TAJMMR: Trans Asian Journal of Marketing & Management Research
ISSN: 2279-0667 Vol. 12, Issue 1, January, 2023 SJIF 2022 = 8.119
A peer reviewed journal

THE INTERNAL FINANCIAL DETERMINANTS OF STOCK PRICE: EVIDENCE FROM NEPALESE COMMERCIAL BANKS

Rohit Kumar Shrestha*; Gyanu Acharya; Bhakta Prasad Dhakal*****

*Associate Professor of Management,
PhD,
Padmakanya Multiple Campus,
T. U., Kathmandu, NEPAL
Email id: rohitshrestha92@gmail.com

**Lecturer in Economics,
Padmakanya Multiple Campus,
T. U., Kathmandu, NEPAL

***Lecturer in Management,
Padmakanya Multiple Campus,
T. U., Kathmandu, NEPAL

DOI: 10.5958/2279-0667.2023.00001.9

ABSTRACT

It is very challenging and problematic to develop a stock market in developing countries like Nepal. Several researchers examined the controversial results between stock price and its determinants. The objective of the study is to assess the effect of determinants on stock market prices in Nepalese commercial banks. The study is based on a causal-comparative research design. The quantitative approach was adopted. Secondary data was applied to the study. The study used the convenience sampling method to select commercial banks. Out of 26 commercial banks in Nepal, only 4 of the banks were selected as sample unit for the study for 10 years of data from 2010/11 to2019/20. They are Himalayan Bank Ltd., Sunrise Bank Ltd., Citizen Bank International Ltd., and Prime Commercial Bank Ltd. Pearson's multiple correlations and linear regression analysis were used for data analysis. Earnings per Share (EPS) and Dividend Per Share (DPS) have a negative and statistically insignificant effect on the Market Price Per Share (MPS). It means EPS and DPS don't affect the stock market. The Price Earning (P/E) ratio has a positive and statistically insignificant effect on MPS. P/E also doesn't affect MPS. Book Value per Share (BVPS) and Market to Book Value (MKt to BV) ratio have a positive and statistically significant effect on MPS. This indicates that an increase in BVPS and MKt to BV will invariably bring about a significant increase in the MPS. Future research can be carried out on macroeconomic determinants.

KEYWORDS: *Determinants, Dividend per Share, Earning Per Share, Stock Price, Nepal.*

INTRODUCTION

One of the main sources of financing for the company is the stock issue. The stock market is important for the financial system of the nation. Equity share is a source of capital for business organizations. The stock markets play important role in the capital formation and economy of a country. The securities markets run to trade securities as a facilitator between savers and users of the fund through sharing risks and pooling money and transferring resources for investment (Husan & Mandal, 2008).

There are two kinds of financial markets. They are the money market and the capital market. In the money market short-term securities, for example, treasury bill is traded in the market. Contrary to it long-term securities such as shares, bonds, and debentures are traded in the capital market (Gitman, 1988). Both the primary and secondary markets are complementary to each other. The capital market is the marketplace through which businessmen collect and mobilize the long–term capital i. e. common stock, preference shares, debentures, etc. Financial resources are properly channelized through the stock market. It isalso helpful for the government to finance new projects. These are the primary instruments of the capital market. Stock markets are essential for economic growth as they ensure the flow of resources to the most productive investment opportunities (Kurihara, 2006). However, the factors influencing share price are often a subject of controversial or debatable. The stock price fluctuates and is not stable due to irrational investors (Shiller, 1985).Given this, the present study attempts to evaluate the factors affecting share prices in Nepalese commercial banks.

The stock market can disclose the economy of a country. It emerged as an inevitable market playing a vital role in economic development that fosters capital formation. Stock markets may trade securities in different places. It helps in the growth of industry and commerce in the country which eventually impacts the economy of the country to a great extent (Ghimire & Mishra, 2018, p. 125).The market price of a share (MPS) is the function of different influential factors. These factors are also affected by the demand and supply of share prices. Both the qualitative and quantitative factors determine the stock price. Factors that affect the stock market price are controversial and unpredictable issues. Shiller's study (1981) found that share prices are unstable excessively because of market irrationality. Stock exchange reacts to environmental changes. Many research studies have been performed regarding the factors of share prices in various nations. These studies conducted at different times across various nations found varying results (Sharma, 2011).It is very challenging and problematic to develop a stock market in developing countries. Several researchers that examined the relationships between selected determinants and stock prices reveal a variety of findings depending on the scope of the study (Husan & Mandal, 2008). Nepalese commercial banks under study have no exception to the issues. Considering these issues, the study is expected to answer the following research questions:

"What is the effect of EPS, DPS, P/E ratio, BVPS, and MKt to BV on MPS in Nepalese commercial banks?"

REVIEW OF LITERATURE

The review of literature consists of the conceptual review, theoretical perspective, and empirical evidence of the study as given below:

Conceptual Reviews:

This study is based on internal factors. Based on past research studies the independent and dependent variables studied in this study are briefed as given below:

Earnings Per Share (EPS) is also known as net profit per share. It is calculated as under**:**

Earnings per share (EPS) = Net income /No. of shares outstanding

A dividend Per Share (DPS) is the part of earnings the company distributes in cash or stock to its shareholders known as a dividend. It is calculated as under**:**

Dividend Per Share (DPS) = Total dividend to ordinary shareholders/ No. of common outstanding

The price/Earning (P/E) Ratio is the ratio of market price in comparison to the current EPS of the company. It is calculated as the P/E Ratio=Market value per share/ Earnings per share

Book Value Per Share (BVPS) is fixed by relating the original value of a firm's common stock adjusted for any outflow.It is calculated as under:

Book Value per Share = (Total Common Stockholders Equity – Preferred Stock) / Number of common shares.

Market to Book Value (MKtto BV) ratio is a financial valuation that shows the company's current market value relative to its book value.It is calculated as under:

MKt to BV Ratio = Market capitalization / Net book value

Market Price per Share (MPS) is also termed as share price. The market price of a share is the price that is paid by the buyer to the seller to buy the share which is traded in the capital market.

Theoretical Perspective:

The Efficient Market Hypothesis (EMH) theory argues that stocks are always traded at their fair price on exchanges. The stock value should be neither undervalued nor inflated in the stock market (Downey, 2021).According to behavioral theory, behavioral finance describes several reactions to financial markets that stand to be contrary to traditional theory and can make a crucial contribution to the avoidance of mistakes and finding investment strategies (Fromlet, 2001).

Empirical Studies:

Al – Deehani (2005) concluded that EPS, DPS, the previous year's dividend, return on equity, and price to book value is highly correlated with the share price of companies in the Kuwait stock exchange. A study by Nirmala et. al., (2011) on "Determinants of Share Prices in India" concluded that dividend, price-earnings ratio, and leverage significantly impacted stock prices for all the sectors. However, profitability influenced stock prices only in the auto sector (p. 188). A study conducted by Sharma (2011), on "Determinants of Equity Share Prices in India" found that earning per share, dividend per share, and book value per share has a significant effect on the market price of the share. A study by Hasan & Mandal (2008) on "Determinants of Stock Price: A Case Study on Dhaka Stock Exchange" indicated that the P/E ratio, EPS, net income, return on investment, demand & supply of influence the stock price. The market force and

economic determinants are not the main determinants of stock prices. In contrast, non-economic, political, and social factors influence the stock price (pp. 11-12).

A study performed by Bhattarai (2014) on "Determinants of Share Price of Nepalese Commercial Banks" concluded that EPS and P/E ratio are the most influencing factors in determining stock price in the commercial banks of Nepal because they have a significant positive relationship with the stock price while dividend yield revealed the significant negative relationship with the stock price (p. 196).A study was performed by Niroula (2021) on "Stock Price Behavior of Commercial Banks of Nepal" to determine the impact of EPS, PE ratio, dividend yield (DY), BVPS, Size, ROE, and ROA on MPS. In his study, he found that EPS, PE, ratio, and bank size have a significant and favorable impact on MPS. DY and ROA impacted MPS in a positive insignificant manner. The impact of BVPS and ROA has negative and negligible. Similarly, Wagle (2021) revealed that MKt to BV, P/E proportion and Earning Yield (E/Y) ratio have a significant positive relationship with the stock market price. As opposed to these the DY ratio has a positive but insignificant association with the stock price.Singh's (2018) study on "Stock Price Determinants: Empirical Evidence from Securities Market, Oman concluded that EPS is a significant factor of stock price while dividend payout is an insignificant determinant. Ghimire & Mishra's (2018) study concluded that the MKt to BV and P/E ratios are the significant positive determining factors of stock price which affect the stock price indirectly manner. Similarly, DPS and BVPS also have a significant positive relationship with the stock price; however, EPS has minimal influence (pp. 132-133).

SIGNIFICANCE OF THE STUDY

This study on the effect of major financial indicators like EPS, DPS, P/E ratio, BVPS, and MKt to BV on the MPS of the Nepalese commercial banks is rational itself. The study indicated the status of Nepalese commercial banks for the determination of the share price. These findings may be helpful to potential investors to make better investment decisions. The information on such determinants and their probable effect on stock prices are important as it would assist new or existing investors to make rational investment decisions and help companies to increase their market value (Bringham & Houston, 2015). This study will be helpful as literature for academicians and researchers for further research. The finding of this study is valuable to the stakeholders, concerned bankers, learners, and government agencies, which assist them to know about the stock market and its possibility in the nation. Finally, the research helps the national economy through the mobilization of scarce resources in productive sectors to accelerate the economic growth of the country.

OBJECTIVE OF THE STUDY

The objective of the study is to assess the effect of EPS, DPS, P/E ratio, BVPS, and MKt to BV on MPS in Nepalese commercial banks.

HYPOTHESIS

The hypothesis test directing this research study is:

H_1: EPS has a significant positive effect on the MPS.

H_2: DPS has a significant positive effect on the MPS.

H_3: P/E ratio has a significant positive effect on the MPS.

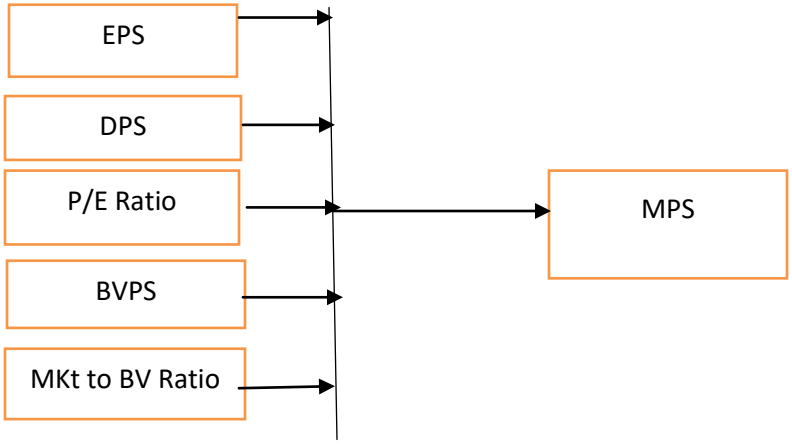
H_4: BVPS has a significant positive effect on the MPS.

H_5: MKt to BV has a significant positive effect on the MPS.

The conceptual framework is expected that the market price per share of commercial banks may be impacted by EPS, DPS, P/E ratio, BVPS, and MKt to BV. Based on the literature review, theory, and major empirical evidence, the following conceptual model has been portrayed:

Figure 1

Conceptual Framework



Research gap:

Even though a few research have been found on this phenomenon, researchers have not reached a consensus on whether or not EPS, DPS, P/E Ratio, BVPS, and MKt to BV affect the MPS. Such contradiction or inconclusiveness encourages further research. Therefore, the study will be benefited to fulfill the gap.

METHODOLOGY

The study is based on a descriptive and analytical research design. The quantitative approach was adopted. The method of secondary datawas applied in this study. Out of 26 commercial banks in Nepal, only 4 banks were selected as sample units for the study covering 10 yearsof datai. e. from the Fiscal Year 2010/11 to2019/20. They are Himalayan Bank Ltd., Sunrise Bank Ltd, Citizen Bank International Ltd., and Prime Commercial Bank Ltd. which are selected based on a convenience sampling technique. Pearson's multiple correlations and linear regression analysis were used for data analysis.

RESULTS AND DISCUSSION

This section includes findings, the meaning of findings, comparison, interpretation, and conclusion.

Results incorporate the following findings and reporting of findings:

Correlation Analysis

Table 1

Pearson Correlation Coefficients of MPS and Explanatory Variables namely EPS, DPS, P/E Ratio, BVPS, and MKt To BV

Variables		Share Price	EPS	DPS	P/E Ratio	BVPS	MKt to BV
MPS	Pearson Correlation	1					
	Sig. (2-tailed)						
EPS	Pearson Correlation	.794**	1				
	Sig. (2-tailed)	0					
DPS	Pearson Correlation	.677**	.815**	1			
	Sig. (2-tailed)	0	0				
P/E Ratio	Pearson Correlation	0.222	-0.23	-.163	1		
	Sig. (2-tailed)	0.168	0.154	.316			
BVPS	Pearson Correlation	.632**	.758**	.576**	-0.126	1	
	Sig. (2-tailed)	0	0	0	0.437		
MKt to BV	Pearson Correlation	.899**	.637**	.595**	0.284	0.27	1
	Sig. (2-tailed)	0	0	0	0.076	0.092	

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

Share price (dependent variable)

EPS, DPS, P/E Ratio, BVPS, and MKt to BV(independent variables).

Where,

MPS = Market Price per Share;

EPS = Earnings Price Per Share; DPS = Dividend Per Share; P/E Ratio = Price Earnings Ratio; BVPS = Book Value Per Share; MKt to BV = Market to Book Value.

Table 1 shows that a high positive correlation was found between EPS and MPS as their correlations were o.794. The correlation between DPS and MPS was also found high as their correlation was 0.677. However, theP/E ratioand MPS have a moderate positive and insignificant relationship as their correlation was 0. 222 and sig. value is greater than the p-value i. e. (0.168> 01). Similarly, the correlation between BVPS and MPS was high which was found 0.632.The strongest correlation was found between MKt to BV ratio and MPS as their correlation was 0.899.

Regression Analysis:

The multiple regression analysis has been applied to explain the effect of the explanatory variables (determinants) i. e. EPS, DPS, P/E ratio, BVPS, and MKt to BV on MPS.

TABLE 2 REGRESSION ANALYSIS OF THE DETERMINANTS OF MPS

Predictors	Coefficients	t-Static	Standardized coefficients	Sig.
Constant	-560.54	-13.02	-0.031	0
EPS	-0.848	-0.372	-0.372	0.712
DPS	-1.128	-0.767	-0.767	0.449
P/E Ratio	0.997	1.062	1.062	0.296

BVPS	3.978	9.122	9.122	0
MKtto BV	149.53	15.17	15.171	0

Significant at the 0.01 level (2-tailed)

R^2 = 0.975; Adjusted R^2 = 0.971; F-value=264.528; F (Sig.) =0Where,

Dependent variables=MPS; Predictors (constant)= EPS, DPS, P/E Ratio, BVPS, and MKt to BV

Table 2 shows that the adjusted R^2 is 0.971. Similarly, F is about 264.528 and a p-value or F(sig.) is equal to 0.000. The model in this study is constructed as MPS = α+ β_1 EPS + β_2 DPS + β_3 P/E + β_4 BVPS+ β_5 MKt to BV + ε. Thus, the regression equation can be presented as MPS= -560.54-0.848EPS- 1.128DPS+0.997P/E+3.978BVPS+149.53MKt to BV. The coefficients of EPS, DPS, P/E ratio, BVPS, and MK_t to BV are -0.848, -1.128, 0.997, 3.978, and 149.53 respectively. The P-values of EPS, DPS, P/E ratio, BVPS, and MK_t to BV are 0.712, 0.449, 0.296, 0, and 0 respectively.

The discussion includes the following comparison of findings and interpretation:

Table 2 shows that adjusted R^2 is 0.971 which means the total variation in the dependent variable (MPS) is jointly explained with 97.1% by independent variables (EPS, DPS, P/E Ratio, BVPS, and MKt to BV), the rest 2.9% of variations in stock markets are explained by other factors not captured by the model. Similarly, findings from the Fishers ratio (i.e., the F-Statistics) which is proof of the validity of the estimated model. The F is about 264.528 and a p-value or F(sig.) is equal to 0.000. It means the overall model (F-value) is significant at the 0.01 level for the study which means that the independent variables were able to explain the dependent variable. The overall model strongly determines the rejection of the null hypothesis.

Table 2 shows that EPS has an inverse insignificant effect on MPS as its coefficient is -0. 848 with a p-value or significance value (0.712) which is greater than the significance level/alpha. Hence, the null hypothesis is accepted and the alternative hypothesis (H_1) is rejected. It indicates that the MPS can increase by -0.848 when the EPS score increases by 1 score on average keeping the effect of other variables constant. This result is contrasted by Sharma (2011), Niroula (2021), Hasan & Mandal (2008), Bhattarai (2014), and Singh (2018). It is interpreted that EPS cannot affect MPS.

DPS has also a negative and insignificant effect on MPS due to its p-value (0.449)> significance value/alpha (0.01).Hence, the null hypothesis is accepted and the alternative hypothesis (H_1) is rejected. It indicates that the MPS can increase by -1.128 when the DPS score increases by 1 score on average This result is similar to Singh (2018), however, the result is contrasted by Sharma (2011), Niroula (2021), Hasan & Mandal (2008), Bhattarai (2014), and Singh (2018).It is interpreted that DPS cannot affect MPS.

Similarly, empirical finding from the regression analysis indicates that the P/E ratio has an insignificant positive effect on MPS due to coefficient (0.997) and p-value (0.296) > 01.Hence, the null hypothesis is accepted and the alternative hypothesis (H_1) is rejected. It indicates that the MPS can increase by 0.997 when the BVPS score increases by 1 score on average keeping the effect of other variables constant. This result is contrasted with Hasan & Mandal (2008), Bhattarai (2014), Nirmala et. al., (2011), and Ghimire & Mishra (2018).

Likewise, BVPS has a significant coefficient of 3.978 (t = 9.12, p-value < 0.01). Hence, the null hypothesis is rejected and the alternative hypothesis (H_1) is accepted. It indicates that the MPS can increase by 3.978 when the BVPS score increases by 1 score on average keeping the effect of other variables constant. This study is inconsistent with Niroula (2021). It can be interpreted that BVPS affects MPS.

Finally, the empirical finding from the regression analysis shows that MKt to BV ratio has a significant and positive effect on MPS, since its coefficient is 149.53 and p-value < .01. Hence, the null hypothesis is rejected and the alternative hypothesis (H_1) is accepted. It indicates that the MPS can increase by 149.53 when the MKt to BV score increases by 1 score on average keeping the effect of other variables constant. Importantly this finding is consistent with the findings provided by Ghimire & Mishra (2018). It can be interpreted that MKt to BV ratio affects MPS.

Whenever the comparison of relative impact is required, Standardized Coefficients are useful. EPS, DPS, P/E ratio, BVPS, and MKt to BV have Standardized Coefficients -0.372, -0.767, 1.062, 9.122, and 15.171.These difference scores indicate that MKt to BV ratio has the best effect on the MPS and the DPS has the worst effect on the MPS.

FINDINGS AND RECOMMENDATION

The major findings of the research study are as given below:

MPS can increase by -0.848 when the EPS score increases by 1 score on average keeping the effect of other variables constant. The MPS can increase by -1.128 when the DPS score increases by 1 score on average. The MPS can increase by 0.997 when the BVPS score increases by 1 score on average keeping the effect of other variables constant. The MPS can increase by 3.978 when the BVPS score increases by 1 score on average keeping the effect of other variables constant. The MPS can increase by 149.53 when the MKt to BV score increases by 1 score on average keeping the effect of other variables constant.

The research recommends that the results of the research can assist to identify the behavior of the stock market in the Nepalese stock market and formulate policies and plans for market stabilization. Future research can be performed on macroeconomic factors such as interest rate, inflation, gross domestic product, and exchange rate.

CONCLUSION

One of the main sources of financing for the company is the stock issue. The rising stock price is a good indicator of happiness for the stakeholders of the company. The objective of the study is to analyze the effect of determinants on the market price of the share in commercial banks of Nepal. Correlation and regression analysis were used to analyze quantitative secondary data. R^2 is capable of explaining about 97.5% of the variability in stock price. The F- value is significant at the 0.01 level which means that the independent variables were able to explain the dependent variable. EPS and DPS have a negative and statistically insignificant effect on MPS. It means EPS and DPS cannot contribute to increasing MPS. The P/E ratio has a positive and statistically insignificant effect on MPS. It means the P/E ratio does not help to increase MPS. BVPS and MKt to BV have a positive and statistically significant effect on BVPS. This indicates that an increase in BVPS and MKt to BV ratio will invariably bring about a significant increase in the MPS.

REFERENCES

Acharya, K. (2019). *Determinants of stock price on Nepalese commercial banks.* (Master's Thesis, Tribhuvan University).

Adhikari, N. (2004). Security Market in Nepal. *SEBON Journal,* 5(2).

Adhikari, N (2015). Nepalese securities market regulation and development. *The Journal of Nepalese Business Studies.*

Al-Deehani TM (2005). The determinants of stock in Kuwait stock exchange: An extreme bounds analysis. *Investment management and financial innovation,* 3, pp. 16-24.

Almumani, M. A. (2014). Determinants of equity share prices of the listed banks in Amman stock exchange: Quantitative approach. *International Journal of Business and Social Science.*

Bajracharya, B. C. (2067 BS). *Business statistics.* M. K. Publishers and distributors.

Bhattarai, Y. R. (2014). Determinants of share price of Nepalese commercial banks. *EconomicJournal of Development Issues,* 17(1), pp. 187-198.

Brigham, E. F., & Houston, J. F. (2015). *Fundamentals of Financial Management.* Cengage Learning.

Downey, L. (2021). *Efficient Market Hypothesis (EMH).*

Citizens Bank International Ltd. (2072BS). *Annual report.* available at: https://www.ctznbank.com/assets/backend/uploads/Reports%20and%20Disclosure/Annual%20Reports/Tenth%20Annual%20Report%20English.pdf. (Assessed: 11 November 2022).

Citizens Bank International Ltd.(2077BS). *Annual report.*https://www.ctznbank.com/assets/backend/uploads/pdf/Citizens%20bank%20annual%20report%202019-20%20Final.pdf

Desai, R. (2015). *Stock market poised to do well in2015.*

Fromlet H. (2001). Behavioral finance theory and practical application: Systematic analysis of departures from the homo economic us paradigm are essential for realistic financial research and analysis. *Business Economics,* 36 (3), pp. 63-69.Available at: https://www.jstor.org/stable/23488166. (Assessed: 17 November 2022).

Gitman, L.J. (1991). *Principle of managerial finance*. Harper Collins Publications.

Ghimire R. R. and Mishra D. (2018). Determinants of stock price in Nepalese market. *The International Research Journal of Management Sciences*, 3 (1), pp. 125-135. Available at: http://ncm.edu.np/wp-content/uploads/2018/12/Stock-price.pdf. (Assessed: 21 September 2022).

Hasan M. D. and Mandal M. S. A. (2008). Determinants of stock price: a case study on Dhaka stock exchange. The Chittagong University *Journal of Business Administration*, 23, pp. 281-294.Available at: https://www.researchgate.net/publication. (Assessed: December 5 2022).

Hair J. Money A., Page M. and Samoul P. (2007). Research methods for business. Routledge.

Himalayan Bank Ltd. (2077 BS). *Annual report.* Available at: https://www.himalayanbank.com/images/pdf/uploaded/HBL%2028_Annual%20Report%202076-077_final.pdf. (Assessed: 13 August 2022).

Himalayan Bank Ltd. (2072 BS). *Annual report.* Available at: https://www.himalayanbank.com/images/pdf/uploaded/23rd_annual_report.pdf. (Assessed: 13 August 2022).

Nirmala, P.S., Sanju, P. S. & Ramachandran, M. (2011). Determinants of share prices in India. *Journal of Emerging Trends in Economics and Management Science (JETEMS)*, 2(2), pp, 124-130.

Niroula B. (2021). Stock price behavior of commercial banks of Nepal. *Patan Pragya*, 8(1), pp. 27-36.

Prime Commercial Bank Ltd. (2072 BS). *Annual report*. Available at: Available at: https://www.primebank.com.np/uploads/annual/Annual_Report_2071-72.pdf. (Assessed: 27 August 2022).

Prime Commercial Bank Ltd. (2077 BS). *Annual report.* Available at: https://www.primebank.com.np/uploads/annual/Annual_Report_2076-77.pdf. (Assessed: 27 August 2022).

Sharma, S. (2011). Determinants of equity share prices in India. *Journal of Arts, Science & Commerce,* 2(4), pp. 51-60.

Shiller, R.(1981). Do stock prices move too much to be justified by subsequent changes in dividends? *American Economic Review*, 71, pp. 421–436.

Shiller, F. (1985). *The study of behavior of bank stock*. ISBN printing house.

Singh, D. (2018). *Stock price determinants: Empirical evidence from Muscat Securities Market, Oman*. Available at: https://www.intechopen.com/chapters/61720. (2 June 2022).

Sun Rise Bank Ltd. (2072 BS). *Annual report*.https://www.sunrisebank.com.np/assets/backend/uploads/report/english8.pdf

Sun Rise Bank Ltd. (2077 BS). *Annual report.*Available at: https://www.sunrisebank.com.np/assets/backend/uploads/untitled%20folder/Annual%20Report%20Combined.pdf. (Assessed: 9 June 2022).

Wagle S. (2021). Determinant of stock market prices in Nepal: A case of commercial banks. SDMIMD *Journal of Management,* 12(2). https://www.informaticsjournals.com/index.php/sdmimd/article/view/27989. (Assessed: 13 December 2022).