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RESEARCH ARTICLE

ANALYSIS ON THE PERFORMANCE OF VARIOUS MUTUAL FUNDS PRE AND POST RUSSIA-UKRAINIAN WAR PERIOD

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Abstract

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In the world of money and finance, mutual funds have been a source of investment which is considered to provide consistent returns to the investors either big or small. The present article tries to provide the fluctuations in the performance of the mutual funds and the impact on them by some external factor, which is Russia-Ukraine war that affected that the world in different ways. The data used for the analysis includes closing values of the various mutual funds from 30 companies for 8 quarters, taking the beginning of the Russia-Ukraine war, and the t test is applied to scrutinize the distinctness between the performance of funds. The study concludes that there is substantial difference in the behavior of funds before and after the war.

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Introduction:-

During 2022, the world has witnessed a threatening situation due to the war scenarios between Russia and Ukraine. Huge damage was caused to the wealth of the nations, numerous people lost lives, livelihood and experienced displacements. Many organizations stated the huge reduce in exports, increase in the energy prices, food insecurity and risen poverty levels. It has negatively impacted the stock markets.

Mutual funds are one of the well knows alternatives for investment and to generate a good amount of gains.Companies in India are classified into various types based on the size of their market capitalization as under:

Large cap: Companies having a market capitalization of over 20000 crores.

Mid cap: Companies having market cap ranging from 5000 to 20000 crores.

Small cap: Companies with market cap of less than 5000 crores.

Mutual funds are also classified into the above-mentioned types based on their allocation of investment.

Need for the study:-

Mutual funds provide as much as flexibility in providing the returns to the investors. Since the beginning of the war, there has been a lot of volatility in the market, nationally and globally as well. Russia which is assumed to be one

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the biggest economic and military powers of the world, has been contributing it major share in the global trade such as gas and other exports. European union and many other nations depend on Russia for imports. This huge nation affected many other nations in terms of trade for conflicting opinions on the Ukraine issue. This research paper analyzes the changes of the performances of various funds in India, and how they got impacted due to the global situation during the war between Russia and Ukraine.

Objectives:-

1. To observe the patterns in the performance of the mutual funds during and after the Russia-Ukrainian war period.
2. To examine which kind of mutual fund is performing better.

Hypotheses:

H1: *There is a tremendousvariation in the return providedby the companies belonging to smallcap fund during and after the Russia-Ukrainian war.*

H2: *There is a noticeable difference in the outcome of the companies belonging to midcap fund during and after the Russia-Ukrainian war.*

H3: *There is a enormous difference in the yield of the companies belonging to large cap fund during and after the Russia-Ukrainian war.*

H4: *There is a considerable difference in the outcome of the companies belonging to multi cap fund during and after the Russia-Ukrainian war.*

H5: *There is a variation among the performance of the companies belonging to various mutual funds.*

Literature Review:-

Katerina Simons conducted a research study on "Risk-adjusted performance of mutual funds". The study concentrates on simple measures of risk measurements, risk-adjusted performance and their agreement in a sample of bonds, domestic stocks and international stock funds.It is concluded that using the best performed stocks and bonds is not useful to study the study and it preferred to use that they perform less in their category because they offset one another's risks better.

Milena Jakšić, Miljan Leković and Marina Milanović in the year 2015 carried a research study on "Measuring the performance of mutual funds – a case study". They used Sharpe ratio (Si), Treynor ratio (Ti), and Jensen's or Alpha index (αi) to measure the performance in to evaluate eight open-end mutual funds in Serbia. It is understood that the portfolio managers in Serbia are facing lack of selection capability as their performance is less than the market portfolios.

Bilal Pandow in the year 2017 conducted a research study on "performance of mutual funds in India". By using the few barometers such as numbers of funds, type of schemes, movement of funds, household savings and performance of AMCs in terms of returns, they conducted their analysis. It is concluded that a risk-adjusted return should be conveyed to the investors which will aid them in the prefect selectivity of stock and market timing performance to keep the cost of funds under check.

Muralidhar Prasad Ayaluru conducted a research study in 2016 on "performance analysis of mutual funds: selected reliance mutual fund schemes". The sample of 10 schemes were selected, for recognition and comparison, BSE-Sensex and NSE-Nifty were taken. As a result, funds Reliance funds with medium risk has medium returns while funds with high risk provided high returns.

Ms. Shilpi Pal and Arti Chandani Prof. in the 2014 conducted a research study on "A Critical Analysis on Selected Mutual Funds in India". Statistical measures were used to evaluate a selected income or debt mutual fund schemes which are expense ratio, standard deviation, sharp ratio, beta and R square. The dimensions used to select the best mutual fund for the investment purpose are expense ratio, standard deviation and returns. In conclusion a fact appeared in the manner of huge proportionate contribution of income schemes for the total AUM of the industry.

Prasanna K Baral and Dr. Kishore Kumar Das in the year 2016 conducted a research study on "Mutual Funds Industry in India: A Growth Trend Analysis". After the collection of secondary data, it has been properly analyzed and interpreted to draw conclusion and inferences. This study reveals that the mutual funds in the private sector has recorded an increase and it has mastered the Indian mutual fund industry unlike the public sector mutual fund the recorded a huge decrease.

D. K. Malhotra and Robert W. McLeod in the year 2014 conducted a research study on "An Empirical Analysis of Mutual Funds Expenses". By analyzing the equity funds, the investors should be aware of size of the fund, the number of years its employed, cash and turnover ratios as key determinants of expenses. The result shows that by analyzing the bond funds the main factor is sales charges, weighted average maturity, size, and existence of a 12b-1 fee.

Haidar Alqadhib, Nada Kulendran and Lalith Seelanatha in the year 2022 conducted a research study on "Impact of COVID-19 on mutual fund performance in Saudi Arabia". The analysis is made by using Fama and French five-factor model to measure the risk-adjusted performance for a sample of 79 mutual funds. The study results that even the individual mutual fund managers weren’t able to reduce the effects on COVID-19 outbreak on mutual fund returns compared to the market portfolio.

Mr. Gaurav Ajmera, Dr. Babita Jha and Dr Sudhi Sharma in the year 2021 conducted a research study on "Investigating the Impact of COVID-19 on the Performance of Indian Mutual Fund Schemes: An Investors Perspective". By analyzing mutual fund schemes from the view of various groups,repurchase, and cash flows in the first part and mutual funds by employing econometric dummy variable regressions for the second part. The study traced that there is huge effect of COVID-19 on the large-cap schemes. Further, funds i.e. DSP Midcap fund, Axis and Kotak Small-Cap funds shows that there is direct effect of the pandemic on the Net Asset Values of the funds.

Ľuboš Pástor and M Blair Vorsatz in the year 2020 conducted a research study on "Mutual Fund Performance and Flows during the COVID-19 Crisis". by conducting regression analysis on active equity funds in the U.S throughout the pandemic period, with two benefits. First, to see whether the result survives the inclusion of many control variables. Second, toeliminate the bias. It is founded that most of the active mutual fund is performinactive benchmarks, in contrary to the hypothesis where active funds outperform in recessions.

Leonardo Agulhon Romanello in the year 2022 conducted a research study on "The COVID-19 Impact on the Mutual Funds Industry". The regression of the dependent variable on the explanatory ones was performed R. This is a type of linear model with multiple group fixed effect, which prior to estimating the remaining coefficients with OLS, sweeps out numerous group effects from the normal equations using the Method of Alternating Projections. The main hypothesis is that the COVID-19 Fear Index is a highly significant predictive factor of the net redemption of funds. The assumption is COVID-19 Fear Index is a statistically significant predictive factor of the net redemption of funds. Financial markets were not driven out from its activities. Opposite results show that the effect of the pandemic through previous losses and increased risk aversion among investors.

Arnold L. Redman* , N.S. Gullett* and Herman Manakyan in the year 2000 conducted a research study on "The Performance of Global and International Mutual Funds". The data collected from three periods 1985 through 1994, 1985 1989, and 1990-1994 are analyzed by Sharpe’s Index, Treynor’s Index, and Jensen’s Alpha. The results exhibit that from 1985 through 1994, international mutual fund portfolios outperformed the US market and the US mutual fund portfolio under the Sharpe and Treynor indices. During the period 1985-1989, the international fund portfolio outperformed both the U.S. market and the domestic fund portfolio, whereas the Pacific Rim fund portfolio outperformed both benchmark portfolios. Returns fell below the stock market and local mutual funds during the period 1990-1994.

Inderjit Kaur in the year 2018 conducted a research study on " Effect of mutual funds characteristics on their performance and trading strategy: A dynamic panel approach". The data obtained about the Indian equity mutual funds for a time frame ranging from 2004 to 2013 was utilized, the changing data is estimated with the most efficient estimator system-Generalized Method of Moment (sys-GMM). The results show that past year’s performance, flow to funds, and cash ratio explained the fund performance measured with conditional Carhart alpha. The findings show that fund characteristics such size, expense ratio, portfolio turnover ratio, and age affect trading strategy of mutual funds.

Methodology:-

The present study analyzes the performances of various types of mutual funds for a period of eight quarters. For this purpose, 30 best performing companies from each type of mutual fund are selected and their returns of the respective quarters were analyzed and compared using t test. The considered period is during and after the Russia Ukrainian war, so as to observe the fluctuations in the performance of funds and to recognize what kind of fund is providing consistent returns over the period.

Tools of analysis:

Data is analyzed with the help of MS excel and SPSS, using descriptive statistics, and t-test as tools of analysis.

Group Statistics					
Type of fund		N	Mean	Std. Deviation	Std. Error Mean
Smallcap	Average After	31	8.9842	4.18641	.75190
	Average Before	31	.5458	1.26163	.22660
Midcap	Average After	31	10.9262	1.45898	.26204
	Average Before	31	.4302	1.02580	.18424
Largecap	Average After	31	8.1126	1.91258	.34351
	Average Before	31	.0898	.80021	.14372
Multicap	Average After	31	7.7115	4.15590	.74642
	Average Before	31	.2701	1.12682	.20238

The results obtained from the descriptive statistics for each of the fund shows a clear difference among the means of their returns during and after the period of war.

1. A difference of approximately 7.5 can be observed between the average of returns of the small cap fund companies.
2. A difference of over 9.5 can is noticed between the average of returns of the small cap fund companies.
3. The mean of the large cap companies also differs by approximately 8.
4. The multi cap fund companies perform far better after the end of the war scenario by a difference of 7 among the averages.

The following results were observed after applying the t test on the returns of the companies from each fund.

Independent Samples Test								
Type of fund		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Smallcap	Equal variances assumed	14.168	.000	10.745	60	.000	8.43839	.78530
	Equal variances not assumed			10.745	35.405	.000	8.43839	.78530
Midcap	Equal variances assumed	3.965	.051	32.767	60	.000	10.49605	.32033
	Equal variances not assumed			32.767	53.836	.000	10.49605	.32033
Largecap	Equal variances assumed	3.599	.063	21.546	60	.000	8.02282	.37236
	Equal variances not			21.546	40.191	.000	8.02282	.37236

	assumed								
Multicap	Equal variances assumed	51.824	.000	9.622	60	.000	7.44137	.77337	
	Equal variances not assumed			9.622	34.387	.000	7.44137	.77337	

The outcomes after the application of the t test on the averages of the returns replicate a huge significance of the situation of the war and the performance.

For the small cap funds, the p-value of Levene's test which is .000 leads to the rejection of null hypothesis of Levens test which assumes equal variances and conclude that there is a significant difference between the variances of the returns of the small cap fund companies during and after the end of the war.

There was a significant difference in the average returns of the companies of small cap fund for before and after the end of the war ($t_{35.405} = 10.745$, $p < 0.001$). The returns provided of the small cap companies in the first four quarters is 8.43% less than that of the returns provided in that later half of the period of study.

Equality of variances test is having a significant value of less than 0.051 which tells that there is similarity or homogeneity between the variances of the midcap company returns. So, we look for an output of equal variances unassumed and the absolute t value which 32.767 at 60 degrees of freedom exhibits the enormous difference of average of the groups. Those belonging to the midcap group offered 10.4% higher average returns after the end of the war than before the period.

Similar values were observed for the large cap funds, where the Levene's test for the equality of variances shows .063. The performance of the companies in the large cap group ($t_{60} = 21.546$, $p < 0.001$) also exhibit a huge difference between the two corresponding cases to reject the null hypothesis and establishes a huge difference between the means of the returns between large cap fund companies.

As all above, 0.000 of the Levene's test value, which is similar to that of the small cap funds, presents a difference of variance and the ($t_{34.387} = 9.622$, $p < 0.001$) at 95% confidence level, leads to rejection of null hypothesis.

The companies belonging to the large and multi cap funds provide a higher of 8.02% and 7.44% average returns from quarter 2 of 2023 till quarter 1 of 2024 when compared to earlier period.

Findings and Suggestions:-

The study observed significant differences between the performance of the companies belonging to all forms of mutual funds, small, mid, large and multi cap, from the beginning and after the end of the war between Russia and Ukraine. As far as the period from the war, the performances seen were higher. Hence it can be concluded that there is a negative impact of the war on the mutual fund returns. The market is experiencing positive outcomes and increasing returns for the last four quarters, from April 2023 till march 2024. This attracts the investors to again tend towards this investment option with a low amount of risk.

Among the different funds considered, mid cap funds showcased a higher percentage of returns compared to others. So, this would be much more reliable for a period until further changes happen.

Further scope:

It is suggested that new researches can be made by considering international mutual funds belonging to different nations so that the investment opportunity gains a wider scope. The outcomes of this research may differ from that of the markets in other countries depending on various factors.

References:-

1. Simons, K. (1998). Risk-adjusted performance of mutual funds. *New England Economic Review*, *9*, 33-48.
2. Jakšić, M., Leković, M., & Milanović, M. (2015). Measuring the performance of mutual funds: A case study. Industrija, 43(1), 37-51.
3. Avinash, M. B., & Manoj, M. S. (2020). Performance Evaluation Of Mutual Funds Before And During The Outbreak Of Covid-19 Pandemic In India.(A Case Study Of Selected Companies). *European Journal of Molecular & Clinical Medicine*, *7*(8), 2286-2305.
4. Pandow, B. (2017). Performance of mutual funds in India. *Available at SSRN 2925049*.
5. Pal, M. S., & Chandani, A. (2014). A critical analysis of selected mutual funds in India. *Procedia Economics and Finance*, *11*, 481-494.
6. Baral, P. K., & Das, D. K. K. (2016). Mutual funds industry in India: a growth trend analysis. *International Journal of Multidisciplinary Research and Development*, *3*(1), 01-13.
7. Bondu, A. (2022). IMPACT OF NPA ON THE PROFITABILITY OF PRIVATE AND PUBLIC SECTOR BANKS IN INDIA: A COMPARATIVE STUDY. *International Journal of Early Childhood Special Education*, *14*(3).
8. Malhotra, D. K., & McLeod, R. W. (1997). An empirical analysis of mutual fund expenses. *Journal of financial research*, *20*(2), 175-190.
9. Ayaluru, M. P. (2016). Performance analysis of mutual funds: Selected reliance mutual fund schemes. *Parikalpana: KIIT Journal of Management*, *12*(1), 52-62.
10. Bondu, M. A., &Sangisetti, M. M. (2023). An Empirical Analysis on the Behavior of Employees in the Kurdistan Region of Iraq amid Tax Awareness, Perception towards Tax Evasion, Tax Compliance. *RES MILITARIS*, *13*(1), 393-404.
11. Malhotra, D. K., & McLeod, R. W. (1997). An empirical analysis of mutual fund expenses. *Journal of financial research*, *20*(2), 175-190.
12. Mr Manoj, S., & Kumari, M. P. V. P. (2023). Green Banking Practices and Strategies for Sustainable. *Res Militaris*, *13*(1), 380-392.
13. Alqadhib, H., Kulendran, N., &Seelanatha, L. (2022). Impact of COVID-19 on mutual fund performance in Saudi Arabia. *Cogent Economics & Finance*, *10*(1), 2056361.
14. Ajmera, M. G., Jha, B., & Sharma, S. (2021). Investigating the Impact of COVID-19 on the Performance of Indian Mutual Fund Schemes: An Investors Perspective. *The journal of contemporary issues in business and government*, *27*(2), 2112-2123.
15. Sangisetti, M. M. (2022). An Analytical Study on Customer Awareness, Perceptions and Satisfaction towards Quality of Banking Services after Merger and Acquisitions of Public Sector Banks in India. *Journal of Positive School Psychology*, *6*(3), 4153-4164.
16. Pástor, Ľ., &Vorsatz, M. B. (2020). Mutual fund performance and flows during the COVID-19 crisis. *The Review of Asset Pricing Studies*, *10*(4), 791-833.
17. ROMANELLO, L. A. The COVID-19 Impact on the Mutual Funds Industry.
18. Redman, A. L., Gullett, N. S., &Manakyan, H. (2000). The performance of global and international mutual funds. *Journal of Financial and strategic Decisions*, *13*(1), 75-85.
19. Kaur, I. (2018). Effect of mutual funds characteristics on their performance and trading strategy: A dynamic panel approach. *Cogent Economics & Finance*, *6*(1), 1493019.
20. https://www.moneycontrol.com/mutualfundindia/