

Share price behavior of Nepalese insurance companies

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Abstract

This research explores the influencing factors of market share price behavior in the Nepalese insurance business. The study focuses on four insurance firms and utilizes a purposive sample approach, yielding a dataset of 40 observations. The research investigates the correlations between significant factors such as dividend payout ratio (DPR), Earnings per share (EPS), price-earnings ratio (PER), dividend per share (DPS), and market price per share (MPS). The data show strong relationships between these characteristics and the MPS. The DPR and MPS have a negative connection, indicating that increased dividend distributions may lead to lower market prices. Positive correlations, on the other hand, are discovered among EPS, PER, DPR, and MPS, indicating that investors appreciate firms with greater profitability, growth prospects, and dividend payments. The research adds to the knowledge of share price behavior in Nepalese insurance firms. However, it is crucial to note that the findings are based on small sample size and may not apply to other sectors or countries. To fully understand the factors determining market pricing, future research should investigate increasing the sample size and including longitudinal approaches. These results have practical ramifications for investors, insurers, and politicians. Understanding share price behavior allows stakeholders to make educated choices about investment strategies, financial performance assessment, and policy creation to improve economic performance and shareholder value in Nepal's insurance business.

Keywords: Capital Market, Financial Performance, Investment, Value of Company

Introduction

Promoting long-term economic growth and capital formation is crucial for economic development and has grown into a significant market. Stock markets are more than just a place to buy and sell stocks; in addition to this primary function, the market also acts as a meeting place for those who conserve and spend money. This occurs because exchanges for securities facilitate the pooling of funds, the distribution of risk, and the business of wealth. In Nepal, they are low-risk securities since the corporation is legally required to pay a fixed interest rate, often higher than fixed deposits, to such bonds even if they experience losses for at least 7-10 years. The country's economy is heavily reliant on the efficient use of its resources and the mobilization of capital (Bhattarai et al., 2020). The growth of the economy as a whole is directly proportional to how efficiently the stock market performs, and research based on real-world situations has demonstrated that expansion of the capital markets is necessary for economic growth. Financial institutions help the national economy (Ghimire et al., 2021; Hall et al., 2016) by amassing capital money to satisfy the financial demands of various producing sectors. However, compared to the growth and appearance of different economic and non-financial organizations, the speed of development of the said market could be more adequate. The income statement, balance sheet, statement of stockholder's equity, and statement of cash flow are the four most important financial statements that stakeholders should know about when analyzing the performance of a business (Anton, 2016; Dahal, 2018).

The share price in the secondary market fluctuates due to internal (organizational) and external (political, economic, financial) factors. The primary market price is par. Few Nepalese investors know what drives share prices. Most investors don't see the company's financial performance but invest anyhow. It produces a peculiar relationship between economic indicators like Earnings Per Share, Dividend Per Share, and market price per share. How do dividend payout ratio (DPR), Earnings per share (EPS), price–earnings ratio (PER), and dividend per share (DPS) affects the market price per share (MPS)? How do DPR, DPS, EPS, and P/E ratios affect Nepalese insurance firms' MPS? The primary purpose of this research is to analyze the company-specific characteristics that affect the share price of Nepalese insurance companies. The specific goals are highlighted below.

- To analyze the association between DPR, DPS, EPS, P/E ratio, and Market Per Share (MPS).
- To measure the effect of DPR, DPS, EPS, and P/E ratio on the MPS of insurance companies in Nepal.

This study attempts to determine the relationship between the MPS of Nepalese insurance companies and their leading financial indicators, including EPS, DPS, P/E Ratio, DPR, and MPS. The association is anticipated to reveal the status of Nepalese insurance companies concerning share price determinants. These findings aid potential investors in making more informed investment decisions.

Literature review

Indexes of the stock market are "pure numbers" used to compare index numbers from the same series or separate series. An index is a ratio calculated using the average of numerous securities. A base year from the past is selected and used to determine the index's initial value. Le et al. (2020) validate the hierarchical order and market timing theories (VanHorne & Wachowicz, 2000). The market value per common share depends on the company's current and projected dividends and investors' perceptions of the stock's risk. The predicted return and risk statistics for particular assets are the exogenously established input data analyzed by portfolio analysis (Tahmoospour et al., 2011).

Simply put, a portfolio is an investor's practice of investing in many different assets. A portfolio consists of various investment assets. According to Pavone (2019), market capitalization refers to the sum of the worth of a company's publicly traded shares. It is an instrument that calculates the business's current market value. A higher EPS indicates that the company will earn more per dollar charged for its services (Gautam & Bista, 2019; Nasreem, 2013). It represents the proportion of dividends declared during a fiscal year relative to the stock's market value, dividend per share by the share's value results in stock market value. A substantial inverse link between dividend yield and stock market price was identified (Bhattarai, 2014).

The ability to make sound financial decisions is crucial to the success of a business (Ramadan & Ramadan 2015). A cash dividend is the portion of a company's earnings that it distributes to its shareholders. The compensation impacts the total amount of internal financing and reduces the amount of retained earnings. When a cash dividend is declared, a company's bank account must have sufficient funds to cover expenses. Otherwise, the firm's currency and reserve accounts would be depleted, lowering its total assets and net worth (Almumani, 2014). Dang et al. (2019) revealed two new findings: first, enterprises with higher stock market liquidity have lower leverage; and second, nations with strong institutional environments have a decreased association between stock market liquidity and leverage. Das (2019) found PE ratio has significant positive effects, whereas a company's scale adversely impacts the market stock price.

Timilsina (2001) discovered that the MPS depends on both EPS and DPS, but DPS is added price sensitive and will immediately impact the market. Maharjan (2009) found a positive correlation between return on assets (ROA), return on equity (ROE), and DPS. Gautam and Bista (2019) found that growth in return on assets and earnings per share cannot explain the disparity in the stock value of Nepalese non-life insurance businesses. EPS, PER, and the company's scale all have a significant positive link with share price; meanwhile, dividend yield, debt ratio, and DPR all have a negative relationship with the share price. Bhattarai (2020) established a statistically significant negative association between the DPR and the MPS. The dividend yield, EPS, and PER for the MPS

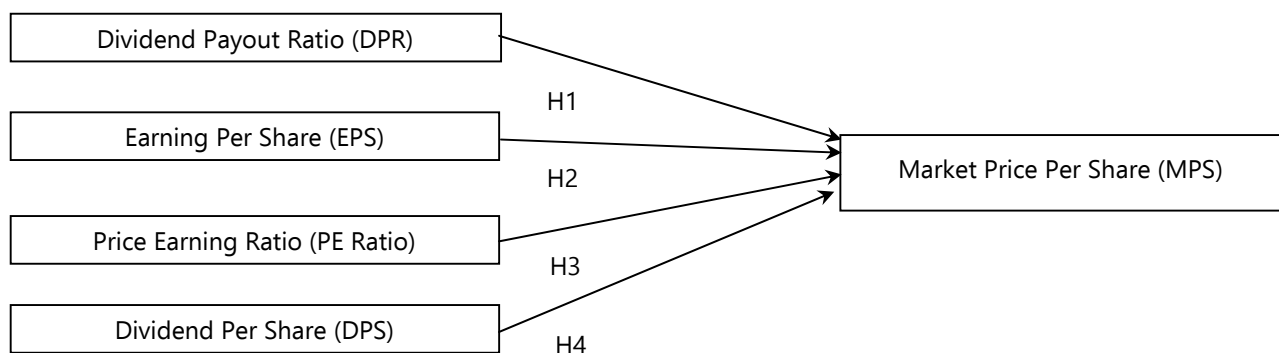
were all positive and statistically significant. According to Khatiwada (2020), earnings per share (EPS) and price-earnings ratio (PER) have a meaningfully positive link with the share price. In contrast, the dividend yield has a meaningfully negative association with the share price. Adhikari (2021) found a positive relationship between the MPS and other dividend variables such as EPS, DPS, DPR, PER, and dividend yield ratio. The findings of Lamichhane and Rai (2021) indicate that EPS positively affects the MPS and stock returns. It demonstrates that increased EPS increases share price and stock returns.

Similarly, the price-earnings ratio (PER) favorably impacts the market price per share and stock returns. The significant factors that decide the price of a claim are the profits per share, the dividends per share, the price-earnings ratio, the firm's age, and the dividend yield. According to Berhe and Kaur (2017), an insurer's market share and profitability are directly proportional to the proportion of the sector's total assets represented by the insurer's assets.

According to the review of the relevant research, MPS is affected by many independent factors, the most influential of which are DPS, PE, EPS, and DPS. The findings indicate that DPS has an immediate and direct effect on the market price of shares, meaning its price sensitivity. In addition, ROA, ROE, and DPS have a positive correlation, emphasizing the significance of dividends in determining market price. The dependent variable in the conceptual framework for this study would be the MPS. DPS, PE, EPS, and DPS constitute the independent variables. The framework would investigate the relationships between these variables and their influence on the market share price. Additional control variables, such as company size and debt ratio, could be considered for a more thorough analysis.

The variables explored in the literature review are internal factors under the insurance company's control and are unique to each. This research utilized the research framework as presented in Figure 1.

Figure 1
Research Framework



The following hypotheses were created for the study based on the literature review of the research:

- H1: There is a significant relationship between the DPR and MPS of insurance companies in Nepal.*
H2: There is a significant relationship between the DPS and MPS of insurance companies in Nepal.
H3: There is a significant relationship between the EPS and MPS of insurance companies in Nepal.
H4: There is a significant relationship between the P/E ratio and the MPS of insurance companies in Nepal.

Methodology

This study employs a descriptive and causal-comparative research design, followed by a review of previous articles, journals, books, and annual reports, as well as associated schedules and consultations based on the quantitative data of the specified objectives. To accomplish its goals, the study concentrates on defining the EPS, DPR, DPS, and P/E ratios for evaluating the MPS of Nepalese life insurance firms.

The current study employs a sampling frame as non-probability, purposive sampling. Currently, 41 insurance companies are operating in Nepal (Nepal Rastra Bank, 2021), of which four (Prabhu Insurance Company (PIC),

Himalayan Insurance Company (HICL), Premier Insurance Company (PMIC), and Sagarmatha Insurance Company (SMIC) were selected for sample from fiscal years 2011/12 to 2020/21. Forty observations are recorded in total.

The research applied secondary data. The essential information was obtained from the insurance companies publicly available financial filings and reports. Published materials from concerned insurance companies (ICs), financial information of concerned ICs, related books and journals, and official websites of the sample ICs.

Table 1
Methods of Analysis

Variables	Formula
Dividend Payout Ratio (DPR)	$\frac{\text{Dividend Per Share (DPS)}}{\text{Earning Per Share (EPS)}}$
Earnings Per Share (EPS)	$\frac{\text{Earning Available to Common Shareholders}}{\text{Number of Equity Shares Outstanding}}$
Divided Per Share (DPS)	$\frac{\text{Earning Paid to Common Shareholders}}{\text{Nubmer of Equity Shares Outstanding}}$
Price-Earnings Ratio (PER)	$\frac{\text{Market Value Per Share}}{\text{Earning Per Share}}$
Market Price of Share (MPS)	$\frac{\text{Current Market Price of the Share}}{\text{Nubmer of Equity Shares Outstanding}}$

The following linear regression model is specified for this study:

$$MPS_{it} = \beta_0 + \beta_1 \text{DPR} + \beta_2 \text{EPS} + \beta_3 \text{DPS} + \beta_4 \text{P/E} + \varepsilon_{it} \dots \dots \dots (1)$$

Where:

MPS = Market price of the share of a firm

DPR = Dividend payout ratio of firm

DPS = dividend per share of a firm

EPS = Earnings per share of a firm

P/E = Price-earnings ratio of firm

$\beta_1, \beta_2, \beta_3, \beta_4$ = Regression coefficient for respective variables

ε = Error terms

Presentation and analysis

This section presents the study's empirical findings. It displays descriptive data, correlation, and regression analysis results to discover the significant factors influencing the stock performance of Nepalese insurance businesses on the NEPSE stock exchange.

Table 2
Descriptive Analysis Results

	N	Minimum	Maximum	Mean	Std. Deviation
DPR	40	-65.51	537.42	48.98	86.44
EPS	40	9.01	106.39	37.40	18.80
PE	40	2.53	85.28	25.32	18.83
MPS	40	97	2401	803.55	556.72
DPS	40	-19.00	86.00	14.50	18.84

Table 2 shows DPR has a wide range of values, with a -65.51 minimum and a maximum of 537.42. The average dividend payout ratio for the sample is 48.98 but with a relatively high standard deviation of 86.44. This indicates

considerable variation in the dividend payout ratios among the companies. Regarding EPS, the data ranges from a minimum value of 9.01 to a maximum of 106.39. The average EPS is 37.40, with a standard deviation of 18.80, suggesting moderate variability in the earnings per share among the companies. The PE minimum value is 2.53, and the maximum is 85.28. The average PE ratio is 25.32, with a standard deviation of 18.83, indicating some variation in the price-earnings ratios among the companies. The MPS ranges from a minimum of 97 to a maximum of 2401. The average market price per share is 803.55, with a relatively high standard deviation of 556.72, implying significant variation in the market prices per share among the companies. Lastly, DPS exhibits a range from -19.00 to 86.00. The average dividend paid per share is 14.50, with a standard deviation of 18.84, indicating some variability in the company dividend payments per share.

This study utilized Pearson's correlation coefficient to quantify linear association to explain the direction and amplitude of the link between various pairs of insurance firms of Nepal's share price behavior and the share market price. The study was carried out in Nepal.

Table 3
Correlation Result

	DPR	EPS	PE	DPS
MPS	.162	.119	.626**	.306

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

Table 3 presents the correlation result, which shows the relationships between the variables included in the study: DPR, EPS, PE, MPS, and DPS. There is no significant relationship between MPS and DPR. The correlation coefficient between EPS and MPS is 0.119, which is not statistically significant. The price-earnings ratio and the market price per share are inextricably linked in a good way. This means that as the price-earnings ratio increases, so does the share price on the market. MPS and DPS have no significant relationship. These correlation results provide initial insights into the relationships between the variables, which can guide further analysis and interpretation in the study.

This section incorporates regression analysis to obtain the relationships and effects of independent and dependent variables, determine the importance of each variable, test hypotheses, and potentially develop predictive models.

Table 4
Regression Result

	Unstandardized coefficient	Std. Error	Standardized coefficient Beta	t-statistics	p-value
(Constant)	-336.15	173.40		-1.93	.061
DPR	-4.13	1.19	-.64	-3.46	.001
EPS	10.86	3.26	.36	3.32	.002
PE	27.60	3.40	.93	8.10	.000
DPS	16.32	5.09	.55	3.20	.003
R = 0.833	R ² = 0.694		Sig. value = 0.000		

Dependent Variable: MPS

Table 4 shows the coefficient of determination of 69.4 % variation in MPS explained by the DPR, EPS, PE, and DPS, and the overall model is statistically significant. The p-values associated with DPR, EPS, PE, and DPS are less than 0.01, indicating that all the independent variables considered are statistically significant with the dependent MPS. This suggests the hypothesis H1, H2, H3, and H4 are supported. The standardized beta coefficients indicate that PE has more influence on MPS, followed by DPR, DPS, and EPS. However, EPS, PE, and DPS positively impact MPS, but DPR negatively impacts MPS.

As Table 4 a one-unit increase in the DPR is associated with a decrease of 4.13 units per share market price. The negative coefficient suggests an inverse relationship between the DPR and the MPS, indicating that the DPR is statistically significant in explaining the market price per share. The positive coefficient indicates a positive relationship between EPS and MPS, and the p-value indicates that EPS is statistically significant. The result found

a positive relationship between PE and the MPS. The t-statistic and the p-value indicate that the price-earnings ratio is highly statistically significant. A one-unit increase in the DPS is associated with an increase of 16.32 units in the MPS. The positive coefficient indicates a positive relationship between the DPS and the MPS. The t-statistic and the p-value suggest that the dividend paid per share is statistically significant. It signifies DPR, EPS, PE, and DPS have substantial effects on the MPS of insurance companies in Nepal. The PE appears to have the highest impact, followed by EPS and DPS. The DPR also has a significant but negative effect on the MPS.

Discussion

The findings from the regression analysis align with the literature discussed earlier. Several studies have highlighted the significance of the DPR, EPS, PER, and DPS influencing the market price per share of companies, including insurance companies. In line with Timilsina (2001), our study confirms that the DPR negatively impacts the market price per share. This suggests that investors may perceive a higher DPR as indicating lower retained earnings, potentially affecting their confidence in the company's growth prospects and, consequently, its share price. The study revealed a strong connection between EPS and market price per share, consistent with Maharjan (2009) and Lamichhane and Rai (2021). This implies that investors value companies that generate higher EPS, as it indicates their profitability and potential for future growth. The positive association between the PER and market price per share supports the findings of Khatiwada (2020). A higher PE ratio suggests that investors are willing to pay a premium for the company's future earnings potential, positively influencing the stock's market price.

Similarly, the positive impact of DPS on the MPS is consistent with the findings of Adhikari (2021). This indicates that investors perceive dividends as a form of return on their investment and are willing to assign a higher value to companies that pay higher dividends per share. Overall, our study's findings reinforce the existing literature and provide empirical evidence for the relationship between the examined variables and market price per share in the context of these insurance companies. These insights can be valuable for investors, insurance executives, and policymakers in understanding the factors influencing share prices and making informed decisions regarding investment strategies and financial performance evaluation.

Conclusion

This study examined the share price behavior of Nepalese insurance firms. The results shed light on the relationship between DPR, EPS, PER, DPS, and MPS. The regression analysis uncovered significant associations between the independent variables and MPS. It was revealed that the DPR has an adverse impact on MPS, suggesting that a higher dividend payout may result in reduced market prices. On the other hand, EPS, PER, and DPS were positively associated with MPS, indicating that investors place a premium on companies with higher earnings, future growth potential, and dividends. Consistent with previous research, these findings provide empirical evidence unique to the Nepalese insurance industry. The results have implications for investors, insurance administrators, and policymakers, who can use this information to make informed decisions regarding investment strategies, financial performance evaluation, and the formulation of policies that foster an investment-friendly environment. However, it is essential to acknowledge the study's limitations. The research sample was restricted to Nepalese insurance, so the findings may not apply to other industries or nations. In addition, the study employed a cross-sectional design, which hinders the ability to infer causality and monitor changes in attitudes and behaviors over time. Future research should consider increasing the sample size, incorporating longitudinal designs, and investigating other variables that may influence the MPS in the insurance sector.

This study contributes to the extant literature on the determinants of MPS in the framework of Nepalese insurance companies and provides industry stakeholders with valuable insights. Investors and industry professionals can make more informed decisions to boost financial performance and shareholder value if they comprehend the factors influencing market prices.

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