the basis of its trading in NEPSE. The analysis of risk and return are the main measurement tools. For this various financial tools like average return, NAV, beta measuring tools have

been used, similarly, the statistical measurement like standard deviation, variance, covariance are also used for analysis and also others various available and relative literature have been reviewed, to have the basis knowledge and understanding of the concept of mutual funds, types, advantages and disadvantage, history and its scenario in Nepal. The review of the past studies has familiarized the researcher with developments contributed on the subject matter and with the various models used to evaluate the performance of portfolio such as Sharpe measure, Treynor measure, Jenson Alpha etc.

5.2 Conclusion

The study has compared the selected mutual funds. Summary of results is presented in different tables. Mutual fund schemes are available to general investors which generally confound them to pick the best out of them. This study provides some insights on mutual fund performance so as to assist the common investors in taking the rational investment decisions for allocating their resources in correct mutual fund scheme. The data employed in the study consisted of monthly NAVs for the closed-ended schemes. The performance of selected mutual fund schemes has been evaluated in terms of return and risk analysis, and risk adjusted performance measures such as Sharpe ratio and Treynor ratio, Jensen ratio.

The performance of mutual fund in terms of Average returns Laxmi Value Fund-1, NMB Sulav Investment Fund-1, NIBL Samriddhi Fund-1 and Siddhartha Equity Oriented Scheme have shown higher and superior returns and Global IME Samunnat Scheme-1 have shown inferior returns. In terms of standard deviation, all mutual fund schemes are less risky than the market except NIBL Samriddhi Fund-1. All the funds have beta less than one and positive which imply that they were less risky than the market portfolio.

According to the Sharpe and Treynor measures, the performance of Funds with positive (Sharpe or Treynor) ratios is a preferable performance because the adjusted return against per unit risk is better as compared to the negative ratios. According to Jensen’s alpha results, those Funds are better performer in the market who have positive alpha and this is indication of the systematic risk adjustment by premium.

All the measures explain the relationship between risk & return. The study found that amongst all the selected mutual funds schemes, Laxmi Value Fund-1 is the best having higher and positive Sharpe ratio, Treynor ratio and Jensen ratio. Based on Sharpe ratio, Treynor ratio and Jensen ratio Laxmi Value Fund-1 revealed the superior performance than the fund that tracks NEPSE. Global IME Samunnat Scheme-1 is the only one scheme having negative and lowest Sharpe measures, Treynor measure and Jensen measure which indicate that Global IME Samunnat Scheme-1 have perform inferior.

In the ultimate analysis it may be concluded that all the funds have performed well in the high volatile market movement expect Global IME Samunnat Scheme-1. Therefore, it is essential for investors to consider statistical parameters like alpha, beta, standard deviation while investing in mutual funds apart from considering NAV and return in order to ensure consistent performance of mutual funds.

For expansion the depth of the capital market, it is necessary to float more mutual funds since these are good instruments of mobilizing savings and providing investment opportunities to small savers. Although small in size, mutual funds have contributed toward broadening the base of the country's capital market and co-operated the investors to gain high and relatively secure returns. Despite bright prospects of mobilizing saving and providing investment opportunities to small savers and the ability to meet different risk profiles through providing a wide range of products, one major factor as to why the mutual funds have not emerged as a preferred saving mode is the lack of availability of quality shares and the underdeveloped state of the capital market. Further to awake the people of our country about the framework of mutual funds where there is enough quantum of financial illiterate people, more investigations of this kind especially by academic institutions through research students are the need of time.

5.3 Implications

5.3.1 General implication

In spite of the limitations under which the study has been carried out it has been able to meet the objective of the study. On the basis of the study made following implications are made.

1 This research report may be useful to investor to make their investment decisions.
2 The results suggest to fund managers to adopt such strategies that could provide maximum benefit to the investors.
3 The study provides analytical comparison between different closed ended mutual fund companies providing significant guidance for fund managers as well as the investors.
4 This report may also provide a mechanism for identifying strengths and weakness of fund managers which help them to take corrective actions.
5 For the transparency of the activities of the mutual fund with regard to accounting and auditing practices, the report and recommendation from the office of auditor general should be implemented effectively.
6 It is found that investors are not aware of mutual fund companies; they should learn thoroughly the prospectus of the mutual fund companies before investing.
7 Mutual fund companies have done very well at international level because it has been handle professionally and efficiently. Therefore, it could be better if Nepalese economy follow suit.
8 In order to get the higher return investors should practice the active investment strategy.
9 Mutual fund reduces risk by diversification, so it is safe investment then other investment alternatives.

5.3.2 Implication for future researchers

1. This study only considered five mutual funds since most of the mutual funds are new in market where in near future, researchers might take more number of mutual funds.

2. Sharpe measure, Treynor measure and Jensen measure have taken into the consideration for evaluating the performance of selected mutual funds. There are other tools and measures also available for evaluating the performance of selected mutual funds.
3. Net assets value is main concerned of this study, whereas other factor also could be taken in near future.
4. The time period of this study was from May 2016 to November 2018 due to its newness in market so research might take longer time period in near future.

REFERENCES

Abbasi, M., Kalantari, E. & Abbasi, H. (2012). Effect of fund size on the performance of mutual funds Evidence from Iran. *Journal of Basic and Applied Scientific Research*, 2(7), 6889-6902

Adhikari, D. (2006). *Problem and prospects of mutual fund companies in Nepal*. Unpublished Master's Degree Thesis. Office of the Dean, faculty of management, T.U.

Aryal, P. (2012). *Performance evaluation of mutual funds in Nepal*. Unpublished Master's Degree Thesis. Office of the Dean, faculty of management, T.U.

Bajracharya, R.B. (2016). Mutual fund performance in Nepalese mutual Fund Units. *Journal of Advanced Academic Research,* 3(11), 92-100

Bansal, S., Kumar, S. & Gupta, S.K. (2012) Test of Sharpe ratio on selected mutual fund schemes. *International Journal of Marketing, Financial Services and Management Research,* 1(9), 60-69

Carhart, M.M. (1997). On persistance in mutual fund perfromance. *The Journal of Finanace,* 52(1), 57-82

Dahlquist, M., Engstrom, S. & Soderlind, P. (2000). Performance and characteristic of Swedish mutual fund. *The Journal of Financial and Quantitative Analysis,* 35(3), 409-423

Grinblatt, M. & Titman, S. (1994). A study of monthly mutual fund returns and performance evaluation techniques. *Journal of Financial and Quantitative Analysis*, 29(3), 419-444

Gohar, R., Ahmeds, S. & Niazi, U. (2011). Performance comparison of mutual Funds in Pakistan. *African Journal of Business Management,* 5(14), 5583-5593

Hada, R. (2004). *Mutual fund emerging trends is in Nepalese financial market*. Unpublished Master's Degree Thesis, Office of the Dean, Faculty of Management, T.U.

Howells & Bain (2005). The Economic of Money Banking and Finance. *A European Text, Business & Economic,* 2(1)

Jensen, M.C. (1968). The Performance of Mutual Fund in the Period 1945-1964. *Journal of Finance,* 23(2), 389-416

Keswan, I.A. & Stolin, D. (2008). Which money is smart? Mutual fund buys and sells of Individual and Institutional Investors. *Journal of Finance,* 63(1), 85-118

Kolosov, P. & Soltanmammedov, S. (2011). *Board structure in Swedish mutual funds industry*. Master Thesis Umea School of Busniess.

Kon, S.J. (1983). The market-timing performance of mutual fund managers. *The Journal of Business,* 56(3), 323-347

Mahato, S. (2002). *Risk and return analysis of investing in mutual fund.* Unpublised Master's Degree Thesis, Office of the Dean, Faculty of Management, T.U.

Nafees, B., Shah, A., Muhammad, S. & Khan, S. (2011). Performance evaluation of open end and close end mutual funds in Pakistan. *African Journal of Business Management*, 15(28), 11425-11434

Neupane, S. (2001). *A study on mutual fund performance in Nepal.* Unpublished Master's Degree Thesis, Office of The Dean, Faculty of Management, T.U.

Poornima, S. & Sudhamathi, R.K. (2013). Performance analysis of growth oriented equity diversified mutual fund schemes using sortino ratio. *Asia Pacific Journal of Research Apeer reviewed International Journal,* 1(8), 27-35

Rai, R.K. (2005). *Problems and prospects of mutual funds companies in Nepal.* Unpublished Master's Degree Thesis, Office of The Dean, Faculty of Management, T.U.

Rakhal, D. (2017). Current status of mutual fund schemes in Nepal. *The Journal of Nepalese Business Studies,* 10(1), 85-95

Rani, G. & Hooda, V.S. (2017). Performance evaluation of mutual fund schemes. *Journal of Business and Management*, 19(10), 01-06

Rauniyar, A. (2016). *Performance evaluation of Nepalese mutual funds.* Unpublished Mphil's Research Paper, Kathmandu University School of Management, K.U.

Sharpe, W.F. (1966). Mutual fund performance. *Journal of Business,* 39 (supplement) , 119-138.

Sondhi, H.J. & Jain, P.K. (2010). Market risk and investment performance of equity mutual fundsin India: some emprical evidence. *Finance India*, XXIV(2), 443-464

Sorros, J.N. (2003). Return and risk analysis: a case study in equity mutual funds operating in the Greek financial market. *Managerial Finance*, 29(9), 21-28

Thapa, K. & Rana, S.B. (2017). *Investment Management*, Kathmandu, Asmita Books Publishers & Distributors (P) Ltd.

Treynor, J. & Mazuy, K.K. (1966). Can mutual funds outguess the market. *Harvard Busniess Review,* 44, 131-136

Treynor, J. (1965). How to rate management of Investment funds. *Harvard Business Review*, 43(1), 63-75

Websites

Chen, J. (2018). Mutual Fund, Investopedia https://www.investopedia.com/terms/m/mutualfund.asp

Deloitte. *Mutual Fund Industry in India*. 20 June 2016. *https://en.wikipedia.org/wiki/Variance_decomposition_of_forecast_errors*

Eldrum, R. (2018). 13 Mutual Funds You Can Buy in Nepal https://toughnickel.com/personal-finance/Mutual-Funds-in-Nepal *www.nepalstock.com/company*

Appendix-I

Monthly NAV of Selected Mutual Funds

Year	Month	GIMES-1	LVF1	NMBSF1	NIBSF-1	SEOS
2016	April	9.96	12.98	16.16	13.4	14.56
	May	10.03	13.53	17.03	14.15	15.353
	June	10.41	14.56	18.32	15.6	16.91
	July	10.63	16.11	20.36	17.13	18.16
	August	10.28	13.17	19.34	16.81	17.64
	September	10.64	13.1	17.07	16.23	16.88
	October	10.47	13.61	17.33	16.1	16.58
	November	10.13	12.4	15.64	15.36	15.906
	December	9.32	11.48	14.92	13.82	14.47
2017	January	9.21	11.52	15.16	13.69	14.33
	February	8.45	11.41	14.63	12.09	13.17
	March	8.74	12.91	14.95	12.77	13.503
	April	10.31	13.56	17.234	15.98	16.025
	May	10.39	13.59	17.01	15.46	15.414
	June	10.05	13.57	16.77	15.11	15.051
	July	10.11	14.47	16.64	14.94	15.402
	August	10.64	11.96	17.06	15.19	16.053
	September	10.28	11.7	14.31	12.89	12.809
	October	10.34	11.7	14.47	13.31	13.213

	November	9.9	11.37	14.17	12.82	12.83
	December	9.99	11.15	14.32	13.09	13.1
2018	January	9.64	11.32	14.01	12.61	12.68
	February	9.38	11.26	13.67	12.2	12.26
	March	8.82	10.48	13.17	11.59	11.56
	April	8.79	11.32	13.26	11.53	11.53
	May	9.32	11.25	13.82	12.1	11.93
	June	8.8	10.69	13.38	11.5	11.8
	July	8.72	10.68	13.18	11.29	11.54
	August	8.63	10.63	13.29	11.15	11.5
	September	8.8	11.01	13.54	10.39	10.54
	October	8.57	10.88	11.3	10.25	10.54
	November	8.07	10.54	11.11	9.72	10.15

Source: www.globalimecapital.com

www.laxmicapital.com

www.nmbcl.com

www.niblcapital.com

www.siddhartha.capital.com

Appendix-II

Calculation of Portfolio Yield

Month	NAV*	Dividend	Yield	NAV**	Dividend	Yield	NAV**	Dividend	Yield
2016-May	10.03		0.7	13.53	0.208	5.84	17.03	0.17	6.44
June	10.41		3.79	14.56	0.208	9.15	18.32	0.17	8.57
July	10.63		2.11	16.11	0.208	12.07	20.36	0.17	12.06
August	10.28		-3.29	13.17	0.208	-16.96	19.34	0.17	-4.18
September	10.64		3.5	13.1	0.208	1.05	17.07	0.17	-10.86
October	10.47		-1.6	13.61	0.208	5.48	17.33	0.17	2.52
November	10.13		-3.25	12.4	0.208	-7.36	15.64	0.17	-8.77
December	9.32		-7.8	11.48	0.208	-5.74	14.92	0.17	-3.52
2017-Jan	9.21		-1.39	11.52	0.208	2.16	15.16	0.18	2.82
February	8.45		-8.25	11.41	0.208	0.85	14.63	0.18	-2.31
March	8.74		3.43	12.91	0.208	14.97	14.95	0.18	3.42
April	10.31		17.96	13.56	0.208	6.65	17.234	0.18	16.46
May	10.39		0.78	13.59	0.208	1.76	17.01	0.18	-0.23
June	10.05		-3.27	13.57	0.208	1.38	16.77	0.18	-0.35
July	10.11		0.6	14.47	0.208	8.17	16.64	0.18	0.3
August	10.64		5.24	11.96	0.208	-15.91	17.06	0.18	3.61
September	10.28		-3.38	11.7	0.208	-0.44	14.31	0.18	-15.06
October	10.34		0.58	11.7	0.208	1.78	14.47	0.18	1.24
November	9.9		-4.26	11.37	0.208	-1.04	14.17	0.18	-0.83

December	9.99		0.91	11.15	0.208	-0.11	14.32	0.18	2.33
2018-Jan	9.64		-3.5	11.32		1.53	14.01	0.18	-0.91
February	9.38		-2.7	11.26		-0.53	13.67	0.18	-1.14
March	8.82		-5.97	10.48		-6.93	13.17	0.18	-2.34
April	8.79		-0.34	11.32		8.02	13.26	0.18	2.05
May	9.32		6.03	11.25		-0.62	13.82	0.18	5.58
June	8.8		-5.58	10.69		-4.98	13.38	0.18	-1.88
July	8.72		-0.91	10.68		-0.094	13.18	0.18	-0.15
August	8.63		-1.03	10.63		-0.47	13.29	0.18	2.2
September	8.8		1.97	11.01		3.58	13.54	0.18	3.24
October	8.57		-2.61	10.88		-1.18	11.3	0.18	-15.21
November	8.07		-5.83	10.54		-3.13	11.11	0.18	-0.088
Average Return			-0.56			0.61			0.16

NAV* : GIMES-1

NAV : LVF-1**

NAV* : NMBSF-1**

Month	NAV****	Dividend	Yield	NAV*****	Dividend	Yield
2016-May	14.15	0.125	6.53	15.353	0.13	6.32
Jun	15.6	0.125	11.13	16.91	0.13	11.01
Jul	17.13	0.125	10.61	18.16	0.13	8.16
Aug	16.81	0.125	-1.14	17.64	0.13	-2.15
Sep	16.23	0.125	-2.71	16.88	0.13	-3.57
Oct	16.1	0.125	-0.031	16.58	0.13	-1.01
Nov	15.36	0.125	-3.82	15.906	0.13	-3.26
Dec	13.82	0.125	-9.21	14.47	0.13	-8.23
2017-Jan	13.69	0.15	0.15	14.33	0.21	0.48
Feb	12.09	0.15	-10.59	13.17	0.21	-6.63
Mar	12.77	0.15	6.87	13.503	0.21	4.1
Apr	15.98	0.15	26.31	16.025	0.21	20.3
May	15.46	0.15	-2.32	15.414	0.21	-2.56
Jun	15.11	0.15	-1.29	15.051	0.21	-0.97
Jul	14.94	0.15	-0.13	15.402	0.21	3.72
Aug	15.19	0.15	2.68	16.053	0.21	5.58
Sep	12.89	0.15	-14.15	12.809	0.21	-18.88
Oct	13.31	0.15	4.42	13.213	0.21	4.76
Nov	12.82	0.15	-2.55	12.83	0.21	-1.29
Dec	13.09	0.15	3.28	13.1	0.21	3.74
2018-Jan	12.61	0.1	-2.9	12.68	0.1	-2.44
Feb	12.2	0.1	-2.46	12.26	0.1	-2.52
Mar	11.59	0.1	-4.18	11.56	0.1	-4.89
Apr	11.53	0.1	0.35	11.53	0.1	0.61

May	12.1	0.1	5.81	11.93	0.1	4.34
Jun	11.5	0.1	-4.13	11.8	0.1	-0.25
July	11.29	0.1	-0.96	11.54	0.1	-1.36
Aug	11.15	0.1	-0.35	11.5	0.1	0.52
Sep	10.39	0.1	-5.92	10.54	0.1	-7.48
Oct	10.25	0.1	-0.39	10.54	0.1	0.95
Nov	9.72	0.1	-4.2	10.15	0.1	-2.75
Average Rerturn			0.15			0.14

NAV** : NIBSF-1**

NAV*** : SEOS**

Calculation of Variance

Year	Month	$(r_M-r_M)^2$	$(r_G-r_G)^2$	$(r_L-r_L)^2$	$(r_N-r_N)^2$	$(r_{NI}-r_{NI})^2$	$(r_S-r_S)^2$
2016	May	26.32	1.59	27.35	39.44	40.70	38.19
2016	June	169.26	18.92	72.93	70.73	120.56	118.16
2016	July	74.65	7.13	131.33	141.61	109.41	64.32
2016	August	8.82	7.45	308.70	18.84	1.66	5.24
2016	September	3.65	16.48	0.19	121.44	8.18	13.76
2016	October	0.81	1.08	23.72	5.57	0.03	1.32
2016	November	64.96	7.24	63.52	79.74	15.76	11.56
2016	December	94.48	52.42	40.32	13.54	87.61	70.06
2017	Janaury	57.00	0.69	2.40	7.08	0.00	0.12
2017	Febuarary	2.31	59.14	0.06	6.10	115.35	45.83
2017	March	516.65	15.92	206.21	10.63	45.16	15.68
2017	April	20.43	342.99	36.48	265.69	684.35	406.43
2017	May	4.20	1.80	1.32	0.15	6.10	7.29
2017	June	4.93	7.34	0.59	0.26	2.07	1.23
2017	July	38.69	1.35	57.15	0.02	0.08	12.82
2017	August	14.90	33.64	272.91	11.90	6.40	29.59
2017	September	1.96	7.95	1.10	231.65	204.49	361.76
2017	October	0.24	1.30	1.37	1.17	18.23	21.34
2017	November	0.66	13.69	2.72	0.98	7.29	2.04
2017	December	81.54	2.16	0.52	4.71	9.80	12.96
2018	Janaury	2.56	8.64	0.85	1.14	9.30	6.66
2018	Febuarary	13.18	4.58	1.30	1.69	6.81	7.08
2018	March	77.44	29.27	56.85	6.25	18.75	25.30
2018	April	122.99	0.05	54.91	3.57	0.04	0.22
2018	May	6.40	43.43	1.51	29.38	32.04	17.64

2018	June	61.00	25.20	31.25	4.16	18.32	0.15
2018	July	0.00	0.12	0.50	0.10	1.23	2.25
2018	August	0.08	0.22	1.17	4.16	0.25	0.14
2018	September	47.47	6.40	8.82	9.49	36.84	58.06
2018	October	5.11	4.20	3.20	236.24	0.29	0.66
2018	November	29.70	27.77	13.99	0.06	18.92	8.35
	Standard Deviation	7.19	5.00	6.89	6.65	7.36	6.74

Calculation of Covariance

Year	Month	(r_G-r_G) (r_M-r_M)	(r_L-r_L) (r_M-r_M)	(r_N-r_N) (r_M-r_M)	$(r_{NI}-r_{NI})$ (r_M-r_M)	(r_S-r_S) (r_M-r_M)
2016	May	6.46	26.84	32.23	32.74	31.71
2016	June	56.59	111.12	109.43	142.87	141.44
2016	July	23.07	99.03	102.84	90.39	69.31
2016	August	8.11	52.15	12.88	3.83	6.80
2016	September	-7.75	-0.84	21.03	5.46	7.08
2016	October	-0.94	4.39	2.13	-0.16	-1.04
2016	November	21.68	64.23	71.96	31.99	27.40
2016	December	70.37	61.71	35.76	90.96	81.34
2017	January	6.27	-11.70	-20.08	0.00	-2.57
2017	February	11.69	-0.36	3.75	16.31	10.28
2017	March	90.69	326.43	74.11	152.76	90.02
2017	April	83.71	27.31	73.70	118.29	91.16
2017	May	-2.75	-2.36	0.80	5.06	5.53
2017	June	6.02	-1.71	1.13	3.19	2.46
2017	July	7.22	47.04	0.87	-1.74	22.27
2017	August	-22.39	63.74	-13.31	-9.76	-20.99
2017	September	3.95	1.47	21.28	20.00	26.60
2017	October	-0.56	-0.57	-0.53	-2.09	-2.26

2017	November	-3.00	-1.34	-0.80	-2.19	-1.16
2017	December	-13.27	6.50	-19.59	-28.26	-32.50
2018	January	-4.70	1.47	-1.71	-4.88	-4.13
2018	February	7.77	4.14	4.72	9.47	9.65
2018	March	47.61	66.34	22.00	38.10	44.26
2018	April	2.44	82.19	20.96	2.22	5.21
2018	May	-16.67	3.11	-13.70	-14.31	-10.62
2018	June	39.21	43.65	15.93	33.42	3.05
2018	July	0.02	0.03	0.02	0.05	0.07
2018	August	0.13	0.30	-0.57	0.14	-0.11
2018	September	17.43	20.47	21.23	-41.83	-52.51
2018	October	4.63	4.04	34.71	1.22	-1.83
2018	November	28.72	20.38	1.35	23.70	15.75
	Total	471.75	1119.20	614.51	716.93	561.66

Calculation of Beta

	GIMES-1	LVF-1	NMBSF-1	NIBSF-1	SEOS
Covariance	15.73	37.31	20.48	0.46	0.36
Market Variance	51.75	51.75	51.75	51.75	51.75
Beta	0.30	0.72	0.40	0.46	0.36