Comparing the Performance of Private and Public Sector Mutual Funds: An Analysis of Factors Influencing Returns

* Syed Muhammad Ali Naqi (Corresponding Author)

** Mohsan Ali

*** Muhammad Habib

Abstract

Increasing interest towards mutual funds has significantly attracted attentions of the researchers, investors in mutual fund scheme. Similarly, investment opportunities and interest towards mutual funds have also increased in Pakistan. Therefore, the aim of the research was to empirically analyse and understand the changes in performance of private and public sector of Pakistan Mutual fund. For conducting this research, researcher has relied on secondary quantitative information, and data has been derived from MUFAP on 1 private company (i.e. Al Meezan Investment Management Limited) and 1 public company (i.e. ABL Cash Fund). For data analysis, statistical tools including correlation, and T-test were used through using SPSS software. Findings show that there is a significance difference in performance of both private and public sector. As NAV and return in private sector is found to be statistically different from public sector. Additionally, risk in mutual fund of private sector is also found to be statistically different from public sector. Further, findings in the current research have also shows a negative association between return and risk of both private and public mutual funds. Findings in the current research can be used to fill a gap in previous studies. Further, findings in the current research can also be used in future studies through increasing sample size, and other factors. Moreover, it can also be used for cross countries, companies, and region.

Keywords: Mutual Fund, Investors, Return, Risk, Portfolio, Capital, Mutual Fund's Performance, Pakistan, Private Sector, Public Sector

Introduction

A mutual fund is considered as a desirable investment and renowned as one of the fastest growing industry globally (Ma, Xiao and Zeng, 2022). This phenomenal growth in mutual fund industry especially in developed countries was occurred due to rapid globalisation, technological advancement, and development of financial institutions (Quresh et al., 2019). Additionally, unprecedented development, well-developed securities markets, and an effective regulatory framework are the backbone mutual funds growth. Similarly, Pakistan Mutual Fund industry has also witnessed a sharp growth in past few years, due to increase in foreign participation, infrastructural development, and personal financial assets. As per the report of Mutual Fund Association of Pakistan (2022), the total assets in Pakistan has increased more than 3 fold, from Rs 158,270 Million in December 2012 to 466,934 Million in 2021in past ten years. Thus, saving pattern and transformation towards mutual funds have significantly increased in Pakistan economy.

However, increasing tends and performance evaluation of mutual funds has long been debate in different companies (Suresh, 2018; Nageswararao, et al., 2019), countries (Burkhanov, 2020; Komal, 2020; Jayalakshmi and Palanichamy, 2020), and region (Quresh et al., 2019; Jayalakshmi and Palanichamy, 2020; Tripathi and Japee (2020), in the literature, particularly with reference to the developed world. Since, very limited research has been conducted to understand how the performance changes in private and public sector, specifically in Pakistan market (Ji et al., 2021; Kumari et al., 2021). Therefore, the main intent of the researcher is to analyse and understand the performance of mutual funds within the private and public sector, and fill a gap in previous studies. The primary reason of choosing Pakistan market is that there is higher potential and opportunities for investment into risky assets and mutual funds in different private and public sector (Mutual Fund Association of

*   Superior University, Lahore, Pakistan Email: naqi54577@gmail.com
**   Superior University, Lahore, Pakistan
***   Superior University, Lahore, Pakistan

Pakistan, 2022). Thus, findings in the current research will significantly help in educating investors to invest in the mutual fund, and identifying different risks and opportunities in private and public sector. Additionally, the current research will also be helpful in terms of understating behavioural aspects of mutual funds in different organisation. Further, it will also contribute in existing literature and body of knowledge relevant to the research phenomenon, and will provide a basis for further future research.

Objectives:
The objectives of this research are:
1. Examine typical pay-outs.
2. Examine returns after adjusting for risk.
3. Determine what influences returns.
4. Assess the reliability of performance.
5. Examine the qualities of money management.
6. Calculate fund costs and fees.
7. Take into account economic and market situations.
8. Share your advice and knowledge.

Overall, the goals of contrasting the efficiency of both government and private mutual funds are to give a thorough examination of the variables affecting returns, evaluate risk-adjusted performance, and provide insightful information for different investment industry stakeholders.

Literature Review:
The mutual funds are the fund in the forms of trust to raise money and invest in diversified portfolio of assets, securities, and more schemes (Ma, Xiao and Zeng, 2022). According to Burkhanov (2020) in mutual funds, financial institutions accept cash from savers, and invest in short term bonds, long term bonds, and other securities issued by government and business units. Furthermore, it helps the investors in enhancing their return, and risk minimisation through diversification and professional management. Simply, it accepts the saving from investors and invests them in corporate and government securities to generate income through dividends, interest, and capital gain. Although, mutual funds are also created in two sorts namely: shut finished and open completed with an increasing development in capital market (Ma, Xiao and Zeng, 2022). Shut finished are those that are initially offer in primary market, and then traded in secondary market, while open finished require a membership for share, and permitted on constantly bases (Burkhanov, 2020).

Henceforth, it has been centre of attention for researchers, investors and academician due to its numerous benefits and opportunities (Suresh, 2018; Nageswararao, et al., 2019; Cordier and Santeramo, 2020; Komal, 2020; Jayalakshmi and Palanichamy, 2020; Tripathi and Japee, 2020; Burkhanov, 2020). Likely, Suresh (2018) indicated that it provide a pooled investments opportunities with low cost which enable the investors to gain access in the market, and enhance their return. Moreover, it also provides a liquidity options to their investors, and funds can be easily traded between trust manager and investors. Further, amounts collected for mutual funds are professionally invested and managed in diversified portfolio in capital market (i.e. debentures, shares, bonds and other securities), and enhance the investor's returns (Ji et al., 2021). In this sense, mutual fund in financial market acts as an intermediary and buys and sells securities on behalf of its holders.

Further, there has been extensive research related to the performance evaluation of mutual funds, however, in the context of public and private sector's mutual fund it found to be highly controversial (Suresh, 2018; Nageswararao, et al., 2019; Cordier and Santeramo, 2020; Komal, 2020; Jayalakshmi and Palanichamy, 2020; Tripathi and Japee, 2020). Tripathi and Japee (2020) further presented mutual fund schemes (equity mid-cap schemes and equity diversified schemes) in different financial institutions (i.e. Canara Bank- Public Bank, HDFC Bank-Private Bank, and ICICI Bank). The findings revealed that in Tax Saving schemes, the investors mostly prefer Canara Public for investment, while in open ended midcap schemes, HDFC private bank was preferred. In another study Jayalakshmi and Palanichamy (2020) has also been focused on HDFC Mutual fund to analyse the performance while using Treynor, Sharpe, and Jenson's ratios. Findings from Sharpe and Treynor revealed that there is positive return in public sector, while Jenson's revealed that there is negative response to the same. Additionally, Suresh (2018) in their study analyse the return and risk in private and public sector based on secondary data for five years. Findings revealed that public sector has provided highest returns with higher risk, while the returns in private limited sector were negative during the time period.

On contrary some researchers argued that private sector are more preferred than public sector (Nageswararao, et al., 2019; Cordier and Santeramo, 2020; Komal, 2020). Likely, Cordier and Santeramo (2020) in their study stated that while making comparison of private and public sector mutual funds indicated that private mutual funds are more preferred by investors due to higher return, as compared to public mutual funds. The author further evaluated that private mutual funds are confronted with less challenges (i.e. low level of awareness, low penetration ratio, and having lack of interest, etc.). Similarly, Komal (2020) in their study analysed that valuation in private mutual funds is relatively more predictable than public market which overall help in maximising return. Additionally, Suresh (2018) in their study indicate that private companies are raising their funds relatively higher than public companies. The primary reason of increase in the mutual funds of private sector was due to effective hedging of funds, pension funds and sovereign wealth funds. Moreover, Nageswararao, et al. (2019) ;Cordier and Santeramo (2020) in their study has also analysed that mutual funds in private companies stay higher, and it provide a higher return, as compared to public companies. The author further evaluated that this is the reason most of the people are inclined toward investment in private companies. Further, Nageswararao, et al. (2019) in their study found that private funds are relatively performing well as compared to public sector. The author concluded that performance of private sector in mutual funds schemes is so good and significant enough in terms of average return. However, following hypotheses have been developed to analyse and understand the performance of mutual funds in private and public sector,

H0a   The difference in mean return of private and public sectors' mutual funds is zero.
H1a   The difference in mean return of private and public sectors' mutual funds is different from zero.
H0b   The difference in mean risk of private and public sectors' mutual funds is zero.
H1b   The difference in mean risk of private and public sectors' mutual funds is different from zero.

Research Method:

In the current research, the main focused has been placed on understanding the performance of mutual funds in private and public sector, specifically in Pakistan. However, for the purpose of this secondary quantitative approach has been deployed, and information were derived using secondary sources such as MUFAP. Data has been extracted from Mutual fund association of Pakistan (https://www.mufap.com.pk/) on both private and public sectors' mutual funds. In private sector Al Meezan Investment Management Limited were selected, while in public sector ABL Cash Fund was selected. The primary reason of using secondary quantitative information is that it helps the researcher in identifying the information conveniently, and hypothesis testing (Johnston, 2017). In addition to this, it also helps the researcher in gather most up-dated information relevant to the research topic. Further, for data analysis, descriptive, reliability, T-test, Correlation analysis, and graphical assessment of returns and risks for preliminary analysis were used through SPSS software.

Results

Table 1 - NAV in Private and Public Sector

Private/Public		N	Mean	Std. Deviation
NAV	Private	62	15.536	0.453
	Public	62	10.265	0.040

From the above table, it can be seen that mean value of NAV in private sector is found to be 15.5, while NAV in public sector is found to be 10.26. Thus, it implies that average performance of mutual funds in private sector is found to be higher than public sector.

Table 2 - Independent Sample Test - NAV

Independent Samples Test		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
NAV	Equal variances assumed	92.987	0.000	91.088	122.000	0.000	5.271	0.058	5.156	5.385

Equal variances not assumed		91.088	61.968	0.000	5.271	0.058	5.155	5.386

The above table, indicate mean difference between NAV of private and public sector. Referring to the Levene's test for equality, it can be seen that sig value is found to be 0.000 < 0.05, and we rejected the null hypothesis, and it implies that variances of two groups are not equal. Thus, equal variance not assumed row would be interpreted and it shows that mean difference between NAV of private and public mutual funds is not equal to zero. Hence, higher NAV is found to be in Private sector, due to more interest and investment towards private sector.

Table 3 – Return in Private and Public Sector

	Private/Public	N	Mean	Std. Deviation
Return	Private	61	-.001	.01198
	Public	61	.00002	.0022

The above table refers toward return in private and public sector. Hence, it can be observed that average return in private sector is found to be -0.001, while average return in public sector is found to be 0.00002. Thus, it implies that average return of mutual funds in public sector is found to be higher than private sector.

Table 4 - Independent Sample Test - Return

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Return	Equal variances assumed	41.5	0.000	-0.664	120.000	0.508	-0.001	0.002	-0.004	0.002
	Equal variances not assumed			-0.664	64.087	0.509	-0.001	0.002	-0.004	0.002

The above table, indicate mean difference between return of private and public sector. Referring to the Levene's test for equality, it can be seen that sig value is found to be 0.000 < 0.05. Hence, the null hypothesis is rejected, and alternative hypothesis is accepted which implies that variances of two groups are not equal. Thus, equal variance not assumed row would be interpreted and it shows that mean difference between return of private and public mutual funds is not equal to zero.

Table 5 – Risk in Private and Public Sector

	Private/Public	N	Mean	Std. Deviation
Risk	Private	60.000	0.006	0.006
	Public	60.000	0.000	0.002

The mean difference in risk of mutual funds in private and public sector. Although, it can be observed that average risk in private sector is found to be 0.006, while average risk in public sector is found to be 0.000. Thus, it implies that average risk of mutual funds in private sector is also found to be higher than public sector.

Table 6 - Independent Sample Test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper

Risk	Equal variances assumed	38.958	0.000	6.876	118.000	0.000	0.005	0.001	0.004	0.007
	Equal variances not assumed			6.876	67.656	0.000	0.005	0.001	0.004	0.007

The above table, indicate mean difference between risk of private and public sector mutual funds. Referring to the Levene's test for equality, it can be seen that sig value is found to be 0.000 < 0.05. Hence, the null hypothesis is rejected, and alternative hypothesis is accepted which implies that variances of two groups are not equal. Thus, equal variance not assumed row would be interpreted and it shows mean difference between risk of private and public mutual funds is not equal to zero.

Table 7 - Correlation Analysis

Correlations				
	[1]	[2]	[3]	[4]
[1] Return in Private Sector	1	-0.106	-0.048	0.057
		0.42	0.716	0.667
[2] Risk in Private Sector	-0.106	1	0.059	-0.075
	0.42		0.658	0.575
[3] Return in Public Sector	-0.048	0.059	1	-.696[**]
	0.716	0.658		0.000
[4] Risk in Public Sector	0.057	-0.075	-.696[**]	1
	0.667	0.575	0.000	

**. Correlation is Significant at the 0.01 level (2-tailed).

The correlation analysis has also been used to analyse the association between return and risk. It can be observed that return in private sector is negative associated with risk in mutual funds of private sector, as coefficient value is found to be -0.106. But this negative relationship is found to be insignificant, as sig value is found to be less than 0.05. Hence, this suggests that there is no meaningful relation between the risk and return of private sector fund. Further, while referring to the public sector return in public sector is also found to be negative and significant with risk in mutual fund of public sector, as coefficient value is -0.696 and sig value is 0.000 < 0.05. This suggests that relationship is significant but negative that means if the risk of the public sector fund increases then return increases and vice-versa.

Discussion and Hypothesis Assessment:

It is important to take into account a number of variables that may affect the returns of private and public sector mutual funds when comparing their performances. The success of mutual funds is significantly influenced by a number of variables, including expense ratios, fund size, management costs, investing strategy, portfolio turnover, the fund manager's skill, and market circumstances. Cost ratios as well as management fees must be taken into account since they have a direct influence on investors' results. Comparing private and public sector mutual funds, the former often have greater cost ratios and fees. Overall returns may be eroded as a result, especially over time. As a result, before making an investment decision, investors should carefully consider the fee structure of mutual funds. Performance can also be impacted by fund size. Large funds may struggle to sustain strong returns as a result of their difficulty in locating acceptable investment opportunities. Smaller funds, on the other hand, could be more flexible but might run into liquidity issues. It is crucial to determine whether fund size and performance are related in any way and perhaps there is a perfect fund size that strikes the right balance. Returns can be considerably impacted by portfolio turnover and investment strategy. Investment techniques used by various mutual funds might differ, such as either passive or active management. While passive management follows a certain market index, active management aims to beat the market through proficient stock selection and market timing. Analysing the performance of funds using various investing methods might offer information about how effective each strategy is. The performance of mutual funds is significantly influenced by economic and market conditions. Under diverse market circumstances, different industries and asset classes behave differently. Investors can determine whether private and public sector mutual funds are appropriate for a given economic context by examining how they perform in various market scenarios. The main intent of this research was to analyse and understand the changes in private and public sector. Hence, NAV,

return, and risk were used to analyse the performance of mutual funds in private and public sector. However, findings show that there is a significant difference in return of mutual funds, and return is found to be greater in private sector than public sector. Similarly, findings in the previous studies have also shown that investment in private sector is mostly preferred by investors due to higher return (Cordier and Santeramo, 2020). Similarly, it has also been supported with the study of Komal (2020) which claim that valuation in private mutual funds is relatively more predictable than public market which overall help in maximising return. Thus, based on the findings in the current research and aforementioned studies H1a is found to be true. Further, risk in mutual funds schemes of private and public sector has also been analysed, and it revealed that there is a significant difference in risk private and public sector. Similarly, findings in previous studies have also indicated that public sector has a higher risk (Suresh, 2018). Thus, based on the findings in the current research and aforementioned studies H1b is also found to be true. Further, findings in the present research can also be summarising with the help of table below:

	Hypothesis Statement	Accepted	Rejected
H0a	The difference in mean return of private and public sectors' mutual funds is zero.	Rejected	
H1a	The difference in mean return of private and public sectors' mutual funds is different from zero.		Accepted
H0b	The difference in mean risk of private and public sectors' mutual funds is zero.	Rejected	
H1b	The difference in mean risk of private and public sectors' mutual funds is different from zero.		Accepted

Recommendation:
Investors should think about low-cost choices, such as exchange-traded funds (ETFs) or passively managed index funds, as expense ratios and operational fees can affect returns. When compared with actively managed funds, they often have lower fees, and their performance often closely mirrors market indices. Analyse the experience and track records of fund managers. Investors should carefully evaluate the experience and track records of fund managers. Look for management who have produced exceptional returns over a sustained period of time. This assessment should look at the way they relate to risk management, investing philosophy, and capacity for navigating various market situations. Instead of concentrating primarily on one industry, investors can broaden their investments by investing in a blend of mutual funds from the private and public sectors. By diversifying investments, one may reduce risk and capitalise on the advantages of both industries. Think about risk-adjusted returns: Investors should compare returns with risk-adjusted performance metrics like the Sharpe ratio. This indicator provides a more thorough evaluation of a fund's performance by taking the degree of risk assumed to earn returns into account. Keep abreast of market developments: Pay close attention to developments in the market and other economic variables that may affect the performance of mutual funds. This entails keeping an eye on interest rates, inflation, world affairs, and other macroeconomic variables. Making educated financial decisions can be aided by being aware of these variables. Regular portfolio reviews and rebalancing are necessary to make sure that an investor's holdings in mutual funds are in line with their investing objectives and risk tolerance. This involves evaluating the effectiveness of money in the public and private sectors and making modifications as needed. Consult a specialist: If deciphering the complexity of mutual fund performance analysis sounds daunting, think about consulting a licenced financial counsellor. Depending on a person's financial objectives, level of tolerance for risks, and investment horizon, they can offer tailored suggestions.

Conclusion:
This article provided a comparison of mutual funds in Private and public sector in terms of return and risk associated with funds. However, in order to analyse this secondary quantitative research method was used, and data was derived from Mutual fund association of Pakistan on both private and public companies. For data analysis basic correlation and T-test were used through using SPSS software. Although, findings shows that there is a significant difference in performance of private and public sector, as NAV and return in private sector is found to be statistically different from public sector. Additionally, risk in mutual fund of private sector is also found to be statistically different from public sector. Further, findings in the current research have also shows a negative association between return and risk of both private and public mutual funds.

Hence, findings in the current research have played an essential role in filling the gap in previous studies, but it is limited to primary quantitative research. However, it can be further explored using secondary qualitative research approach for in-depth findings. Moreover, findings in the current research has only considered time period for two months due to availability of data, and it can be further extended for in-depth analysis. Lastly, only few variables have been considered in the current research, and additional variables (i.e. time period, net profit, and revenue) can also be considered for further detailed analysis.

References:

Burkhanov, A., 2020. Econometric Analysis of World Investment Funds Net Assets. Архивнаучныхисследований, (22). извлечено от https://tsue.scienceweb.uz/index.php/archive/article/view/2532.

Mutual Fund Association of Pakistan (2022). Available at: https://www.mufap.com.pk/nav-report.php?tab=01

Burkhanov, A., 2020. Practice of investment funds development in developed countries. Архивнаучныхисследований, (23). извлечено от https://tsue.scienceweb.uz/index.php/archive/article/view/2723.

Cordier, J. and Santeramo, F., 2020. Mutual funds and the Income Stabilisation Tool in the EU: Retrospect and Prospects. Euro Choices, 19(1), pp.53-58. doi.org/10.1111/1746-692X.12210.

Dr. K. Siva Nageswararao, et.al (2019) Performance Analysis of S&P BSE BANKEX Public Sector Banks, Journal of Adv Research in Dynamical & Control Systems, vol.11, No.8.

Jayalakshmi, M., and Palanichamy, V., 2020. A Study on Performance Evaluation of Hdfc Mutual Funds in India. Our Heritage, 68(1), 3458-3466.

Ji, X., Zhang, Y., Mirza, N., Umar, M. and Rizvi, S.K.A., 2021. The impact of carbon neutrality on the investment performance: Evidence from the equity mutual funds in BRICS. Journal of Environmental Management, 297, p.113228. doi: 10.1016/j.jenvman.2021.113228.

Johnston, M.P., 2017. Secondary data analysis: A method of which the time has come. Qualitative and quantitative methods in libraries, 3(3), pp.619-626. https://www.qqml-journal.net/index.php/qqml/article/view/169.

Komal B. Sharma (2020), "Performance Analysis of mutual fund: A Comparative Study of the selected Debt Mutual fund scheme in India", GAP interdisciplinarities – Vol: III, ISSUE II, (ISSN-– 2581-5628)

Kumari, R., Shabbir, M.S., Saleem, S., Yahya Khan, G., Abbasi, B.A. and Lopez, L.B., 2021. An empirical analysis among foreign direct investment, trade openness and economic growth: evidence from the Indian economy. South Asian Journal of Business Studies. doi/10.1108/SAJBS-06-2020-0199.

Ma, Y., Xiao, K. and Zeng, Y., 2022. Mutual fund liquidity transformation and reverse flight to liquidity. The Review of Financial Studies, 35(10), pp.4674-4711. doi.org/10.1093/rfs/hhac007

Qureshi, F., Kutan, A.M., Ghafoor, A., Khan, H.H. and Qureshi, Z., 2019. Dynamics of mutual funds and stock markets in Asian developing economies. Journal of Asian Economics, 65, p.101135. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4195190.

Suresh A.S, 2018, Equity Analysis of Selected Logistics Sectors Stocks, Asian Journal of Management, Vol: 9, Issue-4, pp: 1301- 1304. DOI: 10.5958/2321-5763.2018.00206.8.

Tripathi, S. and Japee, D.G.P., 2020. Performance Evaluation of Selected Equity Mutual Funds in India. Gap Gyan-A Global Journal of Social Sciences. https://ssrn.com/abstract=3638852.