HONG KONG JOURNAL OF SOCIAL SCIENCES

香港社會科學學報

最新第 62 期 (2023 年秋/冬季) Vol. 62 Autumn/Winter 2023

Open Access Article **https://doi.org/10.55463/hkjss.issn.1021-3619.62.15**

Drivers of Mutual Fund Pricing of the Nepalese Stock Market

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Received: August 7, 2023 ▪ Reviewed: September 12, 2023

▪ Accepted: October 18, 2023 ▪ Published: November 30, 2023

Abstract:
This study aims to explore the relationship between mutual fund market prices and critical determinants in the context of Nepal, including net asset value, age of mutual funds, expense ratio, fund size, stock market index, and interest rate. The applied multiple regression model used monthly data from May 2021 to April 2023, comprising 208 monthly observations. The model focused on understanding the impact of net asset value, mutual fund age, and stock market index, among other factors, on mutual fund market prices. The study identified net asset value, mutual fund age, and the stock market index as pivotal drivers significantly influencing mutual fund market prices. These findings emphasize their crucial importance for fund managers, investors, policymakers, and other market participants, providing valuable insights to facilitate informed decision-making. The research outcomes empower stakeholders with valuable insights and knowledge. Fund managers, investors, policymakers, and other market participants can capitalize on the research insights as they not only optimize their decision-making processes but also contribute to the overall development and efficiency of the Nepalese mutual fund market. This study enhances understanding of mutual fund dynamics by comprehensively analyzing the relationship between market prices and their determinants. Identifying primary drivers – net asset value, mutual fund age, and stock market index, provides novel insights, paving the way for future research in this domain.

Keywords: age of mutual funds, expense ratio, interest rate, net asset value, stock market index.

尼泊爾股市共同基金定價的驅動因素

摘要：
本研究旨在探討尼泊爾背景下共同基金市場價格與關鍵決定因素之間的關係，包括資產淨值、共同基金期限、費用比率、基金規模、股市指數和利率。應用的多元迴歸模型使用了 2021 年 5 月至 2023 年 4 月的月度數據，包括 208 個月度觀測值。此模型著重於了解資產淨值、共同基金年齡和股市指數等因素對共同基金市場價格的影響。該研究確定資產淨值、共同基金期限和股市指數是顯著影響共同基金市場價格的關鍵

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驅動因素。這些發現強調了它們對基金經理人、投資者、政策制定者和其他市場參與者的至關重要性，為促進明智決策提供了寶貴的見解。研究成果為利害關係人提供了寶貴的見解和知識。基金經理人、投資者、政策制定者和其他市場參與者可以利用研究見解，因為他們不僅優化決策流程，而且為尼泊爾共同基金市場的整體發展和效率做出貢獻。本研究透過全面分析市場價格及其決定因素之間的關係，增強了對共同基金動態的理解。確定主要驅動因素——資產淨值、共同基金期限和股市指數，提供了新穎的見解，為該領域的未來研究鋪平了道路。

关键词：共同基金的年齡、費用比率、利率、資產淨值、股票市場指數。

1. Introduction

The mutual fund sector plays a pivotal role in worldwide financial markets, offering investors diversified portfolios and professional management. Its significance has grown considerably, with mutual funds becoming integral to stock markets. The influence of various determinants on mutual fund investments and market prices is widely acknowledged, making it essential to explore these connections for the benefit of key stakeholders and market participants. A mutual fund, professionally managed by an asset management business, is a versatile financial product that plays a pivotal role in investments. It serves as a platform for a collective group of investors, often called unitholders, seeking higher returns and risk diversification. Unlike individual investing, where risks can be concentrated, a mutual fund collects money from diverse investors. It allocates it across various securities, including stocks, bonds, and short-term debt instruments (Dahal, 2022; Dahal et al., 2023). This proactive approach helps reduce risk and allows investors to become part owners of a diversified portfolio. Poudel (2010), for instance, highlighted that mutual funds operating within the capital market offer investors the unique advantage of pooling risks, potentially leading to superior returns. Bodie et al. (1995) advocate the attractiveness of mutual funds to investors, particularly for their ability to reduce transaction costs. Rathnamani (2013) underscored the notable advantages of mutual fund investments, emphasizing their role in providing a secure and easily accessible source of liquidity. Nazir and Nawaz (2010) argued that the mutual fund business is crucial in determining the most efficient distribution and utilization of an economy's surplus resources. Additionally, Bajracharya (2016) claimed the efficacy of mutual funds in a limited market context in Nepal, where only a few mutual funds have been officially established on the Nepal Stock Exchange (NEPSE). These arguments collectively reinforce the significance of the research in exploring how mutual funds perform and their diverse impacts on the financial sector.

A range of pioneering contributions by eminent scholars in the realm of financial theory, such as Sharpe (1964) in asset valuation model, Fama (1970) with the role of information in price formation of financial assets, Ross (1976) in Arbitrage Pricing Theory (APT), and the subsequent multi-factor models proposed by Connor and Korajczyk (1986), Lehmann and Modest (1987) have collectively shaped the understanding of asset prices by introducing the intricate interplay between risk factors, market dynamics, and information efficiency. The contemporary portfolio evaluation model effectively incorporates these characteristics, drawing and expanding upon the pioneering theoretical insights to establish the relationship between asset prices and their dynamics.

In Nepal, the history of mutual funds dates back to 1993, and over the past three decades, it has experienced significant growth and undergone notable transformations in recent years. Currently, the industry comprises 27 mutual funds operating under the Securities Exchange Board of Nepal (SEBON) regulatory framework, following the Mutual Fund Regulation of 2010. These funds consist of 24 closed-ended funds with maturity periods typically ranging from 5 to 10 years, actively traded on the secondary market at NEPSE. In addition, three open-ended funds are exclusively bought and sold through direct transactions with the fund manager. This dynamic environment highlights the need to research this sector's elements driving mutual fund market pricing. While international research has highlighted the interdependence between mutual fund success and the broader dynamics of the stock market, the specifics of this relationship within Nepal’s context have yet to be fully explored. One compelling finding suggests a robust correlation between market prices of investment funds and stock market indicators, highlighting the sensitivity of mutual fund investments to overall market conditions. Consequently, in the recent context, the principal purpose of this study is to examine the complex and evolving links between mutual fund market prices and a multifaceted array of factors, including both fund-specific variables and macroeconomic influences. Understanding this connection is paramount for investors, fund managers, and market participants, who must consider broader economic trends when managing mutual fund portfolios. The remaining sections of the study include a literature review, research methodology, research findings, discussions, and the conclusion.

2. Literature Review

In financial theory, the assessment of mutual fund performance has evolved through the pioneering contributions of distinguished scholars. The portfolio theory, proposed by Harry Markowitz in 1952, asserts that investors aim to maximize returns while

minimizing risk. The central idea is that risk and return are inherently linked; rational investors should anticipate greater rewards in exchange for assuming increased levels of risk. Sharpe's (1964) groundbreaking work introduced the CAPM, a seminal uni-factor model that laid the foundational framework for evaluating asset performance in the context of risk and the broader market. With its primary factor being market risk, CAPM became a cornerstone in evaluating mutual funds, shedding light on whether their returns are adequately compensated for the level of systematic risk they bear. Fama's (1970) landmark paper introduced the Efficient Market Hypothesis (EMH), which posits that financial markets efficiently process and reflect all available information, revolutionizing our understanding of mutual fund performance. Furthermore, Ross (1976) in Arbitrage Pricing Theory (APT) provided an alternative perspective, offering a comprehensive framework for asset pricing and the influencing factors. Beyond these seminal models, the advent of multi-factor models by Connor and Korajczyk (1986) and Lehmann and Modest (1987) postulated the multi-factor models that extended beyond single-factor paradigms like CAPM and APT, incorporating an array of systematic risk factors encompassing macroeconomic variables, industry-specific conditions, interest rates, and various market drivers. The works of these visionary scholars have provided fundamental ideas for understanding the dynamics of financial markets and the formation of financial asset prices.

Over the years, numerous studies have been conducted to assess mutual fund performance, drawing upon theoretical foundations. For example, Poudel (2010) documented key fund characteristics within the context of Nepal, highlighting certain constraints within the Nepalese mutual fund market. According to the study, mutual funds have not garnered widespread favor among investors as their preferred investment choice. Furthermore, the research recommended that mutual fund companies adopt cutting-edge technology and prioritize information dissemination to position mutual funds as compelling alternatives to traditional bank deposits. Abramov and Akshentseva (2015) investigated the Russian mutual fund market, focusing on its three primary performance indicators: stock performance, net inflow, and fund management charges. The study revealed that mutual funds could generate returns exceeding the inflation rate, bond yields, and returns achieved through a 50/50 investment strategy. From 2000 to 2013, a consistent similarity was observed in net flows, abnormal returns, and management company fees compared to global benchmarks.

Hussain et al. (2016) examined the below-average performance phenomenon observed in collective investment schemes in Pakistan. The researchers attributed this underperformance to the inadequate selection abilities of fund managers. Nevertheless, research has indicated that limited life funds perform better than unlimited life mutual funds. Bhaagyasree and Kishori (2016) conducted a study that confirmed the empirical observations made in India, revealing that 14 of the 30 open-end mutual schemes analyzed exhibited more excellent performance than benchmarked returns. The results also revealed that specific strategies demonstrated subpar performance, which can be linked to a lack of diversification. In the study, Ahmad and Khidnaqat (2017) utilized a range of performance metrics, such as the Sharpe ratio, information ratio, Sortino ratio, and Jensen Alpha, to assess the unique characteristics that impact the performance of both conventional and Islamic mutual funds within Pakistan. The research revealed a significant and favorable association between the age of traditional funds and their performance. Conversely, a positive and significant relationship between the liquidity of Islamic funds and their Sharpe ratio was documented. Additionally, a negative correlation was identified between conventional funds' expense and Sharpe ratios.

Asad and Siddiqui (2019) investigated the influence of six microeconomic variables and two macroeconomic factors on the performance of individual funds. Their findings indicated a notable and positive connection between the risk-to-expenditure ratio and mutual fund returns. However, factors such as the coefficient of risk and return, size of the mutual fund, and age of the fund did not significantly influence fund returns. Conversely, an adverse correlation was observed between risk-adjusted returns and macroeconomic factors represented by interest rates and GDP. Robiyanto et al. (2019) evaluated the performance of Sharia mutual funds in Indonesia from 2012 to 2017 and compared the results with the overall market performance. They found that these Sharia mutual funds exhibited positive developments, expanding the range of investment options for those adhering to Sharia principles. PNM Syariah emerged as the top-performing fund based on Sharpe and Jensen measurements, while Manulife Syariah Sectoral Amanah outperformed others when measured using the Treynor Ratio information. Liow and Yeo (2018) found that Asian real estate stock prices are significantly influenced by their net asset values (NAVs), and these prices tend to converge toward their fundamental real estate values over time. This relationship is more prominent in Asian markets, attributed to the region's rapid economic growth, high population density, and swift urbanization than in European markets.

Sharma (2018), in Nepal, when assessed using the Sharpe measure, two mutual funds exhibited superior performance relative to each other. However, the Laxmi Value Fund (LVF) showed relatively weaker performance. Additionally, there was substantial evidence of a positive nexus between the rate of returns of the Nepal Investment Bank Samriddhi Fund (NIBSF) and the Nepal Merchant Bank Samriddhi Fund (NMBSF) and overall market returns. In contrast, there were negative correlations between the returns of LVF-1 and the returns of NEPSE. Thapa (2019) reported that

except for Global IME Samriddhi (GIMES), the performance of all the chosen mutual funds during the entire period under the study exhibited lower returns and higher risk levels than the market. LVF-1 was determined to be a superior performer due to its possession of the highest values in the Sharpe, Treynor, and Jensen measures of result compared to the other portfolio investment schemes chosen for analysis.

Patel and Trivedi (2020) aimed to uncover the factors impacting individuals' investment preferences and decisions, particularly examining the elements that shape investors' choices when selecting mutual funds in the Anand district. Their study revealed that portfolio schemes, prior fund performance, and fund liquidity are the primary drivers influencing investment decisions in this region. Shrestha and Shrestha (2020) focused on determining the key forces that impact investors' decisions in the context of Nepalese portfolio selection, and they identified a substantial correlation between the performance of fund managers and investments in investment funds. Kumar et al. (2020) attempted to examine a notable link between the stock market's performance and mutual fund investment portfolios in India through multiple regression analyses. This study inferred no substantial evidence of linkages in Indian markets during the study period. It has been reasonably concluded that there is no significant evidence of the presence of any such relationships in Indian markets during the period of study. Wagle (2020) conducted a study to determine Nepalese investors' interest in mutual funds. The study revealed that the Nepalese market is predominantly male-dominated and that most investors are interested in trading on the capital market for investment purposes. Investors invest in mutual funds without adequate knowledge and prefer common stock over mutual funds.

Pant et al. (2022) conducted a study exploring how company-specific and broader macroeconomic issues influence the performance of investment portfolios in Nepal. The study examined various factors, including internal aspects like investment fund size, age, cash, and cost ratios, as well as macroeconomic elements such as interest rates, inflation, and stock market performance measured by the stock index. This research examined the relationship between Sharpe's ratio and several predictive factors, including size, age, cash and expense ratios, bank interest rates, inflation, and stock index (NEPSE), unveiling a favorable link with portfolio performance. Moreover, to examine the link between stock market capitalization and its influencing factors, Gurung (2020) pointed out the significance of specific macroeconomic and firm fundamentals in explaining trends in Nepal's stock market capitalization.

The extensive literature review concerning the factors affecting global mutual fund market prices accentuates this sector's crucial role in fostering global capital market growth. Through empirical research, determinants influencing the pricing of Nepal's mutual fund market have been identified. This study employs fund-specific and macroeconomic variables as independent factors, as depicted in Figure 1, to gage market performance, represented by the market price of mutual funds. Fund-specific variables include net asset value, mutual fund age, expense ratio, and total assets. Moreover, the macroeconomic variables include the stock exchange index and the interest rates offered by commercial banks.

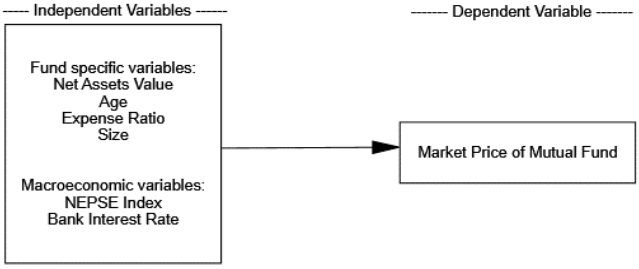

Figure 1. Research framework

3. Research Methodology

The study employed an explanatory research approach to investigate the drivers of the market price of investment portfolios in Nepal. In this study, six mutual funds with closed-end structures listed on the organized stock exchange, NEPSE, were considered, namely: Laxmi Unnati Kosh (LUK), Laxmi Equity Fund (LEF), Global IME Sammunat Yojana-1 (GBIMES-1), NMB Hybrid Fund L-1 (NMBHF-1), Siddhartha Equity Fund (SEF), and Mega Mutual Fund-1 (MMF-1).

The study employed a multiple regression model, using the monthly data from May 2021 to April 2023, including 208 monthly observations. The data were collected from various secondary sources: monthly financial reports from mutual fund schemes, the Nepal Stock Exchange, and Nepal Rastra Bank. The data were gathered from monthly financial reports published by mutual fund schemes, the Nepal Stock Exchange reports, and the Nepal Rastra Bank's bulletins. The market price of mutual funds was employed as the dependent variable to establish a causal relationship between the variables. Four fund-specific variables were used as independent variables: net asset value, age of mutual funds, expense ratio, and size of mutual funds. Additionally, two macroeconomic variables, namely the stock market index and interest rate, were included in the analysis. The equation below presents a multiple regression model depicting the influence of predictor variables on dependent variables, with 't' representing the specific period for each dataset.

$$LN\_MP_t = \alpha + \beta_1 LN\_NAV_t + \beta_2 LN\_AGE_t + \beta_3 EXR_t + \beta_4 LN\_SIZE_t + \beta_5 LN\_NEPSE_t + \beta_6 INT_t + \varepsilon_{it}$$

where:

α – intercept;
LN_MPt - logarithm of mutual fund market price;
LN_NAVt - logarithm of net asset value;
LN_AGEt - logarithm of the age of mutual funds;
EXPt - percentage expense ratio;
LN_SIZEt - logarithm of the size of mutual funds;
LN_NEPSEt - logarithm of the stock market index;
LN_INTt - logarithm of bank interest rate.

4. Results

This section mainly includes descriptive statistics, correlation analysis, and multiple regression results. It has undertaken an analysis of descriptive statistics to offer an initial glimpse of attributes in the dataset that support the comprehensive data distribution and variability within the dataset. The results of correlation analysis explore the associations between the outcome and predictor variables. Finally, the outcomes of multiple regression models enable us to draw more extensive conclusions regarding the forces exerting the market price of mutual funds.

Table 1 provides the results of descriptive statistics, offering a detailed examination of key statistical metrics for each variable of interest, thereby enabling a thorough understanding of their data distribution and central tendencies. Within the dataset, the market price of mutual funds (MP) ranges from 7.00 to 23.20, with an average (mean) value of 10.50. The modest standard deviation of 2.61 suggests a moderate variability around this mean across the 208 monthly observations in the sample size. In contrast, the net asset value (NAV) exhibits a more extensive range, ranging between 7.91 and 26.01 and possessing an average value of 12.35. The comparatively higher standard deviation of 3.36 indicates greater variability among the investment portfolios examined in this study. Regarding the age of mutual funds (AGE), measured in months, it is found that a broad spectrum ranging from 1.00 to 91.00, with a mean age of 48.86. This wide dispersion in age is evident from the substantial standard deviation of 25.77, underlining the dataset's diversity in terms of fund age.

Table 1. Descriptive statistics (Developed by the authors)

	Minimum	Maximum	Mean	Std deviation	N
MP	7.00	23.20	10.50	2.61	208
NAV	7.91	26.01	12.35	3.36	208
AGE	1.00	91.00	48.86	25.77	208
EXR	0.10	16.22	1.18	1.51	208
SIZE	191.89	2693.42	1385.29	454.31	208
NEPSE	1858.33	3160.06	2381.14	415.89	208
INT	8.43	13.03	10.77	1.69	208

Concerning the expense ratio (EXR), it is observed to range 0.10 to 16.22, with an average of 1.18. A standard deviation of 1.51 indicates moderate variability in expense ratios across the sample. Considering the size of mutual funds, represented by their total assets (SIZE) in millions of rupees, it is observed to extend from 191.89 to 2693.42, with an average of 1385.29. The significant standard deviation of 454.31 highlights substantial variation in fund sizes among the analyzed entities. The Nepal Stock Exchange Index (NEPSE) has values between 1858.33 and 3160.06, with an average of 2381.14. The variability measured by a standard deviation 415.89 reflects notable fluctuations in NEPSE values. Finally, the interest rate (INT) fluctuates between 8.43 and 13.03, with an average of 10.77. A relatively low standard deviation of 1.69 indicates that interest rates exhibit comparatively less variability within the dataset.

4.1. Correlation Analysis

Table 2 reports the results of Pearson pairwise correlation coefficients (including 208 monthly observations) that exhibit the extent and course of the relationship between the variables. In contrast, the figures in parentheses are the significance levels. A positive correlation coefficient of 0.527 between net asset value and market price with a significance level of 1 percent indicates a statistically significant and moderate correlation between these two variables. This suggests a meaningful link between these two variables, wherein shifts in one variable correspond to comparable shifts in the other variable.

Table 2. The Pearson correlation (Developed by the authors)

Variables	LN_MP	LN_NAV	LN_AGE	EXP	LN_SIZE	LN_NEPSE	LN_INT
LN_MP	1						
LN_NAV	0.527*	1					
	(0.000)						
LN_AGE	0.255*	-0.010	1				
	(0.000)	(0.887)					
EXP	0.093	0.038	0.012	1			
	(0.180)	(0.583)	(0.868)				
LN_SIZE	0.380*	0.516*	0.068	0.006	1		
	(0.000)	(0.000)	(0.329)	(0.927)			
LN_NEPSE	0.451*	0.595*	-0.227*	0.069	0.492*	1	
	(0.000)	(0.000)	(0.000)	(0.324)	(0.000)		
LN_INT	-0.422*	-0.609*	0.255*	-0.048	-0.506*	-0.904*	1
	(0.000)	(0.000)	(0.000)	(0.489)	(0.000)	(0.000)	

* Significant at the 0.01 level (2-tailed)

The coefficient of correlation (0.255), with statistical significance at the 1 percent level, indicates a moderately positive link between the age of mutual funds (expressed in years) and their market prices. In essence, this suggests that, on average, as mutual funds grow older, their market prices also tend to rise. Additionally, a positive correlation ($\rho = 0.093$) between the expense ratio (expressed as a percentage) and the market price of mutual funds indicates that an increase in the expense ratio tends to correspond with higher market prices. However, it is worth noting that this relationship is relatively weak.

The reported correlation coefficient is 0.380, also statistically significant at the 1 percent level. It highlights a meaningful positive connection between the size of mutual funds, measured by size, and their market prices. When mutual funds have more significant total assets, their market prices tend to be higher. Similarly, the correlation coefficient of 0.451, which is significant at a 99 percent confidence level between the NEPSE index (Index) and market price, underscores a moderately strong positive relationship. This indicates that broader market trends, as reflected by the Nepse index, notably impact asset prices. Changes in the Nepse index can substantially and statistically significantly influence market prices. Lastly, the negative correlation coefficient of 0.422, significant at the 1 percent level, between interest rates (INT) and market price reveals a moderately inverse solid relationship between these two variables. When interest rates increase, the market prices of assets tend to decrease. This can be attributed to the higher borrowing costs associated with rising interest rates, which reduce the appeal of investments in riskier assets.

4.2. Regression Results

The results presented in Table 3 illustrate the findings of a regression analysis conducted to examine the many aspects influencing investment fund performance. The predictor variables considered in this research encompass net asset value, age of mutual funds, expense ratio, size of funds, NEPSE index, and interest rate. The dataset comprises 208 monthly observations. The table also provides information on standard errors, t-statistics, p-values, and variance inflation factors (VIFs). Additionally, it presents R-squared and F-test results for the model used in this study.

Table 3. Regression results (Developed by the authors)

Model	Beta Coefficient	Std. Error	t-Statistics	P-value	VIF
Constant	-3.277	2.546	-1.287	0.199	
LN_NAV	0.343*	0.077	4.433	0.000	1.803
LN_AGE	0.107*	0.019	5.658	0.000	1.154
EXR	0.012	0.011	1.032	0.303	1.008
LN_SIZE	0.030	0.057	0.524	0.601	1.544
LN_NEPSE	0.500**	0.229	2.182	0.030	5.604
LN_INT	-0.073	0.255	-0.286	0.775	5.978
R^2=0.414		F (7,207) = 23.635 (0.000)			
LN_MP = -3.277 + 0.343 LN_NAV + 0.107 LN_AGE + 0.012 EXR + 0.030 LN_TA + 0.500 LN_NEPSE 0.073 INT					

* Significance at the 1% level
** Significance at the 5% level

The findings indicated an R^2 value of 0.414, signifying that roughly 41.4 percent of the variability in the fund's market value can be explained by the predictor variables included in the model. This suggests a moderate explanatory capacity, implying that the combined predictors substantially influence the dependent variable. The F-statistic, with degrees of freedom (7,207), is 23.635 and is significant at the 99 percent confidence level. This pointed to the fact that the regression model, overall, is statistically significant, the independent variables taken together in this model have a significant impact on explaining the variance in the dependent variable. Moreover, the Variance Inflation Factor (VIF) has been reported below 10 for each model. This implies that each independent variable is relatively independent, ensuring that multicollinearity is not a significant issue.

The coefficient of 0.343 for the log of net asset value (LN_NAV) indicates that for each percentage point increase in net asset value, the market price tends to rise by 0.343 percentage points. Conversely, if LN_NAV decreases, indicating a decrease in net asset value, the market price is expected to decrease by 0.343 percentage points. Because the p-value of 0.000 is below the conventional threshold of 0.05, the relationship between net asset value and market price of mutual funds is highly statistically significant.

Similarly, a significant coefficient of 0.107 for the natural logarithm of mutual fund age (LN_AGE) implies that, on average, as mutual fund age increases (in natural log terms), their market prices also tend to increase, holding other factors constant. The expense ratio (EXR) is positively associated with market prices; however, this correlation lacks statistical significance. Likewise, the insignificant but positive coefficient of size suggests that variations in the natural logarithm of total assets (LN_SIZE) do not significantly affect market prices.

The coefficient of 0.500 for the natural logarithm of the stock index (LN_NEPSE) is statistically significant (p-value = 0.030), indicating that as LN_NEPSE increases, the market price of mutual funds tends to rise as well, all else being equal. In contrast, the interest rate (LN_INT) has a negative coefficient. However, it is not statistically significant, suggesting that changes in interest rates do not significantly affect the market price of mutual funds. Hence, the regression analysis suggests that NAV, age, and the stock index positively predict market prices. In contrast, the expense ratio, size, and interest rates do not significantly impact the market prices of mutual funds in Nepal.

5. Discussion

Wagle (2020) examined Nepalese investors' interest in mutual funds and indicated that they misunderstand mutual funds and prefer common stock due to its distinct nature. In this concern, Shrestha and Shrestha (2020) identified a substantial correlation between fund manager skills in its attraction and mutual fund

investing. In terms of understanding, driving factors of mutual pricing include stock price, age of mutual fund, and net asset value.

The regression analysis results shed light on many important variables affecting the market values of mutual funds in Nepal. While other factors, such as the expense ratio, size, and interest rates, do not significantly affect market prices, the net asset value, age of mutual fund schemes, and stock index are essential market drivers. This conclusion partially supports the findings of Patel and Trivedi (2020), who discovered that various criteria, such as the portfolio scheme, historical fund performance, and fund liquidity, drive investors' investment decisions when selecting mutual funds. Understanding these dynamics is essential because it offers important insights into the mutual fund market's complexity and how it responds to different financial and economic conditions (Dahal, 2021; Ghimire et al., 2023).

Mutual funds tend to be affected by broader stock market patterns, as indicated by their significant nexus with the stock index's performance. This implies that the mutual fund market prices tend to benefit, making them potentially more attractive investments during bullish market conditions. It holds when mutual funds contain a diverse portfolio of stocks, and as the overall stock market prospers, the value of these holdings increases, driving up the net asset value (NAV) and the market price of the funds. However, recent studies have presented contrasting findings, for instance, Pant et al. (2022) and Karki et al. (2023) revealed that the factors like stock index, cash ratio, cost ratio, bank rate, and inflation exerted a notable detrimental effect on investment portfolio performances in Nepal. Furthermore, Kumar et al. (2020), in the Indian context, established that there was no significant correlation between stock market returns and mutual fund assets.

Notably, the net asset value demonstrated a strong positive association with the market prices of mutual funds. This suggests that market participants generally perceive funds with higher net asset values as more valuable or attractive investments. This might be due to the increased confidence of investors when they view funds with higher net asset values as more stable or better performing, and in turn, attract more investors' interest and thereby drive up their market prices. This outcome aligns with the conclusions drawn by previous studies; for instance, Liow and Yeo (2018) suggested that in Asian real estate markets, stock prices seem to be affected by the intrinsic worth of their real estate assets, precisely their net asset value. The study's findings indicated that NAV and market price are interrelated, with changes in NAV affecting market prices and vise versa, as evidenced by mean-reverting behavior, spillover effects, and the impact of unexpected shocks on market price-to-NAV ratios.

Moreover, a fascinating and favorable relationship between the fund's age and market prices simply implies that older mutual funds, represented by higher age are associated with higher market prices. It raises the possibility that investors favor older funds because they are more reliable. Investors have confidence in these funds because of their long track record, which could lead to increased demand and higher market prices. Particularly, investors perceive mutual funds tend to gain market value, potentially due to factors such as increased credibility, historical performance, or investor trust associated with older funds. This phenomenon highlights the importance of past outcomes and longevity in forming investor attitudes and affecting the mutual fund market dynamics in the context of Nepal. However, this contrasts with the conclusion of Paudel (2010), which highlighted the small mutual fund market and limited investor acceptance, suggesting a need for further market development and investor education in Nepal. In a global context, similar research findings have emerged. Some studies argue that older funds outperform younger ones, while others contend the opposite. For instance, Hada and Suri's (2020) study suggested that younger funds generally perform better than older ones. However, this study lacks clarity in defining a fund's age of youthfulness before transitioning into the category of older funds. In contrast, Lobao and Gomes (2015), focusing on funds investing in Portuguese stocks, revealed a different scenario. According to their findings, the best-performing funds are typically older, larger, and costlier, with a strong historical performance record and low trading activity. These contrasting findings underline the complexity of the relationship between mutual fund age and market prices, emphasizing the need for nuanced analysis that considers various factors influencing fund performance over time.

In contrast to the variables that exhibited significant impacts on mutual fund prices, other variables, the expense ratio, fund size, and interest rates have demonstrated no significant associations with mutual fund prices. This is consistent with Chen et al. (2004), who found substantial evidence that fund size hurts performance. They claimed that fund style heterogeneity, fund size correlation with other fund attributes, and survivorship bias do not explain the link. They also observed that small-cap stock funds are most affected by fund size. However, the inclusion of these variables in the analysis remains crucial to investigate the factors affecting mutual fund prices comprehensively.

Despite this lack of direct impact, the inclusion of these variables in the analysis remains crucial for a comprehensive understanding of the factors affecting mutual fund prices. While these variables may not appear as predominant drivers in the Nepalese market, the observed relationships, or their absence, could be influenced by multicollinearity or potential interactions with other variables within the model. Previous research, exemplified by studies such as Nazir and Nawaz (2010) and Chen et al. (2004), has indeed established connections between these variables and mutual fund prices. The diverse outcomes suggest that

the variability in the relationship between mutual fund performance and broader stock market dynamics is contingent on specific contexts. Notably, variables such as expense ratio, fund size, and interest rates demonstrated no significant associations with mutual fund prices, consistent with prior findings. These diverse outcomes suggest that the relationship between mutual fund performance and broader stock market dynamics can vary based on specific contexts, and a nuanced understanding of local economic factors and market conditions is always required for further exploration of the relationship, shedding light on the multifaceted interplay between mutual fund performance and market dynamics.

6. Conclusion

The connection between the market prices of mutual funds and the influencing factors is widely recognized. The growing presence of portfolio investment in the stock market and the substantial impact of various factors on investment portfolios highlight the paramount importance of this relationship for critical stakeholders and market participants. Therefore, this research has aimed to explore the connections between mutual fund market prices and several influential factors, including net asset value, age of mutual funds, expense ratio, size of funds, stock market index, and interest rate. It employed a multiple regression model using monthly data collected from May 2021 to April 2023, with 208 monthly observations.

As mutual fund success is closely correlated with broader stock market developments, as seen by their strong connection with stock index performance, this simply illustrates how mutual funds depend on the overall health and fluctuations of the stock market. Mutual funds typically fluctuate with changes in the stock index, reflecting the impact of market circumstances on these investment vehicles. This connection emphasizes how crucial it is to keep an eye on stock market movements while evaluating and managing mutual fund investments because these investments are inextricably linked to the overall state of the economy.

The positive association of the age of mutual funds with their market prices, on the other hand, raises the possibility that investors favor older funds because they are more reliable. Investors have confidence in these funds because of their long track record, which could lead to increased demand and higher market prices. This phenomenon highlights the importance of past outcomes and longevity in forming investor attitudes and influencing the dynamics of mutual fund portfolios in the market.

In the context of Nepal's mutual fund market dynamics, this research has uncovered key insights. Specifically, it highlights the significance of factors such as net asset value (NAV), mutual fund age, and stock index as critical drivers of mutual fund market prices. This study shows a strong correlation between mutual fund market prices and NAV. This shows that investors in mutual funds in the market under study prefer to view those with higher NAVs as more desirable and valuable investments. A higher NAV suggests stability and impressive performance, and this perception is likely shaped by increasing investor trust. As a result, mutual funds with higher NAVs draw more investor interest, which drives up their market values. This demonstrates the significance of NAV as a crucial factor influencing investor choice and its influence on the pricing dynamics of mutual funds in the market under investigation. These findings underscore their importance to investors, fund managers, and other stakeholders. Furthermore, the research indicates that variables such as expense ratio, fund size, and interest rates do not significantly impact market prices. However, the non-significance of these factors still offers valuable insights, providing a comprehensive understanding of the unique dynamics within Nepal's mutual fund market.

Several limitations should be acknowledged when interpreting these findings. First, it is essential to consider the possibility of multi-collinearity or interactions with other variables within the model, which could impact the results. Further research is needed to delve deeper into these potential complexities, providing a more nuanced understanding of mutual fund pricing dynamics specific to Nepal. Second, this study represents a snapshot in time, and Nepal's financial sectors are continuously evolving. Consequently, the observed relationships might vary over time because of changes in market conditions, regulations, and investor behaviors. Ongoing research is vital for tracking these changes and maintaining a current and comprehensive understanding of mutual fund pricing dynamics. Future studies that address multi-collinearity, explore interactions with other variables, and adapt to evolving financial landscapes will significantly contribute to the field. Such endeavors will provide investors, practitioners, and policymakers with valuable insights, enabling them to make informed decisions and create enduring value within Nepal's mutual fund market.

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