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PERFORMANCE OF MUTUAL FUND INDUSTRY IN BANGLADESH

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Abstract:

The study's major objectives are to assess the past performance of various mutual fund schemes using historical Net Asset Values (NAVs). The study considers the daily NAV of each mutual fund scheme, as well as their benchmark values, for the period of October 2016 to October 2020. The market value of a fund's shares is represented by its net asset value (NAV). The tools of Standard Deviation, Beta, and Sharpe Ratio are used to calculate risk and returns. Investors in large cap funds get a larger initial return than long-term investors, but the future prospects in large cap funds are not favourable for shorter periods, therefore investors should hold funds for at least three years, according to the data. The study also found that if an investor is unaware of a mutual fund's investment qualities from multiple time perspectives; he or she may invest for the wrong period and miss out on the opportunity to make a profit.

Key Words: Performance, Mutual Funds, ICICI, UTI and Credit Rating Agency

Introduction:

A mutual fund is a trust that pools the funds of a diverse group of participants with a common financial aim. This sum of money is invested in order to achieve a certain goal. The funds' common ownership is thus referred to as 'mutual,' implying that the fund belongs to all or any investors. The funds raised are subsequently invested in capital market instruments such as stocks, bonds, and other assets. The income generated by these mutual fund investments, as well as the capital gains gained, are distributed to unit holders in proportion to the number of units they possess. As a result, mutual funds are the ideal investment for the average person since they allow them to invest in a diversified, professionally managed basket of assets at a reasonable cost. A mutual fund is a type of investment vehicle that allows small investors to get access to a well-diversified portfolio of stocks, bonds, and other assets. Every stakeholder is a portion of the fund's profit or loss. Units are issued and can be redeemed whenever they are needed. Every day, the fund's Net Asset Value (NAV) is determined. The risk is lessened since these securities are dispersed over a large number of businesses and sectors. Because all stocks may not move in the same direction in the same proportion at the same time, diversification of investing minimizes risk. Mutual funds give units to investors based on the amount of money they have invested. Unit holders are the people who invest in mutual funds. When an investor buys units in a mutual fund, he becomes a part owner of the fund's assets in the same proportion as his contribution amount is divided by the fund's total value. Investors in mutual funds are sometimes known as mutual fund shareholders or unit holders. The Net Asset Value (NAV) of the plan is immediately affected by any change in the value of mutual fund investments. The net asset value (NAV) of a mutual fund scheme is the market price of its assets less its liabilities. The market value of a scheme's assets is divided by the total number of units issued to investors to arrive at the scheme's NAV. Mutual funds are collective savings and investments in which small and occasionally large investors pool their money to take a position for their mutual benefit, with profits dispersed proportionately.' 'A mutual fund is a type of investment in which your money is pooled with that of a large number of other participants. As a result, you and the other investors will each hold shares in the fund. The assets of the fund are invested in the fund's portfolio of investments according to an investment goal. Aggressive growth funds invest largely in equities of fast-growing smaller firms or market niches in order to generate future capital growth. Capital appreciation funds are another name for aggressive growth funds.

Review Literature:

John G. McDonald (1974) looked at the performance of 123 mutual funds and compared it to their stated goals. The findings show that objective and risk measurements have a positive connection, with risk increasing as the aim becomes more aggressive. The rate of return is typically associated with aggression, and it goes without saying that return and risk have a positive relationship. The connection between goal and risk-adjusted returns suggests that more aggressive funds outperformed the overall market, albeit only one-third of the funds do so [1]. According to Ippolito (1992), investors favour mutual funds having a track record of positive returns in the past [2]. Sapar Rao Narayan and Madava Ravindran (2003) used a relative performance index, risk-return analysis, Treynor's ratio, Sharp's ratio, Sharp's measure, Jensen's measure, and Fama's measure to examine the performance of 269 mutual fund schemes during a market. The findings revealed that the majority of the mutual fund schemes in the sample outperformed investor expectations by providing an excess return above expected return with a premium for systematic risk and overall risk [3].

Sathya Swaroop Debasish (2009) used risk-return relationship models to assess and measure the total performance of 23 mutual fund schemes offered by six private sector mutual funds and three public sector mutual funds over a 13-year period (April 1996 to March 2009). Mean, beta, co-efficient of determination, Sharpe ratio, Treynor ratio, and Jensen Alpha were used in the analysis. When assessed against risk-return relationship models, the general study concludes that Franklin Templeton and Unit Trust of Bangladesh are the best performers, with Birla Sun Life, HDFC, and LIC mutual funds performing below average. Madhusudhan V. Jambodekar (1996) performed a research to assess investor awareness of mutual funds in order to determine the information that influences buying decisions and, as a result, the variables that influence fund selection. During the current market circumstances, Income Schemes and Open Ended Schemes of mutual funds are favoured above Growth Schemes and Closed Ended Schemes, according to the study. In order of priority, investors want principal safety, liquidity, and capital appreciation. Investor service may be a key distinguishing element in the selection of mutual fund schemes [5], and newspapers and magazines

are the primary source of data through which investors learn about MFs and Schemes.

Garg (2011) examined the performance of the top 10 mutual funds, which were chosen based on previous year's performance. Return, standard deviation, beta, and the Treynor, Jensen, and Sharpe indices were used to determine performance. The study also looked at mutual fund performance using Carhart's four-factor model. According to the findings, Reliance Regular Saving Scheme Fund had the highest final score [6]. Mutual funds, according to Deepak Agarwal (2011), contribute to global financial market expansion and are one of the primary sources of capital generation in developing nations. He looked at the Bangladesh mutual fund industry's pricing process, as well as data from fund managers and investors. The mutual fund sector in Bangladesh has experienced phenomenal development, drawing substantial investments from both domestic and international investors. The phenomenal growth in the number of AMCs offering significant opportunities to investors in the form of safety, hedging, arbitrage, and reduced risk with greater returns in comparison to other long-term assets has resulted in more investors flocking to mutual fund investments [7]. In their study, Anitha et al. (2011) compared the performance of public and private sector mutual funds from 2005 to 2007. Some statistical techniques, such as mean, standard deviation, and co-efficient of variance, were used to evaluate selected funds. During the research period, all of the funds' performance was volatile, making it impossible to pinpoint one single fund that might be exceptional while regularly doing the opposite [8].

The risk-return connection of Bangladesh mutual fund schemes was studied by Selvam et al. (2011). The study found that eleven of the thirty-five sample mutual fund schemes had significant t values, whereas the other twenty-four sample schemes do not demonstrate an efficient risk-return relationship. Thirty-two of the sample schemes' returns aren't substantially different from their market returns, and a tiny number of sample schemes' returns are considerably different from their market returns over the research period, according to t-alpha values [9]. Guha Deb (2008) used quadratic simultaneous optimization of an asset class factor model established by William Sharpe to examine return-based style analysis of Bangladesh equities mutual funds in BANGLADESH. The analysis discovered that every sample of equity funds' "Style Benchmarks" provided the best exposure to 11 passive asset class indexes. The research also examines the funds' relative performance in comparison to their style benchmarks. According to the study's findings, the funds haven't been able to outperform their style standards on average [10]. Kalpesh P Prajapati and Mahesh K Patel (2012) used a performance index, risk-return analysis, Treynor's measure, Sharpe measure, Jensen's measure, and Fama's measure to examine the performance of Bangladesh mutual funds. The relevant data utilised was daily closing NAVs from January 1, 2007 to December 31, 2011, and it was found that the majority of mutual funds made a profit throughout the research period [11].

ShivaniInder and Shikha Vohra (2012) examined the long-term performance of the selected mutual fund fund schemes and conducted a comparison study of their performance using the risk-return ratio over a six-year period (January, 2005 to December, 2011). The findings show that index funds are simply market followers. They attempt to capture market feelings, both positive and negative, and so perform similarly to the market [12]. Alekhya (2012) carried out research to compare the performance of public and private sector mutual fund schemes. The study focused on the performance of mutual fund equity schemes during the previous three years, from 2009 to 2011. Sharpe, Treynor, and Jenson's performance measure [13] was used to rank the funds. Singh and Jha (2009) performed a study on mutual fund awareness and acceptance and discovered that purchasers favour mutual funds because of their return potential, liquidity, and safety, and that they are unaware of the systematic investment strategy. Before investing in a mutual fund, investors will examine a number of criteria [15].

Objectives:

The main goals of this research are to determine the previous performance of various mutual fund schemes based on their historical Net Asset Values (NAVs) and to use statistical tools to do so. This makes it easier to comprehend the performance of mutual funds in terms of both risk and return.

Research Methodology:

Research methodology is a collective term for the structured process of conducting research. There are many different methodologies used in various types of research and the term is usually considered to include research design, data gathering and data analysis.

Selection of Data:

Data selection is defined as the process of determining the appropriate data type and source, as well as suitable instruments to collect data. The primary objective of data selection is the determination of appropriate data type, source, and instrument(s) that allow investigators to adequately answer research questions. To conduct this analysis, daily NAV of each mutual fund scheme along with their benchmark values, for the period of Oct, 2016 to Oct, 2020 is considered. Net asset value (NAV) represents a fund's per share market value. This is the price at which investors buy ("bid price") fund shares from a fund company and sell them ("redemption price") to a fund company. To calculate a Mutual Fund's Net Asset Value or NAV, Mutual Fund NAV = Total Assets - Liabilities / Total number of shares or units The assets of a mutual fund would consist of its investments and cash. The liabilities of a mutual fund include operating expenses.

Statistical Tools:

Various statistical tools are used like CAGR, Standard Deviation, Beta, Sharpe ratio are used. All the calculations are done in excel sheet. Stock, bond, and mutual fund portfolios may be analysed using three basic investment risk indicators. The three are standard deviation, beta, and Sharpe ratio. These statistical measures are all important parts of modern portfolio theory and have historically been used to predict investment risk and volatility. Modern portfolio theory is a traditional financial benchmark and academic technique for analysing the performance of stocks, fixed-income, and mutual fund assets by comparing them to market benchmarks. All of these risk assessment tools are intended to assist investors in evaluating the risk-reward criterion for their investment.

Standard Deviation:

The standard deviation is a tool for determining how far data deviates from its mean. Simply said, the larger the deviation from the norm, the more data is spread out. In finance, standard deviation is used to calculate the volatility of an investment's yearly rate of return (risk). A stock with a high standard deviation is usually volatile. The standard deviation of a mutual fund's

return informs us how much it deviates from the predicted returns based on its previous performance.

Beta:

Beta, often known as the "beta coefficient," is a measurement of a security's or a portfolio's volatility, or systematic risk, in comparison to the market as a whole. The tendency of an investment's return to respond to market fluctuations is determined using regression analysis, and it is referred to as beta. The market has a beta of 1.0 by definition. Individual securities and portfolio values are calculated based on how much they differ from the market.A beta of 1.0 means that the price of the investment will move in lockstep with the market. A beta less than 1.0 suggests that the investment will be less volatile than the market, while a beta greater than 1.0 indicates that the investment's price will be more volatile than the market. For example, if the beta of a fund portfolio is 1.2, it is theoretically 20% more volatile than the market.Materialistic investors seeking to preserve money will focus on securities and fund portfolios with low betas, whilst those prepared to take on greater risk in exchange for larger returns would seek for high beta assets.

Sharpe Ratio:

The risk-adjusted performance ratio was established by Nobel Laureate economist William Sharpe and evaluates risk-adjusted performance.

$$S = \left(\frac{R_p - R_f}{\sigma_p}\right)$$

It's calculated by subtracting the risk-free rate of return from the investment's rate of return and then dividing the result by the investment's standard deviation of return. This ratio informs investors if the gains on an investment are the consequence of sound investing decisions or excessive risk. This metric is highly important because, while a portfolio or asset may earn greater returns than its peers, it is only the greatest investment provided those higher returns are not accompanied by an excessive level of risk. The Sharpe ratio of an investment indicates its risk-adjusted performance.

Data Collection:

This study mainly depended on secondary data. The secondary data about two mutual fund schemes under the category of large cap fund. Evaluated the performance of sampled mutual fund schemes with the help of Net Asset Value (NAV). The needed daily NAV for sampled mutual funds was taken from the mutual funds websites called Association of Mutual Funds in Bangladesh (AMFI). The other related information was collected from books, journals, magazines and various websites.

Limitations:

Only the latest five years of data have been gathered, therefore sample size is a limiting issue. Past performance isn't always indicative of future results. Micro level data has been used in the study; macro level data may have an impact on the results.

Results of the Study:

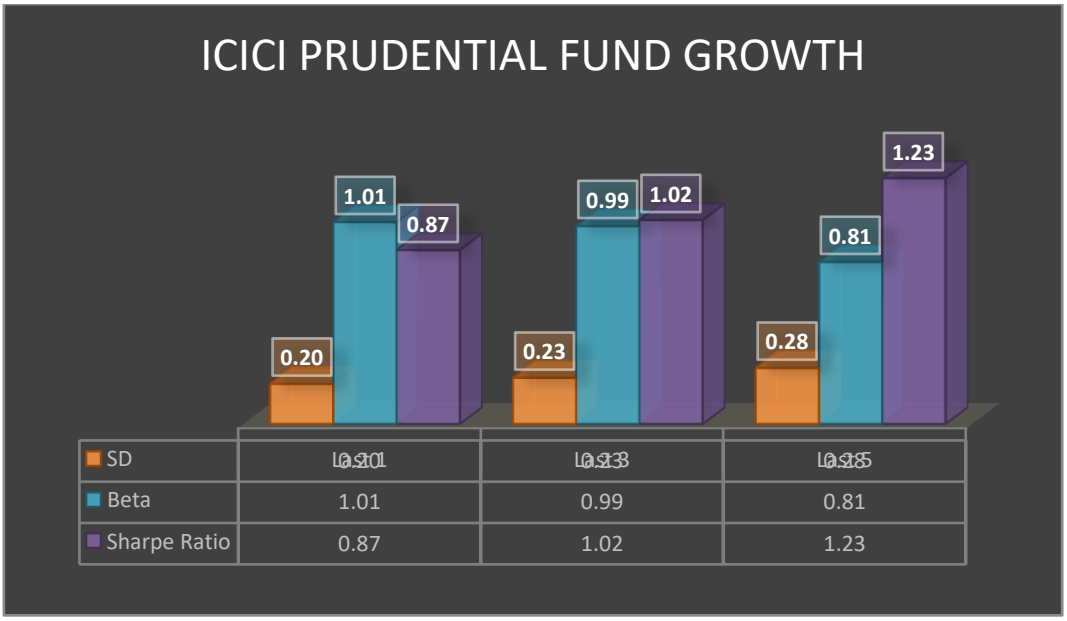
The NAV of the two equity mutual fund schemes has been collected and compared in this part. The sampling has been done on the basis of CRISIL Rating. The results of the study has analysed and presented below.

Table 1: Performance of Mutual fund of ICICI & UTI

	ICICI Prudential Fund Growth			**UTI Equity Fund Growth**		
	Last 1	Last 3	Last 5	Last 1	Last 3	Last 5
CAGR	0.31	0.21	0.17	0.18	0.2	0.18
SD	0.2	0.23	0.28	0.23	0.25	0.32
Beta	1.01	0.99	0.81	1.01	0.99	0.96
Sharpe Ratio	0.87	1.02	1.23	0.82	0.89	1.14

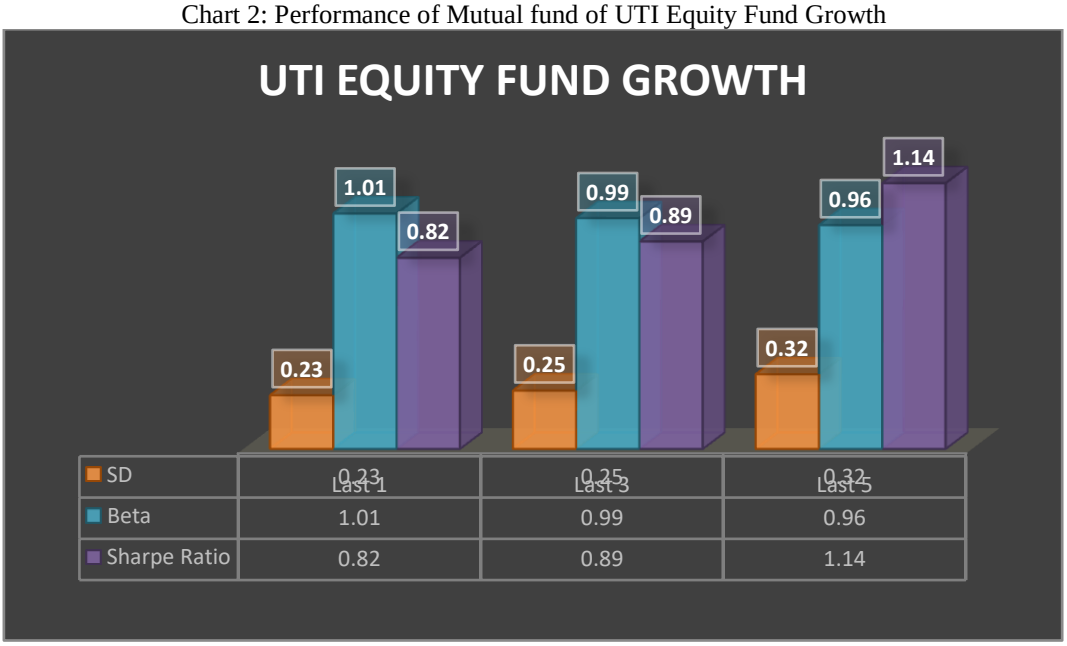
Source: Computed Date

Chart 1: Performance of Mutual fund of ICICI Prudential Fund Growth



In contrast to the risk and return relationship over the previous three and five years as compared to the last one year, the analysis finds that the return is greater than the risk. In compared to the first year, the risk is higher in the third and fifth years, and the return is lower. As a result, it is discovered that investing in this fund in the short term is more advantageous; but, if the fund is held for the long term, the return may be lowered.

Chart 2: Performance of Mutual fund of UTI Equity Fund Growth



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Conclusion:

The findings revealed that investors in big cap funds earn a higher initial return than long-term investors, but the future prospects in large cap funds are not favourable for shorter periods, therefore investors should hold funds for at least three years. Finally, it was discovered that if an investor is uninformed of the investing characteristics of a mutual fund from various time perspectives, he or she may invest for the wrong period and miss out on the potential to make a return. This research is critical for investors who choose to invest in mutual funds rather than individual assets such as stock shares and debentures.

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