

Factors driving stock prices of Nepalese insurers

Dipendra Karki

Lecturer, Nepal Commerce Campus, Faculty of Management, Tribhuvan University

Email: dipendra.karki@ncc.tu.edu.np

<https://orcid.org/0000-0001-9045-7423>

Cite this paper

Karki, D. (2020). Factors driving stock prices of Nepalese insurers. *NCC Journal*, 5(1), 17-28.

<https://doi.org/10.3126/nccj.v5i1.56938>

Abstract

The effect of firm-specific and macroeconomic factors on the price-earnings ratio of Nepalese insurance companies is analyzed in this study using pooled cross-sectional data. The study covers a period of eight years (2007/08 to 2014/15) and uses secondary data from 13 insurance companies with a total of 104 observations. The findings suggest that firm size, money supply, and gross domestic product have a positive correlation with stock prices, while inflation has a negative correlation. Furthermore, size, gross domestic product, and money supply have a positive impact on the price-earnings ratio, whereas dividends per share, book value per share, return on equity, and inflation have a negative impact. The study's results have important implications for insurance companies in Nepal, particularly in making investment decisions and formulating pricing strategies. The research's analytical techniques and strategies can be applied to different facets of the Nepalese stock market.

Keywords: Stock pricing, Insurance companies, Firm-specific variables, Macroeconomic variables

Introduction

Understanding the factors that influence share price behavior is of great significance to investors, policymakers, and researchers alike. Share prices are primarily influenced by fundamental variables in an efficient market, including earnings per share, dividend per share, return on equity, net worth, dividend yield, and business size (Sharma, 2011). However, due to market irrationality, stock values are seldom consistent and frequently vary significantly in response to news concerning fundamentals (Shiller, 1981). Due to the extreme volatility and turbulence in stock prices, the most recent global financial crisis has brought about previously unheard-of upheavals in the world's stock markets. Therefore, the variations in the stock market are closely monitored by policymakers, companies, investors, and researchers.

The stock market contributes significantly to economic development by encouraging capital formation and boosting economic growth through market mechanisms (Nisa & Nishant, 2011). In addition, the stock market gives individuals, governments, companies, and organizations a place to exchange and invest savings by purchasing shares. However, the price of any specific product is influenced by both macroeconomic and microeconomic factors. Micro-environmental variables including earnings per share, dividend per share, book value of the company, dividend pay-out ratio, and price-earnings ratio can have a significant impact on stock prices (Gompers et al., 2003). Politics, general economic conditions, governmental rules, legal considerations, and social considerations are all macroeconomic issues.

Therefore, determining the factors that influence share price behavior is critical in making profitable investment decisions. The factors that affect share prices in various nations have been the subject of several research. For instance, Sharma and Singh (2006) discovered that the following factors affect share prices: earnings per share, price-earnings ratio, dividend per share, dividend coverage, dividend payout, book value per share, and firm size.

In a similar vein, Al-Omar and A-Mutairi (2008) discovered that book value per share and earnings per share were factors in share prices. There isn't much research, nevertheless, that examines the factors that influence share price behavior in the context of Nepal. In order to better understand the factors that affect the share price behavior of Nepalese insurance businesses listed on the Nepal Stock Exchange, this study will evaluate those factors.

Stock market has become the most interesting and challenging subject matter of studies in developed countries. Although, different studies have been carried out to determine the variables that impact the share price behavior in developing countries, there is no unanimous finding regarding the share price behavior. However, due to weak financial market development, such studies are far behind in developing countries like Nepal. Several studies have found more contrasting result on factors that affects the share price behavior. According to Shiller (1981), market irrationality is mostly to blame for the unstable nature of stock prices and their extreme fluctuations in response to fundamental news (such as dividends). Therefore, it is claimed that knowing how different basic factors affect share price is much beneficial to stockholders as it will assist them to make wise investing decisions. Investors need to be able to predict the direction of stock price fluctuations in order to determine whether the stocks are worth the values placed on them (Osamwonyi & Evbayiro, 2012). As evidenced by the connections between output (industrial production), inflation, and stock prices in the Chinese economy, there is a distinct and negative relationship between stock prices and inflation. Additionally, the results show that output growth has a negative and considerable impact on stock prices (Zhao, 1999). There exists a positive correlation between the share price and GDP but not significant determinants (Somoye et al., 2009).

Uddin (2009) found both linear and non-linear relationships of share price with earnings per share, net asset value, and dividend percentage. Sharma (2011) discovered that earnings per share and dividends per share are positive and the dividend yield is the negative determinant of stock prices in the Bombay Stock Exchange. An examination of significant fundamental variables and long-term stock price movements in a developing market from 1981 to 2000 on the Karachi Stock Exchange found that payout ratio, firm size, and dividend yields are significantly related to stock price (Irfan & Nishat, 2003). Although they have a positive relationship with stock prices, earnings per share, dividends per share, and GDP do not significantly affect share prices (Somoye et al., 2009). Rajbhandari et. al. (2020) argue that adaptation of new technologies and the government's policy on improving efficiency affect industry performance and share prices. According to Al-Shubiri (2010), there is a highly substantial positive association between the stock price and dividend percentage, net asset value per share, and the GDP, and a highly significant negative relationship between the stock market price and loan interest. In a similar vein, Das and Pattanayak (2009) discovered that while more risk and volatility have negative effects on share prices, higher profitability, returns on investment, growth potential, and attractive valuation had positive effects.

In the Nepalese context, stocks with large earnings ratios seemed to have lower liquidity, profitability, asset turnover, and interest coverage than higher leverage (Pradhan, 1993). According to the analysis, there is a negative correlation between size (market equity) and dividend yields. According to Timilsina (1997), there is a positive correlation between dividends per share and stock price, and the effects of dividends per share on share prices vary depending on the industry. Market capitalization is significantly impacted by dividends per share, returns on equity, and dividend yields, but not by the price-earnings ratio (Manandhar, 1998). The study also noted the inverse relationship between the market value of equity and the dividend per share. Dhaugoda et al. (2016) and Amatya (2016) discovered a similar association between dividend per share and firm size and market price per share. The market price per share has been found to have a negative association with leverage, inflation, and interest rates, according to Sapkota (2016). The study also showed that among the important factors that influence the market price per share in the context of Nepal are dividends per share, earnings per share, price-earnings ratio, return on assets, leverage, and gross domestic product.

Despite the empirical evidence discussed above in the context of Nepal and other nations, there is insufficient evidence regarding the variables that impact the stock price behavior in the Nepalese insurance sector. As a result, this study addresses the following research issues:

- What is the structure and pattern of the price-earnings ratio? What changes have occurred throughout time?
- What are the size, book value per share, dividend per share, and return on equity's structures and patterns? How have they evolved throughout the years?
- What is the pattern and structure of inflation, money supply, and gross domestic product? How have they performed over the period?
- Which of the factors significantly influences the stock prices of Nepalese insurers?

Research objectives

The major objective of this research is to analyze the factors influencing the stock price behavior of insurance companies in Nepal. The specific objectives are as follows:

- To examine the direction & magnitude of the relationship of firm-specific and macroeconomic factors with stock prices of Nepalese insurance companies.
- To analyze how the share prices of Nepalese Insurers are impacted by dividend per share, return on equity, book value per share, size, GDP, inflation, and money supply.
- To identify the trend of different variables influencing the stock price of insurance companies in Nepal.

Literature review

The factors that affect the stock price of different companies have been the subject of several research. Nicholson (1960) focused on 100 industrial stocks and found that investing in companies with low price-earnings ratios leads to more gains and better income. Miller and Modigliani (1961) showed that a company's worth depends on its ability to generate profits, and dividends may not affect stock price if the market is imperfect. According to Fama (1981), there is a negative relationship between inflation and stock market prices, with uncertainty and inflation hampering future economic activity. Fama and French (1995) found that small businesses on the American stock market generate larger returns than big businesses. Maysami and Koh (2000) investigated the dynamic relationships between macroeconomic variables and the stock markets and found a co-integrating relationship between changes in stock market levels of Singapore and money supply growth, inflation, exchange rate variations, and short- and long-term interest rate changes. Sharma and Wongbampo (2002) studied the associations between stock returns and five macroeconomic variables across five Asian nations and documented a long-term positive relationship between stock price indices and output growth and a long-term negative relationship between aggregate price levels. Al-Deehani (2005) analyzed the factors that affect the share prices of listed companies in the Kuwait Stock Exchange, while Gunu (2009) examined Nigerian stock market prices and found that macroeconomic factors like money supply, GDP, and overall deficits significantly affect stock prices. Somoye et al. (2009) looked at the variables affecting equity prices on the Nigerian stock market and found that GDP, dividends per share, and earnings per share positively correlated with stock prices.

The link between stock prices and macroeconomic issues in various nations has been the subject of numerous studies. Eita (2011) found that Namibian stock prices are typically depressed by unorthodox monetary policy, and the country's equity market is ineffective as a hedge against inflation. Nisa and Nishant (2011) investigated the association between Karachi Stock Exchange stock prices, financial fundamentals, and macroeconomic factors using the dynamic panel GMM approach. They discovered that historical stock price behavior, firm size, and prior earnings per share are the most crucial variables and that macroeconomic indices like GDP growth,

interest rates, and financial depth significantly affect stock prices. Using the Vector Error Correction Model and the co-integration test, Chandran et al. (2011) investigated the correlation between the stock market, interest rate, inflation rate, GDP, and exchange rate in Malaysia, the US, and China. The findings showed a long-term co-integration link between stock markets in these countries and the variables studied.

Kabajeh et al. (2012) studied the share prices of Jordanian insurance businesses between 2002 and 2007 and their respective ROE, ROA, and ROI ratios. The findings revealed a strong association between the share prices of Jordanian insurance companies and the ROE, ROA, and ROI ratios. Naik and Padhi (2012) examined the BSE Sensex index of the Indian stock market and found a positive correlation between stock price, money supply, and industrial production, but a negative correlation with inflation. Saeidi and Okhli (2012) analyzed the effect of return on assets on stock prices of the companies in Tehran stock exchanges and found a significant influence and connection between the independent and dependent variables. Using information from Pakistan, India, and Sri Lanka, Aurangzeb (2012) investigated into the variables influencing the South Asian stock market's performance. The findings indicated that interest rate has a substantial negative impact on stock market performance in South Asian countries, whereas foreign direct investment and the exchange rate had a considerable positive impact. It was discovered that inflation had a detrimental but minor impact on the performance of the stock market in South Asia.

Ramzan (2013) studied the determinants of share price in the Karachi Stock Exchange using a fixed-effect regression model. The analysis discovered that, in contrast to dividend yield, asset growth, and return on asset, size had no association at all with the share price. Also, Uddin (2013) conducted a study on the financial sector of Bangladesh, which included banks, insurance, and leasing companies. Using data from 2005 to 2011, the study found a high correlation between stock price and net profit after tax, net asset value, earnings per share, and price-earnings ratio. In the same year, Malaolu et al. (2013) studied the macroeconomic factors of stock pricing in Nigeria from 1985 to 2001. Their study found that there was no co-integration between the variables, indicating that there is no long-term link. Sindhu et al. (2014) analyzed the impact of qualitative and quantitative variables on the market price per common share. They found that the most significant factors of stock pricing were the price-earnings ratio, demand for the stock, stock price rumors, changes in government policies, and economic conditions. In addition, the study found that cash flows, leverage, profitability, growth, market capitalization, and dividends account for 65% of the fluctuation in stock price. Khan (2014) studied the correlation between macroeconomic indicators and stock prices (KSE-100 index) from 1992 to 2011. The research documented that interest rates have a negative impact on stock prices, whereas exchange rates, inflation, and GDP growth rates have favorable relationships with stock prices. The independent factors in the study might account for 80% of the variation in the dependent variable. Finally, Stephen and Okror (2014) evaluated the variables that influenced stock price movement in Nigeria from 2001 to 2011. Their study found that components in the determinants of stock prices include book value per share, earnings per share, and dividend per share.

Overall, these studies provide valuable insights into the variables affecting stock prices in different countries. However, there is a research gap regarding the impact of other macroeconomic determinants on stock prices, such as trade policy, political instability, and changes in foreign exchange rates. These factors may have significant effects on stock prices in emerging markets, which may not be captured by the above studies.

Nepalese evidences

Studies on the Nepalese economy and stock market are limited, leaving room for further research. Pradhan (1993) found that larger stocks have lower profitability but less variable returns. Karki (2012) found that there is a cointegrating relationship between tourism and economic growth, which subsequently impacts the performance of the stock market. Gurung (2004) found that the securities market in Nepal is unstable and poor performing,

with a small market size and poor liquidity. Dangol (2008) argued that the stock market of Nepal is inefficient and affected by political uncertainty. Bhatta (2010) found that weak form efficiency does not exist in the Nepalese stock market and that market prices show a systematic pattern. Shrestha (2011) discovered an asymmetric V-shaped association between positive and negative stock returns and trading volume in Nepal, as well as a positive relationship between stock returns and trading volume.

According to Shrestha and Subedi (2014)'s research, while interest rates had a negative impact on the performance of the Nepali stock market, inflation and the expansion of the money supply did. The movement of the stock market index was shown to be significantly impacted by changes in politics and the Nepal Rastra Bank's policies. For commercial banks listed on the Nepalese stock market, Bhattarai (2014) observed that earnings per share and price-earnings ratios have a strong positive correlation with share price while dividend yield exhibited a substantial inverse association with share price. Bhattarai and Joshi (2015) discovered both short-run and long-run interdependence between stock index and some macroeconomic variables, with a short-run causal relationship running from the consumer price index to stock index and both reverse causality in the long run, supporting the widely held belief that stock returns are an inflation hedge.

Karki (2018) examined how Nepal's stock market performance was impacted by macroeconomic factors. For the annual statistics from 1994 to 2016, real GDP, inflation, money supply, and interest rates were taken into account. According to the study, the stock market is positively impacted by real GDP, inflation, and the money supply, but negatively impacted by interest rates. Macroeconomic variables were not found to be correlated with the stock market index, proving that they have no impact on Nepali stock prices. Additionally, Karki (2018) discovered that the most significant determinants of the stock prices of commercial banks in Nepal were earnings per share and stock dividends per share. The stock dividend in particular was determined to be the most important of the six fundamental variables considered. Using annual data from 2008/09 to 2014/15, Lamichhane and Dhungana's (2019) study on the influence of firm-specific variables on share price volatility and stock returns discovered that dividend payout and dividend yield have a positive relation with share price volatility, whereas book to market has a negative and significant relationship with stock price volatility.

According to reviews, the Nepalese stock market is severely illiquid, risky, and underdeveloped. The security market is quite niche, and trading activity is slow. The government's low priorities in financial reform policies, small market size, and high concentration ratio have made it vulnerable to manipulation and price rigging. Research also indicates a correlation between a country's level of political unpredictability and the rate at which common stocks in that country generate returns. Furthermore, while the stock market has a positive contribution to the economic growth of Nepal in the second stage, it is not significantly associated with economic growth in the first stage. Despite the extensive literature on the Nepalese context, there is a research gap in terms of examining the effect of global economic conditions on the Nepalese market.

Research methods

The study uses a descriptive and causal comparative research design to examine the variables affecting the share price behavior of Nepalese insurance companies. Finding information regarding variables like book value per share, return on equity, size, dividend per share, GDP, inflation, and money supply is performed using the descriptive research design. To comprehend the strength and direction of the relationship between the variables and the impact of these variables on the stock prices of Nepalese insurance companies, the causal comparative research design is used. In this study, a sample of 13 insurance companies from the life and non-life insurance industries is taken into account. It includes a total of 104 observations and spans the years 2007/08 to 2014/15. The sample was chosen via purposeful sampling. The Nepal Stock Exchange, the Insurance Board of Nepal, and the annual reports of representative corporations were used to gather the secondary data and information that was required. The sample companies, study time, and number of observations are listed in Table 1.

Table 1
Sample Companies along with Study Period and Number of Observations

S.N	Name of the firms	Period	Observations
1	Lumbini General Insurance Company Limited (LGICL)	2007/08-2014/15	8
2	Nepal Life Insurance Company Limited (NLIICL)	2007/08-2014/15	8
3	Himalayan General Insurance Company Limited (HGICL)	2007/08-2014/15	8
4	United Insurance Company (Nepal) Limited (UICL)	2007/08-2014/15	8
5	Premier Insurance Company (Nepal) Limited (PICLN)	2007/08-2014/15	8
6	Neco Insurance Company Limited (NICL)	2007/08-2014/15	8
7	Sagarmatha Insurance Company Limited (SIL)	2007/08-2014/15	8
8	Life Insurance Coporation (Nepal) Limited (LIICL)	2007/08-2014/15	8
9	Shikhar Insurance Company Limited (SICL)	2007/08-2014/15	8
10	Prabhu Insurance Company limited (PICL)	2007/08-2014/15	8
11	NB Insurance Company Limited (NBCI)	2007/08-2014/15	8
12	Surya Life Insurance Company Limited (SLICL)	2007/08-2014/15	8
13	National Life Insurance Company Limited Nepal (NLIC)	2007/08-2014/15	8
Total observation			104

This study uses statistical and econometric models to analyze secondary data, including descriptive, correlation, and regression analysis. The regression models are used to evaluate the variables affecting the stock price behavior of Nepalese insurance companies. The study employs various statistical tests of significance to validate the models, and based on the reviewed literatures the share price behavior takes the following form:

Share price behavior = f (DPS, BVPS, SZ, ROE, INF, GDP, and MS)

The analytical model has been presented in the manner described in more detail as in equation (i).

$$P/E \text{ ratio} = \alpha + \beta_1 \text{DPS}_{it} + \beta_2 \text{ROE}_{it} + \beta_3 \text{BVPS}_i + \beta_4 \text{SZ}_{it} + \beta_5 \text{GDP}_{it} + \beta_6 \text{INF}_{it} + \beta_7 \text{MS}_{it} + e_{it} \dots\dots\dots (i)$$

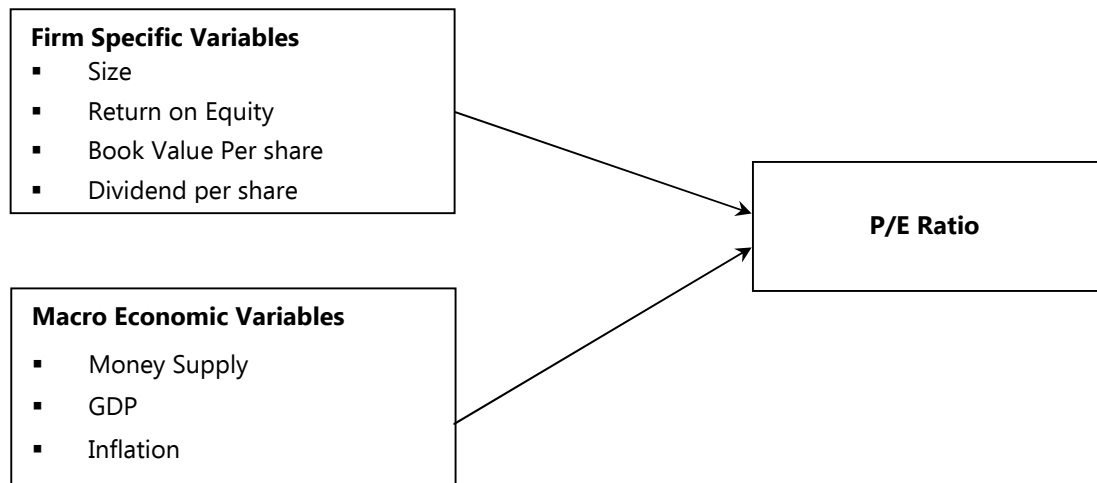
Where,

- = constant term
- P/E ratio = Price-earnings ratio
- SZ = Size or total assets
- ROE = Return on equity
- DPS = Dividend per share
- BVPS = Book-value per share
- INF = Inflation
- GDP = Gross domestic product
- MS = Money supply
- e = Disturbance or error term

Conceptual framework

The study's major focus and scope in terms of the variables considered are summarized in the following conceptual framework, which is based on the aim and the literature review. Figure 1 depicts the correlation between the dependent and explanatory factors.

Figure 1
Factors Influencing Stock Prices of Nepalese Insurance Companies



Results and discussion

The analytical process entails recognizing issues, assessing the availability of acceptable data, deciding on the method most suited to addressing the questions of interest, implementing the methodology, and evaluating, summarizing, and conveying the results. The study analyzes the structure and pattern of share price behavior indicators namely price-earnings ratio and explanatory factors namely size, dividend per share, return on equity, book value per share, gross domestic product, inflation, and money supply from 2007/08 to 2014/15 for the period of 8 years.

Table 2
Structure of P/E ratio of Sample companies for the period of 2007/08 to 2014/15 (in times)

Firms	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	Average	SD
PICLN	18.17	14.21	9.57	8.49	6.15	4.25	22.85	9.86	11.69	6.29
SIL	20.28	6.03	6.24	4.32	3.26	8.53	19.23	50.36	14.78	15.80
NLIC	2727	32.84	45.24	9.19	22.03	6.75	79.17	71.11	374.17	951.06
LGICL	36.05	15.54	8.06	16.48	4.04	4.82	17.94	7.90	13.85	10.46
HGICL	32.51	11.76	7.38	17.76	-3.63	2.53	15.80	7.14	11.41	10.98
NLICL	986.17	414.98	458.33	-31.96	4.70	11.73	76.78	68.68	248.68	352.92
UICL	35.62	132.44	33.63	27.05	7.48	9.94	20.03	8.79	34.37	41.15
LICL	497.00	21.00	-231.00	-41.00	13.00	19.00	138.00	16.00	54.00	206.67
PICL	24.56	8.00	8.74	6.00	3.00	3.00	18.00	11.00	10.29	7.52
SICL	45.49	16.22	12.41	6.76	6.32	8.62	21.35	11.24	16.05	12.91
NICL	40.73	16.73	6.33	7.93	4.72	4.13	28.74	14.12	15.43	13.10
NBCL	1131.71	2172.34	12.47	-7.72	-2.94	-6.08	-19.89	3.15	410.38	815.32
SLICL	105.83	157.53	33.63	26.71	17.64	16.95	85.63	61.05	63.12	50.21
Average	438.55	232.28	31.62	3.85	6.60	7.24	40.28	26.18		
SD	788.27	594.07	145.89	20.25	7.28	6.49	42.14	26.02		

Table 2 shows that NBCL has highest average price earnings ratio of 410.38 times followed by NLIC (374.17 times) and NLICL (248.68 times). The average price earnings ratio calculated through the year varied widely over a period of time. It declined from 438.55 times to 26.18 times in 2014/15 over 2007/08. The average price earnings ratio differs broadly within the individual insurance companies also. The price earnings ratio increased for SIL. It increased from 20.28 times in 2007/08 to 50.36 in 2014/15 for SIL. On the other hand, price earnings ratio decreased for PICLN from 18.17 times in 2007/08 to 9.86 in 2014/15, and for NLIC from 2727 times in

2007/08 to 71.11 times in 2014/15. The variation in price earnings ratio is shown by standard deviation which is lowermost for PICLN (6.29) followed by PICL (7.52) and LGICL (10.46).

Table 3 displays the descriptive data for the sample companies for the dependent variable (Price Earnings Ratio) and the independent variables (Return on Equity, Dividend per Share, Size, Book Value per Share, Gross Domestic Product, Inflation, and Money Supply).

Table 3
Descriptive Statistics for the Sample Insurance Companies of Nepal

Variables	Minimum	Minimum	Mean	Std. Deviation
PE	-231.00	2727.00	98.32	371.60
DPS	0.00	126.32	13.66	21.73
SZ	197	24762	2876.46	1.27
BVPS	6.72	330.60	152.86	56.32
ROE	-180.93	85.16	10.00	28.80
INF	5.70	11.10	9.03	1.46
GDP	2.30	5.90	4.29	1.08
MS	12.20	27.30	19.61	4.97

The result in Table 3 presents descriptive statistics for the dependent and independent variables for a particular insurance provider. With a minimum of -231 times and a maximum of 2727 times, the price earnings ratio clearly has a wide range, with an average of 98.32 times. DPS averages out to be 13.66 rupees, with a minimum of 0 rupees and a top of 126.32 rupees. Sizes range from 197 million rupees to 24762 million rupees, with an average of 2876.46 million rupees. Similar to this, BVPS has a minimum of 6.72 rupees and a maximum of 330.60 rupees, with an average of 152.86 rupees. The range of return on equity is -180.93 percent at the lowest end and 85.16 percent at the highest, with an average of 10%. The average rate of inflation is 9.03 percent, with a minimum of 5.70% and a maximum of 11.10%. Similar variations may be seen in gross domestic product, which has a range of 2.30 percent to 5.90% with an average of 4.29%. The level of the money supply might be as low as 12.20 percent or as high as 27.30 percent, with an average of 19.61 percent.

Table 4
Pearson's Correlation Matrix for the Variables used

Variables	P/E ratio	DPS	BVPS	ROE	SZ	INF	GDP	MS
P/E ratio	1							
DPS	-0.119	1						
SZ	0.018	0.632**	1					
BVPS	-0.251*	0.308**	0.155	1				
ROE	-0.59	0.479**	0.310**	0.516**	1			
INF	-0.279**	0.064	0.079	0.036	0.044	1		
GDP	0.194*	-0.098	-0.187	-0.125	-0.132	-0.379**	1	
MS	0.274**	0.015	-0.155	-0.057	-0.033	0.455**	-0.254**	1

** The correlation has a significance level of 0.01 (2-tailed).

* The correlation has a significance level of 0.05 (2-tailed).

The correlation results shown in Table 4 provide valuable insights into the association between the price earnings ratio and the various explanatory variables. Firstly, the negative relationship between the price earnings ratio and dividend per share indicates that investors may perceive higher dividend payouts as an indicator of lower future earnings growth potential, resulting in a lower price-earnings ratio. Secondly, the positive association between the size of the company and the price-earnings ratio suggests that larger companies may

be perceived as having greater stability and growth potential, leading to a higher price earnings ratio. Thirdly, the negative association between the price-earnings ratio and book value per share suggests that investors may perceive higher book value per share as an indicator of lower growth potential, resulting in a lower price-earnings ratio. Fourthly, the negative relationship between the price earnings ratio and return on equity suggests that investors may perceive a higher return on equity as an indicator of lower future growth potential, resulting in a lower price-earnings ratio.

Fifthly, the negative relationship between inflation and price-earnings ratio suggests that higher inflation may lead to higher discount rates applied to future earnings, resulting in a lower price-earnings ratio. Sixthly, the positive relationship between the price-earnings ratio and gross domestic product suggests that a growing economy may lead to higher earnings growth potential, resulting in a higher price-earnings ratio. Lastly, the positive relationship between money supply and price-earnings ratio suggests that a higher money supply may lead to higher demand for stocks, resulting in a higher price-earnings ratio. Further, the explanatory variables; BVPS, INF, GDP, and MS exhibit a statistically significant correlation with price to earnings ratio.

Table 5
Estimated Regression Results of Stock Pricing (P/E) on Study Variables for Sample Companies

Particulars	B	t	Sig.
(Constant)	-890.33	-1.024	0.309
DPS	-4.385	-1.956	0.053
ROA	-12.018	-0.92	0.36
SZ	54.431	1.58	0.118
BVPS	-1.479	-1.896	0.061
ROE	3.019	1.611	0.111
INF	-30.852	-1.127	0.263
GDP	27.018	0.903	0.369
MS	16.22	2.061	0.042

The regression analysis results presented in Table 5 show that dividend per share has a negative effect on the price to earnings ratio, but the coefficient is not significant. This implies that a higher dividend per share is associated with a lower price-earnings ratio, but this effect is not statistically significant. The finding is consistent with previous research conducted by Malhotra and Tandon (2013). However, size has a favorable effect on the price-earnings ratio. This implies that a company's price-earnings ratio will rise as its total assets increase. This result is consistent with earlier studies by Ramzan (2013) and Shafai (2012).

The book value per share has a negative and strong beta coefficient, which means that as the book value per share rises, the price-earnings ratio also rises. This result is in line with earlier studies that have been done in this field. The price-earnings ratio decreases when the return on equity increases, according to the negative beta coefficients of return on equity, but these coefficients are not statistically significant. This implies that a lower price-earnings ratio is linked to a better return on equity. Further evidence that an increase in inflation causes a decline in the price-earnings ratio comes from the fact that the inflation beta coefficient is negative and significant. This result is consistent with earlier studies by Zhou (1999), Fama and Schwert (1977), and others.

The beta coefficient of gross domestic product is positive and significant, revealing that a rise in the gross domestic product guides to a rise in the price-earnings ratio. This result supports the previous research conducted by Reddy (2012), Nisa and Nishant (2011), and Gunu (2009). Finally, the beta coefficient of the money supply is positive and statistically significant, indicating that an increase in the money supply causes a rise in the price-earnings ratio. This result is consistent with the previous research conducted in this area.

Conclusion

This study examined the factors influencing the stock price behavior of Nepalese insurance companies. The findings indicate that book value per share, dividend per share, and return on equity have a negative impact on the price-earning behavior of Nepalese insurance companies. On the other hand, size, money supply, and gross domestic product have a positive impact on share price behavior, while inflation has a negative impact. These results have important implications for investors, policymakers, and insurance companies in Nepal. Investors should consider these factors while making investment decisions, policymakers should monitor and address inflation to improve the share price behavior of insurance companies, and insurance companies should focus on increasing their size and profitability.

References

- Al-Deehani, T. (2005). Factors affecting stock prices in the Kuwaiti stock exchange. *Managerial Finance*, 31(7), 63-74.
- Al-Omar, H., & Al-Mutairi, A. (2008). The relationship between the Kuwaiti banks share prices and their attributes. *Scientific Journal of King Faisal University*, 9(1), 325-338.
- Al-Shubiri, F. N. (2010). The impact of macroeconomic factors on Jordanian stock prices (1993-2008). *European Journal of Economics, Finance and Administrative Sciences*, 20, 106-114.
- Amatya, N. (2016). Stock price and its determinants in Nepal. *Journal of Finance and Economics*, 4(4), 124-130.
- Aurangzeb, H. (2012). Factors affecting the performance of stock market: a case study of South Asian countries. *World Journal of Social Sciences*, 2(5), 147-160.
- Bhatta, G. P. (2010). Does Nepalese stock market follow random walk. *SEBON Journal*, 4(6), 18-58.
- Bhattarai, K., & Joshi, P. (2015). Macroeconomic variables and stock market: Evidence from Nepal. *NRB Economic Review*, 27(1), 15-28.
- Bhattarai, Y. R. (2014). Determinants of share price of Nepalese commercial banks. *Economic Journal of Development*, 17(18), 187-198.
- Chandran, V. G. R., Tang, C. F., & Farooq, A. (2011). The determinants of stock market performance: new evidence from Malaysia, China, and the United States. *Global Journal of Business Research*, 5(5), 65-74.
- Dangol, J. (2008). *Unanticipated Politicle Events And Stock Returns: An Event Study*. Kathmandu: Nepal Rastra Bank.
- Das, R., & Pattanayak, J. K. (2009). Factors affecting Indian stock market price: An empirical investigation. *Vision*, 13(2), 49-61.
- Dhaugoda, D. K., Dhakal, D. R., & Shakya, S. (2016). Determinants of stock prices in Nepalese stock market. *NRB Economic Review*, 28(1), 1-18.
- Eita, J. H. (2010). Determinants of stock market price in Namibia. *International Journal of Financial Management*, 5(2), 56-78.
- Fama, E. F. (1981). Stock returns, inflation, and monetary policy. *The American Economic Review*, 71(4), 545-565.
- Fama, E. F., & French, K. R. (1995). Size and book-to-market factors in earnings and returns. *The Journal of Finance*, 50(1), 131-155.
- Gompers, P. A., Ishii, J. L., & Metrick, A. (2003). Corporate governance and equity prices. *The Quarterly Journal of Economics*, 118(1), 107-155.
- Gunu, U. (2009). Environmental factors influencing of share price on Nigeria stock exchange market. *An International Multi-Disciplinary Journal*, 3(5), 199-212.
- Gurung, J. B. (2004). Growth and performance of securities market in Nepal. *The Journal of Nepalese Business Studies*, 1(1), 85-92.

- Irfan, C., & Nishat, M. (2003). Stock prices, fundamental variables, and long-term trends in the Karachi Stock Exchange. *Pakistan Development Review*, 42(4), 915-926.
- Kabajeh, M. A., Shattarat, W. M., & Dahmash, F. N. (2012). The relationship between financial ratios and stock prices: evidence from Jordanian insurance companies. *International Journal of Humanities and Social Science*, 2(22), 78-88.
- Karki, D (2012). *Economic impact of tourism in Nepal's economy using cointegration and error correction model*. 1-12, Retrieved from <https://www.researchgate.net/publication/276027809>.
- Karki, D. (2018). Fundamentals of common stock pricing: evidence from commercial banks of Nepal. *SAARJ Journal on Banking & Insurance Research*, 7(1), 4-32.
- Karki, D. (2018). Stock market responses to macroeconomic dynamics: Testing for long-run equilibrium in Nepal. *Pravaha*, 24(1), 64-82
- Khan, A. U. (2014). The impact of macroeconomic indicators on stock prices in Pakistan. *International Journal of Business and Social Science*, 5(4), 18-27.
- Lamichhane, K., & Dhungana, R. (2019). Firm-specific determinants of stock price volatility and returns in Nepal. *Journal of Economics and Business*, 2(1), 21-36.
- Malaolu, V. A., Salami, A. O., & Adegbite, T. A. (2013). Macroeconomic determinants of stock price movements in Nigeria. *International Journal of Humanities and Social Science Invention*, 2(5), 36-43.
- Malhotra, R., & Tandon, K. (2013). Determinants of stock prices: Empirical evidence from India. *International Journal of Business and Management*, 8(7), 95-106.
- Manandhar, K. D. (1998). A case of dividend policy and value of the firm in small stock market: A case of Nepal. *Management Dynamics*, 8(1), 15-20.
- Maysami, R. C., & Koh, T. S. (2000). A vector error correction model of the Singapore stock market. *International Review of Economics & Finance*, 9(1), 79-96.
- Miller, M. H., & Modigliani, F. (1961). The cost of capital, corporate finance and the theory of investment. *American Economic Review*, 48(1), 261-297.
- Naik, P. K., & Padhi, P. (2012). Impact of macroeconomic variables on stock prices: empirical evidence from India. *Journal of Economics and Behavioral Studies*, 4(2), 87-96.
- Nicholson, S. (1960). Price ratio in relation to investment results. *Financial Analysts Journal*, 16(5), 43-48.
- Nisa, M., & Nishat, M. (2011). The determinants of stock prices in Pakistan. *Asian Economic and Financial Review*, 1(4), 276-291.
- Osamwonyi, I. O., & Evbayiro, O. T. (2012). Empirical analysis of the determinants of stock prices in Nigeria. *Research Journal of Finance and Accounting*, 3(2), 62-70.
- Pradhan, R. S. (1993). Stock market behavior in a small capital market: A case of Nepal. *The Nepalese Management Review*, 9(1), 23-49.
- Rajbhandari, S. Khanal, G., Parajuli, S., & Karki, D. (2020). A review on potentiality of industry 4.0 in Nepal: Does the pandemic play catalyst role? *Quest Journal of Management and Social Sciences*, 2(2), 3557-370.
- Ramzan, M. (2013). An empirical study of the relationship between stock prices and their determinants in Pakistan. *Journal of Management Research*, 5(1), 103-121.
- Reddy, B. K. (2012). An empirical analysis of the determinants of stock prices in India. *Journal of Business Management & Social Sciences Research*, 1(4), 1-7.
- Saeidi, S. P., & Okhli, O. (2012). Analyzing the impact of return on assets on stock prices of the companies in Tehran Stock Exchange. *Journal of Basic and Applied Scientific Research*, 2(4), 3874-3880.
- Sapkota, B. R. (2016). Determinants of stock price in the context of Nepal. *Journal of Nepalese Business Studies*, 17(1), 36-51.
- Shafai, M. (2012). Determinants of stock price: A study of Pakistan's cement industry. *International Journal of Business and Social Science*, 3(18), 51-62.

- Sharma, R., & Singh, S. (2006). Determinants of share prices: a study of selected Indian companies. *Asia-Pacific Journal of Management Research and Innovation*, 2(1), 25-34.
- Sharma, S. (2011). Determinants of share price in India. *Journal of Arts, Science and Commerce*, 2(4), 51-60.
- Sharma, S. C., & Wongbampo, R. (2002). Macroeconomic factors and the Malaysian equity market: A view through rolling subsamples. *Journal of Economic Studies*, 29(1), 6-27.
- Shiller, R. (1981). Do stock prices move too much to be justified by subsequent changes in dividends? *American economic review*, 71 (3), 421-436.
- Shrestha, K. (2011). The relationship between stock returns and trading volume: Evidence from Nepal. *Journal of Finance and Bank Management*, 1(1), 37-52.
- Shrestha, K., & Subedi, B. (2014). Macroeconomic variables and stock market performance in Nepal: An empirical analysis. *NRB Economic Review*, 26(1), 1-18.
- Sindhu, M., Arif, A., & Shahid, M. A. (2014). Determinants of stock prices: empirical evidence from Karachi stock exchange. *Interdisciplinary Journal of Contemporary Research in Business*, 5(5), 185-199.
- Somoye, R. O., Arawomo, D. F., & Ogunmuyiwa, M. S. (2009). Determinants of stock prices in Nigeria: Implications for economic policy. *European Journal of Economics, Finance and Administrative Sciences*, 15, 49-58.
- Stephen, E. A., & Okoro, E. G. (2014). Determinants of stock price movement in Nigeria: Evidence from Nigeria stock exchange. *Journal of Economics and Sustainable Development*, 5(3), 1-7.
- Timilsina, S. (1997). Dividend and stock price: An empirical study. *Journal of Finance*, 3(2), 25-30.
- Uddin, M. (2009). Determinants of market price of stock: A study on bank leasing and industrial services, and food company shares. *Journal of Modern Accounting and Auditing*, 5(7), 1-7.
- Uddin, M. J. (2013). Stock Price and Financial Performance: A Study on the Banking, Insurance and Leasing Companies Listed in Dhaka Stock Exchange. *Journal of Business Studies Quarterly*, 4(2), 15-24.
- Zhao, X. (1999). Stock price, inflation and output: Evidence from China. *Applied Economics Letters*, 6(8), 509-511.