English Section

Impact of firm specific and macroeconomic factors on share price behavior of Nepalese commercial banks

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Abstract

This study examines the effect of firm specific and macro-economic factors on share price behavior of Nepalese commercial banks. The dependent variables are share price and share return. The independent variables are earnings per share, price earnings ratio, return on assets, assets size, dividend per share, gross domestic product and inflation. The study is based on secondary data of 26 commercial banks with 208 observations for the period from 2011/12 to 2018/19. The data were collected from Banking and Financial Statistics published by Nepal Rastra Bank, annual reports of Nepal Stock Exchange and Security Board of Nepal and annual reports of the selected commercial banks. The correlation coefficients and regression models are estimated to test the significance and importance of firm specific and macroeconomic factors on the share price behavior of Nepalese commercial banks.

The study showed that earnings per share has a positive impact on share price and share return. It indicates that increase in earnings per share leads to increase in share price and share return. The study also showed that price earnings ratio has a positive impact on share price and share return. It reveals that increase in price earnings ratio leads to increase in share price and share return. Likewise, return on assets has a positive impact on share price and share return indicating higher the return on assets, higher would be the share price and share return. In addition, the study showed that assets size has a positive impact on share price. It indicates that larger the assets size, higher would be the share price. In addition, dividend per share has a positive impact on share price and share return. It reveals that increase in dividend per share leads to increase in share price and share return. However, inflation rate has a negative impact on share price. It reveals that increase in inflation rate leads to decrease in share price. Furthermore, gross domestic product has a positive impact on share price and share return. It means that higher the gross domestic product, higher would be the share price and share return.

Keywords: *Share price, share return, earnings per share, price earnings ratio, return on assets, assets size, dividend per share and inflation.*

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1. Introduction

Stock market plays a significant and substantial role in the economic development of country by promoting capital formation and raising economic growth. The price of a company's share represents investors' confidence in the future profitability of the company and also used to represent the value of shareholders' wealth. The share price is a significant determinant for the investment decision of investors in the share market because investors mainly focus on the price of shares when they decide to invest in shares. However, share prices are fluctuating every day, which depends on various internal factors like dividend payout, dividend yield, dividend per share, sales growth, leverage, earnings volatility, and firm size as well as external factors like exchange rate, inflation, and GDP. Therefore, investors need to have knowledge and awareness about the factors which determine share price in order to make an optimum investment decision (Sharif *et al*., 2015). The share price of a company changes to reflect its performance or investors' perception about the future performance of the company, as well as the general economic outlook of the country. The decision of an investor to buy shares in a company and the timing of such decision is based on the share price of the company. Rational investors are motivated to invest in companies with strong financial performance, or a growing company. The value of a company is reflected in its share price which also reflects investors' confidence about the performance of the company.

According to Fama (1981), a stock market is said to be efficient (pricing) if current securities' prices reflect all available information. In an efficient market, stock prices would be analyzed by technical analysis or fundamental analysis. Technical analysis evaluates the stock price movement and predicts the future stock price based on historical data of stock price. Fundamental analysis evaluates the intrinsic value of the company and compares it to the stock price. Srinivasan (2012) stated that understanding the impact of various fundamental variables on stock price is very much helpful to investors as it will help them in taking profitable investment decisions. Docking and Koch (2005) discovered the direct relationship between dividend announcement and equity price behavior. According to Tandon and Malhotra (2013), investment in shares offers the benefit of liquidity as well as the opportunity to beat the market and earn high returns. However, the task of predicting share prices is far from simple. Share price movement is not independent in nature and both intrinsic as well as extrinsic factors have been established to exercise influence over stock price movements.

Hunjra *et al*. (2014) concluded that dividend yield and dividend payout ratio which are both the measures of dividend policy have significant impact on stock price. The study also showed that dividend yield is negatively related to stock price. In addition, dividend payout ratio is positively related to stock price which

means that these results are against dividend irrelevance theory. Similarly, profit after tax and earnings per share have significant positive impact on stock price and return on equity has positive insignificant impact on stock price. In addition, Malik *et al*. (2012) assessed the effect of dividend policy on stock price in Karachi Stock Exchange for the period of 10 years from 2001 to 2010. The study showed that profit after tax has a positive significant relationship with stock price which means if company is earning high profit, then its share price will become high. The results also showed significant positive relationship between stock price and return on equity. The study explained that if company is utilizing the funds provided by shareholders efficiently, then it will produce positive impact on stock price otherwise it has negative impact on stock prices. Furthermore, Liu and Hu (2005) analyzed the cash dividend payment in Chinese listed companies. The study found that companies which pay more cash dividend have high earnings per share and return on equity. Similarly, the study also stated that earnings per share and return on equity are positively related to stock prices of the firms.

The investment decision of the investors of the stock market is greatly influenced by the market price of a share (Uddin *et al.,* 2013). Investors utilize different analytical tools to assess investment opportunities in order to make appropriate decisions in selecting stocks. The stock market plays a significant role in the allocation of resources, both directly as a source of funds and as a determinant of firms' value and its borrowing capacity. It works as an intermediary between savers and companies seeking additional financing for business expansion. It provides a platform to individuals, governments, firms and organizations to trade and invest through the purchase of shares. A stock market is very crucial to sustainable economic growth as it can assure the flow of resources to the most productive investment opportunities. Chandra (1981) indicated that size has a significant positive impact on market price of share. Macroeconomic factors such as GDP growth rate and inflation have positive and significant relationship with market price per share (Al-Shubiri, 2010).

Atchyuthan (2017) determined the factors that influence the share prices of manufacturing firms in Sri Lanka. The study revealed that earnings per share and dividend per share have significant positive association with share price. Kengatharan and Ford (2021) investigated the factors determining the share price volatility of listed companies in the Colombo Stock Exchange (CSE), Sri Lanka. The study concluded that dividend yield, dividend per share, exchange rates, and firm size have a significant impact on price volatility in the Sri Lankan context. Mehmood *et al*. (2019) examined the determinants of stock price volatility in Pakistan stock exchange over the period 2011-2015. The results revealed that there is a positive relationship between stock price volatility and dividend payout ratio. Besides, earnings volatility and leverage have a negative relationship with stock

price volatility. Similarly, assets growth and size have a positive relationship with stock price volatility. Enow and Brijlal (2016) investigated the determinants of share prices using fourteen companies listed on the Johannesburg Stock Exchange from 2009-2013. The study found that dividends per share, earnings per share, and price-earnings ratio accounts for 57.8 percent of share price movements. Furthermore, earnings per share and price-earnings are positively correlated to share prices.

Musah and Aryeetey (2021) examined the factors that influence share price of firms listed on the Ghana Stock Exchange. The results of the study showed that firm-specific variables such as firm size, book ratios of debt to asset ratio, return on asset and return on equity are positively related to share price of listed firms in Ghana. Similarly, Baah and Tawiah (2014) examined the factors that influence dividend policy and how dividend policy affects share price of listed firms in Ghana. The study reported statistically insignificant relationship between dividend payout and share price of listed firms in Ghana. In addition, Aveh and Awunyo-Vitor (2017) examined firm-specific determinants of share price after the adoption of IFRS in Ghana. The study reported that earnings per share, book value and market capitalization and return on equity are significant determinants of share price in Ghana. Moreover, Adam and Tweneboah (2010) found that in the short run, inflation and exchange rate influence the stock market price in Ghana.

In the context of Nepal, Silwal and Napit (2019) examined the determinants of the stock market price in Nepalese commercial banks for the period of 2008/09 to 2017/18. The result showed that book value per share, price earnings ratio, return on equity and dividend yield have positive impact on the share price. Similarly, the study also concluded that dividend yield has minimum influence on stock market price whilst size has insignificant impact on determining stock market price of commercial banks in Nepal. Bhattarai (2016) assessed the determinants of share price of commercial banks listed on the Nepal Stock Exchange Limited over the period of 2006 to 2014. The results revealed that earning per share and price- earnings ratios have the significant positive association with share price while dividend yield has a significant inverse association with share price. The major conclusion of the study is that dividend yield, earning per share and price-earnings ratio are the most influencing factors in determining share price in Nepalese commercial banks.

Sapkota (2016) revealed that there is a positive relationship of market price of share with earnings per share, dividend per share, return on assets, price earnings ratio and gross domestic product. In addition, Thapa (2019) revealed that earning per share, dividend per share, effective rules and regulations, market whims and company profiles have significant positive association with share price. However, interest rate and price to earnings ratio have significant inverse association with share price. Furthermore, Amatya (2016) found that there is a positive impact of

dividend per share, firm size, capital adequacy ratio, gross domestic product and inflation on bank performance as well as share price. Ghimire and Mishra (2018) examined the relationship between stock price and explanatory variables like: Dividend per share, earnings per share, price-earnings ratio, book value, market to book value for the period 2012 to 2017. With the sample size of 11 financial and non-financial firms of Nepal, the result indicated that the variables market to book value and price-earnings ratio are the significant determinants of stock price which directly affect the stock price. Likewise, Dividend per share and book value also have significant positive influence on stock price whereas earnings per share has less influence on the stock price.

The above discussion shows that empirical evidences vary greatly across the studies on the impact of firm specific and macroeconomic factors on share price behavior of commercial banks. Therefore, in order to support one view or the other, this study has been conducted. Hence, this study focuses on the impact of firm specific and macroeconomic factors on share price behavior of Nepalese commercial banks.

The main purpose of the study is to analyze the impact of firm specific and macroeconomic factors on share price behavior of Nepalese commercial banks. Specifically, it examines the impact of earnings per share, price earnings ratio, return on assets, assets size, dividend per share, gross domestic product and inflation on share price and share return in the context of Nepalese commercial banks.

The remainder of this study is organized as follows. Section two describes the sample, data and methodology. Section three presents the empirical results and the final sections draws conclusion and discusses the implications of the study findings.

2. Methodological aspects

The study is based on the secondary data which were gathered for 26 commercial banks in Nepal with 208 observations for the period of 2011/12 to 2018/19. The main sources of data include Banking and Financial Statistics published by Nepal Rastra Bank, annual reports of Nepal Stock Exchange and Security Board of Nepal and annual reports of the selected commercial banks. Table 1 shows the list of commercial banks selected for the study along with the study period and number of observations.

Table 1: List of commercial banks selected for the study along with the study period and number of observations

S. N.	Name of the banks	Study period	Observations
1	Agricultural Development Bank Limited	2011/12-2018/19	8
2	Bank of Kathmandu Limited	2011/12-2018/19	8
3	Century Commercial Bank Limited	2011/12-2018/19	8
4	Citizens Bank International Limited	2011/12-2018/19	8
5	Civil Bank Limited	2011/12-2018/19	8
6	Everest Bank Limited	2011/12-2018/19	8
7	Global IME Bank Limited	2011/12-2018/19	8
8	Himalayan Bank Limited	2011/12-2018/19	8
9	Kumari Bank Limited	2011/12-2018/19	8
10	Laxmi Bank Limited	2011/12-2018/19	8
11	Machhapuchchhre Bank Limited	2011/12-2018/19	8
12	Mega Bank Nepal Limited	2011/12-2018/19	8
13	Nabil Bank Limited	2011/12-2018/19	8
14	Nepal Bangladesh Bank Limited	2011/12-2018/19	8
15	Nepal Bank Limited	2011/12-2018/19	8
16	Nepal Credit and Commerce Bank Limited	2011/12-2018/19	8
17	Nepal Investment Bank Limited	2011/12-2018/19	8
18	Nepal SBI Bank Limited	2011/12-2018/19	8
19	NIC Asia Bank Limited	2011/12-2018/19	8
20	NMB Bank Limited	2011/12-2018/19	8
21	Prabhu Bank Limited	2011/12-2018/19	8
22	Prime Commercial Bank Limited	2011/12-2018/19	8
23	Sanima Bank Limited	2011/12-2018/19	8
24	Siddhartha Bank Limited	2011/12-2018/19	8
25	Standard Chartered Bank Nepal Limited	2011/12-2018/19	8
26	Sunrise Bank Limited	2011/12-2018/19	8
Total number of observations			**208**

Thus, the study is based on the 208 observations.

The model

The model estimated in this study assumes that the share price behavior depends on firm specific and macroeconomic variables. The dependent variables are share price and share return. The selected independent variables are earnings per share, price earnings ratio, return on assets, assets size, dividend per share,

gross domestic product and inflation. Therefore, the following model equations are designed to test the hypothesis.

$SP = \beta 0 + \beta 1\ EPS + \beta 2\ PE + \beta 3\ ROA + \beta 4\ AS + \beta 5\ DPS + \beta 6\ GDP + \beta 7\ INF + e$

$SR = \beta 0 + \beta 1\ EPS + \beta 2\ PE + \beta 3\ ROA + \beta 4\ AS + \beta 5\ DPS + \beta 6\ GDP + \beta 7\ INF + e$

Where,

SP = Share price is defined as a closing market share price of the year, in Rupees.

SR =Share return is defined as difference between current year share price and previous year share price to current year share price, in percentage.

EPS = Earnings per share is defined as share price to price earnings, in Rupees.

PE = Price earnings ratio is defined as share price to earnings per share, in times.

ROA = Return on assets is defined as the ratio of net income to total assets, in percentage.

AS = Asset size is measured in terms of total assets, Rupees in billion.

DPS = Dividend per share is defined as total dividends paid out over an entire year divided by the number of outstanding ordinary shares issued, in Rupees.

GDP = Gross domestic product is defined in terms of gross domestic product of the year, Rupees in billion.

INF = Inflation rate is defined as change in consumer price index, in percentage.

The following section describes the independent variables used in this study.

Earnings per share

Geetha and Swaaminathan (2015) defined earnings per share as the ratio of the profit after tax of the company for any financial year after the payment of preference dividend. Jatoi *et al.* (2014) showed that earning per share (EPS) has a positive and significant impact on the market value of share. According to Miller and Modigliani (1961), firms share price is based upon its earnings and firm's value is unrelated to dividend policy. The study on the determinants of market price of share showed that the dividend per share and earnings per share are positively related to market price of share. Uddin *et al.* (2013) observed that earnings per share has a significant positive impact on the stock price of the companies. Earnings per share, profitability and firm size have positive relationship with market price of share (Shrestha, 2015). Based on it, this study develops the following hypothesis:

H_1: There is a positive relationship between earnings per share and share price behavior.

Price earnings ratio

Geetha and Swaaminathan (2015) pointed that price earnings ratio enables an investor to make appropriate calculation of the time required to cover the investment in a company's stock. High price earnings ratio suggests that investors are expecting higher earnings growth in the future compared to companies with a lower price earnings ratio (Tandon and Malhotra, 2013). In addition, Almumani (2014) indicated that price earnings ratio has a significant positive association with firm's stock price. Similarly, Arslan *et al*. (2014) analyzed the impact of dividend yield and price earnings ratio on stock returns of non-financial listed firms of Pakistan. The study revealed that price earnings ratio and size of firm have significant positive impact on stock prices. Based on it, this study develops the following hypothesis:

H2: There is a positive relationship between price earnings ratio and share price behavior.

Return on assets

Return on assets depicts the efficiency of company's management in utilizing all resources or assets of the firm to procure earnings (Ambreen and Aftab, 2016). Kabajeh *et al.* (2012) revealed a significant positive relationship between return on assets and share prices of Jordanian insurance public companies. Similarly, Anwaar (2016) investigated the impact of firm performance on stock returns of the firms listed on FTSE-100 Index, London Stock Exchange over the period 2005 to 2014. The results showed that net profit margin and return on assets have significant positive impact on stock returns. In addition, Ebrahimi (2011) revealed that earning per share and return on assets have a positive effect on stock price. Moreover, Idawati and Wahyudi (2015) showed a positive relationship between ROA and stock price. Based on it, this study develops the following hypothesis:

H3: There is a positive relationship between return on assets and share price behavior.

Asset size

Macharia and Gatuhi (2013) concluded that there is positive and significant relationship between company size and market share price. In addition, size has a positive significant relationship with stock returns (Ramzan and Naveed, 2013). Similarly, Dickens *et al.* (2002) found that the temptation to buy shares of large companies lead to increase its market price with access to capital, better credit rating, and more customers, which will enhance their profitability and ability to pay higher dividends. This results in increase in share price of the large companies. In addition, Chandra (1981) found that size has significant positive impact on market price of share. Based on it, this study develops the following hypothesis:

H4: There is a positive relationship between asset size and share price behavior.

Dividend per share

Khanna and Zahir (1982) stated that dividend is the portion of the profit after taxes which are distributed to the share- holders for their investment and bearing risk in the company. Sundaram and Rajesh (2016) found that firm's earnings per share, price earnings ratio and dividend per share have a significant and positive association with stock price. Similarly, the rise in GDP, dividend and P/E ratio leads to rise in share prices, whereas B/M ratio and interest rate are negatively related to share prices (Khan, 2012). Kim and Maddala (1992) concluded that there is positive relationship between dividend per share and firm performance. Based on it, this study develops the following hypothesis:

H5: There is a positive relationship between dividend per share and share price behavior.

Gross domestic product

Al-Shubiri (2010) examined the relationship of macroeconomic factors with the stock price. The study found that there is highly positive significant relationship between market price of stock and gross domestic product. Furthermore, Mehr-Un-Nisa and Nishat (2011) found that macroeconomic indicator like GDP growth rate and money supply have positive and significant relationship with the stock prices. Moreover, Taulbee (2001) showed that gross domestic product has a significant positive correlation with the stock price. Based on it, this study develops the following hypothesis:

H6: There is a positive relationship between gross domestic product and share price behavior.

Inflation

Inflation means a sustained increase in the aggregate or general price level in economy. Hamao (1988) showed that inflation significantly influenced Japanese stock returns. Gallagher and Taylor (2002) found that stock return is negatively affected by both expected and unexpected inflation. Similarly, inflation rate has a significant negative impact on stock price movement in Nigeria (Malaolu *et al.*, 2013). In addition, Aurangzeb (2012) stated that there is a negative but insignificant impact of inflation on stock market performance. Based on it, this study develops the following hypothesis:

H7: There is a negative relationship between inflation and share price behavior.

3. Results and discussion

Descriptive statistics

Table 2 presents the descriptive statistics of selected dependent and independent variables during the period 2011/12 to 2018/19.

Table 2: Descriptive statistics

This table shows the descriptive statistics of dependent and independent variables of 26 Nepalese commercial banks for the study period of 2011/12 to 2018/19. The dependent variables are SP (Share price is defined as a closing market share price of the year, in Rupees) and SR (Share return is defined as difference between current year share price and previous year share price to current year share price, in percentage). The independent variables are EPS (Earnings per share is defined as share price to price earnings, in Rupees), PE (Price earnings ratio is defined as share price to earnings per share, in times), ROA (Return on assets is defined as the ratio of net income to total assets, in percentage), AS (Asset size is measured in terms of total assets, Rupees in billion), DPS (Dividend per share is defined as total dividends paid out over an entire year divided by the number of outstanding ordinary shares issued, in Rupees), GDP (Gross domestic product is defined in terms of gross domestic product of the year, Rupees in billion) and INF (Inflation rate is defined as change in consumer price index, in percentage).

Variables	Minimum	Maximum	Mean	SD
SP	0.00	5123.00	609.55	646.54
SR	-87.38	256.60	12.46	55.14
EPS	-40.23	198.53	28.18	21.81
PE	-3.41	83.94	21.23	13.38
ROA	-3.43	4.01	1.56	0.82
AS	5.70	217.70	70.40	41.47
DPS	0.00	105.26	19.23	15.71
GDP	15.27	34.64	23.42	6.26
INF	4.20	9.90	7.21	2.31

Correlation analysis

Having indicated the descriptive statistics, Pearson's correlation coefficients are computed and the results are presented in Table 3.

Table 3: Pearson's correlation coefficient matrix

This table shows the bivariate Pearson's correlation coefficients of dependent and independent variables of 26 Nepalese commercial banks for the study period of 2011/12 to 2018/19. The dependent variables are SP (Share price is defined as a closing market share price of the year, in Rupees) and SR (Share return is defined as difference between current year share price and previous year share price to current year share price, in percentage). The independent variables are EPS (Earnings per share is defined as share price to price earnings, in Rupees), PE (Price earnings ratio is defined as share price to earnings per share, in times), ROA (Return on assets is defined as the ratio of net income to total assets, in percentage), AS (Asset size is measured in terms of total assets, Rupees in billion), DPS (Dividend per share is defined as total dividends paid out over an entire year divided by the number of outstanding ordinary shares issued, in Rupees), GDP (Gross domestic product is

defined in terms of gross domestic product of the year, Rupees in billion) and INF (Inflation rate is defined as change in consumer price index, in percentage).

Variables	SP	SR	EPS	PE	ROA	AS	DPS	GDP	INF
SP	1								
SR	0.229**	1							
EPS	0.482**	0.022	1						
E	0.482**	0.190**	-0.061	1					
ROA	0.352**	0.020	0.501**	-0.040	1				
AS	0.197**	-0.239**	0.234**	-0.033	0.386**	1			
DPS	0.701**	0.057	0.474**	0.319**	0.452**	0.291**	1		
GDP	0.101	0.333**	-0.134	-0.097	0.212**	0.733**	0.030	1	
INF	-0.169*	0.552**	0.154*	0.193**	-0.158*	-0.594**	0.052	-0.824**	1

Note: The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent levels respectively.

Table 3 shows that earnings per share is positively correlated to share price. It indicates that increase in earnings per share leads to increase in share price. The study also shows that price earnings ratio has a positive relationship with share price. It reveals that higher the price earnings ratio, higher would be the share price. Likewise, the study also shows that return on assets has a positive relationship with share price. It indicates that higher the return on assets, higher would be the share price. In addition, the study shows that assets size is positively correlated to share price. It indicates that larger the assets size, higher would be the share price. In addition, dividend per share is positively correlated to share price. It reveals that increase in dividend per share leads to increase in share price. However, the study shows that inflation rate has a negative relationship with share price. It reveals that increase in inflation rate leads to decrease in share price. Furthermore, gross domestic product has a positive relationship with share price. It means that higher the gross domestic product, higher would be the share price.

On the other hand, earnings per share is positively correlated to share return. It indicates that increase in earnings per share leads to increase in share return. The study also shows that price earnings ratio has a positive relationship with share return. It reveals that higher the price earnings ratio, higher would be the share return. Likewise, the study also shows that return on assets has a positive relationship with share return. It indicates that higher the return on assets, higher would be the share return. However, the study shows that assets size is negatively correlated to share return. It indicates that larger the assets size, lower would be the share return. In addition, dividend per share is positively correlated to share return. It reveals that increase in dividend per share leads to increase in share return. However, the study shows that inflation rate has a positive relationship with share return. It reveals that increase in inflation rate leads to increase in share return. Furthermore, gross

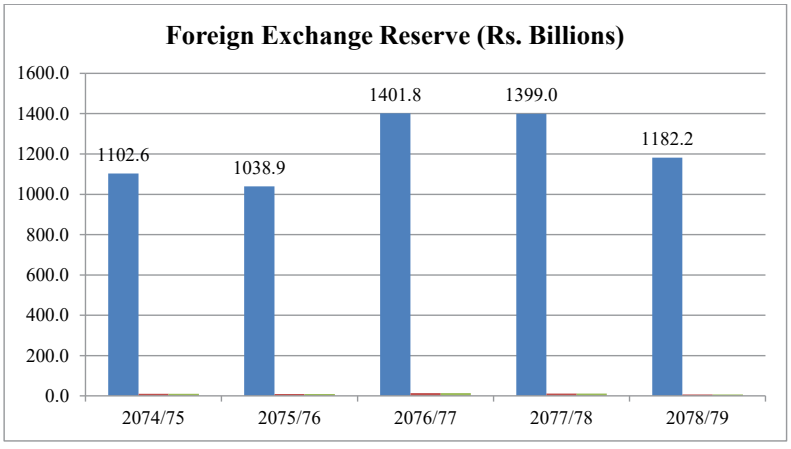
domestic product has a positive relationship with share return. It means that higher the gross domestic product, higher would be the share return.

Regression analysis

Having indicated the Pearson's correlation coefficients, the regression analysis has been carried out and results are presented in Table 4. More specifically, it shows the regression results of earnings per share, price earnings ratio, return on assets, assets size, dividend per share, gross domestic product and inflation rate on share price of Nepalese commercial banks.

Table 4: Estimated regression results of earnings per share, price earnings ratio, return on assets, assets size, dividend per share, gross domestic product and inflation rate on share price of Nepalese commercial banks

The results are based on panel data of 26 commercial banks with 208 observations for the period of 2011/12-2018/19 by using the linear regression model and the model is SP= β0 + β1 EPS+ β2 PE+ β3 ROA + β4 AS + β5 DPS + β6 GDP + β7 INF + e, where the dependent variable is SP (Share price is defined as a closing market share price of the year, in Rupees). The independent variables are EPS (Earnings per share is defined as share price to price earnings, in Rupees), PE (Price earnings ratio is defined as share price to earnings per share, in times), ROA (Return on assets is defined as the ratio of net income to total assets, in percentage), AS (Asset size is measured in terms of total assets, Rupees in billion), DPS (Dividend per share is defined as total dividends paid out over an entire year divided by the number of outstanding ordinary shares issued, in Rupees), GDP (Gross domestic product is defined in terms of gross domestic product of the year, Rupees in billion) and INF (Inflation rate is defined as change in consumer price index, in percentage).



Notes:

i. *Figures in parenthesis are t-values.*

ii. *The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.*

iii. *Share price is the dependent variable.*

Table 4 shows that the beta coefficients of return on assets are positive with share price. It indicates that return on assets has a positive impact on share price. This finding is similar to the findings of Idawati and Wahyudi (2015). Similarly, the beta coefficients of dividend per share are positive with share price. It indicates that dividend per share has a positive impact on share price. This finding is consistent with the findings of Kim and Maddala (1992). Likewise, the beta coefficients of price earnings ratio are positive with share price. It indicates that price earnings ratio has a positive impact on share price. This finding is similar to the findings of Arslan *et al*. (2014). Similarly, the beta coefficients of earnings per share are positive with share price. It indicates that earnings per share have a positive impact on share price. This finding is consistent with the findings of Miller and Modigliani (1961).

Table 5 shows regression results of earnings per share, price earnings ratio, return on assets, assets size, dividend per share, gross domestic product and inflation rate on share return of Nepalese commercial banks.

Table 5: Estimated regression results of earnings per share, price earnings ratio, return on assets, assets size, dividend per share, gross domestic product and inflation rate on share return of Nepalese commercial banks

The results are based on panel data of 26 commercial banks with 208 observations for the period of 2011/12-2018/19 by using the linear regression model and the model is SR = β0 + β1 EPS+ β2 PE+ β3 ROA + β4 AS + β5 DPS + β6 GDP + β7 INF + e, where the dependent variable is SR (Share return is defined as difference between current year share price and previous year share price to current year share price, in percentage). The independent variables are EPS (Earnings per share is defined as share price to price earnings, in Rupees), PE (Price earnings ratio is defined as share price to earnings per share, in times), ROA (Return on assets is defined as the ratio of net income to total assets, in percentage), AS (Asset size is measured in terms of total assets, Rupees in billion), DPS (Dividend per share is defined as total dividends paid out over an entire year divided by the number of outstanding ordinary shares issued, in Rupees), GDP (Gross domestic product is defined in terms of gross domestic product of the year, Rupees in billion) and INF (Inflation rate is defined as change in consumer price index, in percentage).

Model	Intercept	Regression coefficients of							Adj.	SEE	F-value
		EPS	PE	ROA	AS	DPS	GDP	INF	R_bar^2		
1	10.859	0.057							0.004	55.261	0.104
	(1.732)	(0.323)									
2	-4.121		0.781						0.131	54.273	7.675
	(0.583)		(2.770)**								
3	34.84				-0.318				0.053	53.672	12.484
	(4.743)**				(3.533)**						

4	8.643 (1.427)					0.199 (0.813)			0.002	55.186	0.661
5	81.085 (5.781)**						2.93 (5.063)**		0.206	52.127	25.638
6	-82.539 (7.855)**							13.172 (9.491)**	0.301	46.107	90.072
7	-6.745 (0.764)	0.087 (0.499)	0.79 (2.791)**						0.028	54.372	3.948
8	-7.707 (0.740)	0.069 (0.343)	0.79 (2.786)**	0.929 (0.175)					0.023	54.510	2.630
9	8.126 (0.737)	0.097 (0.462)	0.753 (2.487)**	7.635 (1.361)	-0.385 (3.968)**	0.045 (0.147)			0.086	52.727	4.879
10	62.960 (3.099)**	0.212 (0.938)	0.654 (2.198)*	10.133 (1.829)	-0.017 (0.114)	-0.03 (0.098)	3.092 (3.185)**		0.151	51.572	5.940
11	-212.408 (5.756)**	0.345 (1.77)	0.267 (1.026)	11.239 (2.357)**	0.031 (0.237)	-0.125 (0.481)	2.731 (2.526)**	20.48 (8.471)**	0.353	44.353	17.135

Notes:

i. Figures in parenthesis are t-values.

ii. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.

iii. Share return is the dependent variable.

Table 5 shows that the beta coefficients of earnings per share are positive with share return. It indicates that earnings per share have a positive impact on share return. This finding is similar to the findings of Uddin *et al.* (2013). Similarly, the beta coefficients of dividend per share are positive with share return. It indicates that dividend per share has a positive impact on share return. This finding is consistent with the findings of Sundaram and Rajesh (2016). Likewise, the beta coefficients of price earnings ratio are positive with share return. It indicates that price earnings ratio has a positive impact on share return. This finding is similar to the findings of Tandon and Malhotra (2013). Similarly, the beta coefficients of gross domestic product are positive with share return. It indicates that gross domestic product has a positive impact on share return. This finding is consistent with the findings of Al-Shubiri (2010).

4. Summary and conclusion

The stock market plays an important role in the economic growth of a country by promoting capital formation and raising economic growth. Trading of securities in stock market facilitates savers and users of capital fund pooling, risk sharing, and transferring wealth. The trading sector is becoming the backbone of the financial system and an engine for economic growth in the county.

This study attempts to examine the impact of firm specific and macroeconomic

variables on share price behavior of Nepalese commercial banks. This study is based on secondary data of 26 commercial banks with 208 observations for the period of 2011/12 to 2018/19.

The study shows that the earnings per share, price earnings ratio, return on assets, assets size, dividend per share and gross domestic product have positive impact on share price of commercial banks in Nepal. However, inflation rate has a negative impact on share price. The study also shows that earnings per share, price earnings ratio, return on assets, dividend per share, gross domestic product and inflation have positive impact on share return. However, assets size has a negative impact on the share return. The study concluded that dividend per share followed by earning per share and price earnings ratio is the most significant factor that explains the changes in share price of Nepalese commercial banks. The study also concluded that inflation followed by gross domestic product and assets size is the most significant factor that explains the changes in share return of Nepalese commercial banks.

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Necessity of Municipal Bonds for Urban Development in Nepal

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Background

Rapid urbanization is a world-wide phenomenon in developing countries like Nepal. Nepal has 753 local level government authorities in which 460 are rural municipalities and 293 are urban municipalities. Metropolitan (500,000+ population), sub-metropolitan (200,000+ population), and municipality (10,000+ population) are the three kinds of municipalities in Nepal. There are six metropolitan cities, 11 sub-metropolitan cities, and 276 municipalities in Nepal. Since the government has increased number of municipalities, there is need to improve provision of urban infrastructure services. In order to meet the financing challenges to address these needs, the government must accelerate the development of markets in long-term bonds sold by local governments, often referred to as "municipal" bonds.

Municipal bonds are securities or debt instruments issued by municipalities or city authorities to raise capital for public works and income generating projects. They usually carry a fixed interest rate. For the local government, it enables them to raise money to finance the necessary infrastructure to develop the localities without relying heavily on the central government.

Sound local government finance is becoming more important in developing countries like Nepal. In recent years a number of developing countries have been undergoing political decentralization, with central governments devolving to local governments the responsibilities for delivering local public services and developing the key infrastructure that requires large financial resources. This trend demands that local governments strengthen their financial capacity. Decentralization is based on the recognition that participation of key local stakeholders, including local governments and communities, is critical for economic growth and poverty reduction. By enabling local governments to efficiently allocate resources for public service delivery, decentralization reforms aim to reduce the large fiscal deficits of central and local governments.

The Status of Urban and Rural Municipalities in Nepal

The rapid urbanization in most developing countries reinforces the need both to improve existing, often poorly maintained, infrastructure and to meet new

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demand for housing, education, water supply, sanitation, solid waste management and public transport. This requires massive investments, much of which should be financed by local or municipal governments. Local government finance has become an increasingly important issue due to decentralization. Excessive reliance of local governments on central government transfers for their development expenditures restricts active and voluntary development of essential infrastructure demanded by local communities.

Most of municipal services rendered by both urban and rural municipalities are not satisfied. The key services like drinking water, sanitation, school and health facilities are either privately provided at overpriced or are poorly delivered through publicly funded institutions. Urban areas experience deficiencies in basic urban services, environmental degradation and encroachment on public lands, forests and river banks. Most of the urban municipalities lack properly engineered and operated sanitary landfills and they have limited and intermittent water supply services, poorly maintained road infrastructure and inadequate drainage systems.

Province	HQ	MC*	SMC*	Municipality	Rural Municipality	Total Local Level
State 1	Biratnagar	1	2	46	88	137
Madhesh	Janakpur	1	3	73	59	136
Bagmati	Hetauda	3	1	41	74	119
Gandaki	Pokhara	1	0	26	58	85
Lumbini	Deukhuri	0	4	32	73	109
Karnali	Birendranagar	0	0	25	54	79
Sudurpashchim	Godawari	0	1	33	54	88
Nepal		**6**	**11**	**276**	**460**	**753**

Source: Ministry of Federal Affairs and General Administration.

MC = Metropolitan City and SMC* = Sub-metropolitan City*

Banks or Bonds?

Developing local credit markets is imperative for local governments in developing countries because of the need to access private domestic savings to finance infrastructure investments for urban services. Urban growth has multiplied demand for investment in water systems, wastewater collection and treatment, roads, and other facilities. At the same time, decentralization strategies have shifted much of the responsibility for this investment to local governments. Local governments should consider two models of municipal credit market (i) bank

lending, which financed municipal investment in Western Europe throughout most of the 20th century and is still the primary source of local credit financing there; and (ii) municipal bonds, which have been the foundation of municipal borrowing in North America.

The US municipal bond market is the most vibrant form of this model. It introduced credit-rating agencies, public disclosure of financial information, and private bond insurance to limit credit risk. Developing countries may find it difficult to adopt the US model to their infant local credit markets. First, the benefits of credit rating agencies may be watered down when the model is introduced in a regime of restricted access to financial information. Second, most policy makers wrongly assume that bond issues immediately open the doors to long-term financing, thus failing to craft the policies that will make long-term finance possible. Third, this model is deficient in serving the needs of smaller and less creditworthy local governments.

Many countries simultaneously use bank lending to municipalities and local bond issuance. The policy rationale, however, justifies emphasizing development of local bond markets. The public monitoring and public disclosure required for efficient bond market operation are consistent with greater transparency for all public financial transactions. In a competitive world, bonds have more ways to tap institutional and household long-term savings. Even when the ultimate credit extended to a local government continues to be a loan from a bank or other financial institution, the financial intermediary will increasingly raise its own capital for on lending from bond issues that is the direction of change for the most successful intermediation vehicles.

Basic Principles for Local Bond Financing

Developed market economies' practices in flotation of local government bonds cannot be replicated in developing countries like Nepal. The following specific conditions must be considered for local bond financing:

1. **Repayment Capacity:** The scale of local government bonds must be in line with repayment capacity, which requires local governments to predict revenue and repayment capacities and achieve a balance between current needs and future repayment capacity. Legislative bodies should approve the scale of bond issuance at corresponding government levels.
2. **Prudence and Efficiency:** Local governments must consider the returns on bond funds. To avoid risk, bond proceeds should only be used for capital expenditures, not for balancing current account deficits, which should be solved through adjustment of revenue and expenditure. Returns are direct and indirect. Direct

returns refer to the revenue from the project itself and indirect returns refer to the calculable increase in government revenue through expenditure on projects that do not generate revenue themselves, such as an improved investment environment and better transportation through free roads. Local governments must ensure that the proceeds from bond issuance go to revenue-generating projects.

3. **Central Government Regulation and Coordination:** To avoid the risk of local government over borrowing due to decentralized decisions, the central Government should coordinate and control the aggregate scale of government bonds. A clear and effective system of central approval should be established, including the creation of a government bond management committee to plan the aggregate scale of central and local government bonds, chart the progress of bond issuance, and coordinate and supervise local government bonds. The committee can also check local operations at the issuing, using, and repayment stages. Credit of local government bonds should be rated and the results publicized so that local governments will strictly abide by the relevant laws and regulations and keep accurate records.
4. **Determining Fund Modalities:** Not all cities are qualified to issue government bonds. Local governments applying for bond issuance should be strictly examined. Certain large and medium-sized cities may be allowed to issue government bonds first. Other cities may be allowed later. Issuers may include cities under direct central administration and state planning, cities administered by provinces, cities along coasts and rivers, famous tourist cities, and other development zone cities above a certain size. Specific conditions may be set. For example, a local government applying for issuance must have a balanced budget or surplus, no fiscal deficit within the last 3 years and sound credit with no record of default.

Capital Market Development

Stock market is one of the significant components of capital market that plays a crucial role in the economy by channelizing the funds from savers to the investors. The trading of securities in the stock market is extremely important for the efficient allocation of capital within economies. If the financial transmitting mechanism is inefficient, the flow of funds to real investment will be impeded and the level of activities will fall below the potential. The well-functioning of stock market ensures economic development through the prompt capital accumulation and tuning it through better resource allocation in productive and basic infrastructural sectors of the nation.

The historical background of stock market in Nepal starts with the establishment of Biratnagar Jute Mill in 1936 AD and Nepal Bank Ltd. in 1937 AD Securities Exchange Centre was established in 1976 AD with an objective of

facilitating and promoting the growth of capital market, before conversion into Nepal Stock Exchange Ltd. (NEPSE). It was the only stock market institution undertaking the job of brokering, underwriting, managing public issues, market making for government bonds and other financial services. NEPSE opened its trading floor for its members first on January 13, 1994, which could only accommodate 50 members adopting an open out-cry system, which later on replaced by the partial automation system for the transaction of securities.

The Automated Trading System (ATS), an internationally compatible trading system was inaugurated on 24 August 2007. The system eliminated all possible human errors as seen in the open out-cry trading procedures. Several international practices have been incorporated to make the system internationally compatible and modifications have also been made to customize the existing rules and regulations of the country. After the introduction of the ATS and with the initiative and guidance of NEPSE, member brokers of NEPSE started online trading through Wide Area Network (WAN) from their own office from 13 October 2007. Because of this facility, stock brokers can now sell or buy shares from their office. The brokers who have the necessary infrastructure prescribed by NEPSE will get access to WAN.

The Securities Board of Nepal (SEBON) is regulator of the capital market that regulates issue and trading of securities and market intermediaries, promote the market and protect investor's rights. The SEBON is responsible to register securities and approve prospectus of public companies, provide license to operate stock exchanges, provide license to operate securities businesses, permit operation of collective investment schemes and investment funds, draft regulations, issue directives and guidelines and approve bylaws of stock exchanges, supervise and monitor stock exchanges and securities business activities, take enforcement measures to ensure market integrity, frame policies and programs relating to securities markets and advise to the government. Since capital market is one of the significant parts of financial system so SEBON needs to develop a policy for capital market expansion and development through inclusive financial environment in the nation.

Municipal Bonds and Infrastructure Development

Municipal bonds are debt instruments issued to raise funds; investors receive the principle amount plus interest in return. Municipal bonds have been used as a source of funding for regional infrastructure development. It is widely used in many nations, particularly in the United States and Europe. United States began building of the canal in New York City in 1812 using the municipal bonds and considered the most advanced in the utilization of municipal bonds for infrastructure construction. There is growing use of municipal bonds in Europe, Asia and other developed

nation for the infrastructure financing. Ahmedabad, Bangalore, Hyderabad, Nashik, Nagpur, Ludhiana, Madurai, and Indore were among the first cities in India to use municipal bonds for infrastructure projects. Many emerging economies are attempting to accelerate the development of municipal bonds.

The municipal bonds are often used for urban development such as waste management, water supply, infrastructure initiatives, green initiatives, and smart city development. Municipal bonds are an option for financing infrastructure that is more promising than relying solely on government funds. Municipal bonds urged local governments to instantly embrace good governance elements such as openness and accountability in the financial management arena. The advantages of municipal bond issuance as a cost-effective and fairly equitable financing option. Municipal bonds are frequently seen as a less expensive alternative to public-private partnerships (PPPs), or ways that preserve greater public control over projects and service delivery.

The Roadmap for Municipal Bond Practices in Nepal

There is no practices of municipal bond in Nepal. It is necessary to develop law at first. Development of municipal bond markets requires viable infrastructure projects, with definite cash flows, a regulatory framework enabling private sector participation in local projects, and cash-flow-generating capability of projects through defined user charges and fiscal and financial capability of the city governments. The local level institutions should have ability to demonstrate the financial and operational efficiency necessary to attract investments from the private sector. There is need significant capacity building to access municipal bond markets.

Local governments need long-term capital for investment in urban infrastructure, and given local level institutions' resource constraints, the time is ripe to develop municipal bond markets. The growth of institutional investors, such as pension funds, provident funds, and insurance companies, implies increasing demand for local debt securities. However, if bond markets are to cater to the needs of local government financing, particularly of urban infrastructure, the central, state, and local governments must solve their legal, administrative, and capacity-building problems. The municipal bond issuance requires significant capacity building and capital planning by the issuers, as well as building capital market relationships, making investors aware of the issuer profile, and becoming familiar with market intermediaries and the regulatory environment.

Fiscal and financial management at the state and city government level requires financial and technical resources that many local governments do not have. Areas needing attention are numerous, such as fiscal reform, expenditure management, tax reforms, user charges, reform of state public enterprises, reform of urban sector and city governance, and design of regulatory frameworks such as for municipal borrowing power and bankruptcy. These require significant training and capacity building.

Conclusion and Suggestions

Almost all cities face challenges arising from poor urban governance, mismanagement of funds, and a lack of accountability by urban local bodies, resulting a lack of adequate infrastructure, lack of access to basic urban services, a lack of housing, inequalities in access to public infrastructure and increased pressure on limited resources. Municipal bonds may be better solutions for urban development since they are a more stable and effective source of urban financing for urban local governments. Municipal bonds can be governed by the Securities Board of Nepal (SEBON) through essential acts, rules and regulations. After studying financial, legal, and institutional aspects, the Securities Exchange Board of Nepal (SEBON) should begin the process of issuing municipal bonds in Nepal for the sustainable urban development. Municipal bonds may support local governments obtain the large sums of money required for the urban development, but they must maintain strong financial health and operational performance in order to receive high credit ratings and attract investor interest. The significance of strict monitoring and regulation of local borrowing is generally recognized for the sustained development of a municipal bond system in developing countries like Nepal, particularly in light of rising public debt and global worries over excessive fiscal deficits. The active participation of government is essential in constructing a viable and dynamic municipal bond system through local capacity building to financial empowerment of local government and required legal adjustments.

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Initial Public Offering Stock Returns: A Review Note

Jas Bahadur Gurung*

Introduction

Initial public offering (IPO) is considered as the original sale of firm's securities to the wider public originally in the primary market to raise fresh capital (Brealey & Myers, 2003). It is the issuance of securities in the primary market either after incorporation or conversion of private limited to public limited company. The job of issuing the securities is entrusted to the investment banking company. Primary market also provides a forum for the sale of new securities called seasoned new issues, by the companies that are already public (Gitman & Joehnk, 2012). Mainly the companies that are small and fast growing and require more capital to their expansion, they go for public with prospectus. Moreover, an established large private company can also be looking additional cash infusions through IPOs. They obtain external equity financing through IPO of shares. Companies need listing on a stock exchange when they go public for many reasons including easier access to additional capital, lower cost of financing with greater diversification and liquidity as well as to undertake potential attractive investments. As such, any private company that issues equity to the general public for raising fresh capital then it becomes a public limited company.

IPOs are issued under the varieties of pricing methods such as fixed price, book-build price and auction price. In a fixed price IPO, the company fixes the IPO price in advance as the sum of the par value and sometimes at premium. The offering price is established without first formally attempting to learn investor valuations (Benveniste & Busaba, 1997). However, investors apply for the IPOs at the stated price. In a book-build issue the company will only provide an indicative price range followed by road show especially to the institutional investors who transmit nonbinding indications of interest to the underwriter. Once the book building process is over, the issuing firm and the underwriter set a price of IPOs (Derrien & Womack, 2003). Similarly, price sealed bid is used and auctioneer chooses the highest price in auction pricing of IPOs. Generally, it is found that IPO pricing is widely used through the book-building route in the international arena.

Several empirical studies have documented that the IPO pricing methods do have an impact on the degree of IPO initial returns, short-run and long run returns as well as the efficiency of the IPO market. The following section discusses the IPO performance in the primary market of developed and emerging countries and others.

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Initial Returns

Initial return is the phenomenon of a positive gain to a new issue after the first day of trading relative to the offer price. According to Du (2014) initial return is often referred to as the underpricing. Empirical studies have shown that underpricing occurs across countries and over time, suggesting that firms leave a considerable amount of money on the table. Loughran et al., (1994) reported that underpricing generally occurs in virtually all of the IPO markets around the world. The extent of underpricing is termed as "issue price discount" (Wong & Chiang, 1986).

The deeper the underpricing, the higher will be the initial returns resulting into the better performance or returns of IPOs for the investors (Welch, 1989). On the other hand, deeper the underpricing, the issuing firms are not able to realize the true value of the offerings resulting into the loss of wealth of the company as it represents the part of the indirect cost of going public. As investors are categorized into informed and uninformed, Rock (1986) argued that underpricing is necessary to induce uninformed investors to take part in the offering of IPOs despite the adverse selection problem introduced by the presence of informed investors. Most of the literature on IPO underpricing documented that such an underpricing is due to informational asymmetry existing between three main participants of the IPO process namely; an underwriter, an issuer and an investor.

Empirical studies have shown that there is a positive gain i.e. initial return (or underpricing) in new issues of common stock which is an almost universal feature of the IPO market. Table 1 depicts the positive initial returns of IPOs across countries.

Table 1

Evidence on Initial Returns (Underpricing) of IPOs

Country	Source	Sample Size	Time Period	Avg. Initial Return (%)
United States	Ibbotson (1975) Croes (2017)	771 294	1960-1969 2010-2017	11.40 19.61
UK	Levis (1993) Chambers and Dimson (2009)	712 NA	1980-1988 1989-2007	14.30 19.00
Hong Kong	Dawson (1987)	21	1978-1983	13.80
Singapore	Lee, Taylor and Walter (1996)	132	1973-1992	31.39
France	Jenkinson and Mayer (1988)	11	1986-1987	5.10
Malaysia	Jelic, Saadouni and Briston (2001)	182	1980-1995	99.25
Korea	Dhatt, Kim and Lim (1998)	477	1980-1996	74.30
Canada Jog and Riding (1987)		100	1971-1983	11.50
Switzerland	Kunz and Aggarwal (1994)	42	1983-1989	35.80

Australia	Finn and Higham (1988) Steen, Kalev and Turpie (2001)	93 177	1966-1978 1989-1998	20.80 29.20
Netherland	Van Frederikslust and Van der Geest (2003)	106	1985-1987	16.00
OECD Countries*	Sundarasen (2018)	6182	2003-2012	23.74
Thailand	Wethyavivorn and Koo-Smith (1991)	32	1988-1989	56.70
Pakistan	Alim, Ramakrishnan and Khan (2016)	77	2000-2015	32.64
Brazil	Aggarwal and Leal (1993)	62	1980-1990	78.50
China	Su and Fleisher (1999) Ma (2005)	308 A-shares	1987-1995 1991-2003	948.60 175.25
India	Singh and Mittal (2000) Sahoo and Rajib (2010) Hawaldar, Kumar and Mallikarjunappa (2018)	500 92 464	1992-1996 NA 2001-2011	82.22 46.55 28.65
Nepal	Dahal (2007) Subedi (2012) Gurung (2020)	107 57 63	1994-2006 2006-2010 2010-2019	53.25 504.40 276.87

*OECD Countries = Organization of Economic Cooperation and Development countries, established on September 30, 1961.

Source: Literature survey 2021

Table 1 presents a glimpse of IPO initial returns across the countries for different time periods. The results suggests that IPO underpricing (or initial returns) is lower in developed markets than that of emerging and other markets. The degree of IPO underpricing is comparatively higher in the under-developed markets like Nepal. Those who invests in IPO share of companies are benefitted with initial returns in the primary market. IPO initial return (or underpricing) of most stock markets is a common phenomenon, regardless of whether these markets are developed or emerging (Ritter, 1984)

Short Run Returns

Underpricing of emerging and under-developed IPO markets is relatively high compared to developed markets. This indicates that the emerging and under-developed IPO markets leave a considerable amount of money on the table while going public. But the question is whether the underpricing remain same in the subsequent days beyond the first-day. In this regard, Aussenneg (2007) argued that underpricing of IPOs and that of the subsequent price adjustment process did not finish at the end of the first trading day. Thus, a buy-and-hold abnormal return could also be observable during aftermarket trading days (excluding the first day return).

Empirical evidences on short-run returns i.e. up to one year period, excluding first day return of IPOs have been presented in Table 2.

Table 2

Evidence on Short-Run Returns (Excluding First Day Return) of IPOs

Country	Source	Sample Size	Time Period	Avg. SR Return (%)
United States	Aggarwal and Rivoli (1990) Reilly (1977)	1,598 486	1977-1987 1972-1975	-13.70 -11.60
United Kingdom	Leleux and Muzyka (1997) Espenlaub, Gregory and Tonk (2000)	220 588	1987-1991 1985-1992	-19.20 -21.30
Denmark	Jakobsen and Sorensan (2001)	76	1984-1992	-30.40
Switzerland	Loughran, et. al. (2006)	34	1983-2000	-6.10
Malaysia	Ahmad-Zaluki, et. al. (2004)	154	1990-2000	-8.16
France	Derrien and Womack (2003) Leleux and Muzyka (1997)	264 56	1992-1998 1987-1991	-6.30 -30.30
Italy	Giudici and Paleari (1999) Mozzola and Marchisio (2003)	84 37	1985-1995 1995-2000	-2.60 -31.70
Switzerland	Kunz and Aggarwal (1994) Drobetz and Kaumermam (2002)	34 120	1983-1989 1983-2000	-6.10 -6.80
Australia	Bird and Yeung Perera and Kulendran (2012)	68 254	1995-2004 2006-2011	12.0 23.3 (10-day)
Austria	Aussenegg (2007)	51	1984-1996	2.09 (1-month) 4.11 (6-month) 16.23
China	Cai, Lin and Mase Chi, Wang and Young	335 897	1997-2001 1996-2002	-30.0 16.6
Turkey	Kiymaz (1998) Kucukkocaoglu (2008)	138 217	1990-1995 1993-2005	44.10 11.5 (1-month)
India	Sahoo and Rajib (2010)	92	2002-2006	46.55
Bangladesh	Hasan and Quayes (2008)	93	1999-1997	119.0 (21-day)

Pakistan	Mamtaz, Smith and Ahmed (2015)	80	2000-2013	18.54 (1-month) 15.86 (2-month) 17.40 (3-month)
South Africa	Heerden and Alagidede (2012)	138	2006-2010	102.43 (5-day) 195.89 (10-day) 201.22 (15-day) 197.82 (20-day)

Note. 1. A negative (–) sign indicates underperformance and a positive (+) sign indicates over performance in the short-run. 2. Short-run period indicates the time horizon up to one year period of IPO excluding first day trading of stock.

Source: Adapted from Perera and Kulendran (2016), and the rest of the figures were based on papers published by the authors listed in the table.

Table 2 presents that the average buy-and-hold abnormal returns for the initial days except first day are positive calculated based on days and months while it deteriorates as the time passes. On the other hand, the average buy-and-hold abnormal returns of developed markets is negative whereas it is positive in the emerging and under-developed markets. The positive short-run returns suggests that the emerging market stock prices may take long time to adjust for market expectations to reach their equilibrium prices (Ljungqvist *et al*., 2006).

Long Run Returns

Besides the initial return and the short-run return of new issue of common stocks, the long-run return is also important for underwriters, issuing firms, and investors. Most of the studies showed a long-run IPO returns for 3-, and 5-year periods. Buy-and-hold abnormal returns, cumulative abnormal returns and wealth relatives are the commonly used techniques of measuring long-run IPO returns in the primary stock markets.

Table 3 presents the results of empirical works on average long-run returns of IPOs carried out in developed, and emerging markets.

Table 3

Evidence on Long-Run Return of IPOs

Country	Source	Sample Size	Time Period	Avg. LR Return (%)
United States	Ritter (1991) Loughran and Ritter (1995)	1,526 4,753	1975-1984 1970-1990	-29.10[b] -20.00[a]
United Kingdom	Levis (1993)	712	1980-1988	-30.6[a]

Australia	Lee, Taylor and Walter (1996)	266	1979-1986	-51.0[a]
Germany	Uhlir (1989) Ljunqvist (1997)	97 145	1977-1987 1970-1990	-7.40[a] -12.10[a]
Switzerland	Kunz and Aggarwal (1994)	42	1983-1989	-6.10[a]
Malaysia	Paudyal, Saadouni andBriston (1998)	77	1984-1995	12.85[a]
New Zealand	Firth (1997)	143	1979-1987	-10.00[a]
Finland	Keloharju (1993)	79	1984-1989	-21.10[a]
Korea	Kim, Krinsky and Lee (1995)	99	1985-1988	59.01[a]
Egypt -	Omran (2002)	53*	1994-1998	27.00[a]
Canada	Kooli and Suret (2004)	445	1991-1998	-35.15[a] -43.66[b]
Netherlands	Reede (2017)	-	2000-2011	-28.80[a]
Pakistan	Mamtaz, Smith and Ahmed (2016)	57	2000-2010	-32.73[a]
India	Dhamija and Arora (2017)	377	2005-2015	-57.33[a]

*Privatization IPOs, [a] three year return, [b] five year return

Note. A negative (–) sign indicates underperformance and a positive (+) sign indicates over performance in the long-run.

Source: Adapted from Jaskiewicz and Gonzalez (2005), Perera and Kulendran (2016), and the rest of the figures were based on papers published by the authors listed in the table.

Table 3 presents the long-run returns of new issue of common stocks that are almost negative. It suggests that IPOs are overpriced in the long-run. In other words, the performance of IPOs experienced poor in their third and fifth anniversary with negative average buy-and-hold abnormal returns. It is also referred to as a severe underperformance of IPOs. The results clearly illustrates that longer-term investment in IPOs is not beneficial to the investors (Aussenegg, 2007).

Conclusion

The major conclusion of this paper is that initial returns of IPOs are universal phenomenon since the results of developed, emerging and even under-developed markets are positive. However, the degree of underpricing (or initial returns) differs from market to market. Investors are highly benefitted from the first day returns investing in IPO of common stocks especially in emerging and under-developed markets. Another conclusion of this paper is that the average buy-and-hold abnormal returns for the initial days except first day are positive calculated based on days and months while it deteriorates as the time passes. The short-run returns of developed markets is negative whereas it is positive in the emerging markets. The positive short-run returns suggests that the emerging market stock prices may take long time to adjust for market expectations to reach their equilibrium prices. Further, the long-run returns of new issue of common stocks suggests that IPOs are overpriced in the long-run illustrating longer-term investment in IPOs is not beneficial to the investors. The results presented in tables further indicate that studies on short-run and long-run returns of IPOs are still lacking in the context of Nepal suggesting there is a broad scope of the study to the scholars interested in it.

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Challenges and Solutions to External Sector

Prem Prasad Acharya*

Introduction

1. The external sector is one of the major sector among the four sectors of the economy. In the economy there exist four sectors namely Real, Monetary, Government and External. In the external sector exports, imports, remittances, current account, balance of payments, foreign exchanges reserves, exchange rates, foreign assistances etc. are included. The external sector of Nepal is being most vulnerable in the present time. The vulnerability of the external sector is being a global issue and Nepal is also facing the most noticeable situation in the recent time. This article analyzes the external sector which is one of the most focused sector of the economy.

2. The overall balance of the economy depends upon the inter-relationship among the four sectors of the economy. The real sector is the sector which is mainly related to primary sector and directly related to the production of the goods and services. To fulfill the human wants we need food, shelter, clothing, health, education and so on. The primary sector is vital in providing these essential goods and services. Normally speaking, the agriculture sector is the prime sector for the satisfaction of the basic human needs. The volume of overall production and quality of the production determines the wealth of the nation.

3. The secondary sector is the industrial sector. This sector is also referred as the intermediate sector which gives the foundation of industrial production. The goods like computers, laptops, vehicles, telephones, construction materials etc. are the outcome of this sector.

4. The tertiary sector is the service sector. This sector is related with the services like health, education, consultancy, caring etc. This sector provides the self-actualizations of human needs. The services like the teaching service of the teacher, consultancy service of the lawyer, consultancy service of the consultants, banking services of banks and bankers, exchange of messages and voices by the communication sector etc. make human life more comfortable and satisfied.

Situation of External Sector

5. In the present time, the indicators of the external sector of Nepal show the vulnerable situation. The exports are not being increased in the expected pace while the imports are being accelerating in an unchecked speed. The remittance is being decreased as compared to the previous level of inflows. The tourism sector and the income from it is not being revived in the present situation.

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6. The foreign assistance is not in the line of expectation. Every year the government of Nepal targets for the high level of foreign assistance in the form of grants and loans. But, in the realization part it could hardly be realized. The criteria and pre-conditions set during the negotiation of foreign assistance are rarely met. Due to this reason the realization part of foreign assistance is weak.

7. The external sector indicators are weak in the present time. The overall impact of trade, remittance, tourism income, foreign assistance among others indicators are in weak position. Due to this reason the current account balance is being highly deficit, balance of payment is being negative, foreign exchange reserve is depleting and import capacity is deteriorating.

Some Indicators of External Sector

Amount in Billions

Headings	2017/18 2074/75	2018/19 2075/76	2019/20 2076/77	2020/21 2077/78	2021/22* 2078/79
Exports (Rs.)	81.35	97.11	97.71	141.12	190.52
Imports (Rs.)	1245.10	1428.54	1196.80	1539.84	1954.67
Remittance (Rs.)	755.06	879.36	875.03	961.05	971.53
Current Account (Rs.)	246.82	-266.97	-33.76	-333.67	-460.46
BOP (Rs.)	0.96	-67.40	282.40	1.23	-290.38
FER (Rs)	1102.60	1038.90	1401.80	1399.00	1182.16

Source: NRB and Author's Estimates, * Estimates

8. The foreign trade of Nepal is creating huge gap in the gain and payment situation of the country. Observing the exported and imported goods we can see that the imported goods are of high value in price and exported goods are of low value. This situation creates a huge gap in between the receipts from exports and payment against the imports and creates a large trade deficit.

9. The gain from the export is not so strong enough. The major exported goods are handicraft (Metal and Wooden); Herbs; Musical Instruments, Parts and Accessories; Nepalese Papers and Paper Products; Noodles; Other Handicraft Goods; Pashmina; Pulses; Readymade Garments; Readymade Leather Goods among others. These products are either primarily unprocessed or semi processed which do not yield high value.

10. Import is being the major issue in the recent days for Nepal. Nepal is being import driven country since last few years. The imports stood at Rs.1539.84 billion in FY 2077/78 and it reached almost to this volume during the nine months of FY 2078/79 too. Among the total imports, 60.9 percent imports are from India, 14.2 percent is from China and rest (24.9 percent) is from other

countries. This shows that the volume of imports is being accelerating and trade diversification is also low.

11. The import concentration is on the high value goods. While analyzing the trend of import, the major imported items are Petrolimum Porducts, Transport Equipments, Vehichle and Other Vehicle Spare Parts, Other Machinery and Parts, Medicine, Crude Soyabean Oil, Telecommunication Equipment and Parts, Rice/Paddy, M.S.Billet, Gold, Crude Palm Oil and other.

12. The gain from the tourism is being quite low. In the front of tourism receipts our income is being deteriorating since the COVID-19. The tourist arrivals and the income from the tourism sector is very nominal. The travel income (tourist income) was Rs. 60.08 billion in 2076/77 while it decreased tremendously and stood at Rs.7.27 billion in 2077/78 and it is just Rs.18.47 billion during the nine months of 2078/79.

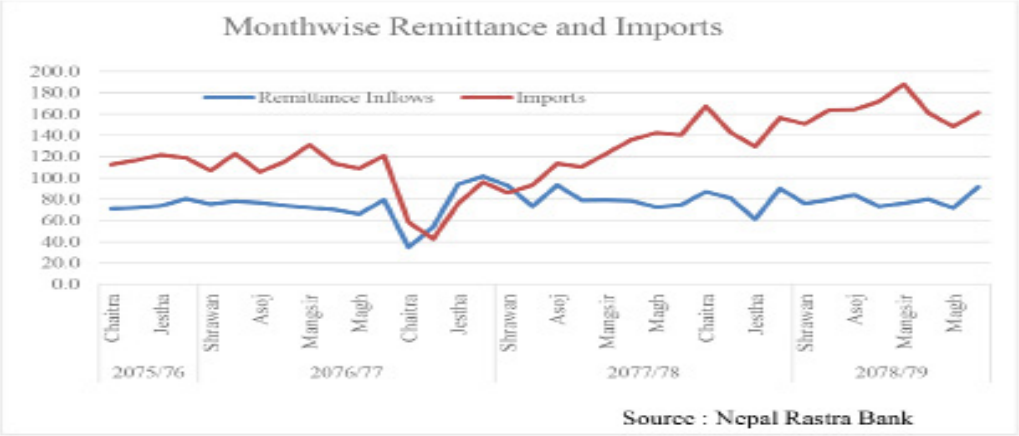
13. Remittance is being the major source of foreign currency earning for Nepal since last few years. The ratio of which with GDP is gradually increasing. The workers' remittance is Rs. 961.10 billion in FY 2077/78. A study conducted by NRB shows that the Qatar has the highest share in remittance. The following table shows the share allocated figure of remittance of 2077/78.

Countrywise Remittance of Nepal
(FY 2077/78)

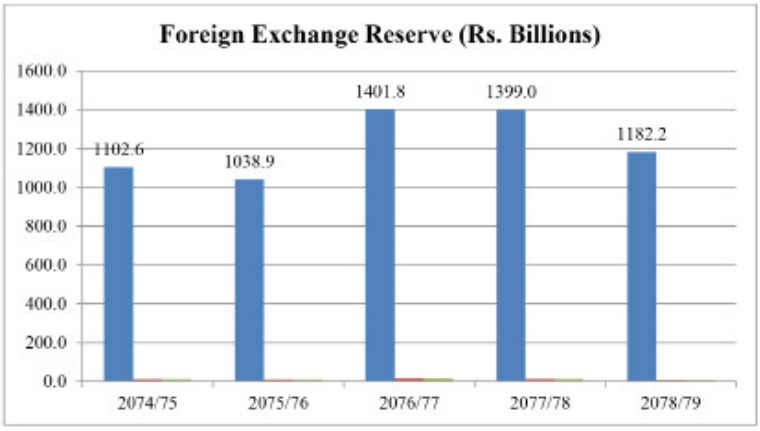
Country	Ratio	Amount (Million)
Quatar	17.7	170106.7
India	14.2	136469.8
UAE	13.4	128781.4
Saudi Arabia	12.5	120131.9
Malaysia	9.7	93222.3
USA	8.3	79767.6
Japan	7.5	72079.1
Kuwait	3.8	36520.1
Baharain	2.9	27870.6
Korea	2	19221.1
UK	1.7	16337.9
Australia	0.4	3844.2
Other	5.9	56702.2
Total	100	961055.0

Source : NRB & Author's Calculation

14. The remittance situation shows that Nepal is being highly relying country on it. In comparison to the GDP, the ratio is 22.5 percent in 2077/78. Similarly, Nepal's import is remittance driven. While observing the data of remittance and imports (month wise) in the recent years we can see the similar pattern of remittance and imports.



15. The foreign exchange reserve is depleting in the recent time. The overall payments for the imports, services, foreign education, debt repayment and servicing is being increased in an exponential path. The receipts from remittance is not increasing in the trend of last years. The receipts from tourism, exports, services etc. are also nominal. The trend of receipts and payments had widened the gap between receipts and payments. The result of which is huge deficits in current account, negative balance of payments and depletion of foreign exchange reserves. The situation also deteriorated the import capacity of goods and services in the recent time.



Challenges in External Sector

16. Narrowing the trade deficits seems a major challenge for Nepal. Increasing volume of imports and not expanding the exports widens the trade deficits. The next situation is the low quantity and nominal value of the exported goods and high volume and value of imported goods. This also enforces to widen the trade deficits. In addition to this, our production and productive capacity is low as compared to neighboring countries. This is also a cause for huge trade deficits.

17. Maintain and increasing the volume of remittance is the next challenge. After the restoration of multiparty democracy in Nepal the tendency of foreign employment has been increased. This made remittance inflow more comfortable. The consequence of which caused the labor shortage in the Nepalese market. This lowered the internal production and productivity. The remittance is the short term gain. Maintain the high volume of remittance and using it in productive purposes is the another challenge.

18. Reviving the tourism sector is the another challenge for Nepal. In the context of natural beauties and prospects we have to use the tourism business abundantly. Unfortunately, we are being unable to make huge and game changer projects like airports, infrastructures, hotels, recreation centers and luxury stay for tourists. In the latest scenario, we are struggling to revive the previous stage of tourism in spite of promoting it.

19. Maintaining the consensus among the political parties in common minimum agenda is the another challenge. Nepal faced long term struggle and conflict in the name of political freedom and personal empowerment among the equal access in the national level. In this process, we left behind in the development of infrastructure, maintain the discipline and promoting the national values and culture.

20. Realizing the capital expenditure at the level of targets is the another challenge. The average expenditure pattern of the capital budget of the government of Nepal is around 70 percent from the announced budget figure. Without making the increment in the volume of capital budget and realization of it in full potential the private investment cannot be promoted. Without investment, it is impossible to create make more output in the country. It again compels to worsen the external sector.

21. Further deterioration of the external sector. Since the remittance based consumption had compelled for the variety of using the different goods, the import will grow in a tremendous way. The exports cannot be immediately increased as we have limitation in production and resources utilization. Other sectors are also weak and are not taking the momentum as expected. These scenarios will further worsen the external sector.

Solutions for the challenges

22. Increasing the production and productivity is the foremost way to narrow down the trade deficits. Without producing the high value goods and services in large quantity we cannot export them and get high receipts. On this front, we have to enhance our productive capacity internally. This will help to promote the situation of import substitution and export promotion.

23. Managing the current remittance in the optimum level and using it in the productive purposes. While observing the last few decades we see that we are receiving remittances in the remarkable volume. It needs to be maintained in the present level in the future time too. On doing so we can conduct different skill and knowledge enhancing training focusing to the peoples seeking for foreign employments. In addition to this, we have to widen the horizon of utilizing the remittances in the sectors which benefit for the national economy.

24. Accelerating the tourism sector and reviving it in the stage of pre-covid phase. Nepal bears large prospects on tourism sector. We should focus to build the infrastructure related to this sector and make a culture of serving tourists in a discipline manner. The tourist related products and services should be well managed internally to make more income form this sector.

25. Make common consensus among the political leaders in the national economic agenda. Whatever may be philosophy of the political parties we should be clear that our economic condition is the primal focus for us. This matter should be clearly understood by the political parties and their leaders. On this front, the situation of no conflict should be created.

26. Maintain the good governance and utilizing the available resources in a proper way. The performance of government seems very poor irrespective of the government led by any political party or the alliances. The capacity of utilizing the capital expenditure should be enhanced and the resources should be utilized in the productive purposes which yield the national value.

27. Reserch and Development should be promoted. The situation of covid, war between Ukrine and Russia, Trade conflicts between China and USA, new challenges in the digital era like Cryptocurrency and digital currency etc. should be properly analyzed. Revisiting the exchange rate regime of Nepal is the another issue. What are the preconditions for it? Do we have short term solution to correct the external sector or not? These issue should be properly addressed immediately.

28. The scenarios like too much imports and low volume of receipts should be foreseen immediately. Since, that type of scenario is being indicated by the external sector indicators in the present time an expert team should be formed

immediately. The team should make a quick review-study and based on the study the immediate measures should be taken by the nation to reinforce the external situation in a tolerable level. In addition to the immediate steps, three approaches of balance of payments (Elasticity, Absorption and Monetary) should be analyzed in the context of Nepal. If this shows the indication for the improvement, we should apply those approaches with great caution.

Conclusion

29. The challenges of the external sector should be overcome through the suitable measures. The possible causes of external sector pressure are widening gap in the foreign trade, low volume of internal production, conflicts in the political level, indifference while executing the national level economic policy which promotes the national self-efficiency and make self-reliant economy.

30. We should use our strong areas to overcome the external sector pressure. Despite the major challenges like large trade deficits, high dependency in the remittance inflows, low production and productivity, conflicts in the opinions, weak governance etc. we have potentialities on tourism, electricity, culture and values, labor augmented technologies and so on. On promoting these we can accelerate the domestic production and productivity in the remarkable level. This will help to substitute the imports and promote the exports. Without any delay, a clear-cut road map should be made categorizing the measures as short term, medium term and long term and implement them. This will ultimately correct the external sector pressure that we are facing now.

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Impact Of Dividend Policy On Share Price Volatility Of Commercial Banks In Nepal

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Abstract

This study examines the impact of dividend policy on share price volatility of Nepalsese commercial banks. Change in market price of share and change in stock return are selected as the dependent variables. The selected independent variables are dividend payout ratio, dividend yield, earnings volatility, firm size, asset growth and leverage. The study is based on secondary data of 19 commercial banks with 171 observations for the period from 2011/12 to 2019/20. The data are collected from the publications and websites of Nepal Rastra Bank (NRB) and Ministry of Finance (MoF) and annual reports of the selected commercial banks. The regression models are estimated to test the significance and impact of dividend policy on share price volatility in the context of Nepalese commercial banks.

The results showed that assets growth has a positive impact on the change in market price of share and stock return. It indicates that higher the assets growth, higher would be the change in market price of share and stock return. Similarly, dividend payout has positive impact on the change in market price of share and stock return. It indicates that increase in dividend payout ratio leads to increase in change in market price of share and stock return. The study also showed that dividend yield has a negative impact on the change in market price of share. It reveals that increase in dividend yield leads to decrease in the change in market price of share. Likewise, the study also showed that earnings volatility has a negative impact on the change in market price of share. It indicates that increase in earnings volatility leads to decrease in the change in market price of share. Further, firm size has a positive impact on change in stock return. It indicates that larger the firm size, higher would be the change in stock return. The study also showed leverage has a positive impact on the change in stock return. It means that increase in leverage ratio leads to increase in the change in stock return.

Keywords: *Dividend payout ratio, dividend yield, earnings volatility, firm size, asset growth and leverage.*

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1. Introduction

Stock price volatility means a change in stock prices over time. It is a consequence of instability, unpredictability, and risks (Phan and Tran, 2019). Neelanjana and Hassan (2019) stated that the share price volatility is the degree of price change in share for a certain period of time. Share price volatility is used to explain the risk of a common share (Nguyen *et al.*, 2020). Similarly, Ullah *et al.* (2015) stated that share price volatility is the rate of change in the price of a share during a given time period. Corporate dividend policy is one of the most enduring issues in modern corporate finance. Dividend policy determines the division of earnings between payments to stockholders and reinvestment in the firm. Dividend price directly affect the stock price of the commercial bank. In addition, Jahfer and Mulafara (2016) defined divided policy as relevant matter that determine the changes in share price in the stock market and management. According to Gunarathne *et al*. (2016), dividend policy refers to a company's policy which determines the amount of dividend payments and the amounts of retained earnings for reinvesting in new projects. Further, Warrad (2017) explained that dividend yield reflects how much the company distributes the amount of dividend compared to its share price. Furthermore, Dickens *et al.* (2002) explained that the dividend policy is a consistent approach to the distribution versus retention decision rather than making the decision on the purely ad-hoc basis from period. The study further stated that dividend policy is desirable to pay dividends is always a controversial topic because shareholders always expect higher dividends, but the firm ensures towards setting aside funds for maximizing the shareholders wealth. Likewise, Oloruntoba and Adeleke (2018) identified that the dividend policy is an important decision for the company to survive in the global competitive environment because investors consider payment of dividend as a source of income and the way of assessing whether the company is liquid or not.

Hashemijoo *et al.* (2012) assessed the impact of dividend policy on share price volatility in Malaysian Stock Market. The study revealed that there is a negative relationship between share price volatility and dividend policy. Furthermore, Zakaria *et al*. (2012) suggested that dividend payout ratio significantly influence the changes in share price. Likewise, Al-Malkawi (2007) indicated that there is a positive relationship of profitability, firm's age and firm's size with dividend policy. However, the study further revealed that leverage, risk and institution ownership have a negative effect on dividend policy. According to Hooi *et al.* (2015), dividend yield, dividend payout, firm size and share price are negatively related to share price volatility and were statistically significant. In addition, the study found positive and statistically significant relationships between earning volatility and long-term debt to price volatility. Furthermore, Sharif *et al.* (2015) suggested that the dividend

function or policy should be determined based on its expected impact on the firm's share value. In addition, DeAngelo *et al.* (2008) showed that optimal dividend policy is an important factor which will ensure maximization of the wealth of the shareholder distributed in the past are subject to mitigate the dividend cash flow relationships. Moreover, the dividend policy of the firm is irrelevant to firm value, as higher dividend would increase sale of stock to raise finances for the investment programs. Similarly, Mosley and Singer (2008) claimed that the dividend policy in modern finance as a very crucial decision since it affects the shareholders wealth maximization, firm's retained earnings, future growth prospects, leverage, liquidity and many more.

Ohiaeri *et al.* (2019) stated that increased dividends obtained by investors will increase interest in investing and share prices will increase along with increased investor confidence and company value. In addition, Duke *et al*. (2015) indicated that stock prices are a major factor that can help investors make investment decisions. The study further explained that the strength of supply and demand in the capital market can cause fluctuations in stock prices. Almumani and Science (2014) showed that there is a positive correlation of dividend per share, earning per share, book value per share and price earnings ratio with stock market price. Moreover, the study found a significant relationship between banks book value per share and stock market price. Furthermore, Majanga (2015) found that there is a significant positive relationship between stock prices and dividends. In addition, Shah and Noreen (2016) explained that there is a significant negative relationship between share price volatility and dividend policy (dividend payout and dividend yield). Moreover, the study revealed that there is a statistically significant positive relationship between some control variables and share price volatility such as assets growth, earning volatility and earning per share. Additionally, Attah-Botchwey (2014) implied that share prices rise because of pressure on the share as the dividend of company's increases.

Olatunde *et al.* (2020) revealed that the dividend yield has a significant positive relationship with stock price volatility. Similarly, Allen and Rachim (1996) concluded that there is a positive relationship between share price volatility and dividend yield. Moreover, Ghose and Chowdhury (2016) assessed the determinants of share prices in Bangladesh. The study revealed that dividend per share has a positive and significant impact on the share prices of pharmaceuticals sectors. In addition, Aveh and Awunyo (2017) examined the firm-specific determinants of stock prices of the firms listed in Ghana Stock Exchange. The study found that there is a positive and significant relationship between earnings price per share and market price per share. Haque (2019) revealed that size of the bank has a significant negative impact on share price volatility in the context of 35 manufacturing companies listed in Dhaka Stock Exchange (DSE) of Bangladesh. Furthermore,

Ahmad *et al.* (2013) revealed that there is a positive impact of growth on stock return and the size of the firm has an insignificant relationship with stock return of 100 non-financial companies in Karachi Stock Exchange (KSE) over the period (2006-2010). Likewise, Sadiq *et al.* (2013) showed a positive relationship of stock price volatility with size and growth of non-financial firms listed on Karachi Stock Exchange covering 35 firms from 2001 to 2011.

Nishat and Irfan (2004) investigated the impact of dividend policy on stock price in Pakistan. The study found that both of the dividend policy measures (dividend yield and payout ratio) have significant impact on the stock price volatility. In addition, Karathanassis and Philippas (1988) found that dividends, retained earnings and size to exert a significant positive influence on share prices. Similarly, Zahir and Khanna (1982) showed that share prices of private sector firms are significantly influenced by dividend payout and dividend yield. Shafi (2014) found that firm size, earnings per share and dividend have significant impact on the dividend policy. Furthermore, Al Troudi and Milhem (2013) found that the stock price is influenced by retained earnings and earnings per share.

In the context of Nepal, Bhandari and Pokharel (2012) stated that payment of dividend is the effective way to attract investors and retain current investors. Furthermore, Dhungel (2013) found that there is no significant impact of dividend on share pricing in most of the banks. However, the study stated that there is a significant correlation between market price of share and earnings per share as well as market price of share and dividend per share including bonus share. Poudel (2016) showed that book value per share, dividend per share and earning per share affect the market price per share positively. Silwal and Napit (2019) found that the dividend yield has positive influence on the price of the stock whereas size has a negative relationship and is statistically insignificant with stock price. Further, the study revealed that book value per share is a most influential factor that determines stock price in Nepal. In addition, Gautam and Bista (2019) showed that the firm size is positively related to market price of share and price earnings ratio. In addition, the study indicated that larger firm size leads to increase in market price of share and price earnings ratio. However, the study found that inflation, dividend per share, return on assets and earnings per share are negatively related to market price of share and price earnings ratio.

The above discussion shows that empirical evidences vary greatly across the studies on the impact of dividend policy on share price volatility. Though there are above mentioned empirical evidences in the context of other countries and in Nepal, no such findings using more recent data exist in the context of Nepal. Therefore, in order to support one view or the other, this study has been conducted.

The main purpose of the study is to analyze the impact of dividend policy on share price volatility in the context of Nepalese commercial banks. Specifically, it examines the relationship of dividend payout ratio, dividend yield, earnings volatility, firm size, asset growth and leverage on change in market price of share and change in stock return of Nepalese commercial banks.

The remainder of this study is organized as follows. Section two describes the sample, data and methodology. Section three presents the empirical results and the final sections draws conclusion and discusses the implications of the study findings.

2. Methodological aspects

The study is based on the secondary data which were gathered from 19 Nepalese commercial banks from 2011/12 to 2019/20, leading to a total of 171 observations. The main sources of data include publications and websites of Nepal Rastra Bank (NRB), Ministry of Finance (MoF), and annual reports of the selected commercial banks. This study is based on descriptive as well as causal comparative research designs. Table 1 shows the list of commercial banks selected for the study along with the study period and number of observations.

Table 1: List of sample banks selected for the study along with the study period and number of observations

S. N.	Name of the banks	Study period	Observations
1	Agricultural Development Bank Limited	2011/12-2019/20	9
2	Bank of Kathmandu Limited	2011/12-2019/20	9
3	Citizens Bank International Limited	2011/12-2019/20	9
4	Everest Bank Limited	2011/12-2019/20	9
5	Himalayan Bank Limited	2011/12-2019/20	9
6	Kumari Bank Limited	2011/12-2019/20	9
7	Laxmi Bank Limited	2011/12-2019/20	9
8	Machhapuchchhre Bank Limited	2011/12-2019/20	9
9	Nabil Bank Limited	2011/12-2019/20	9
10	Nepal Bangladesh Bank Limited	2011/12-2019/20	9
11	Nepal Investment Bank Limited	2011/12-2019/20	9
12	Nepal SBI Bank Limited	2011/12-2019/20	9
13	NIC Asia Bank Limited	2011/12-2019/20	9

14	NMB Bank Limited	2011/12-2019/20	9
15	Prime Commercial Bank Limited	2011/12-2019/20	9
16	Sanima Bank Limited	2011/12-2019/20	9
17	Siddhartha Bank Limited	2011/12-2019/20	9
18	Standard Chartered Bank Nepal Limited	2011/12-2019/20	9
19	Sunrise Bank Limited	2011/12-2019/20	9
Total number of observations			**171**

Thus, the study is based on the 171 observations.

The model

The model used in this study assumes that share price volatility depends on different variables. The dependent variables selected for the study are change in market price of share, change in stock return. Similarly, the selected independent variables in this study are dividend payout ratio, dividend yield, earnings volatility, firm size, asset growth and leverage. The following model equations are designed to test the hypothesis.

$\Delta MPS = \beta 0 + \beta 1\ DPit + \beta 2\ DYit + \beta 3\ EVit + \beta 4\ FSit + \beta 5\ AGit + \beta 6\ LEV + eit$

$\Delta SR = \beta 0 + \beta 1\ DPit + \beta 2\ DYit + \beta 3\ EVit + \beta 4\ FSit + \beta 5\ AGit + \beta 6\ LEV + eit$

Where,

ΔMPS = Change in market price of share is measured by difference between current year MPS and last year MPS, divided by last year MPS, in percentage.

ΔSR = Change in stock return is measured by difference of current year stock return with last year stock return, divided by last year stock return, in percentage.

DP = Dividend payout ratio is measured by ratio of dividend per share to earnings per share, in percentage.

DY = Dividend yield is measured by dividing the dividend of each firm by the average annual market price, in percentage.

EV = Earnings volatility is measured by the ratio of operating profit to total assets, in percentage.

FS = Firm size is measured by the total assets of the bank, Rs. In billion

AG = Asset growth is measured by the ratio of change in total asset at the end of the year to total asset at the beginning of the year, in percentage.

LEV = Leverage is measured by the ratio of long-term debt to total assets, in percentage.

The following section describes the independent variables used in this study along with hypothesis formulation.

Dividend payout ratio (DPR)

Hunjra *et al*. (2014) found that dividend payout ratio is positively related to stock price. Furthermore, Handayani *et al.* (2018) examined the determinants of the stock price volatility in Indonesian manufacturing sector. The study revealed that dividend payout ratio has a positive relationship with stock price volatility. Moreover, Priana and Muliartha (2017) concluded that the dividend payout ratio has a positive effect on stock price volatility. Similarly, Iftikhar *et al*. (2017) concluded that dividend payout has a significant positive impact on stock prices. Similarly, Ilaboya and Aggreh (2013) examined the relationship between dividend policy and share price volatility across companies listed in the Nigerian Stock Exchange. The result showed that there is a positive and significant impact of dividend per share on stock volatility. Based on it, this study develops the following hypothesis:

H1: There is a positive relationship between dividend payout ratio and share price volatility.

Dividend yield (DY)

Malhotra and Tandon (2013) showed a significant negative relationship between dividend yield and market price of the firm's stock. Similarly, Arslan and Zaman (2014) assessed the impact of dividend yield and price earnings ratio on stock returns of non-financial listed firms of Pakistan. The study found a significant negative relationship between dividend yield and stock prices. Similarly, Zahira and Rajeshwaran (2020) explored the relationship between dividend policy and stock return of the non-financial companies listed in Colombo Stock Exchange. The study concluded that there is a negative relationship between dividend yields. Likewise, Masum (2014) revealed that the dividend yield and profit after tax has negative and insignificant relation with stock prices of commercial banks listed in Dhaka Stock Exchange. Moreover, Baskin (1989) found that there is a significant negative relationship between dividend payout and share price volatility. Based on it, this study develops the following hypothesis:

H2: There is a negative relationship between dividend yield and share price volatility.

Earnings volatility (EV)

Rowena and Hendra (2017) found that earnings volatility has a negative and significant effect on stock prices. Further, Yulinda *et al*. (2020) found that earnings

volatility has a significant and negative association with stock price volatility. Ahmed *et al.* (2020) revealed that there is no relation between earnings volatility and stock returns under normal condition. However, there is a significant negative relation between crisis-period stock returns and prior earnings volatility. On the contrary, Mobarak and Mahfud (2017) found earnings volatility has a negative and significant effect on stock price volatility. Based on it, this study develops the following hypothesis:

H3: There is a negative relationship between earnings volatility and share price volatility.

Firm size (FS)

According to Docking and Koch (2005), firm size is one of the important determinants of share prices. Furthermore, Mashayekh and Harraf (2011) found a negative and significant relation between firm size and stock return volatility. Similarly, Dangol and Acharya (2020) showed the existence of a negative relationship between stock returns and firm size. Likewise, Banz (1981) concluded that a negative relationship exists between firm size, measured by market value of equity, and common stock returns. Based on it, this study develops the following hypothesis:

H4: There is a negative relationship between firm size and share price volatility.

Asset growth (AG)

Ghauri (2014) assessed the determinants of changes in share price in banking sector of Pakistan. The study explained that factors such as dividend yield, return on asset and asset growth have insignificant but positive relationships with stock price volatility. Similarly, Zainudin *et al*. (2017) revealed that there is a significant positive relationship of earnings volatility and assets growth with stock price volatility. In addition, Syarifudin (2021) concluded a positive relationship between asset growth and stock prices which means that increase in asset growth will lead to increase stock prices. Moreover, Widiantari and Sukartha (2021) found that dividend payout ratio and asset growth have a positive effect on stock price volatility. Based on it, this study develops the following hypothesis:

H5: There is a positive relationship between asset growth and share price volatility.

Leverage (LEV)

Nirmala *et al*. (2011) found that leverage is a significant determinant of share prices. Furthermore, Yanti (2019) revealed that leverage, earning volatility, and growth have insignificant negative relationship with stock price volatility. Similarly, Utami and Purwohandoko (2020) found that leverage has negative relationship with stock price volatility. Furthermore, Attiya and Hafeez (2009) revealed that the leverage

has a negative relationship with dividend payout ratio. Moreover, Cai and Zhang (2011) found that there is a negative relationship between changes in the leverage and the stock share prices. Based on it, this study develops the following hypothesis:

H6: There is a negative relationship between leverage and share price volatility.

3. Results and discussion

Descriptive statistics

Table 2 presents the descriptive statistics of the selected dependent and independent variables during the period 2011/12 to 2019/20.

Table 2: Descriptive statistics

This table shows the descriptive statistics of dependent and independent variables of 19 Nepalese commercial banks for the study period from 2011/12 to 2019/20. The dependent variables are ΔMPS (Change in market price of share is measured by the difference between current year MPS and last year MPS, divided by last year MPS*, in percentage) and* ΔSR (Change in stock return is measured by difference of current year stock return with last year stock return, divided by last year stock return*, in percentage). The independent variables are DP (Dividend payout ratio is measured by ratio of dividend per share to earnings per share, in percentage), DY (Dividend yield is measured by dividing the dividend of each firm by the average annual market price, in percentage), EV (Earnings volatility is measured by the ratio of operating profit to total assets, in percentage), FS (Firm size is measured by the total assets of the bank, Rs. In billion) AG (Asset growth is measured by the ratio of change in total asset at the end of the year to total asset at the beginning of the year, in percentage) and LEV (Leverage is measured by the ratio of long-term debt to total assets, in percentage).*

Variables	Minimum	Maximum	Mean	Std. Deviation
ΔMPS	-67.10	256.60	8.60	51.53
ΔSR	-144.42	29.26	-2.70	15.18
AG	-5.73	87.08	21.23	14.55
EV	-0.15	4.77	2.15	0.85
FS	2.62	5.52	4.25	0.62
DP	0.00	296.59	76.69	37.02
DY	0.00	14.90	3.97	1.95
Lev	0.00	12.05	3.02	3.23

Source: SPSS output

Correlation analysis

Having indicated the descriptive statistics, Pearson's correlation coefficients are computed and the results are presented in Table 3.

Table 3: Pearson's correlation coefficients matrix

This table shows the bivariate Pearson's correlation coefficients of dependent and independent variables of 19 Nepalese commercial banks for the study period from 2011/12 to 2019/20. The dependent variables are ΔMPS (Change in market price of share is measured by the difference between current year MPS and last year MPS, divided by last year MPS*, in percentage) and* ΔSR (Change in stock return is measured by difference of current year stock return with last year stock return, divided by last year stock return*, in percentage). The independent variables are DP (Dividend payout ratio is measured by ratio of dividend per share to earnings per share, in percentage), DY (Dividend yield is measured by dividing the dividend of each firm by the average annual market price, in percentage), EV (Earnings volatility is measured by the ratio of operating profit to total assets, in percentage), FS (Firm size is measured by the total assets of the bank, Rs. In billion) AG (Asset growth is measured by the ratio of change in total asset at the end of the year to total asset at the beginning of the year, in percentage) and LEV (Leverage is measured by the ratio of long-term debt to total assets, in percentage).*

Variables	ΔMPS	ΔSR	AG	DP	DY	EV	FS	LEV
ΔMPS	1							
ΔSR	-0.206**	1						
AG	0.043	0.025	1					
DP	0.024	0.028	0.079	1				
DY	-0.147	0.037	-0.002	0.463**	1			
EV	-0.102	0.039	-0.205**	0.051	0.077	1		
FS	-0.266**	0.136	-0.054	0.094	0.195*	0.288**	1	
LEV	-0.292**	0.026	-0.034	-0.054	0.250**	0.066	0.574**	1

Note: The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent levels respectively.

Table 3 shows that there is a positive relationship between assets growth and change in market price of share. It indicates that increase in assets growth leads to increase in change in market price of share. Similarly, dividend payout is positively correlated to change in market price of share. It indicates that increase in dividend payout ratio leads to increase in change in market price of share. The study also shows that dividend yield is negatively related to change in market price of share. It reveals that higher the dividend yield, lower would be the change in market price of share. Likewise, the study also shows that earnings volatility is negatively related to change in market price of share. It indicates that higher the earnings volatility, lower would be the change in market price of share. Further, the study shows that firm size has a negative relationship with change in market price of share. It reveals that larger the firm size, lower would be the change in market price of share. The study also reveals that leverage is negatively correlated to change in market price of share. It indicates that increase in leverage ratio leads to decrease in change in market price of share.

On the other hand, the result shows that there is a positive relationship between asset growth and change in stock return. It indicates that increase in asset growth leads to increase in change in stock return. Similarly, dividend payout is also positively related to change in stock return. It indicates that higher dividend payout ratio leads to increase in change in stock return. Further, the dividend yield is positively correlated to change in stock return. It indicates that higher the dividend yield, higher would be the change in stock return. The study also shows that earnings volatility is positively correlated to the change in stock return. This indicates that higher the earnings volatility, higher would be the change in stock return. Likewise, the study shows that firm size has positive relationship with change in stock return. It indicates that larger the firm size, higher would be the change in stock return. The study also shows leverage has a positive relationship with change in stock return. It means that higher the leverage, higher would be the change in stock return.

Regression analysis

Having indicated the Pearson's correlation coefficients, the regression analysis has been carried out and results are presented in Table 4. More specifically, it shows the regression results of dividend payout ratio, dividend yield, earnings volatility, firm size, asset growth and leverage on change in market price of share of Nepalese commercial banks.

Table 4: Estimated regression results of dividend payout ratio, dividend yield, earnings volatility, firm size, asset growth and leverage on change in market price per share

This result is based on panel data of 19 commercial banks with 171 observations for the study period from 2011/12 to 2018/19 by using linear regression model. The model is $\Delta MPS = \beta 0 + \beta 1\ DPit + \beta 2\ DYit + \beta 3\ EVit + \beta 4\ FSit + \beta 5\ AGit + \beta 6\ LEV + eit$, *where the dependent variable is* ΔMPS (Change in market price of share is measured by the difference between current year MPS and last year MPS, divided by last year MPS, *in percentage). The independent variables are DP (Dividend payout ratio is measured by ratio of dividend per share to earnings per share, in percentage), DY (Dividend yield is measured by dividing the dividend of each firm by the average annual market price, in percentage), EV (Earnings volatility is measured by the ratio of operating profit to total assets, in percentage), FS (Firm size is measured by the total assets of the bank, Rs. In billion) AG (Asset growth is measured by the ratio of change in total asset at the end of the year to total asset at the beginning of the year, in percentage) and LEV (Leverage is measured by the ratio of long-term debt to total assets, in percentage).*

Model	Intercept	Regression coefficients of						Adj. R_bar^2	SEE	F-value
		AG	DP	DY	EV	FS	LEV			
1	0.53 (0.764)	0.153 (0.564)						0.004	0.516	0.318
2	0.060 (0.663)		0.033 (0.312)					0.005	0.516	0.097
3	0.240 (2.702)**			-3.871 (1.929)				0.016	0.511	3.723

4	.218 (2.040)*				-6.125 (1.327)			0.004	0.514	1.761
5	1.030 (3.871)**					-0.222 (3.585)**		0.165	0.498	12.849
6	0.227 (4.378)**						-4.665 (3.972)**	0.181	0.494	15.779
7	0.033 (0.311)	0.148 (0.540)	0.029 (0.268)					0.013	0.517	0.194
8	0.148 (1.287)	0.120 (0.444)	0.158 (1.318)	-5.254 (2.320)*				0.016	0.511	1.927
9	0.268 (1.726)	0.054 (0.196)	0.163 (1.361)	-5.119 (2.259)*	-5.401 (1.149)			0.018	0.51	1.777
10	0.990 (3.512)**	0.056 (0.209)	0.163 (1.389)	-4.016 (1.792)	-1.424 (2.98)**	-0.200 (3.038)**		0.164	0.498	13.339
11	0.730 (2.343)*	0.051 (0.192)	0.109 (0.909)	-2.850 (1.235)	-2.617 (0.548)	-0.113 (1.421)	-2.871 (1.896)	0.079	0.495	3.425

Notes:

i. Figures in parenthesis are t-values.

ii. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.

iii. Change in market price of share is the dependent variable.

Table 4 shows that the beta coefficients for assets growth are positive with change in market price of share. It indicates that assets growth has a positive impact on change in market price of share. This finding is similar to the findings of Syarifudin (2021). Similarly, the beta coefficients for dividend payout ratio are positive with change in market price of share. It indicates that dividend payout ratio has a positive impact on change in market price of share. This finding is consistent with the findings of Priana and Muliartha (2017). Moreover, the beta coefficients for dividend yield are negative with change in market price of share. It indicates that dividend yield has a negative impact on change in market price of share. This finding is consistent with the findings of Arslan and Zaman (2014). Likewise, the beta coefficients for earnings volatility are negative with change in market price of share. It indicates that earnings volatility has a negative impact on change in market price of share. This finding is similar to the findings of Yulinda *et al.* (2020). Further, the beta coefficients for firm size are negative with change in market price of share. It indicates that firm size has a negative impact on change in market price of share. This finding is similar to the findings of Dangol and Acharya (2020). Furthermore, the beta coefficients for leverage are negative with change in market price of share. It indicates that leverage has a negative impact on change in market price of share. This finding is similar to the findings of Cai and Zhang (2011).

The regression results of dividend payout ratio, dividend yield, earnings

volatility, firm size, asset growth and leverage on change in market price per share of Nepalese commercial banks have been presented in Table 5.

Table 5: Estimated regression results of dividend payout ratio, dividend yield, earnings volatility, firm size, asset growth and leverage on change in stock return

This result is based on panel data of 19 commercial banks with 171 observations for the study period from 2011/12 to 2018/19 by using linear regression model. The model is $\Delta SR = \beta 0 + \beta 1\ DPit + \beta 2\ DYit + \beta 3\ EVit + \beta 4\ FSit + \beta 5\ AGit + \beta 6\ LEV + eit$, *where the dependent variable is* ΔSR (Change in stock return is measured by difference of current year stock return with last year stock return, divided by last year stock return, *in percentage). The independent variables are DP (Dividend payout ratio is measured by ratio of dividend per share to earnings per share, in percentage), DY (Dividend yield is measured by dividing the dividend of each firm by the average annual market price, in percentage), EV (Earnings volatility is measured by the ratio of operating profit to total assets, in percentage), FS (Firm size is measured by the total assets of the bank, Rs. In billion) AG (Asset growth is measured by the ratio of change in total asset at the end of the year to total asset at the beginning of the year, in percentage) and LEV (Leverage is measured by the ratio of long-term debt to total assets, in percentage).*

Model	Intercept	Regression coefficients of						Adj. R_bar^2	SEE	F-value
		AG	DP	DY	EV	FS	LEV			
1	-1.437 (1.849)	0.599 (0.203)						0.006	5.611	0.041
2	-1.768 (1.788)		0.598 (0.514)					0.004	5.607	0.265
3	-1.412 (1.450)			2.574 (0.117)				0.006	5.611	0.014
4	-1.659 (1.426)				16.277 (0.323)			0.005	5.609	0.104
5	-5.683 (1.907)					1.030 (2.483)*		0.087	5.575	4.199
6	-1.350 (2.294)*						1.348 (0.101)	0.006	5.611	0.012
7	-1.859 (1.632)	0.482 (0.162)	0.583 (0.499)					0.01	5.623	0.145
8	-1.788 (1.411)	0.465 (0.156)	0.662 (0.500)	3.219 (0.129)				0.016	5.639	0.101
9	-2.188 (1.270)	0.684 (0.223)	0.645 (0.485)	3.665 (0.146)	17.872 (0.343)			0.022	5.654	0.105

10	-6.060 (1.902)	0.670 (0.220)	0.648 (0.489)	9.590 (0.378)	3.477 (0.064)	1.075 (2.442)*		0.015	5.636	0.501
11	-7.323 (2.061)*	0.645 (0.211)	0.386 (0.283)	3.927 (0.149)	9.267 (0.170)	1.497 (2.643)**	13.941 (0.807)	0.017	5.642	0.525

Notes:

i. Figures in parenthesis are t-values.

ii. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.

iii. Change in stock return is the dependent variable.

Table 5 shows that the beta coefficients for assets growth are positive with change in stock return. It indicates that assets growth has a positive impact on change in stock return. This finding is similar to the findings of Zainudin *et al.* (2017). Similarly, the beta coefficients for dividend payout ratio are positive with change in stock return. It indicates that dividend payout ratio has a positive impact on change in stock return. This finding is consistent with the findings of Ilaboya and Aggreh (2013). Moreover, the beta coefficients for dividend yield are positive with change in stock return. It indicates that dividend yield has a positive impact on change in stock return. This finding is consistent with the findings of Malhotra and Tandon (2013). Likewise, the beta coefficients for earnings volatility are positive with change in stock return. It indicates that earnings volatility has a positive impact on change in stock return. This finding is similar to the findings of Wei and Zhang (2006). Further, the beta coefficients for firm size are positive with change in stock return. It indicates that firm size has a positive impact on change in stock return. This finding is similar to the findings of Mashayekh and Harraf (2011).

4. Summary and conclusion

Corporate dividend policy is an important factor to determine the stock market. Dividend on share is an important indicator that shows the performance of banks and thereby attracting the investors. Different factors such as dividend payout ratio, dividend yield, earnings volatility, firm size, asset growth and leverage play important role in share price volatility. Stock price volatility means the ups and downs in stock prices during a time period. It's a common phenomenon in the equity market and measures the unforeseen changes in the stock prices. Dividend policy is always one of the main factors that an investor will focus on when determining their investment strategy.

This study attempts to analyze the impact of dividend policy on the share price volatility of Nepalese commercial banks. The study is based on secondary

data of 19 commercial banks with 171 observations for the period from 2011/12 to 2019/20.

The study showed that dividend yield, earnings volatility, firm size and leverage have negative impact on the change in market price of share of Nepalese commercial banks. Similarly, assets growth and dividend payout ratio have positive impact on the change in market price of share. Similarly, the study concluded that there is an insignificant impact of dividend policy on share price volatility of Nepalese commercial banks. The study also concluded that leverage followed by firm size are the most influencing factors that explains the changes in the market price of share of Nepalese commercial banks.

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Public Offer Document: Disclosure Practice and Essence

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1. Introduction

Securities are the instruments bought, sold and exchanged in securities markets. They are long term financial instruments like shares, stocks, bonds, debentures, units etc. Issuance is the act or process of offering the securities by issuers to investors. Issuers are companies or entities require funds. Investors are any persons or entities who commit capital with the expectation of receiving financial returns. The merchant banks act as an intermediary providing expert and specialized services of issue management to the issuer companies. The issuer companies rely on various sources of funds to meet their financial obligations and capital requirements. The fund need can be for the long-term or short-term. Generally, companies obtain funds for short-term by taking loans and financial assistance from bank and financial institutions. Companies issue the securities for long-term funds by offer documents or prospectus to the investors.

Nepalese primary market has been expanded nationwide and is in the gateway of modernization with introduction of Application Supported by Blocked Amount (ASBA) and Centralized ASBA. The primary applicants can access services from almost all BFIs as ASBA members, merchant banks, depository participants (DPs) and its branches. Recent increment in numbers of dematerialize accounts and applications leading oversubscriptions of most of recent public issues is indicating emerging capital market developments. The systematic and techno-friendly primary market plays a vital role in promoting and sustaining growth of economy by mobilizing funds to businesses and industries. However, level of investor education and informed investment decision is a challenging. To overcome this issue, it is prominent that disclosures are required to be issued by issuing entities, disclosing all relevant information that can potentially influence an investor's decision. The disclosure clause is strictly regulated by the securities regulators not only to fulfill the regulatory obligation but also to aware the investors about the issuer to take the wise financial decision.

The offer document includes discretionary as well as mandatory clauses of disclosures. In merit-based regulation, the regulator takes some responsibility for assessing the quality of a proposed offering. This approach is generally associated with developing markets and may be of particular benefit where a market lacks a group of analysts and advisers who could analyze information if it were made publicly available. It is therefore, generally regarded as transitional and not necessary in a fully developed market (Objectives and Principles of Securities Regulation, May

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2003). Disclosure basically refers to the action of making all relevant information public about a business in a timely manner. Relevant information of issuer refers to any and every piece of information including company data, facts, figures, position, focus, business intents, prospects, procedures, innovations, management and so on, that can potentially influence an investor's decision. Prospectus disclosure information is wide-ranging details on the issuers business focus, strategy, operation, market, ownership, governance, industry and regulatory background, as well as its financial performances. The prospectus information serves as an important role in reducing information asymmetry between insider-owners and outside public investors. Careful study of such prospectus disclosure potentially helps in understand the opportunity and assessing risks. The pivotal areas to consider in this regard are the issuer's declarations on risk factors and planned utilization of issue proceeds. The discretionary disclosure in offer documents deals with the amount of detail divulged. However, the level of coverage varies considerably across IPO going firms. While applying for issues via electronic platform, provision of offer documents is permitted that investors must give prior consent before electronic delivery of offer documents. A significant amount of disclosure is necessary for an entity to be granted initial public offering (IPO) approval. Publication of a prospectus precedes the general invitation for investor subscriptions.

2. Legal Provisions Associated with Publication of Prospectus/Offer Document:

The word "Prospectus" is defined in Securities Act, 2006 as a prospectus required to be published by a body corporate pursuant to Section 30 prior to the public issue of securities. The act and its regulations has some key provisions regarding the publication of prospectus which is summarized as below:

Securities Act, 2006

Clause 30. Prospectus to be published: (1) A body corporate shall have to get a prospectus approved by the Board for making public issue of securities in accordance with this Act after the commencement of this Act and publish the prospectus for information to all the concerned. While publishing the prospectus in such a way, the prospectus shall also mention the place where the general public can obtain or inspect the prospectus.

*Clause 31. Approval of a prospectus: The B*oard shall approve only a prospectus which contains such information as may be adequate for investors to make evaluation as to the assets and liabilities, financial status, profit and loss of the issuer and expected matters in the future.

Clause 32. Matters to be referred to in prospectus: Every prospectus shall contain such general matters as required to be set down in the prospectus, capital and other information of the issuer, main functions to be done by the issuer, information pertaining to legal action, economic condition, general administration, management of the issuer, information relating to the expert preparing the prospectus and the economic statements contained in the prospectus and such other matters as may be prescribed.

Clause 33. Liability for matters referred to in prospectus: (1) The concerned body corporate and the director signing a prospectus and the expert preparing such a prospectus shall be severally and collectively liable for the truth of the details and documents underpinning the information set down in the prospectus submitted to the Board for the purpose of registering securities with the Board and obtaining permission to issue such securities.

(2) Where any person who subscribes for any securities on the faith of the matters set down in the prospectus subsequently sustains any loss or damage by the reason that the matters set down in the prospectus have been set down with mala fide intention or untrue or false statements have been included therein knowingly, the body, director or experts preparing the prospectus shall be liable to pay compensation for such loss or damage. Provided that no director shall be liable to pay such compensation if he or she proves that he or she has resigned prior to making a decision on the matters set down in the prospectus with ulterior motive or knowingly or that he or she did not know that the prospectus was untrue.

(3) Where any investor sustains any loss or damage by the reason that the prospectus, information, statements or returns submitted by a body corporate to the Board, such an investor may make a petition to the concerned District Court for compensation within thirty five days from the date of knowledge within one year after the making of investment.

Clause 34. A body corporate to make a notice: (1) Everybody corporate issuing securities shall provide information on the following matters to the Board and its shareholders as soon as possible: (a) Such matters as may be necessary and supportive to evaluate its economic condition, (b) Such information as may be capable of affecting the transaction of stock exchanges or the value of securities.

(2) Everybody corporate issuing securities shall also provide the Board and its shareholders with the notice and information as prescribed, in addition to the matters set down in sub-section (1).

Clause 35. Compensation for revocation of enlisting, if any: Where a body corporate issuing any securities has enlisted the securities by making agreement with a stock exchange and the stock exchange revokes the enlisting of such securities by the

reason of the failure of such body corporate to observe such matters as required to be observed by it under this Act or the rules or bye-laws framed under this Act and any shareholder sustains any loss and damage by virtue of such revocation of enlisting, the directors of such a body corporate shall personally or collectively pay compensation to such a shareholder.

Securities Registration and Issue Regulation, 2016

Rule 11. Application to be submitted for the Approval of the Prospectus: (1) The body corporate shall draft the prospect as prescribed in Schedule-5 for the public issuance of securities pursuant to the Section 31 of the Act and the Regulation.

(2) The body corporate in order to obtain the approval for the publication of prospectus for the public issuance of securities as prepared pursuant to sub-rule (1) require applying before the Board attached with a receipt voucher of the processing fee as prescribed in Schedule-6.

(3) While submitting the application and prospectus pursuant to the sub-rule (2), the following information and documents shall be attached: 1 Added by Securities Registration and Issuance (Second amendment) Regulation, 2018 (2075) 337 (a) Document to verify the Capital Structure (authorized, issued and paid up) of the body corporate, (b) Updated Articles of Association and Regulations of the body corporate established under the prevailing laws of the company, (c) If the body corporate has been established under other law, the rules or bylaws thereunder, (d) Audited financial statements of the latest year, (e) Due diligence certificate issued by the Issuance and Sales Manager declaring that the draft prospectus have been prepared professionally and in compliance to the Act, these rules and other rules under the Act, bylaws, directives related to the issuance and sales management.

(4) The Board shall not start processing of approval of the prospectus until all required statement and documents to be submitted to the Board pursuant to sub-rule (2) or (3) have been received.

12. Examination of Prospectus: (1) The Board shall examine the prospectus received for the approval pursuant to rule 11. (2) The Board, in course of examining the prospectus pursuant to sub-rule (1), finds that some important information has to be omitted or undesirable information has been included, the Board may direct to include required information, amend as required or change in the prospectus. (3) The body corporate shall submit the prospectus with revision or adding information as directed by Board pursuant to sub-rule (2).

13. Approval and Publication of the Prospectus: (1) Pursuant to Rule 12, while examining the application attached with a prospectus received pursuant to rule 11, if the Board is satisfied with the content and presentation of the prospectus, the Bard shall approve the prospectus for its publication in the format as prescribed in the Schedule-7.

(2) Nothing stated elsewhere of this rule, the prospectus will be valid pursuant to sub-rule (1) unless it has no significant impact to the decision of the investor with the substantial change in the above mentioned prospects pursuant rule 11.

(3) In case of changes in the disclosures made in the prospectus approved prior to the opening of subscription whether it is due to regulatory provisions or directives of the regulatory body or due to other reason, and such changes is material beyond normal course of business operation having substantial impact on the decision or investor, the prospectus shall require to be change and amended 338 by including such changes and the issue process shall require to start only after getting the amended prospectus approved by the Board.

(4) Whatever mentioned in the sub-rule (3), any changes having material impact occurs accidentally or otherwise during the period or opening of public issue, the collection or the application should be on hold and the information on the event, its impact and changes shall have to be published immediately in the national daily, through the issuance and Sales Manager, for the information of the concerned investors and the Board shall have to be prior informed.

3. IOSCO Principles on Disclosure for Issuers:

International Organization of Securities Commission (IOSCO) has outlined under the heading of Principles for Issuers (Principal no. 10) - There should be full, accurate and timely disclosure of financial results and other information which is material to investors' decisions. Disclosure requirements of the type described here may extend beyond the issuer to include others, such as directors and senior officers of the company, participating underwriters, and material shareholders.

Regulation of issuers should ensure both investor protection and a fair, orderly and efficient market. It describes some of the other laws necessary to complement securities regulation. Of particular importance in this context are:

- company formation;
- duties of directors and officers;
- regulation of takeover bids and other transactions intended to effect a change in control;
- laws governing the issuance of securities;

  disclosure of information to security holders to enable informed voting decisions;
- disclosure of material shareholdings;
- insolvency law.

Timely Disclosure of Information

Investors should be provided with the information necessary to make informed investment decisions on an ongoing basis. The principle of full, timely and accurate disclosure of current and reliable information material to investment decisions is directly related to the objectives of investor protection and fair, efficient and transparent markets.

When Disclosure is Required

Disclosure rules should extend to, at least:

- the conditions applicable to an offering of securities for public sale;
- the content and distribution of prospectuses or other offering documents (and, where relevant, short form profile or introductory documents);
- supplementary documents prepared in the offering;
- advertising in connection with the offering of securities;
- information about those who have a significant interest in a listed company;
- information about those who seek control of a company
- information material to the price or value of a listed security;
- periodic reports;
- shareholder voting decisions

Disclosure should be clear, reasonably specific and timely. Specific disclosure requirements should be augmented by a general disclosure requirement. Such a general disclosure requirement can provide that disclosure is required of all material information that is relevant to a particular investment decision. Another approach for such a general disclosure requirement provides that disclosure is required of all material information that is necessary to keep disclosures made from being misleading.

Regulation should ensure the sufficiency and accuracy of information. Generally, this will involve sanctions or liability on the issuer company and those responsible persons who fail to exercise due diligence in the gathering and provision of information. Regulation should ensure that proper responsibility is taken for the content of information and, depending upon the circumstances, those liable to take responsibility may include the issuing company, underwriters, promoters, directors, authorizing officers of the company, and those experts and advisers who consent to be named in the documentation or provide advice.

Regulators also need to give careful consideration to the circumstances in which it may be necessary to the proper functioning of the market to allow something

less than full disclosure: for example, of trade secrets or incomplete negotiations. In the limited circumstances where the market requires some derogation from the objective of full and timely disclosure, there may need to be temporary suspensions from trading or restrictions on the trading activities of those who possess more complete information. In such circumstances, trading should be prohibited in the absence of full disclosure.

Information About Corporate Control

To safeguard the fair and equitable treatment of shareholders, regulation should require disclosure of the security holdings of management and of those persons who hold a substantial beneficial ownership interest in a company. This is generally regarded as information necessary to informed investment decisions in the secondary market. The level at which disclosure is required varies from jurisdiction to jurisdiction, but is generally set at a level well below that which would be characterized as a controlling interest. More stringent disclosure requirements may be appropriate for persons contemplating exercise of control. The nature of the disclosure required also varies but full public disclosure is generally thought to best meet the underlying policy rational of disclosure where a change in control of a company has occurred or is contemplated. Regulation should have regard to the information needs of the shareholders of the subject company. The information necessary to enable informed decision making will vary with the nature of the transaction but the general objective remains true for cash offers, offers by way of tender and exchange, business combinations and privatizations. Generally, in the circumstances described in the preceding sentence, this will require that shareholders of a company:

- have a reasonable time in which to consider any offer under which a person would acquire a substantial interest in the company;
- are supplied with adequate information to enable them to assess the merits of any proposal under which a person would acquire a substantial interest in the company;
- as far as practicable, have reasonable and equal opportunities to participate in any benefits accruing to the shareholders under any proposal under which a person would acquire a substantial interest in the company;
- receive fair and equal treatment (in particular, minority shareholders) in relation to the proposal;
- are not unfairly disadvantaged by the treatment and conduct of the directors of any party to the transaction or by the failure of the directors to act in good faith in responding to or making recommendations with respect to the proposal.

Accounting and Auditing Standards

Comparability and reliability of financial information are critical to informed decision making. The objective of general-purpose financial statements is to provide information about the financial position, results of operations, cash flow and changes in the ownership equity of an enterprise that is useful to a wide range of users for decision making purposes. The statements should be characterized by comprehensibility, consistency, relevance, reliability and comparability. Financial statements should also show the results of the stewardship of management or the accountability of management for the resources entrusted to it. High quality accounting and auditing standards provide a framework for other disclosure obligations. Accounting and auditing standards are necessary safeguards of the reliability of financial information. Accounting standards should ensure that fundamental information is available. There should be comprehensive and well-defined accounting principles that are of a high and internationally acceptable quality, and provide accurate and relevant information on financial performance.

Regulation should be intended to ensure:

- The timeliness and relevance of the information provided to investors and potential investors.
- An appropriate mechanism for the setting of quality standards and to ensure that where there is some dispute or uncertainty, standards can be the subject of authoritative and timely interpretation that is consistently applied.
- An independent verification of financial statements and compliance with accounting principles through professional external auditing.
- Any audit is conducted pursuant to well defined and internationally acceptable standards.
- Rules designed to ensure the independence of the auditor.
- That where a set of international standards acceptable to the regulator is available, their use should be permitted to facilitate efficient cross-border capital raising as an aid to the provision of internationally comparable information and to assist in the more efficient raising of capital.
- A mechanism for enforcing compliance with accounting and auditing standards.

The International Organization of Securities Commissions (IOSCO) has published in 18th of January, 2019 a statement setting out the importance for issuers of considering the inclusion of environmental, social and governance (ESG) matters when disclosing information material to investors' decisions.

As underlined by IOSCO in its Objectives and Principles of Securities Regulation, 2 securities regulation has three key objectives: protecting investors, ensuring that markets are fair, efficient, and transparent, and reducing systemic risk. IOSCO Principle 16 states that issuers should provide "full, accurate, and timely disclosure of financial results, risk, and other information which is material to investors' decisions." With regard to this Principle, IOSCO emphasizes that ESG matters, though sometimes characterized as non-financial, may have a material short-term and long-term impact on the business operations of the issuers as well as on risks and returns for investors and their investment and voting decisions.

Disclosure of ESG information in the market has increased in recent years. Examples of ESG matters that issuers are disclosing include environmental factors related to sustainability and climate change, social factors including labor practices and diversity, and general governance related factors that have a material impact on the issuer's business.

4. The Prospectus / Public Offer Document

A prospectus is a legal disclosure document that provides information about an investment offering to the public. The prospectus contains information about the company, its management team, past and recent financial performance, and other related information that investors would like to be aware before making investment decision.

Major Components of a prospectus:

Security offering details

The prospectus provides information on the number of securities that are being offered to the public and the price for unit of security. It also states the expected rate of return on the investor's funds. This section also provides information on the subscription period when interested investors can purchase the securities.

General Overview and history of the company

The prospectus provides an overview of the company since its creation. It gives a chronology of events occurred over the years. It also includes information about the founders, company registration, and initial service offerings. This section may also include an overview of the company's strategy and what management believes is its competitive advantage . It provide the background issuing company like name and address, registration information, main place of business, brief history of the body corporate from inception to date and its main objectives, name, history and main objectives of the subsidiary(ies) if any, and percentage of holding in the subsidiary,

Services/products offered by the company

This section lists the core business activities undertaken by the issuer entity. The company provides information about the services and products provided to customers.

Board of Directors & Management profile

A prospectus includes information about the company's board structure and management. It outlines the management team's experience and qualifications that ensures investors a good fit for the company. Investors want assurance that the company's BoD and management executives are capable enough to safeguard their investments.

Utilization of proceeds from Issuance

A company will often offer an issue of securities when it is unable to raise capital internally to finance a large investment. The prospectus will have details of their future plans and strategies on the optimum utilization of funds raised by issue of securities. It will not only communicate the investors about their road map of investment but also commits to provide returns on investment.

Financial information

The prospectus provides investors with information about the company's past and present financial performance. The information may include EBIT, net profit, capital structure, return on investment, earning per share, net worth, stock performance, etc. It will also include projected financial statements showing prospects of it financial roadmap ahead.

Risks involved

The prospectus discloses the risks that investors face when investing in securities. Other risks that a company may reveal include possible capital restrictions, government regulations, individual investors holding large numbers of stocks, etc. The disclosures protect the company from accusations that it withheld vital information that caused the investors to incur losses.

Declarations and Disclaimers:

It involves declaration on investment risk, disclaimer statement of the regulatory body, declaration from Issue and Sales manager, declaration related to the responsibility and accountability of the company directors, disclaimer statement by the issuer company, statement of compliance to regulatory requirement and declaration regarding the promoters, directors, and chief executive officers etc. These information helps the investors assess the overall investment climate.

The information disclosure on public offer documents approved by SEBON should contain the following details:

The front page of the Prospectus

- It covers the general information like Name, Logo and Address of the registered office of the Body Corporate, Name of the Statute and section relating to the issue of prospectus, Date of approval, Date of registration of the prospectus, Type of securities offered, total number of securities offered for subscription, number of security for the reserved category (employees, mutual fund etc.) and net numbers of security available for public offering, Face value or the security and amount called up for application, Lock-in period, credit ratings etc.
- It also mentions the Declaration on Risk on investment, Disclaimer regarding the responsibility of the regulator, Date of opening of the Issue, Date of closing of the issue (earliest and latest), Name, address, and logo of the Issuance and Sales Manager.
- Information regarding the Net Worth.

The inside cover page of the prospectus shall include the following information

- A glossary of technical and other terms used in the prospectus
- Location form where the prospectus and application may be obtained and application may be submitted.

Information to be disclosed starting form the second page of the prospectus.

a. Declaration of the Issuance and Sales Manager
b. Declaration by Body Corporate
    i. Responsibility and accountability statement of the Directors
    ii. Responsibility statement by the body corporate
    iii. Compliance with the regulatory requirement of the regulating agentcy
    iv. Declaration regarding the promoters, directors and chief executive
c. Information on body corporate
    i. Background on body corporate
    ii. Description of property
    iii. Future Plans and strategies
    iv. Composition of the Board of Directors and representations

d. Information on the capital structure
e. Information on the promoters/directors
    i. Background of the promoters/directors
    ii. Transaction with promoters /directors
f. Description on the limitation of liability
g. Information on personnel of the body corporate
    i. Information on the key managerial personnel of the body corporate
    ii. Information on the allowances and remunerations given to the directors and the key managerial personnel
h. Risk faced and Management's views on managing the risk
i. Financial statements
    i. Financial statements and views and analysis of management on the statements
    ii. Information on the financial ratios
j. Information regarding the issuance of the security
    i. Objective of issuance of securities,
    ii. Deployment of capital proceeds form the issuance of securities
    iii. Interim use of funds before putting it in the project.
    iv. Premium related information if being issued at premium
    v. Provisions related to allotment, refund and listing of securities
    vi. Detail related to underwriting
    vii. Attention to be paid while applying
k. Details on Related Party Transactions
l. Information relating to foreign investment and management
m. Performance of the Issuer's securities if the body corporate is already listed
n. Promises of the past public issue and performance.
o. Information related to Consultants/ Experts
p. Where there are funding sources other than the public issue, for the completion of the project, such details
q. Details of litigation of defaults
r. Disclosure on Investors grievances and redress system
s. In case securities are issued otherwise than for case, name

of the person or the group, description of the assets/service purchased number of securities issued and the rate of the securities.

t. Details regarding the issuance of debentures
u. Details regarding the issuance of preference shares
v. Other general information
w. A copy of commitment letter (due diligence certificate) presented by the Issue and Sales Managers

5. Roles of Disclosures in Prospectus/Offer Documents

The role of disclosure in the prospectus can be discussed under the following headings:

Compliance of Regulatory Obligations

The securities regulators have various disclosure provisions set for issuer companies, in their respective acts, regulations, guidelines, bylaws. Sometimes, they may set special disclosure provisions for particular sectors. For instance, SEBON has set special disclosure measures for hydroelectricity companies in Nepal. To fulfill these sorts of legal and regulatory obligations, the companies disclose the required information under prescribed framework. It will allow companies to fulfill legal responsibility and thus refrain from legal challenge.

Investors Education and Awareness

The issuer company fulfills the legal and regulatory obligation by preparing and issuing the good prospectus. On the other hand, it can tell about its financial planning and business prospects to the general and institutional investors publicly. It also provides investors the opportunity to explore investment related information and assess the risks associated with investment. If investors read the offer documents carefully and make an assessment based on the factual information provided, will help to take the better decisions. It will give the details of the issuer company on overall wings of the business including background, credit rating, management, business, operation, technology, market, risks, financials, plans & policies, strategies, commitments and prospective etc. The investor got valuation of stock awareness.

Promotion/Publicity of Issuer Company

Though prospectus is a legal document, it is a tool used to attract the general investors to participate into the company by owning share of it. Hence, this will grant opportunity to promote the company and make a good public posture and reputation. For this, the company have to put the relevant information adequately. To make it more understandable and accessible to the larger number of investors/

readers, it should avoid difficult and jargon terminologies as far as possible. It should be clear, precise, complete, simple and easy to understand by the general public. The information stated in final prospectus is assumed to be very authentic and thus gets public faith and reliability. As it is published in web pages of the company, issue and sales manager and regulator, it becomes public document. So, it is often covered by press and media too. Hence, the issuer company can have opportunity to get publicity without additional expenses.

Ensures Transparency and Accountability

Transparency and accountability are the two pillars of corporate good governance. Adequate and timely disclosure of information to its stakeholders make the institution more credible and trustworthy based on principle of transparency and accountability. Accountability goes beyond the mere responsibility of delivery of task or service. It is an answerability if a service is not delivered in a timely and efficient manner. Increased transparency in the corporations' operations and management makes it easier for investors to make informed decisions. It also cuts down on the possibility of manipulation or misuse of investors' funds.

Avoids Financial Frauds and Economic Crisis

Dissemination of trustworthy information and accountability is crucial to avoid various financial frauds. Financial statement fraud occurs when corporations misrepresent or deceive investors into believing that they are more profitable than they actually are. Similarly, severe financial and economic crisis can be avoided with increased transparency. The 2008 Global Financial Crisis is an excellent example of a financial/economic crisis, to some extent, due to lack of transparency and accountability in the market.

Eliminates Insider Trading and Window Dressing

Insider trading is the buying or selling of a listed company's stock by someone who has non-public, material information. Material nonpublic information is any information that could substantially impact an investor's decision to buy or sell the security that has not been made available to the public. Hence, Sufficient disclosure prevents agents or inside people with "inside information" in the market from misusing it for personal and family gain or profit. It also prevents the chance of window dressing and manipulation of accounts, thereby further increasing transparency in the market.

Allows investors to make informed decisions

Decision making depends on several factors beyond our control. These include uncertainties that can affect our plans and actions. When making investment money, for instance, need to evaluate the risk in terms of a return on investment.

A well-informed decision requires patience, objective thinking, accounting for unpredictability, and preparing for failures. Disclosure of relevant information by company helps investors make informed decisions. It helps to decrease the sentiment of mistrust and speculation at one hand and increases investor confidence at another hand as they feel fully prepared to make informed investment decisions with transparency in information at hand.

Mitigate uncertainties in the market

Adequate disclosure also reduces uncertainty to a great extent in the market. Uncertainty is one of the most prominent reasons for market volatility. When there is full disclosure by businesses in the market, there is an increased level of overall certainty in the market, thereby decreasing volatility levels and bringing in stability. For instance, The stock markets have been extremely volatile in the early part of 2020 due to news of the spreading COVID-19 pandemic. This is leading to extreme uncertainty for many businesses as they determine the best path forward for their organizations.

Resolution of Disputes:

Corporate disputes includes the disputes relating to antitrust, breach of contract, breach of fiduciary duty, fraud and misrepresentation, board member disputes, partnership disputes, privacy, cyber security and data breach, product liability, real estate, land use and environmental litigation, restrictive agreement, securities litigation, shareholder disputes and derivative actions, tax disputes, trade secret and unfair competition etc. The information stated in the final offer documents gets authenticity and thus regarded as a legal document. To resolve the aforementioned issues, the information and facts included in the document are related with them, it could be dragged as evidence. Thus disclosure in the offer documents could serve as a resolution of various forms of corporate disputes.

6. Importance of Disclosure for Investor Protection

The term Investor Protection is a wide term encompassing various measures designed to protect the investors from malpractices of companies, market participants and other intermediaries. As all investment has some risk element, this risk factor should be borne in mind by the investors and they should take all precautions to protect their interest in the first place.

The securities regulator strives to make capital market a fair, efficient and transparent by safeguarding the investors. Investors can be protected by flow of adequate and timely information regarding investment decision. Companies have to discloses the information to fulfill regulatory obligation and promote its own brand. Disclosure of information brings transparency and it is vital for an effective and successful securities market. Disclosure can be considered as the act of releasing relevant

information pertaining to a company that may influence an investment decision. As a regulator SEBON oversights its key market intermediaries and participants to ensures the adequate and timely disclosure of information, so as to maintain transparent dealings and protect the investors against frauds.

The investors should have easy access to investment related information prior to participating in transactions. To achieve this, the regulator requires issuer and listed companies disclose certain material investment information to the public. These disclosures consist of investment specific documentation such as prospectuses, as well as financial statements, revised registration statements, material change notices and offering documents. Disclosure requirements ensures that information is adequately disseminated by a company. Proper disclosure provision exercised by regulators always helps the general public investors to be well equipped with the knowledge of the securities being offered so as to make a rational investment decision. This initiative provide knowledge for all investors to make a rational investment decision. SEBON has also outlined the disclosure requirement and continuously monitoring its application in the best interest of investors. Failure to disclose information adequately and timely manner would be considered a contravention of the securities laws and provisions.

7. Conclusion:

It is essential that investors should be provided with the information necessary to make informed investment decisions. The principle of full, timely and accurate disclosure of current and reliable information material to investment decisions is directly related to the objectives of investor protection and fair, efficient and transparent markets. The role of offer documents and information provided into it also helps the investors to make a rational investment decision. It has close tie with investor protection as well. For this, simplified prospectuses should be designed to ensure that these documents are clear, concise, understandable and well-organized and contain the most important information that an investor would consider in making an investment decision. Investors should be encouraged to read and consider the contents of a simplified prospectus through the application of plain language principles and concise and standardized formats. Sound corporate governance is essential for maintaining investors' confidence and good performance to solve problems of corporate misconduct and behaviors. In view of growing number of scandals and subsequent wide-spread public and media outcry, a plethora of governance norms, codes, measures, best practices, and standards have been set. The disclosure regarding these in the offer document also plays pivotal role in promoting the corporate good governance and shape a posture for reputation of institution in the eyes of investors. Similarly, the essence of adequate and timely disclosure in

public offer documents helps to aware the investors, ensures transparency, avoids financial frauds and economic crises, eliminates insider trading and window dressing, allows investors to make informed decisions, mitigate uncertainties in the market and eventually protect the investors.

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ICT in Nepalese securities market

Sanu Khadka*

Introduction

Economic growth and prosperity in the modern economy are unimaginable without efficient capital market and this is equally true for the growing economy in developing countries like Nepal. The impact of information and communication technology (ICT) on the growth of capital markets has been a subject of hot topic in modern times. Information and communications technology (ICT) is an umbrella term that includes any communication device or application such as radio, television, cellular phones, computer, satellite systems, network hardware and software as well as the various devices and applications associated with them such as videoconferencing and distance learning (Okwu ,2016). The hurried transmission of the Internet, of mobile telephony and of broadband networks all express how persistent this technology has become. ICT has made the capital market more efficient by providing all participants with quicker and more effective means of exchanging information and new products and instruments have been made readily available as a result of the advent of sophisticated ICT.

Capital markets can be more flexible, acquire superior intensity and wideness with the interference of ICT. The application of sophisticated information technologies like Block chain, Big data and Artificial Intelligence (AI) are taking the capital market to a new height of efficiency. ICT has contributed the most for Easy access of real and accurate information in an inexpensive manner .It has enhanced the practice of corporate governance to deliver its promises of transparency, accountability and security. ICT is transforming the way we trade the securities in the market and it creates myriad opportunities which would have been unimaginable 10 years ago. With the cutting edge technology surfacing through the world, securities market of Nepal is also focusing on technological advancement. One of the significant contributions of ICT to the capital market is easy access of real time, accurate information in an inexpensive manner. Investors are analyzing the raw information by integrating information technology with better analytics search technology and business intelligence. Nepal being relatively younger member in the league of countries with stock exchanges and the same holds true in terms of technological advancements in country. Nowadays it is trying to adopt the emerging technologies to develop stock market to new height and expand in every districts of the country. As per the direction of SEBON, NEPSE is also trying its best to cope with emerging technologies.

* *Ast. Director, SEBON*

Some of the technological reforms in Nepalese capital market:

NEPSE opened its trading floor on Jan13, 1994 and had adopted an "open out-cry" system for the transactions of security. Later it ended the conventional "open out-cry" system since August 24, 2007 and adopted a computerized trading system. The computerized trading system took the securities market trading procedure to new height enabling circuit breaker and trading halt mechanisms. The major technological reforms in chronological order are as follows. (SEBON, 2017) & (NEPSE, 2018)

- In 2010 AD, Central Depository and clearing (CDSC) the subsidiary company of NEPSE was established to provide centralized depository, clearing and settlement services in Nepal. The company uses CDAS and CNS software to make the clearing and settlement effective and faster. The trading of dematerialized shares were started.
- In 2014 AD, CDSC became the member of Association of National Numbering Agencies (ANNA). ANNA has a role of servicing as the Registration Authority for the International Securities Instrument Number (ISIN) standard.
- SEBON directed to implement full-fledged dematerialization mandatory since Jan 15, 2016. By the commencement of mandatory dematerialized trading the security trading, clearing and settlement process are eased thereby liquidity in securities market. T+2 days clearing and settlement cycle has decreased the earlier 15-45 days clearing process. There are approximately 2 million DEMAT accounts registered.
- The transformative change in Nepalese Stock Market is regarding Initial Public Offering (IPO). Application supported by blocked amount (ASBA) has been introduced which has solved many issues such as hours of queues to submit the form and wait for more than sixty days for allocation results and settlements.
- The different online news portal such as nepse.com, merolagani.com, nepalipaisa.com, Karobar Dainik, Sharesansar etc. are providing the updated and live data regarding share markets to the investor.
- Different portfolio management software are available.
- Semi online trading is implemented since 13th April, 2018 which enable the investors to buy/sell request through email, SMS or mobile app.
- NEPSE started an internet-based fully automated online trading system NEPSE Online Trading System (NOTS) on November 6, 2018. The implementation of NOTS has been a milestone in the history of NEPSE.

- The electronic trading of Debenture has been started on July, 2019.
- CDSC launched MeroShare app on September 16, 2020 .After this launch, investors are able to do the IPO investments, share transfers, view their portfolio, etc. from the app itself. The app have all the services which was available from the web-based meroshare portal.
- NEPSE completely stopped the physical trading of securities from January 17, 2021 (CDS & Clearing Ltd., 2021).

SEBON's initiatives in adopting the technology:

SEBON, the regulator of securities markets and commodity derivatives markets is responsible to adopt, embrace and manage the emerging technologies in markets. Some of the technological reforms initiatives by SEBON are:

- **Establishment of Electronic Reporting and Retrieval System (ERRS):** Electronic Reporting and Retrieval System (ERRS) has been inaugurated on the occasion of World investor week (WIW), 2020 which aim to facilitate the reporting task of the market participants in efficient way. They can send their annual and quarterly statements and other periodic information electronically saving their time and cost. It also enables investors for an easy access of reliable information needed to make informed decisions. The stock exchange, credit rating agencies ,52 stock brokers, 30 merchant banks and more than 167 listed companies are already registered in the system and reporting the SEBON timely through this system. The analytics module in the system has made the supervision task more efficient by generating different reports as per ones need. You can visit https://errs.sebon.gov.np/ for registration and reporting.
- **Handling investor grievances through website:** The system and processes of securities market needs to be fair, efficient, and transparent in order to safeguard the interest of investors. Protecting the investor is the very prime objective of SEBON .SEBON has always given the priorities for the investor grievances. Previously, every grievances were taken in the form of written application and emails but now it can be handled through the website too. The separate web page for handling grievance has been created in the organization website. You can visit http://sebon.gov.np/grievance for registering any grievance.
- **Educating the investors through online and web materials:** The separate web page for the education purpose has been created in the organization website. You can visit http://sebon.gov.np/education for different audio, video and written educating materials. Many capital market literacy programs with the coordination with other market participants has been conducted through the Zoom platform. Utilizing the ICT, Many Radio programs and video conferencing has been done to reach the larger investor groups.

- **Formulation of IT policy:** In order to increase and facilitate the increased and proper use of ICT in securities market activities, SEBON has formulated the SEBON IT-policy 2076. SEBON is drafting the IT Operation guidelines for market participants to monitor them regularly for the proper implementation of the programs and strategies under the IT policy. Nepal Stock Exchange Ltd (NEPSE) and CDSC have also formulated the IT policies respectively for regulating the IT devices and systems.
- **Online enlistment process :** In order to be enlisted in the standing list of SEBON, an individual, firm, organization or company meeting the qualification under the rule can apply online along with the required documents within the period specified.

Near future plan (SEBON, strategic plan 2021-2024):

SEBON has published the strategic plan 2021-2024 on April 19, 2021 outlining strategic initiatives and key priorities of SEBON for the next four financial years in order to accomplish SEBON's mandate. Some of the technological plans included are:

- **Establishment of "Automated Market surveillance system':** The integrity of the market is maintained through a combination of surveillance, inspection, investigation and enforcement of relevant laws and rules. Automated Market surveillance system contains the automated surveillance tools that analyses trading patterns and are installed with a comprehensive alerts management system. These tools are able to track the positions of alleged large readers, and detect market manipulation, front-running, fraud and trade practice violations. Market surveillance, in particular, plays a significant role in anticipating the potential vulnerabilities to a capital market. Presently, SEBON is performing real time surveillance through the surveillance window provided by NEPSE. Due to many data constraints and the technological limitations, the system cannot give the all needed reports. So SEBON should establish its own surveillance system. With coordination between different regulating bodies in the south Asian countries, SEBON is planning to do research on Establishment of Automated Market surveillance system.
- **Formulation of SEBON ICT Directives for Market Participants, 2022:** SEBON is on the way on drafting the ICT directives for market participants. In order to manage and guide the ICT activities of markets the proposed "SEBON ICT Directives for Market Participants, 2022" will incorporates the rules and disciplines relating to IT governance, maintain confidentiality, integrity and authenticity of information, IT/IS audit, smooth IT operation, IT service management and IT risk assessment and its compliances. The SEBON ICT

Directives for Market Participants, 2022 will promote the proper and secured use of ICT in markets and strengthen the institutional capacity.

- **Enhancement of Electronic Reporting and Retrieval System (ERRS):** The current system has facilitated the reporting task of the market participants. Enhancing it and adding the module for issue management will be very effective .It will give new height to the current traditional way of working. One can create a file, upload/download documents, and move it for approval to authorities from different sections irrespective of their physical location so that File creators can view the complete status of the file movement. It enables corporate governance to deliver its promises of transparency, accountability and security.
- **Development of ICT infrastructures and build capacity to support technology-driven innovation and business strategies:** SEBON is on the way of establishing the technological standards, protocols and capacity requirements to ensure greater interoperability across a broad range of systems, data environment, and entities and Enhance the ICT capacity and standards of market operators and market intermediaries.
- **Development of institutional capacity:** SEBON will provide different trainings to make the competent employees to cope with the technological changes .SEBON is in process of restructuring organogram and institutional capacity.

Conclusion

The technology offers a host of new opportunities for development and expansion of securities market. Possibilities always come with challenges. Despite all these opportunities, it also introduces new risks. The issue of data protection inherently comes with information technology since capital market comprises the financial details of individuals and serves great leverage to whoever holds the data. One of the major risk is cyber-crime. Cyber-resilience refers to the ability for technological infrastructure and a firm's reputation, critical operations, etc. to continue during (or recover quickly) after a successful attack (OICV-IOSCO, 2015). Growing use of ICT in Nepalese securities market and the huge number of digitally illiterate people are likely to contribute increased cyber threats. Capital Market relying totally in third party vendors for software systems without corresponding cyber security monitoring is also providing aid to cyber threats. SEBON being the apex regulator of securities market of Nepal should focus on increasing the cyber resilience program and implement the broader approach based on proactive response to cyber threats and information sharing on on-going malicious events and

past experiences. In order to increase and facilitate the increased and proper use of ICT in securities market activities, SEBON should direct market infrastructures to have state-of –the-art ICT technology and system with appropriate forward and backward linkages .Addressing the technology growth with suitable regulatory and data policies will boost the impact of ICT to build the efficient capital market of Nepal resulting the economic development of the nation..

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A Study Of Individual Investors' Behaviors In The Stock Market Of Nepal During COVID-19 Pandemic Period: A Qualitative Approach

Binod Ale *

Abstract

The main purpose of this research study is to investigate and identify the psychological and contextual factors affecting individual investor's investment decision making behaviour during the time of COVID 19 using qualitative approach. The study begins with the Conventional theories, Efficient Market Hypothesis (EMH) that signifies the rational investment behaviour. The existence of abnormal circumstances lead the investors to take measure to protect their investment and avoid the risk of uncertainties. However, the number of investors, trade turnover, volume and transactions are found increased during COVID-19 pandemic lockdown period that significantly draw research interest. Such observed market anomalies are attempted to explain by past research studies with the support of behavioural finance theories. The study will be conducted within Kathmandu Valley having 10 participants actively involved in secondary market, NEPSE, will be selected to conduct semi-structured interview. The data collected will be analysed using narrative analysis method and presented using content analysis method. The findings of this research study will be helpful to understand investor's behaviour during abnormal circumstances and allow to optimize the risk of investment in volatile market. This will also help to understand strategies of investors to make significant profits from short term market swings in the stock market.

Keywords:

COVID-19, Efficient Market, Behavioural Finance, Investor's Biases, Market anomalies

1. Introduction

The unexpected breakout of COVID-19 pandemic has created an unparalleled and devastating hazard to both human health and socio-economic prosperity across the world. The first COVID-19 cases were reported to the World Health Organisation (WHO) on December 31, 2019.. Since traditional finance assumes investors' rationality based upon the efficient market hypothesis (EMH), investors' flawed judgments could be analysed using behavioural finance (Shiller 2003).

The only Stock market in the Nepal, Nepal Stock Exchange Ltd (NEPSE) initially hit by the Virus outbreak that lead the market to dip by more than 30%. NEPSE

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halted its transactions (both online and physical) on March 22, 2020. The investors takes protective measures or react as the psychological impact in the capital market if abnormal circumstances occur, which is called the "trigger events" (Dreman & Lufkin, 2000).

Although NEPSE had remained bearish for a few years, the year 2020 kicked off with a bullish trend, the stock exchange making it to 1632 points on February 27, 2020. The stock market has responded positively as the COVID -19 pandemic unfolds, and the market remained highly volatile which can be evident by significant change in stock prices, increased transactions, trading volumes, extensive market turnovers and opening of new DEMAT accounts and brokerage accounts. As a result, the secondary market, which is setting new records on a daily basis, also crossed the 3100 index on August 2021.

The prior researches on investors 'behaviour bias were studied different context and this study contributes the past literatures in analysing the behaviour during extreme market situations when the aggregate behaviour of investors in the market could show different features in different situation.

2. Background of the Study

There exist several factors that have direct and indirect impact on stock market such as fundamental factors like interest rates, company financial statements, regulatory bodies plan and policies, company announcements etc. based on which investors consciously develop their investment decisions. Sentiment of investors, macroeconomic, and monetary variables have some impact on stock prices (Karki, 2017).Political risks (Beaulieu et al., 2006) and natural calamities; avalanche, flood, fire, epidemic & earthquake (Lamb, 1998; Carter & Simkins, 2004; Ramjah, 2013). Investor activity during the time of economic uncertainty during the pandemic has aligned with behavioural finance theories and concepts because with increased trading activity in the market investors. (Bates, 2020).

Traditional theory of Efficient Market Hypothesis, developed by Eugene Fama, carries the assumption that market is efficient where all the information relevant to stock prices is freely and widely available and universally shared among investors. Political hassles and impulsive directions leading the overall economy into unforeseen direction. But the recent trend in the stock market has revealed the high degree of volatility and NEPSE index after achieving record breaking level during the initial phase of COVID lockdown, later started to fall consistently after announcement of policy level restrictions by the governments. Stock market bubbles occur when investors overvalue a stock and drive its price above what it is truly valued at based on a certain valuation model (W, 2020). This research study has focused to make the qualitative investigation on presence of investors' behavior bias leading to stock market volatility.

3. Statement of Problems

The COVID-19 era has shown several new challenges to socio-economic life of the individuals. Unlike other catastrophic events, COVID-19 pandemic has also been disruptive and threatened the individual, business, industries and entire economies all over the world. The recent literatures on the study of psychological behaviour of investor implies that whether positive or negative psychological behaviour towards stock market can change the picture of market and economy. The stock price reactions documented the evidence of panic trading and increased volatility in national and international stock markets (Bhanwar et al. 2020). But very few research has been found to focus on market abnormalities (market rises under critical situation) identified in few nations due to some investors 'bias behaviour such as herding and overconfidence especially in case of India, Saudi Arabia and Indonesia.

Most of the empirical research findings indicates negative returns volatility due to COVID and some show positive returns. Thus, existing findings have been found differ based on countries and context which suggest that need for in-depth studies of other psychological behavioural forces that affect market volatility in Nepalese Stock market. The numerous literatures are found to explain behaviours forces relating to negative volatile returns due to fear, uncertainty, risk aversion, negative emotions etc. in line with traditional EMH theory, however the study of behavioural forces that may impact the positive volatility even during pandemic crisis has actually become research gap to be fulfilled by this research. In addition, The COVID-19 pandemic is a new phenomenon, therefore the studies on it are still new to investigate in developing or emerging nations to see the impact on various sectors.

3. Research Questions

The purpose of the research is to investigate impact of COVID-19 pandemic on investors' sentiment and identify the prevalence of behavioural biases in the Nepal Stock Exchange (NEPSE) to make investment decisions during the pandemic outbreak. Since the impact of pandemic has bought high volatility and uncertainty in the financial market, a study that could explain the possible impact of this uncertainty and volatility on investors' decision making could provide valuable insights into the growing literature of investors' bias. Some of the vital questions that have been addressed by this research study are:

1. Whether the behaviour biases exist in Individual investors' decision making in NESPE during COVID-19?
2. What are the major behavioural biases that impact investors decisions during COVID-19?
3. Do behavioural biases induce market volatility during COVID crisis?

4. Rationales of the Study

The major significance of this study is to understand the psychological base of the investors' behaviour and how it relates to market volatility and disruptions. Government can frame policies regarding development of the stock market and regulate the investors' behaviours in order to protect their asset and interest. The study will enhance the awareness among investors to understand if they have rational or irrational behaviours in crisis situation. Based on this, they can construct discipline investment. This research also contributes to the literature gap of investors' bias behaviour in the stock market of developing or emerging nations like NEPSE during the pandemic.

Moreover, the findings contribute on identification of individual investor's potential risks due to irrational decision making led by some major behaviour biases and evaluate the investment performances during crisis. The rest of the article is organized as follows: Section II discusses the relevant literatures. Section III explains the research data and methodology, after this Section IV involves data analysis and findings followed by Section V discussion and conclusion.

5. Literature Review

This section of the study focuses on the previous literature related to the impact of the pandemic and unexpected events on the stock markets, investor psychology and behaviour, along with the conceptual and theoretical framework. While the dynamic of stock markets during the pandemic might looks random, irrational, or even insane at first glance, on closer inspection it becomes clear that they did not react blindly (CapelleBlancard & Desroziers, 2020).

The empirical studies addressing the issues of the dynamics of COVID-19-led stock market volatilities are only a few. In earlier studies, Bai (2014) and Baker et al. (2012) argued that the investors feel pessimistic about investment prospects in a given market and sell off that market's stocks under the outbreak of communicable diseases. Shanaev et al. (2020) also added that he influence of investor's sentiment in asset price volatility is widely described as a combination of investors' reaction to the current market situation and unjustified expectation of the future cash flows (Baker, M., and Wurgler, J., 2007). Ngwakwe (2020) revealed that the Dow Jones Industrial Average recorded a significant fall in average stock value during the COVID-19 period, on the other side; the China Stock Exchange Composite Index experienced a significant increase in mean stock values during the pandemic, higher than it had been before the pandemic. Alam et al. (2020) indicated that the market reacted positively with significantly positive average abnormal returns during the present lockdown period, and investors anticipated the lockdown and reacted positively, whereas in the pre-lockdown period investors panicked.

Conceptual Review: Investors Behavior and Stock Market Volatility

Schwert (1989) states that stock market volatility indicates that future cash flows and discount rates are uncertain. Stock market volatility tends to increase drastically if there are important events that have a broad economic and financial impact, such as the 1997/98 Asian economic crisis, and most recently the health crisis due to COVID-19. Ullah (2019) stated the findings reveal that behavioural biases such as confidence have a positive impact on stock volatility.

Theoretical Review: Behavioral Bias and Market Anomalies

While traditional finance theories (e.g. Portfolio theory, EMH) try to argue and explain why financial markets are efficient, on the other side the reasons behind the evidence of market inefficiency and anomalies are explained by behavioural finance. Shiller (1981) argued that investors are not completely rational, which could affect market prices aside from fundamental variables.

Though Traditional Financial Models have notion of rationality of Investors in their Investment decisions yet real Circumstances found a lot of deviations and anomalies from these financial Theories. The literatures of behavioral bias integrate the theories like prospect theory, heuristic theory, and herding and market factors in order to analyze the presence of market anomalies. The existing literatures on above mentioned theories, have been studied to explore the presence and impact of investors 'bias in the COVID pandemic.

1. Heuristic Theory

Heuristic is considered a strategy for making decisions, which disregards the part of information in the process of making decisions quickly, frugally and accurately than more complex methods (Gerd Gigerenzer & Wolfgang Gaissmaier, 2011). (Kahneman, D., & Tversky, A., 1979), are considered to be the first writers on the subject, studied three more vital factors, which were termed as: representativeness, availability bias, and anchoring, were included in the heuristic theory.

2. Prospect Theory

(Kahneman, D., & Tversky, A., 1979), prove that investors will behave to avoid risk if they prefer investments with certain risk prospects in certain expected value or, in other words, utility function is concave. (Barberis, 2013), confirms that prospect theory contains elements such as reference dependence, loss aversion, diminishing sensitivity, and probability weighting. (Malkiel, 2003), argues that psychological factor plays a significant role in market prices and not rational investors, which makes the market ineffective. (Malkiel, 2003), confirms that as long as investor judgments still contain mistakes, pricing irregularities and predictable patterns in stock returns in the capital market may appear in the long or short term.

3. Market Factors

Since the market factors are considered as external factors which influence investors' behavior, are generally not included in behavioral determinants. (DeBondt, W.F.M. and Thaler, R., 1985), has stated in their study that investors' behavior could seriously affect financial markets through behavioral finance.

4. Herding Effects

Herding occurs in finance when investors follow the crowd instead of their own analysis. The roots of the global financial crisis in 2008, that the prices of the homes in US rose about 85% inflation adjusted between 1997 and 2006 because people were extrapolation biased, meaning that they believed that the prices would just continue to go up (Shefrin, 2009).

This led to overconfidence of both the bankers handing out mortgages, and the consumers purchasing them. In the past couple of decades, the most impactful have been the pandemics Ebola, Mers, Sars and the most recent Covid-19, had a significant negative effect on to the stock market and companies, they recovered quickly in only a couple of months.

This literature review examined the market reaction and investor behavior during the most recent crisis Covid-19.Very few researches has mentioned the fundamental causes for extraordinary growth in stock market during COVID, however no detailed study and explanation have been presented which has been taken as knowledge gap in the existing literature and this study is an attempt to fulfill the gap by analyzing the association of investors bias leading to market anomalies during COVID.

6. Conceptual Framework

The conceptual framework of the research study can have been developed to understand the relation between investor's behavioral biases and investors decisions in the stock market that lead to market anomalies and volatility during COVID-19-time period. In this research study, the Individual investors is that they cannot behave rational every time and there may arise different types of behavioral biases that are also be supported by behavioral finance theories, knowledge and past researches, with epistemological ground, which impact the investor's decision in the stock market and lead to fluctuate the stock price ultimately.

The study is focused on the event of COVID crisis as much of the qualitative studies of investors behaviors are yet to study in case of Nepal. The study will be supportive to previous qualitative researches in stock market as well.

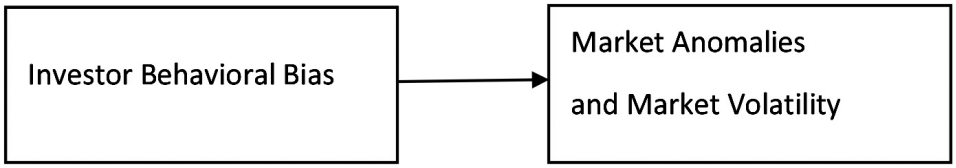

Figure 1: Conceptual Framework

7.Research Methodology

This section of the study gives detailed information about the research methodology to investigate the existence of investors' bias behavior in NEPSE during the time of COVID and examine their connection to market anomalies and market volatility. The research also focuses if they are same or common during financial crisis and the most recent COVID-19 crisis. Any additional or new dynamics to investor's behavior bias during COVID crisis is crucial point to discover and study of the research. Questionnaires were set for interview and narrative analysis was implemented to capture relevant data for study. The data were also open-ended nature and interviews of respondents with semi-structured questionnaires found to be appropriate to apprehend the conversation of respondents more deeply and convincing manner. Sample of 10 respondents were only selected with purposive sampling focusing to 30-40 minutes long interview.

8.Research Approach (Paradigm)

Since the study is mainly based on the psychological aspects of individuals based on their experiences, feeling, emotions and due to nature of data, qualitative approach has been adopted. Each individual respondent has shared their own experiences of trading in NEPSE during COVID and each story has been analyzed to identify key salient bias that strongly shape investment behavior or influence decision making. Hence the study adopts more inductive approach to reach knowledge. The interpretive paradigm is used for the study as it provides an epistemological base for the study of given phenomenon. It depicts the ideal investor behavior part from their actual behavior. It also captures the hidden feelings of the interviewees that cannot be studied through other methods.

9. Research Design

This research study is based on collection and analysis of qualitative data from the selected sample of population. Qualitative research approach has been used as it allows to explore in detail views of the interviewees and capture emerging themes (Denzin and Lincoln, 2020). The interaction was made with the target sample individuals and recording of their interviews were collected based on semi structured questionnaires under narrative approach. However, previous researchers

have already used causal comparative and descriptive research designs to deal with a catastrophic event. Thematic data analysis approach has been used to categorize the major themes emerged from the data analysis.

10. Site of Study or Selection of Research Location

The study was conducted among the participants chosen purposely from Kathmandu Valley since the large number of individual investors are enrolled in secondary market (NEPSE) from the selected location.

11. Selection of Population and Sample

Individual investors from Kathmandu Valley with diversified demographic characteristics who are investing in secondary market of Nepal since long time i.e. more than 10 years, were selected as participant of this study. The major participants of this research study are experienced individual investors who are active and connected to brokers, shared their stock trading experiences and feelings in realistic manner. The institutional investors were not considered into this study. Out of 10 participants, 60% were male and rest female. Some key selection criteria of the participant can be as illustrated below:

Table 1

Demographic criteria of sample Individual Investor

Investor Types:	Individual Investor Only
Gender:	Both Male and Female
Education:	Literate
Occupations:	Any
Income Level :	Regular
Investor Location:	Kathmandu Valley
Years of Experiences:	more than 10 years
Involvement in Market:	Secondary Market (NEPSE)
Investment Choice:	Equity or Stock
Equity Type:	Ordinary shares
Duration of Investment:	Short Term and Long Term
Trading Strategy :	Value Investing and Speculations
Health indicator:	Vaccinated against COVID-19 virus

12. Data Collection

A total of 10 interviews were conducted with the selected sample participant. Each individual fulfills the above sample criteria. The interviews were conducted physically as well as through telephone and online medium. The set of surveys semi structured questionnaires were constructed to capture the personality characteristics, perceptions, beliefs, sentiments and certain psychological thought process of investors that influenced their decision making in stock market during Pandemic crisis. The conversation made with the participants during the interview conducted in Nepali language though the questionnaires were set in English they were explained to them clearly. The participants were eligible and interested to share their investing/trading ideas, information and experiences during the period of COVID. Those data and information were promptly recorded in handwritten notes, field notes and also were in audio records in mobile devices additionally. Moreover, telephonic interviews were also conducted according to the flexibility of the time of interviewees to whom questionnaires were sent through email for responses. Such notes and records are required to be formalize through transcription. Each interview lasted for 30-40 minutes. As rough guide, it took average of 2 hours to carefully sort the data and information and transcribe them to categorize into suitable themes for analysis and interpretation.

13. Data Preparation and Analysis

The data collected were guided by the research questions which were first analyzed to identify key themes using thematic analysis in order to read the similarities in the pattern of the data in the form or written and verbal. The research interviews were transcribed and checked in order to make the data and information more organized. No software was used. Data shortening techniques such as coding was implemented (Miles et al., 2014). Once coding the data and information, the search for appropriate themes were performed classifying and summarizing the data based on similarities and differences that would be finally used to generate meaningful interpretation. Some of the key codes generated are excessive cash inflow, short term profit, insider information, mass investors, experience, confidence level, loss averaging, market analysis, earnings and dividends, fear and greed, profit booking and stop loss, trading strategy, margin trading, aggressive price change and volume increase and decrease etc.

14. Findings and Discussions

Based on codes generated from complex analysis of the data similarities and differences, following themes were drawn for further interpretations of the collected data and information.

- Online Trading attracted Short Term Opportunity
- Investors' Experiences During COVID-19 Pandemic
- Following the sources of investment advices and recommendations
- Highly optimistic and Increase Risk tolerance capacity
- Market trend and Representation of Stock price
- Investors meet return expectation

Online Trading attracted Short Term Opportunity

This theme discusses the investors interest to get involved in stock market to grab short term profit opportunity in the secondary Market. The respondents mainly discussed about the increase in money supply in the market due to lockdown which resulted into increase in the transactions and volume of the trade in the market. This shows that the respondents keep updates about the economy to understand the situation of the investment opportunity in the market. The availability of online platform has also been contributing the easy platform to attract large number of investors in active trading. Some of the interview responses are as follows:

"Due to lockdown many business transactions got halted, and supply of money increased to stock market to market short term profit" (interviewee 1)

"Stock market is usually taken as investment for quick money, I have been regular trader in NEPSE, as the stock market gained the momentum, I became optimistic to increase my trading frequency" (interviewee 2)

I usually prefer to invest in trading whether in daily, weekly or monthly shares for the sake to take return as quickly as possible" (interviewee 3)

Investors' Experiences During COVID-19 Pandemic

This theme encompasses the experience of stock market investors and how their experiences would affect their prospect to remain active in Nepalese stock market. Understanding of investors' personal investment experiences is particularly important since this in long run this will develop their future involvement in the stock market (Strahilevitzet al., 2011). The experience teaches many lessons to individual to take decision on buying or selling of stocks. This will boost the confidence of the trader to trade in particular stocks. However, sometimes individual can be overconfident due to past experiences. This lead into irrational behavior. The following experiences are illustrated by the respondent as individual investors:

"My experience in stock market has taught me to buy the stock when market falls and sell the stocks when market increases. I have suffered loss and enjoyed gains both in the past. The more you become experienced it will be easy for you to tackle" (interviewee 4)

"I have been involved in the stock market of Nepal since decades many things have got changed and have become accessible to large public. DEMAT and online trading platform have made the market more reachable. I believe the market has huge potential to grow further now" (interviewee 1)

"Stock market is itself a good teacher for any investor or trader, as long as you get involve in the market you will be able to understand market more deeply and make better decision" (Interviewee 5)

"Usually, the investors remain active in stock market whatever the condition of market and economy. I suffered much losses previously but not I can manage those losses based and can make consistent income based on my investment and trading skills learnt from the market" (Interviewee 6).

Following the sources of investment advices or recommendation

The theme has been extracted from the classified data as the respondents were actively trading based on investment advices from third party/consultant/ friends or family members who were consistently involved and willing to follow the recommendation of their own brokers. Mostly investors do not rely on consultants and they check the company's general trends from fundamental and technical analysis online, journals, newspapers and magazines. They do not rely fully on third party for additional information as it just provides wind information which is prevailing in market which cannot be checked analytically. Since there were many new investors involved in the market and as previous literatures suggested there exist herding on information flow from the person whom one can trust easily. Here are some information from interviewee:

"I choose the stocks to invest that were chosen by mass investors since most of the investors already studied their fundamental aspects and remains confident on that stock" (interviewee 1)

"I tend to track trades and investment of big brokers and investors and follow investment strategies and apply in my investment for stock selection." (interviewee 2)

"I tend to follow news of rights shares and dividend of the company shares and put money on those company which are going to announce certain events"

Highly Optimistic and Increase in Risk Taking Capacity

Risk is an important factor for investors to consider when making investment decisions. There are two types of investors in the market. Through the different respondents' views, it shows that all respondents were ready to take risk as they were more optimistic. The investors who are making huge profits are willing to take more risk and vice versa. The above statement confirms through these responses from interviews:

"Before investing, I questioned the risks and analyzed the measures that can be achieved through venture capital" (Interviewee No. 4)

"I believe risky assets can cause significant losses so, invest in a diversified portfolio to minimize a risk of loss" (Interviewee No. 2).

Market trend and Representation of Stock price

The respondents were having more tendency to buy rising stocks with the expectation that its price will continue to rise further and demand for this stock will escalate due to more investors get attracted to particular stocks. This led the stock price to get overvalued and fluctuate more due to frequent trading. The bullish trend in the stock market also led expectation of investors positive towards stocks they bought. This also impact the stock price

"when stock price goes up, it attracts more investors or trader who can expect its price will rise continuously further" (interviewee 1)

"when market goes into uptrend, most of the stocks are overvalued, as these overvalued stocks attract more than individuals" (interviewee 7)

"I usually do not do my homework related to previous stock prices and market trends, believed the market will continue its bullish journey" (interviewee 8)

Investors seeking alternative income stream and financial security

In the midst of COVID, when many of the households were suffering from financial problem along with health issues, stock market was performing better which attracted many of the investors to perceive the market as lucrative source of income and expected to have financial security in the period of crisis. Some of the responses reflecting above theme:

"I will not increase my investment when the market performance is poor, I prefer to sell the stocks as soon as earn profit in it."

"I don't feel comfortable to sell my stocks in loss in time period rather hold till the price of the stocks gets rise"

15. Conclusion

The results of this qualitative study shows that besides fundamental and technical factors to influence investors decision making behavior, there are psychological forces which impact decision of the investors. Number of research studies have been made in examining the impact of fundamental (economic, industry and company related) forces on the stock price and overall market. The investors sentiments and psychological aspects are also considered to be inevitable forces that impact ultimately on the decision of investors. There is tendency of stock market to fluctuates based on the mass psychology of the investors. Past literatures have

explained the investors sentiments leads them to take investment decision positively or negatively. Mainly in the crisis time, the investors develop fear, negative emotions, feel risk due to uncertainty and react pessimistically. But when the investors react confidently and optimistically it may lead to create market anomalies. Such optimistic and pessimistic sentiments persuade trading frequency in stocks and that would make the stock price volatile. The research paper aims at examining the existence of multiple behavioral bias in the decision making of the investors in NEPSE during COVID or not. The results also indicate how the identified behavioral bias leads to market anomalies and stock volatility. The themes which were constructed from the data and information after coding and analysis, help to interpret the decision making behavior of individual investor during COVID.

Table 2

Thematic Analysis, Behavior Bias and its impact

SN	Themes Constructed	Behavioral Bias Constructs	Impact on Stock Price Volatility	Impact on Market Anomalies
1	Online Trading attracted Short Term Opportunity	Mental Accounting and Disposition Effects	Short term trading of stocks leads to fluctuate the price more lead to Increases in volatility	Increase
2	Investors' Experiences During COVID-19 Pandemic	Overconfidence Bias, Optimism Bias	Overconfidence and optimistic investors seek stock price to rise further which lead the stock price to overvalued and boost volatility	Increase
3	Following the sources of investment advices or recommendation	Herding Effect Bias, Availability Bias	When the group majority makes a wrong decision, it will turn to significant market price deviations	Increase
4	Highly Optimistic and Increase in Risk Taking Capacity	House money effect	Investor would look forward to invest in stock where majority are making more profit	Increase
5	Market trend and Representation of Stock price	Market factor, representativeness bias	Tendency to buy rising stocks with the expectation that this rise will continue will cause stock price to get overvalued and offers greater volatility Market	Increase

6	Investors seeking alternative income stream and financial security	projection bias, self-attribution, loss aversion	The expectation of making guaranteed profit from investment lead to increase the price of the stock and boost the volatility	Increase

The above table shows that various types of behavioral bias are found to exist in the investors decision making during COVID time. Each of the bias produces anomalies in the market. Heuristic Bias such Overconfidence, Anchoring, Availability bias and Representativeness have been found in positive association with stock market volatility. However, Framing Bias and Gambler Fallacy as included by prior literatures are not found as influential during COVID. Similarly, Prospect theory involving Mental Accounting, Disposition effects, loss aversion have been identified most important factors influencing investors cognitive decisions and creates the stock price to rise and fall sharply. As included by prior research, herding behavior and availability bias of individual investors strongly seeking ease access for information leads to choose the investment on stock based on information advised or recommended by any market sources. This lead to increase volatility of stock market. This research has identified few new behavior bias sources such House money effect bias, projection bias and self-attribution which were not found to be explained previously. Heuristic, Prospect, Herding and Availability Bias are considered to be major forces to impact stock market volatility during COVID pandemic and cause market anomalies.

16. Research Implications

This research will be able to provide new insights for investors, professional investors, brokerage firms, management, corporate governance and government, helping them make appropriate and powerful decisions and eventually stabilize the market. The contribution of the study to the theory is twofold. First, this study aims to improve our insight and understanding of the relationship between behavioral factors and investor decisions. Secondly, researcher also uses a holistic approach to study internal and external factors in the meantime. This study will contribute to behavioral finance literature in the context of developing countries as it has revealed the impact of COVID-19 on the emerging stock market, and its results are generalizable to other emerging stock markets.

The findings of this study will help academicians, researchers and policymakers of developing countries. Academicians can formulate new behavioral models that can depict the solutions of dealing with an uncertain situation like COVID-19. Policymakers like the Securities Board of Nepal (SEBON) and the NEPSE can formulate crisis management strategies based on behavioral finance concepts to cope with situations like COVID-19 in the future and help lessen

investors' losses in the stock markets. The role of the SEBON is crucial as it regulates the financial markets. It can arrange workshops to educate investors to manage their decisions during crisis time and focus on the best use of irrational and rational decision-making a t the same time.

Research Limitation and Future Direction:

This is Qualitative focused study, however the issues can be analyzed more in detail using several statistical tools and methods. The study area, period and sample size of the study are limited. This research study is limited to individual investors as it does not include institutional and professional investors. Triangulation method may be used in future study. Moderating variables such as economic constraints, demographic variables, socio-cultural differences, financial ability and regulatory policies can also be included.

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Mobile Trading for Efficient Capital Market

Sunil Kumar Karki*

Introduction

Information and Communication Technology (ICT) has turned the world into an information intensive society and is considered as the nerve of growth that can tremendously transform the economic, political, cultural and social conditions of country. Technological progress is a considerable driving force behind every development levels. It is changing the financial landscape in unprecedented ways with implications for the way we access, use, finance and invest our money and assets. From the mainframe computers in the old days to smart phones in our hands today, information technology have taken a giant leaps towards the rise of the information economy. Processes and transactions are faster, smarter and more automated. Technology is also a facilitator of global integration and financial access.

Nepal, being relatively a late starter in the world of technology, its history dates back to some decade i.e., 1971 AD with the installation and operation of mainframe IBM-1401 computer in the National Computer Center (NCE) for the national population census (Sharma & Kim, 2016). As per the recent data of Nepal Telecommunication Authority (NTA), the internet user has increased more than 50 times in these recent five years. More than 100% mobile penetration rate and the launch of fourth generation (4G/LTE) technology shows a promising future of internet and network connection in Nepal (NTA, 2022). This high mobile penetration due to 3G and 4G Technology of mobile operators has coverage in almost all remote areas of Nepal and Broadband internet accessibility has also shown the way to seek the opportunity of Mobile Trading.

Mobile trading refers to trading in the stock market using a mobile phone. Mobile trading allows investors to access trading platforms from their mobiles rather than being confined to traditional trading methods via computer. Such technology allows easier access for smartphone users to actively manage their portfolios even when they are away from a desktop or laptop. Leading brokerages now offer apps to their clients who can use them to trade in shares, invest in mutual funds or in initial public offers, and even monitor their portfolio.

It is more advanced than traditional trading which was done through a computer, in addition to it being quicker and easier. The ease of punching trades through a brokerage's mobile application, affordable Smartphone and cheap data plans have prompted several investors to switch to mobile phone transactions. While

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mobile devices, such as Android phones and iPhones, have always allowed users to check the performance of the stock market, mobile trading apps provide access to online trading platforms, which can be utilized to execute trades instantly from anywhere.

Scenario of Stock market in Nepal

Nepal Stock Exchange (NEPSE) is the only stock exchange in Nepal. It is located in the Singha Durbar Plaza, Kathmandu. The main objective of NEPSE is to impact free marketability and liquidity to the government and corporate securities facilitating translation in its trading floor through member market intermediaries, such as brokers, market makers, etc. NEPSE is the only secondary market of Nepal that opened its trading floor on February 19, 1994. Earlier, a Securities Exchange Center Limited was in operation since 1976. With an initiation to reform the capital market of Nepal, the existing Securities Exchange was converted into NEPSE (www.nepalstock.com.np).

The trading system at NEPSE was based on Open-out-Cry till 2007. On August 24, 2007, NEPSE adopted a semi-automated screen-based trading system by setting up a Wide Area Network (WAN). With the establishment of CDS & Clearing Limited on March 31, 2011, a new era of the stock market started in Nepal. The dematerialization of the securities started in Nepal (www.nrb.org.np). NEPSE conducted electronic trading of securities on April 15, 2014 for the first time, following the phase-wise implementation of online trading at NEPSE. On October 8, 2014, NEPSE started the first phase of trading dematerialized shares of the banking sector. The settlement of traded shares was done online for the first time at NEPSE through CDS & Clearing Limited (Nepal Stock Exchange Limited, 2020). Securities Board of Nepal (SEBON) and CDS & Clearing Limited declared to carry out the securities transaction only for dematerialized securities from January 15, 2016. The electronic settlement of the dematerialized securities was started on October 7, 2018, by the implementation of the Electronic Delivery Instruction Slip (EDIS). NEPSE started an internet-based fully automated online trading system on November 6, 2018. It is termed as NEPSE Online Trading System (NOTS). The implementation of NOTS has been a milestone in the history of NEPSE. NEPSE completely stopped the physical trading of securities from January 17, 2021 (CDS & Clearing Ltd., 2021).

Nepal Stock Exchange (NEPSE) officially launched a mobile application on July 5, 2015 that facilitates easy dissemination of information to the users. The application is expected to help promote investment in the stock market. Nepse developed the new app in association with software developer Braindigit IT Solution. The app can be downloaded on handheld devices running on iOS and Android operating systems.A user can buy and sell stocks, as well as manage his

portfolio on his mobile phone, with the help of a multitude of apps. It has become popular, though not a common mode of trading, with almost all stock brokerages offering iPhone and Android apps available to users, who wish to trade from their mobile devices.

Every mode of financial transacting is moving online, including stock trading. With more and more individuals moving to their smartphones to trade on the stock market, questions arise pertaining to the security of trades. The convenience of an online trading app is all about you being able to trade online from anywhere. This is why trading apps are popular.

Issues of Mobile Trading

The Popularity of App: With the volatility of the stock market and hectic travelling/work schedules of most traders, it's a challenge to find a trading portal in one spot. One is compelled to trade on the move, and this spirited way of trading offers traders opportunities to cash in when the time is right. Therefore, most traders find it convenient to use trading apps online. These offer a dynamic and quick way of riding the highs and lows of the stock market without missing a moment of excitement.

Increased security Trading: Buying and selling on any stock exchange is all about the timing. Any trader worth their salt will swear by this, and this is what makes trading through apps on smartphones versatile. If you want to trade through an online trading app, Nepal has many. Trading apps are designed in such a way as to provide security and safety in all aspects of trading activity. Encrypted firewalls exist and these secure transactions and details of funds from any fraudulence. With mobile trading being accessible to more investors, mainly small ones in remote locations, apps have enhanced security measures to boost trading through mobile apps.

Here are reasons why trading through an app is safe:

- The same safety protocols as those used by web-based portals are used on apps.
- You can access trading accounts in apps with your distinctive and unique details only.
- A user ID and one-time password is the way to access your account on an app.

The parent, origin, or source of the trading platform can be checked with a few clicks online. It is important to ensure that the trading platform is owned by a trustworthy source. The terms and services of the trading app must be well developed and described on the platform.

App's Sources

The parent, origin, or source of the trading platform can be checked with a few clicks online. It is important to ensure that the trading platform is owned by a trustworthy source. The terms and services of the trading app must be well developed and described on the platform. Trading applications with a trustworthy parent organization with history, public financial reports etc. are less likely to involve in deceitful activities for self-interest. Reputed trading and investment services providers generally use encrypted and secure methods to process trade orders and other activities. Hence, there is a lesser probability of cyber theft and security compromise for online traders.

2FA in Trading App

Many trading applications use 2-factor authentication to login into the accounts. By choosing the trading apps with 2FA login, you can provide an extra layer of protection above passwords to mitigate the risk of account theft. Login with fingerprints or face identification can be an additional step to enhance safety in online trading.

The account details must be protected at any cost and should not be shared with anyone. Traders should never leave their mobile application or computer unattended and must log out after every trading session. Protection of the login credentials is of utmost importance while trading and investing online. No matter how secure or trustworthy the broker or platform is, any online account can be compromised if the password and login details are leaked, even from the user side.

It is a general mistake by online traders to make an easy-to-remember password that is somehow related to them. Oftentimes the easiest to remember passwords are the easiest to crack for the hackers and conmen. The passwords must be robust, unique, complex, and most importantly should not make any sense. A secure platform would require you to set a difficult password with complex combinations.

Server Security

Although an end-user can never know the backend infrastructure that an App has, you should check whether the broker has a history of data leaks or breaches. You can find this information by searching about the broker, normally in case of such a breach, there would news & the regulators would also take action.

Take care of Security from your Side

Even if your app is most secure, the developers cannot eliminate the risks & vulnerabilities that originate from user side. If you have downloaded a Trading app or platform, take these precautionary steps.

- Use an Anti-Malware: Some malicious software or viruses can log what you type on your device, and leak your credentials to a third party. Installing an authentic anti-malware or antivirus like Malware Bytes can reduce the probability of theft through software. Choose an Anti-malware that also offers web protection.
- Do Not Use Public Networks: The freely available networks or Wi-Fi can be tapped to leak your login or trade details by man in the middle attack. Hence, online traders must avoid using the public or freely available networks to trade.
- Never Share your Login credentials: Don't share your login details with anyone. Also, never leave your device open in public or private that has access to your data & login credentials.

Mobile trading: Key benefits

- **Ease of placing orders**: Market orders can be placed effortlessly on mobile trading applications as compared to desktop terminals. No need to start up the big machines again and again.
- **Live market data & portfolio**: Mobile trading applications facilitate live market data including stock indices, shares, currencies, commodities, derivatives, etc. The existing portfolio can be reviewed on the mobile itself in no time. A user can take a brief idea about the performance of the portfolio and the underlying assets.
- **Notification facility**: Mobile trading applications do have the notification and alerts facility which works independently from the SMS alerts sent by the exchanges, brokerages and custodians. The notification facility keeps a user updated with the latest developments in the portfolio and recommendations given by the brokerages.
- **Live related news**: With the help of mobile trading applications, a customer can also track live news related to a specific development or associated with a stock.
- **Research reports**: Mobile trading applications also provide quick and easy access to the research reports which are generated by the respective brokerage houses or firms.
- **Historical charts & analysis**: Several premium mobile trading applications also provide the facilities of historical stock prices, indices data and analytical tools on the mobile trading applications.

Mobile trading: Key limitations

- **Restricted access**: A large number of mobile trading applications have restricted access which implies that there can be a number of barriers such as unavailability of derivative products, currency products and data of international stock indices.
- **Smaller screen size**: Small screen size is a big drawback for the users. A trading platform usually contains a bunch of details which can't be viewed with ease on a smaller screen. However, this problem has been reducing steadily with the introduction of larger screen sizes and trading applications for tablets.
- **Mobile connectivity**: Connectivity on the mobile trading platform is another big issue as the wireless signals may disrupt in remote areas and a number of hilly locations. A disturbance in the mobile network at the time of placing an order may lead to a partial loss of funds being transferred to the exchange or the brokerage firm.
- **Slow speed**: Other than the high-end smartphones, most of the budget smartphones don't have a fast processor due to which the normal operations on the phone progress with slow speeds. The lower processing speeds of the smartphone can lead to delay in placing the orders as compared to the desktop terminals.

List of Few Popular Stock Market Apps in Nepal:

- NEPSE App
- Nepali paisa
- Nepal Market Depth
- Nepal Share
- Sharehub
- Merolagani

Thus, downloading the best app helps you for doing better in the Stock market. Above mentioned apps have their distinct features and application purpose. However, installing one app on your smartphone helps you to get the right information, knowledge, and news related to the Stock Market.

Conclusion and Recommendation

After the break-out of the COVID-19 pandemic, ICT uses have increased tremendously. There are very less no of people going to brokers for buying and selling Shares. It has brought revolution in share market. People are investing their

time and money in Stock Market with the help of modern technology i.e. mobile trading apps. With the help of mobile apps, they can analyze the market, buy or sell their inventory online and so on. Mobile trading has allowed individuals to become traders and investors, not only from the comfort of their own homes, but also from anywhere in the world with an Internet connection.

According to NTA, Nepal Telecom Authority, the penetration of broadband internet by the end of Fiscal Year 078/79 is 102.8% while Mobile broadband penetration is 76.03%.This high mobile penetration due to 3G and 4G Technology of mobile operators has coverage in almost all remote areas of Nepal. Broadband internet accessibility has also helped in Success of Mobile Trading. The high speed broadband internet has helped users to launch the apps and perform transactions smoothly.

It is recommended to check the app sources and ensure that the trading app is owned by a trustworthy source and follow 2FA in Trading App. Further users are suggested not to share their user login credentials and take advantage of you being able to trade online from anywhere.

Capital market of Nepal is trying to adopt the emerging technologies and modernizing the trading practices. Successful technology is always likely to become the target of Security Breaches. The regulator of securities market of Nepal should focus on increasing the cyber resilience program and implement the broader approach based on proactive response to cyber threats and information sharing on on-going malicious events and past experiences. Hence, if cyber security risk is mitigated properly, Nepalese securities market can harness the opportunities of information and technology to develop the capital market of Nepal resulting overall economic development of the nation.

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Factors influencing stock price of Nepalese commercial banks

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Abstract

The study examines the factors influencing stock price of Nepalese commercial banks. Market price per share and stock return are selected as the dependent variables. The selected independent variables are earnings per share, dividend per share, price earnings ratio, return on assets, gross domestic product, inflation and money supply. The study is based on secondary data of 21 commercial banks with 168 observations for the period from 2012/13 to 2020/21. The data were collected from Banking and Financial Statistics published by Nepal Rastra Bank, publications and websites of Nepal Rastra Bank (NRB) and Ministry of Finance (MoF) and annual reports of the selected commercial banks. The correlation coefficients and regression models are estimated to test the significance and importance of different bank specific and macro-economic variables on the stock price of Nepalese commercial banks.

The study showed that there is positive impact of earnings per share on market price per share and stock return. It indicates that higher the earnings per share, higher would be the market price per share and stock return. Similarly, dividend per share has a positive impact on market price per share and stock return. It indicates that higher the dividend per share, higher would be the market price per share and stock return. In addition, price earnings ratio has a positive impact on market price per share and stock return. It indicates that higher the price earnings ratio, higher would be the market price per share and stock return. Likewise, return on assets has a positive impact on market price per share. It indicates that higher the return on assets, higher would be the market price per share. However, there is negative impact of return on assets on stock return. It indicates that higher the return on assets, lower would be the stock return.

Keywords: *Market price per share, stock return, are earning per share, dividend per share, price earnings ratio, return on assets, gross domestic product, inflation and money supply.*

1. Introduction

The capital market is one of the effective means of accelerating the accumulation of funds for development financing through a mechanism for collecting funds from the public and channeling these funds to productive sectors. With the development of the capital market, investment alternatives for investors are no longer limited to real assets and deposits in the banking system but can

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invest their funds in the capital market, either in the form of stocks, bonds, or other securities (Lubis and Adriani, 2021). Stock market is a very important economic institution that plays a crucial role in the economy (Adam *et al.*, 2016). Stock markets are essential for economic growth as they insure the flow of resources to the most productive investment opportunities (Kurihara, 2006). Investors take decisions to invest in particular shares of companies, keeping in view their share price (Nisa and Nishat, 2011). The major internal factors that affect share prices are company performance, governance, liquidity position, dividends and earnings (Alam *et al.,* 2016). Specially, investors should consider the internal factors of a firm, when they invest in shares in order to maximize their earnings through stock investment (Kengatharan, 2018). Commercial banks play an important role in the financial service industry and they have become a principal financial intermediary in the fund transfer system (Bandaranayake and Jayasinghe, 2014). *Stocks in the banking industry are highly sought by investors. Banks that have good health will attract many investors (*Perdana and Adriana, 2018). Schmidt and Spreng (1996) focused that better educated investors have a more extensive knowledge structure and are more capable of identifying, locating, and assimilating relevant information. Allozi and Obeidat (2016) concluded that managers should focus more on financial ratios that have significant relationship with stock return for more profits. Likewise, Holthausen and Larcker (1992) found that financial ratio analysis is useful in predicting stock returns. Furthermore, Martinez (1999) confirmed that financial statement information helped in predicting stock returns for firms traded in French stock market. The stock market is all about dynamics and that is why investors and fund managers face the problem of accurately predicting the stock prices to earn decent returns (Tandon and Malhotra, 2013). Fluctuation in stock prices may occur due to the supply and demand forces but there is no perfect system that indicates the exact movement of stock prices (Bhattarai, 2014). Sharma (2011) suggested that earnings per share, net asset value per share and price earnings are recommended as the determinants of stock prices globally.

Uddin (2009) found a significant relationship among market return and firm specific factors such as net asset value per share, dividend percentage, earning per share of bank leasing, and insurance companies. Likewise, Nirmala *et al.* (2011) concluded that dividend, price earnings ratio and leverage are significant determinants of share prices for all the sectors. Similarly, Kamuti and Omwenga (2017) found that listed firms' financial statements conditions, investors' disposable income, market information and knowledge in financial management have positive effect on investment decision making. Nugroho *et al.* (2020) concluded that non-performing loan, net profit margin, return on assets, and loan to deposit ratio have a significant effect on stock prices of banks listed on the Indonesia Stock Exchange. In addition, Subing and Kusumah (2017) indicated that price earnings ratio, return

on assets, and oil prices have positive impact on company stock prices, while inflation has a negative impact on company stock prices. Furthermore, Dissanayake and Biyiri (2017) found that there is a significant positive impact of earnings per share, dividend per share and return on equity on share price.

According to Mirfakhr-Al-Dini *et al.* (2011), there is a positive and significant relationship between earnings per share and stock price of the company. Likewise, Emamgholipour *et al.* (2013) indicated that earnings per share have a significant and positive effects on stock return of current year. Adekunle *et al.* (2015) showed that earnings per share and return on asset have positive relationships with share prices. However, gross domestic products and inflation rate depict negative relationships with share prices. Similarly, Iftikhar *et al.* (2017) concluded that dividend policy is positively related to share price. In addition to this, dividend policy plays important role in attracting reputable investors and contributes a lot in strengthening capital structure of a firm. Likewise, Ahmed (2018) found that there is positive and significant impact of dividend per share and earning per share on stock prices. Almumani (2014) concluded that dividend per share, earnings per share, book value per share and P/E ratio have significant positive impact on market price per share of the listed banks in Amman stock exchange. Furthermore, Wildatunjanah and Suparningsih (2019) found that debt to equity ratio and price earnings ratio have significant and positive effect on stock price of the firms listed in Indonesia stock exchange (IDX). Moreover, Idawati and Wahyudi (2015) stated that there is positive relationship of return on assets and earnings per share with the stock price. Similarly, Murniati (2016) concluded that debt to equity ratio, company size and return on assets have significant positive effect on stock prices. Furthermore, Abdullahi (2020) concluded that inflation rate has a negative influence on the banking sector stock price both in the short and long runs in Nigerian Stock market. Furthermore, Epaphra (2018) found that money supply and exchange rate have positive effect on stock prices.

Jadhav and Badade (2012) concluded that earnings per share, dividend per share, price-earnings ratio, dividend yield and book value per share play a vital role in determining the price of equity shares. Ergun (2012) concluded that stock movements for electric and metal main sub sectors are highly dependent on the financial position of the companies. Aldiena and Al-Hakim (2019) concluded that return on assets, net profit margin, debt to equity ratio and price to book value have significant effect on the formation of stock returns. Likewise, In'airat (2018) found that dividend and oil prices are relevant in explaining the market price of equity. In addition, Nofitasari and Kurniasih (2020) concluded that net profit margin, debt to equity ratio, price earnings ratio, inflation and interest rate have positive influence to stock return. Moreover, Sukhija (2014) concluded that earnings per share, dividend per share, price earnings ratio and book value per share have significant influence

on market price of share. Javaid (2010) concluded that dividend and earning per share have positive effect on the stock price, whereas gross domestic product and inflation have negative affect over the stock prices. Furthermore, Chucks *et al.* (2021) concluded that there is a positive impact of earnings per share and exchange rate on the market price of shares whereas there is a negative impact of inflation and interest rate on market share price.

In the context of Nepal, the stock market is still in its initial phase. Many practices, strategies and policies have to be done in this sector (Panta, 2020). Nepal stock market is not yet fully matured. Buyers prefer to buy primary stock and take stock dividend rather than cash dividend (Thapa, 2019). Nepalese investors are more conscious towards the dividend and price appreciation of the shares. This shows that there lacks professionalism in Nepalese investors (Poudel, 2016). Dangol (2011) stated that Nepalese capital market is consistent with information hypothesis, i.e., market reflects all political events concerned with capital market. In addition, Shrestha and Pokhrel (2019) argued that to reduce rumors and speculation, transparency should be increased in this market by making information related to listed companies easily accessible and available. Furthermore, Bajracharya and Sawagvudcharee (2019) concluded that internal factors such as earnings per share, dividend per share and price earnings ratio have positive and significant relationship with the market price per share. According to Ghimire and Mishra (2018), market to book value ratio, price earnings ratio are the significant determinants of stock price. Joshi (2012) concluded that dividend has a significant effect on market stock price in both banking and non-banking sector. Moreover, Lamichhane and Rai (2021) found that earnings per share, dividend per share, return on assets, price earnings ratio and return on equity have positive impact on market price per share and stock returns. According to Gautam (2017), there is positive relationship of leverage, market capitalization, dividend payout and dividend yield with stock return. Similarly, Rakhal (2018) concluded that remittance and money supply positively affect the stock market whereas interest rate and exchange rate negatively affect the stock market performance. Likewise, Karki (2018) revealed that the performance of stock market is positively related to real gross domestic product, inflation and money supply.

The above discussion shows that empirical evidences vary greatly across the studies on the factors influencing stock price. Though there are above mentioned empirical evidences in the context of other countries and in Nepal, no such findings using more recent data exist in the context of Nepal. Therefore, in order to support one view or the other, this study has been conducted.

The main purpose of the study is to analyze the factors influencing stock price of Nepalese commercial banks. Specifically, it examines the relationship of

earnings per share, dividend per share, price earnings ratio, return on assets, gross domestic product, inflation and money supply with market price per share and stock return of Nepalese commercial banks.

The remainder of this study is organized as follows. Section two describes the sample, data and methodology. Section three presents the empirical results and the final sections draws conclusion and discusses the implications of the study findings.

2. Methodological aspects

The study is based on the secondary data which were gathered from 21 Nepalese commercial banks from 2013/14 to 2020/21, leading to a total of 168 observations. The main sources of data include publications and websites of Nepal Rastra Bank (NRB), Ministry of Finance (MoF), and annual reports of the selected commercial banks. This study is based on descriptive as well as causal comparative research designs. Table 1 shows the list of commercial banks selected for the study along with the study period and number of observations.

Table 1: List of commercial banks selected for the study along with study period and number of observations

S. N.	Name of the banks	Study period	Observations
1	Agricultural Development Bank Limited	2013/14-2020/21	8
2	Standard Chartered Bank Nepal Limited	2013/14-2020/21	8
3	Century Commercial Bank Limited	2013/14-2020/21	8
4	NMB Bank Limited	2013/14-2020/21	8
5	Civil Bank Limited	2013/14-2020/21	8
6	Global IME Bank Limited	2013/14-2020/21	8
7	Himalayan Bank Limited	2013/14-2020/21	8
8	Kumari Bank Limited	2013/14-2020/21	8
9	Laxmi Bank Limited	2013/14-2020/21	8

10	Machhapuchchhre Bank Limited	2013/14-2020/21	8
11	Mega Bank Nepal Limited	2013/14-2020/21	8
12	Siddhartha Bank Limited	2013/14-2020/21	8
13	Nepal Bangladesh Bank Limited	2013/14-2020/21	8
14	Nepal Bank Limited	2013/14-2020/21	8
15	Nepal Credit and Commerce Bank Limited	2013/14-2020/21	8
16	Nepal Investment Bank Limited	2013/14-2020/21	8
17	Nepal SBI Bank Limited	2013/14-2020/21	8
18	Everest Bank Limited	2013/14-2020/21	8
19	Prime Commercial Bank Limited	2013/14-2020/21	8
20	Sanima Bank Limited	2013/14-2020/21	8
21	Sunrise Bank Limited	2013/14-2020/21	8
Total number of observations			**168**

Thus, the study is based on 168 observations.

The model

The models used in this study analyze the impact of bank specific factors and macro-economic factors on the stock price of Nepalese commercial banks. The dependent variables selected for the study are market price per share and stock return. Similarly, the selected independent variables in this study are earnings per share, dividend per share, price earnings ratio, returns on assets, gross domestic product, inflation and money supply. The following model equations are designed to test the hypothesis.

$MPPS_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 DPS_{it} + \beta_3 PER_{it} + \beta_4 ROA_{it} + \beta 5\ GDP_{it} + \beta 6\ INF_{it} + \beta_7 MSIt + e_{it}$

$SR_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 DPS_{it} + \beta_3 PER_{it} + \beta_4 ROA_{it} + \beta_5 GDP_{it} + \beta_6 INF_{it} + \beta_7 MS_{it} + e_{it}$

Where,

MPPS = Market price per share as measured by the share price of the bank determined by the demand and supply forces in the market, in Rupees.

SR = Stock return as measured by change in price plus dividend by previous year's price, in percentage.

EPS = Earnings per share as measured by the company's total earnings by the total number of shares outstanding, in Rupees.

DIV = Dividend per share as measured by the company's total dividend paid by the total number of shares outstanding, in Rupees.

PER = Price earnings ratio as measured by the ratio of market value per share to earnings per share, in times.

ROA = Return on assets as measured by the ratio of net income to total assets, in percentage.

GDP = Gross domestic product as measured by the total goods and services produced within the country in a year, US$ in billion.

INF = Inflation measured as measured by the change in consumer price index, in percentage.

MS = Money supply as measured by the broad money (M2), US$ in billion.

The following section describes the independent variables used in this study along with hypothesis formulation.

Earnings per share

O'Hara *et al.* (2000) found that there is a strong positive correlation between earnings per share and share price. Jatoi *et al.* (2014) showed that earning per share (EPS) has a positive and significant impact on the market value of share of cement industry of Pakistan. Al-Tamimi *et al.* (2011) concluded that there is a strong and positive impact of earning per share on the UAE stock prices. Arshad *et al.* (2015) indicated that earnings per share has a positive and significant relationship with share prices. Similarly, Edem (2018) indicated that earnings per share have a significant and positive association with stock prices of money deposit banks. Based on it, this study develops the following hypothesis:

H1: There is a positive relationship of earnings per share with market price per share and stock return.

Dividend per share

Kothari and Shanken (1997) showed a positive relationship of book to market ratio and dividend per share with stock price. Similarly, Rashid and Rahman (2008) found that there is a significant positive relationship between the dividend and share price. Moreover, Wet and Mpinda (2013) found that dividend yield is positively related to the market price per share in both the fixed and random effect models while earnings per share do not have a significant impact on the market price per share. Furthermore, Menike and Prabath (2014) indicated that dividend per share, earning per share and book value per share have positive and significant impact on the stock price in the CSE. In addition, Attah-Botchwey (2014) stated that dividend payment is positively related to share price indicating that firms with higher dividend payment have their share price going up. Based on it, this study develops the following hypothesis:

H2: There is positive relationship of dividend per share with market price per share and stock return.

Price earnings ratio

Hatta and Dwiyanto (2012) found that earnings per share and price earnings ratio have positive and significant effects on stock prices. Likewise, Motamedi (2013) found significant and positive relationship between share return, systematic risk (Beta), size, volume of trade and P/E ratio. Moreover, Mondal and Imran (2010) concluded that price earnings ratio, demand for the share, changes in government policies, economic conditions have positive influence on stock price. Similarly, Safitri *et al*. (2020) indicated that there is a positive and significant impact of price earnings ratio and earnings per share on the price of shares. According to Khan (2012), price earnings ratio, dividend, and GDP have positive and significant relationship with share prices. Furthermore, Tandon and Malhotra (2013) found that there is a significant positive association of firms' book value, earning per share and price earnings ratio with firm's stock price. Based on it, this study develops the following hypothesis:

H3: There is positive relationship of price earnings ratio with market price per share and stock return.

Returns on assets

Kabajeh *et al.* (2012) revealed a significant positive relationship between return on assets and share prices of Jordanian insurance public companies. Similarly, Anwaar (2016) concluded that net profit margin and return on assets have significant positive impact on stock returns, while earnings per share has insignificant negative impact on stock returns. Likewise, Al-Omoush and Al-Shubiri (2013) concluded that there is a direct positive impact of return on equity and return on assets on stock

returns. According to Har and Ghafar (2015), return on assets and return on capital employed have a positive and significant relationship with stock returns. Moreover, Gursida (2017) found that return on assets has a positive and significant influence on stock price. Based on it, this study develops the following hypothesis:

H4: There is positive relationship of return on assets with market price per share and stock return.

Gross domestic product

Chen *et al.* (1986) indicated that the relationship between stock market prices and gross domestic product in the U.S is positive and significant. Likewise, Pilinkus and Boguslauskas (2009) found that gross domestic product and money supply have strong positive effect on stock market prices. Singh *et al.* (2011) found that gross domestic product is a significant factor that affects stock return. According to Adaramola (2011), there is a positive and significant impact of interest rate, exchange rate, oil price and gross domestic product on stock prices of individual firms in Nigeria. Moreover, Hassanzadeh and Kianvand (2012) found that Iran's stock market index is positively influenced by the GDP growth rate and money supply. Moreover, Hunjra *et al.* (2014) concluded that there is a positive and significant relationship of interest rate, inflation rate, exchange rate, and GDP with stock prices. Based on it, this study develops the following hypothesis:

H5: There is positive relationship of gross domestic product with market price per share and stock return.

Inflation

Udegbunam and Eriki (2001) revealed a significant negative relationship exists between inflation rate and share price. Gallagher and Taylor (2002) found that the stock returns are negatively affected by both expected and unexpected inflation. Similarly, Al-Shubiri (2010) found that there is a negative and significant relationship of inflation and lending interest rate on stock price of Amman Stock Exchange. According to Reddy (2012), interest rate and inflation rate have a negative impact on stock prices. Malaolu *et al.* (2013) revealed that the monetary authorities and policy makers should be more concerned about the changes in inflation rate due to its significant negative impact on stock price movements in Nigeria. Moreover, Nijam *et al.* (2015) found that the stock index is negatively related to inflation. Mawardi *et al.* (2019) stated that Indonesia Sharia Stock Index is affected significantly and negatively by the inflation rate and industrial production index. Based on it, this study develops the following hypothesis:

H6: There is negative relationship of inflation with market price per share and stock return.

Money supply

Nkechukwu *et al.* (2013) concluded that money supply has a positive and significant long-run effect on stock prices. Sohail and Hussain (2009) indicated that industrial production index, real effective exchange rate and money supply have significant and positive effect on the stock returns in the long-run. According to Hosseini *et al*. (2011), money supply has a positive impact on Chinese stock market. Moreover, Ray (2012) stated that interest rate, foreign exchange reserve, gross domestic product, and money supply positively influence Indian stock price. Moreover, Ouma and Muriu (2014) concluded that there is a positive and significant linkage between money supply and stock returns. Similarly, Khan and Khan (2018) stated that money supply has a strong positive impact on the stock prices. Based on it, this study develops the following hypothesis:

H7: There is positive impact of money supply on market price per share and stock return.

3. Results and discussion

Descriptive statistics

Table 2 presents the descriptive statistics of the selected dependent and independent variables during the period 2013/14 to 2020/21.

Table 2: Descriptive statistics

This table shows the descriptive statistics of dependent and independent variables of 21 Nepalese commercial banks for the study period from 2013/14 to 2020/21. The dependent variables are MPPS (Market price per share as measured by the share price of the bank determined by the demand and supply forces in the market, in Rupees) and SR (Stock return as measured by change in price plus dividend by previous year's price, in percentage). The independent variables are EPS (Earnings per share as measured by the company's total earnings by the total number of shares outstanding, in Rupees), DIV (Dividend per share as measured by the company's total dividend paid by the total number of shares outstanding, in Rupees), PER (Price earnings ratio as measured by the ratio of market value per share to earnings per share, in times), ROA (Return on assets as measured by the ratio of net income to total assets, in percentage), GDP (Gross domestic product as measured by the total goods and services produced within the country in a year, US$ in billion), INF (Inflation measured as measured by the change in consumer price index, in percentage) and MS (Money supply as measured by the broad money (M2), US$ in billion).

Variables	Minimum	Maximum	Mean	Std. Deviation
MPPS	139.00	3600.00	568.02	524.10
SR	-65.58	268.20	17.45	56.13
EPS	4.35	86.04	24.50	13.22
DPS	0.00	110.52	21.33	16.31

PER	5.48	78.33	22.77	11.33
ROA	0.01	5.02	1.58	0.62
GDP	20.00	34.27	28.81	5.66
INF	3.60	9.93	6.15	2.23
MS	75.36	135.76	98.82	17.81

Source: SPSS output

Correlation analysis

Having indicated the descriptive statistics, Pearson's correlation coefficients are computed and the results are presented in Table 3.

Table 3: Pearson's correlation coefficients matrix

This table shows the bivariate Pearson's correlation coefficients of dependent and independent variables of 21 Nepalese commercial banks for the study period from 2013/14 to 2020/21. The dependent variables are MPPS (Market price per share as measured by the share price of the bank determined by the demand and supply forces in the market, in Rupees) and SR (Stock return as measured by change in price plus dividend by previous year's price, in percentage). The independent variables are EPS (Earnings per share as measured by the company's total earnings by the total number of shares outstanding, in Rupees), DIV (Dividend per share as measured by the company's total dividend paid by the total number of shares outstanding, in Rupees), PER (Price earnings ratio as measured by the ratio of market value per share to earnings per share, in times), ROA (Return on assets as measured by the ratio of net income to total assets, in percentage), GDP (Gross domestic product as measured by the total goods and services produced within the country in a year, US$ in billion), INF (Inflation measured as measured by the change in consumer price index, in percentage) and MS (Money supply as measured by the broad money (M2), US$ in billion).

Variables	MPPS	SR	EPS	DPS	PER	ROA	GDP	INF	MS
MPPS	1								
SR	0.205**	1							
EPS	0.702**	0.065	1						
DPS	0.668**	0.017	0.568**	1					
PER	0.606**	0.251**	0.028	0.290**	1				
ROA	0.197*	-0.049	-0.332**	0.268**	-0.159*	1			
GDP	-0.378**	-0.323**	-0.309**	-0.168*	-0.368**	-0.082	1		
INF	0.394**	0.413**	0.287**	0.161*	0.350**	0.123	-0.799**	1	
MS	-0.252**	-0.032	-0.286**	-0.241**	-0.119	-.250**	0.766**	-0.544**	1

Note: The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent levels respectively.

Table 3 shows that there is a positive relationship between earnings per share and market price per share. It indicates that higher the earnings per share,

higher would be the market price per share. Similarly, there is a positive relationship between dividend per share and market price per share. It indicates that higher the dividend per share, higher would be the market price per share. Furthermore, there is a positive relationship between price earnings ratio and market price per share. It indicates that higher the price earnings ratio, higher would be the market price per share. Moreover, there is a positive relationship between return on assets and market price per share. It indicates that higher the return on assets, higher would be the market price per share. However, there is a negative relationship between gross domestic product and market price per share. It indicates that higher the gross domestic product, lower would be the market price per share. Furthermore, there is a positive relationship between inflation and market price per share. It indicates that higher the inflation, higher would be the market price per share. In contrast, there is a negative relationship between money supply and market price per share. It indicates that higher the money supply, lower would be the market price per share.

Similarly, the result also shows that there is a positive relationship between earning per share and stock return. It indicates that higher the earning per share, higher would be the stock return. Likewise, there is a positive relationship between dividend per share and stock return. It indicates that higher the dividend per share, higher would be the stock return. Furthermore, there is a positive relationship between price earnings ratio and stock return. It indicates that higher the price earnings ratio, higher would be the stock return. In contrast, there is a negative relationship between return on assets and stock return. It indicates that higher the return on assets, lower would be the stock return. Likewise, there is a negative relationship between gross domestic product and stock return. It indicates that higher the gross domestic product, lower would be the stock return. However, there is a positive relationship between inflation and stock return. It indicates that higher the inflation, higher would be the stock return. In contrast, there is a negative relationship between money supply and stock return. It indicates that higher the money supply, lower would be the stock return.

Regression analysis

Having indicated the Pearson's correlation coefficients, the regression analysis has been carried out and results are presented in Table 4. More specifically, it shows the regression results of earnings per share, dividend per share, price earnings ratio, returns on assets, gross domestic product, inflation and money supply with market price per share of Nepalese commercial banks.

Table 4: Estimated regression results of earnings per share, dividend per share, price earnings ratio, returns on assets, gross domestic product, inflation and money supply with market price per share

The results are based on panel data of 21 commercial banks with 168 observations for the period of 2013/14-2020/21 by using the linear regression model and the model is MPPSit = β0 + β1 EPSit + β2 DPSit+ β3 PERit + β4 ROAit + β5 GDPit + β6 INFit + β7 MSit + eit where, the dependent is MPPS (Market price per share as measured by the share price of the bank determined by the demand and supply forces in the market, in Rupees). The independent variables are EPS (Earnings per share as measured by the company's total earnings by the total number of shares outstanding, in Rupees), DIV (Dividend per share as measured by the company's total dividend paid by the total number of shares outstanding, in Rupees), PER (Price earnings ratio as measured by the ratio of market value per share to earnings per share, in times), ROA (Return on assets as measured by the ratio of net income to total assets, in percentage), GDP (Gross domestic product as measured by the total goods and services produced within the country in a year, US$ in billion), INF (Inflation measured as measured by the change in consumer price index, in percentage) and MS (Money supply as measured by the broad money (M2), US$ in billion).

Model	Intercept	Regression coefficients of							Adj R – bar^2	SEE	F-Value
		EPS	DPS	PER	ROA	GDP	INF	MS			
1	-114.18 (1.87)	27.85 (12.70)**							0.49	374.30	161.40
2	109.74 (2.21)*		21.48 (11.58)**						0.44	390.94	134.12
3	-70.77 (0.96)*			28.05 (9.82)**					0.36	418.14	96.48
4	305.61 (2.81)**				166.29 (2.59)**				0.03	515.43	6.69
5	3720.46 (6.19)**					-2173.54 (5.26)**			0.13	486.78	27.63
6	-1.28 (0.01)						92.63 (5.52)**		0.15	483.30	30.42
7	4120.68 (3.89)**							-1777.71 (3.36)**	0.05	508.78	11.27
8	-167.32 (3.05)**	18.86 (7.96)**	12.79 (6.66)**						0.59	333.45	123.89
9	-689.89 (15.38)**	23.17 (16.03)**	5.82 (4.76)**	24.86 (17.16)**					0.85	200.14	327.55
10	-747.16 (12.59)**	22.76 (15.51)**	5.50 (4.45)**	25.36 (17.10)**	39.88 (1.47)				0.85	199.35	247.92
11	-1157.88 (3.68)**	23.43 (15.12)**	5.23 (4.18)**	26.24 (16.18)**	42.68 (1.57)	258.85 (1.33)			0.85	198.86	199.63
12	-1765.23 (3.65)**	23.26 (15.05)**	5.34 (4.28)**	25.87 (15.89)**	37.81 (1.39)	608.84 (2.12)*	19.14 (1.65)		0.85	197.88	168.57
13	-1701.42 (3.02)**	23.31 (14.86)**	5.27 (4.08)**	25.98 (15.23)**	36.40 (1.30)	672.80 (1.65)	19.62 (1.66)	-80.25 (0.22)	0.85	198.47	143.65

Notes:

i. Figures in parenthesis are t-values.

ii. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent

level respectively.

iii. Market price per share is the dependent variable.

Table 4 shows that the beta coefficients for earnings per share are positive with market price per share. It indicates that the earnings per share have a positive impact on market price per share. This finding is similar to the findings of Jatoi *et al.* (2014). Similarly, the beta coefficients for dividend per share are positive with market price per share. It indicates that dividend per share has a positive impact on market price per share. This finding is consistent with the findings of Kothari and Shanken (1997). Likewise, the beta coefficients for price earnings ratio are positive with market price per share. It indicates that price earnings ratio has a positive impact on market price per share. This finding is similar to the findings of Hatta and Dwiyanto (2012). Similarly, the beta coefficients for return on assets are positive with market price per share. It indicates that return on assets has a positive impact on market price per share. This finding is consistent with the findings of Kabajeh *et al.* (2012). However, the beta coefficients for gross domestic product are negative with market price per share. It indicates that gross domestic product has a negative impact on market price per share. This finding is inconsistent to the findings of Chen *et al.* (1986). Similarly, the beta coefficients for inflation are positive with market price per share. It indicates that inflation has a positive impact on market price per share. This finding is inconsistent with the findings of Udegbunam and Eriki (2001).

The regression results of earnings per share, dividend per share, price earnings ratio, returns on assets, gross domestic product, inflation and money supply with stock return of Nepalese commercial banks have been presented in Table 5.

Table 5: Estimated regression results of earning per share, dividend per share, price earnings ratio, returns on assets, gross domestic product, inflation and money supply with stock return

The results are based on panel data of 21 commercial banks with 168 observations for the period of 2013/14-2020/21 by using the linear regression model and the model is SRit = β0 + β1 EPSit + β2 DPSit+ β3 PERit + β4 ROAit + β5 GDPit + β6 INFit + β7 MSit + eit where, the dependent SR (Stock return as measured by change in price plus dividend by previous year's price, in percentage). The independent variables are EPS (Earnings per share as measured by the company's total earnings by the total number of shares outstanding, in Rupees), DIV (Dividend per share as measured by the company's total dividend paid by the total number of shares outstanding, in Rupees), PER (Price earnings ratio as measured by the ratio of market value per share to earnings per share, in times), ROA (Return on assets as measured by the ratio of net income to total assets, in percentage), GDP (Gross domestic product as measured by the total goods and services produced within the country in a year, US$ in billion), INF (Inflation measured as measured by the change in consumer price index, in percentage) and MS (Money supply as measured by the broad money (M2), US$ in billion).

Model	Intercept	Regression coefficients of							Adj R _ bar^2	SEE	F - Value
		EPS	DPS	PER	ROA	GDP	INF	MS			
1	10.73 (1.17)	0.28 (0.84)							0.002	56.18	0.69
2	16.21 (2.26)*		0.06 (0.22)						0.006	56.29	0.05
3	-10.81 (1,14)			1.24 (3.33)**					0.057	54.49	11.11
4	24.39 (2.05)*				-4.40 (0.63)				0.004	56.23	0.39
5	306.48 (4.66)**					-199.27 (4.40)**			0.099	53.27	19.39
6	-46.51 (3.99)**						10.41 (5.84)**		0.165	51.27	34.12
7	64.78 (0.56)							-23.80 (0.41)	0.005	56.27	0.17
8	11.14 (1.20)	0.35 (0.86)	0.10 (0.31)						0.007	56.33	0.39
9	-18.93 (1.55)	0.59 (1.51)	0.50 (1.51)	1.43 (3.63)**					0.062	54.36	4.68
10	-17.37 (1.07)	0.60 (1.50)	0.49 (1.46)	1.42 (3.49)**	-1.09 (0.15)				0.056	54.52	3.49
11	241.69 (2.88)**	0.18 (0.42)	0.32 (0.96)	0.86 (1.99)*	-2.86 (0.39)	-163.26 (3.14)**			0.105	53.10	4.92
12	-94.25 (0.75)	0.08 (0.19)	0.26 (0.80)	0.66 (1.56)	-5.55 (0.78)	-30.32 (0.41)	10.58 (3.52)**		0.164	51.33	6.45
13	-366.12 (2.61)**	0.14 (0.37)	0.04 (0.13)	0.19 (0.46)	-0.47 (0.07)	-242.20 (2.39)*	8.54 (2.90)**	-341.95 (3.79)**	0.228	49.32	8.04

Notes:

i. Figures in parenthesis are t-values.

ii. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.

iii. Stock return is the dependent variable.

Table 5 shows that the beta coefficients for earnings per share are positive with stock return. It indicates that the earnings per share have a positive impact on stock return. This finding is similar to the findings of O'Hara *et al.* (2000). Similarly, the beta coefficients for dividend per share are positive with stock return. It indicates that dividend per share has a positive impact on stock return. This finding is consistent with the findings of Rashid and Rahman (2008). Likewise, the beta coefficients for price earnings ratio are positive with stock

return. It indicates that price earnings ratio has a positive impact on stock return. This finding is similar to the findings of Safitri *et al.* (2020). However, the beta coefficients for money supply are negative with stock return. It indicates that money supply has a negative impact on stock return. This finding is in contrast to the findings of Nkechukwu *et al.* (2013).

4. Summary and conclusion

Stock markets are essential for economic growth as they insure the flow of resources to the most productive investment opportunities in the country. In essence, a large number of economic variables like gross domestic product, interest rates, current account, monthly supply, employment, their information etc. have an impact on daily stock prices. *Stocks in the banking industry are one of the stocks that are highly sought after by investors. Similarly,* commercial banks play an important role in the financial service industry and they have become a principal financial intermediary in the fund transfer system.

This study attempts to analyze the factors influencing stock price of Nepalese commercial banks. The study is based on secondary data of 21 commercial banks with 168 observations for the study period from 2013/14 to 2020/21.

The study showed that earnings per share, dividend per share, price earnings ratio, return on assets and inflation have positive impact on market price per share. However, gross domestic product and money supply have negative impact on market price per share. Similarly, earnings per share, dividend per share, price earnings ratio and inflation have positive impact on stock return. However, return on assets, gross domestic product and money supply have negative impact on stock return. Likewise, the study also concluded that gross domestic product followed by money supply and inflation is the most influencing factor that explain the changes in the stock price in terms of stock returns of Nepalese commercial banks. The study also concluded that gross domestic product followed by money supply and return on assets is the most influencing factor that explain the changes in the stock price in terms of market price per share in context of Nepalese commercial banks.

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Nepalese Securities Market and Its Future Avenues

Chet Narayan Acharya*

1. Background

Nepalese securities market has institutionalized in 1976 AD with the establishment of Securities Exchange Centre (SEC). It was established with an objective of undertaking the responsibility of brokering, underwriting, managing public issue, market making for government bonds and other financial services. The initiation of shares by Biratnagar Jute Mills Ltd. and Nepal Bank Ltd. in 1937 AD was the landmark history of the foundation of the securities market in Nepal. Likewise, introduction of the Company Act in 1964, the first issuance of Government Bond in 1964 and the establishment of Securities Exchange Center Ltd. in 1976 were other significant breakthroughs for the development of Nepalese securities market. The SEC was transformed into Nepal Stock Exchange (NEPSE) in 1993, operating under Securities Exchange Act, 1983. In 1993, Securities Board of Nepal (SEBON) has established, it has started to work as the regulatory body of capital market for its healthy development. The establishment of SEBON has given a proper structure and framework to the Nepalese capital market. It has widened the horizon of market by introducing market intermediaries directly under its jurisdiction and also made it mandatory for the corporate bodies to report their performance annually as well as semiannually (SEBON Annual Report, 2011). As a part of its continuous efforts to build an advanced capital market, The Securities Exchange Act, 1983 was amended in 1996. The act was later amended for the second time in 1997.

Similarly, NEPSE is the country's only one stock exchange. It has no long history and it is still in budding phase. In 2033 BS, the government of Nepal has established a security purchasing and trading center. Later, in 2050 BS, it is transferred into Nepal Stock Exchange Limited (NEPSE). On January 13, 1994, the Nepal Stock Exchange (NEPSE) inaugurated its trading floor (29 Poush, 2050). The primary function of the stock exchange is to facilitate the trading of listed securities. NEPSE has been trying to register publicly issued securities in the secondary market so that they can be traded easily. It is a specialized government-owned entity governed by the Companies Act. It performs its regular business in compliance with the Securities Act. The main objective of it is to assist to the country's economic development through capital formation and mobilization, as well as to stimulate investor interest by establishing a secondary market for the trading of securities issued by the Government of Nepal and organizations.

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2. Securities Board of Nepal (SEBON) and Nepal Stock Exchange (NEPSE)

Main constituents of securities market of Nepal are Apex regulator Securities Board of Nepal (SEBON) and Nepal Stock Exchange (NEPSE) Ltd. SEBON has been established as an apex market regulator and facilitator under the securities Act, 2006. The Governing Board of SEBON consists of seven members including full time Chairman appointed by the Government for tenure of 4 years, Joint Secretary Ministry of Finance, joint secretary of Ministry of Law, justice and Parliamentary affairs, representative from NRB, representative from Institute of Chartered Accountants of Nepal, representative from federation of Nepalese Chambers of Commerce and Industries and one member appointed by the Government from amongst the experts pertaining to management of securities market, development of capital market, and financial or economic sector. The major financial sources of SEBON are the government grant, transaction fee from the stock exchange and registration fee of corporate securities. Since the establishment of SEBON has been working under the legal and statutory frameworks of securities market such as providing advice to Government on matters related with the development of Nepalese capital markets, register the securities of public companies, issue necessary securities regulations and directives, issue license to operate stock exchange. NEPSE works under the jurisdiction of the SEBON.

NEPSE works as issue and redemption manager of securities and other financial instruments. It has opened its trading floor on 13th January 1994 under securities Exchange Act, 1983. At present, NEPSE is the Nepal's sole secondary market trading platform provider for listed securities. The Board of Directors consists nine directors in accordance with Securities Exchange Act 1983. Government of Nepal nominates six directors and rest of the directors are from different institutional investors. The shareholder ownership structure of NEPSE comprises of Government of Nepal, Nepal Rastra Bank, Nepal Industrial and Development Corporation and Members.

3. NEPSE Index

NEPSE index in a transaction index of Nepal stock exchange which is calculated and published by it. In order to calculated according to the base market capitalization. The base market capitalization is February 12, 1994, which was the first share transaction day in Nepal. The increase in the value and transaction of transacted share increase then the market capitalization value also increase. Market capitalization is calculated by the total share is multiplied by the certain day's share value. As there is different value of share number and share price, separate multiply value is calculated and added later to find the total sum. In this way, market capitalization is calculated. For example, the company named 'ABC' has registered

5, 00,000 number of shares @ Rs 100. On that day, market capitalization value was Rs 50 crore. The market capitalization of each company is added to find out total market capitalization. Stock exchange finds out the market index on the base of market capitalization. During the transaction time, when the market capitalization increases, the NEPSE index also increases and where market capitalization decreases, the NEPSE index decreases.

4. Current Status

In its earlier open cry trading platform, NEPSE has launched automated Online Trading System (NOTS) on 6th November 2018. "NOTS" is designed to allow investors to place their orders online, while everything including trading, clearing, and settlement can be carried out electronically. Through the chain of Central Depository System, the settlement cycle of trades completes in T+1. T+1 means that when a security is purchased, payment and the securities transfer must be settled in no later than next business days. In the current scenario, the market is improving and developing continuously and investors can sell or buy their securities at their desired time and location through online platform.

At present, there are 50 member brokers with 43 branches, who operate on the trading floor as per the Securities Act- 2007, rules and bye-laws. The broker house and its branches are expanded over 21 different cities of Nepal. Moreover, numbers of issue managers and under writers for the public issue of securities provides their service. Issue and sales managers provide their service in issuing and under writing for public issue of securities and securities dealer works as individual portfolio manager. NEPSE provides trading floor through its agents and market intermediaries to impart free marketability and liquidity to the government and corporate securities. NEPSE has opened its trading floor on13th January 1994. Members of NEPSE allowed to act as market intermediaries in buying and selling of government bonds and listed corporate securities. As of May 2022, the equity market capitalization of the companies listed on NEPSE was approximately Rs. 334,357 crore (US$27 billion).

5. Market Capitalization of NEPSE

Market Capitalization is calculated as percentage of Nominal GDP from annual Market Capitalization and annual Nominal GDP. Nepal Stock Exchange Limited provides Market Capitalization in local currency. The Central Bureau of Statistics provides Nominal GDP in local currency, at producer prices. In developed economies, market capitalization ranges from 55-110 percent of Gross National Product (GNP) and in emerging economies it comes between 20-40 percent of GNP (Maturing markets, IFC, 2002). In case of Nepal, equity market capitalization varies from 5- 11 percent of GNP. According to the data from Economic Survey 2021/22,

Nepalese Stock Market Capitalization accounted for 100.4 % of its Nominal GDP in Jul 2021, compared with a percentage of 48.4 % in the previous year. The data reached an all-time high of 100.4 % in Jul 2021 and a record low of 7.1 % in Jul 2003.

6. Trading System

The trading system of NEPSE equipped with automated online based trading. The NEPSE trading system is called 'NEPSE Online Trading System (NOTS) is a fully online based trading system, which adopts the principle of an order driven market. Trading on equities takes place on five days of week i.e. Sunday to Thursday. Market opens at 10:30 as the pre-opening session and continuous session starts at 11 AM and closes at 3 PM. The trading system adopts principle of order driven market. The best buy order is matched with the best sell order. An order may match partially with another order producing multiple trades. For order matching the best buy order is the one with the highest price and the best sell order is the one with the lowest price. This is because the system views all buy orders available from the point of view of the sellers and all sell orders from the point of view of the buyers in the market. Therefore, of all buy orders available in the market at any point of time, a seller would obviously like to sell at the highest possible buy price that is offered. Hence, the best buy order is the order with the highest price and the best sell order is the order with the lowest price.

7. Securities Available for Trading

NEPSE provides a platform for the trading of listed securities including equity shares, preference shares, debentures, and mutual funds. After the launch of the Securities Exchange Centre (SEC), shares of various manufacturing, trading and banking companies listed on SEC. By the end of 1990, the listed shares were dominated by public enterprises. Forty-two companies were listed, out of which more than 25 companies had some form of government ownership. Currently, the listed number of companies reached at 207 by the end of FY 2020/21 under the category of Commercial Banks, Hydro Power, Microfinance, Life Insurance, Development Bank Limited, Finance, Non-Life Insurance, Manufacturing And Processing, Hotels, Mutual Funds and Others sector. However, the government ownership companies had decreased due to the privatization that took place in different planning stage of privatization act.

8. Circuit Break and Price Range System

A circuit breaker is a rule adopted by Nepal Stock Exchange to control unreasonable price fluctuation. NEPSE has implemented index-based circuit breakers. If NEPSE index fluctuates 4 % within the first hour of regular trading i.e. before 12 pm, trading becomes suspended for 20 minutes. If NEPSE fluctuates by 5 % within the second hour i.e. 1 pm, trading becomes suspended for another

40 minutes as a second circuit. After that, if the market index fluctuates by 6 %, all transactions for the rest of the day becomes suspended. This halt gives market investors to analyze events, news, announcements and take a necessary rational decision. NEPSE has implemented an index-based circuit breaker from 21 Sep 2007. A circuit breaker is a market stabilizing tool used to check sudden rise/fall in the index. There is another concept in NEPSE trading. If the price of the individual company increase or decreases by 10% in a single day, it is called circuit-level trading. If it increases by 10% it is called a positive circuit and if the price decrease by 10%, it is called a negative circuit. Price Range is applicable on individual securities. The trading of the individual securities are not halted but allowed to trade within the price range. The price band is 10 percent of previous close on either way.

9. **Disappointing Investor's Confidence**

Intuitional set up of NEPSE has opened an opportunity to the investors, both large and small, to invest in the enterprise sector and participate in the secondary stock exchange market. Nepalese stock market has proved successful among both the entrepreneurs and the investors showing earnest acceptance and market participation. However, the performance of stock exchange is still lacks corporate governance. The enthusiasm among investors is still poor. NEPSE has not noticed and prioritized among Political leaders and policy makers. The actors of financial markets are loosely tied together from legal provisions, which are not effectively implemented (Koirala and Bajracharya, 2021). The action of SEBON are still have to improve for good corporate governance. The result has been poor security to investors, particularly minority shareholders, who are not fully aware of the risk and return considerations. Over the long time, investors' confidence in the market has become weak due to long-disputed issue of capital gains tax. Still, the government has been unable to settle the issue, which causes the securities market consecutively, and investors are panicking. Frequent credit crunch problem and increasing bank interests on margin loans, investors have been losing the confidence in the secondary market.

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Financial Literacy in Schools

Dipesh Chaulagain*

1. Introduction

Recalling my secondary level education I had competitive educational certificates in my hand with the basic understanding of numerous subjects from science, mathematics, social studies, health and environment but my curriculum lacks a major subject missing titled "Financial Literacy". In early twenty's I was still unknown on the basics of a variety of financial topics such as personal budgeting, debt management, education and retirement saving, insurance, investing and even tax planning. These subjects may not be especially relevant in my high schools' levels but as the journey of life continues and I was in late twenty's I realized that financial literacy is the most valuable subject for the rest of the lives. The concept and implications of interest rate, opportunity cost, debt management, compound interest and budgeting would have helped me to manage my educational loans and escape the dangerous level of debt. Certain topics such as income tax and retirement planning will be useful to all my friends no matter what they end up doing in the future. The lack of financial literacy can lead to a number of pitfalls such as accumulating unsustainable debt burdens, either through poor investment decisions or a lack of long-term preparations which in turn can lead to poor credit, bankruptcy, housing foreclosure, or other negative consequences. Low levels of financial literacy have also been associated with a lower standard of living, decreased psychological and physical well-being and greater reliance on government support. So, few basic steps such as creating a budget, keeping track of expenses, being diligent about timely payments, being prudent about saving money, periodically checking credit report, and investing for the future can be practiced from high schools. Financial education can make a difference. It can empower and equip young people with the knowledge, skills and confidence to take charge of their lives and build a more secure future for themselves and their families.

Financial literacy is the outcome of this process and is defined as a combination of financial awareness, knowledge, skills, attitude and behaviors necessary to make sound financial decisions and ultimately achieve financial wellbeing (OECD/INFE, 2012). Financial literacy can be described through several stages depending on individual/household, financial, economic and social contexts. It can start with very basic notions, such as awareness of the characteristics and use of available financial products, progressing to more advanced ones, which deal with the knowledge of financial concepts and of the development of skills and attitudes for the management of personal finance in the short and long term. Ultimately, all stages of financial literacy encompass positive behavioral change for individuals and households. (G20 Presidency and the OECD Publication).

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Education is the learning or the process of acquiring knowledge and developing the power of reasoning and judgment. Therefore, financial education is a lifelong concept and emphasizes the development of human abilities to understand money and make decisions about financial problems. While financial literacy focuses on an understanding of the basics of the subject matter, financial education, which includes financial literacy, is more improved and covers practical skill to make a decision on financial problems.

Our society has been changing constantly and is becoming more complicated. We have globally connected markets which offer varieties of product and services to the consumers. It is the consumer who has to make the choice of his own interest out of various alternatives the market offers. It is financial education that makes the consumer aware of his rights to protect himself by acquiring financial education. Social values are fast-changing and modern society has an individualistic behavior. The financial needs of the consumer also have become complicated and only with the appropriate knowledge and skill in the field of finance and understanding of financial products and services can one make a good decision. Financial education, including financial literacy, begins at the school level and continues throughout one's lifetime.

Opening an account at any formal financial service provider does not mean that the person is financially educated. It may mean that the account holder has access to formal financial services. The person needs financial literacy/education sessions to understand what is money, how to keep it safely for the future, where to borrow from, what is the rate of interest, what is his financial plan, how s/he should prioritize his needs, how s/he should keep herself/himself safe from unseen future risks and so on.

2. Benefits of financial Literacy

Listed below are the assortment of benefits of being financially literate:

- Ability to make better financial decisions
- Effective management of money and debt
- Greater equipped to reach financial goals
- Reduction of expenses through better regulation
- Less financial stress and anxiety
- Increase in ethical decision-making when selecting insurance, loans, investments, and using a credit card
- Effective creation of a structured budget

Making steps to becoming financially literate is an important component of life that can ensure financial solidity, reduce anxiety, and stimulate the achievement of financial goals.

3. Nepalese Context

According to the data of survey conducted in 2018 the literacy rate of Nepal is 67.9%. Nepali people's access to finance has increased significantly over the years. According to the Report on Financial Access in Nepal published by NRB on Friday, around 67.34 per cent population in Nepal has access to finance. As of poush end, 2078 Bs (Mid Jan,2022) 4.118 crores deposit accounts have been opened in banks and financial institutions. This is the number of accounts opened only in commercial banks, development banks and finance companies. This number will be higher if the accounts opened in the microfinances are also included. The number of bank account is more than the total population of Nepal. Just because there are more accounts than the bank account doesn't mean that all Nepalis have access to bank accounts. An individual can also open account in more than one bank and financial institution, That is why there is more account than the population. Owing to the financial literacy campaign launched by Nepal Rastra Bank and other banks and financial institutions, Nepali people's access to finance has increased significantly over the years, with 6.4 per cent increase in a year. The total no. of branches of bank and financial institution is 11215 and banking institutions have presence in 750 local levels. Around 16 million peoples use internet and mobile banking The area of capital market has also increased dramatically over the past few years and currently there are 5.2 million Demat account holders and 4.3 million Mero share users. The no of active traders in the secondary market is 1.2 million. During the Covid -19 lockdown period the number of participants in the capital market increased tremendously resulting in the record-breaking turnover of 21.6 billion. The Youths from urban areas participation in the Nepalese Capital market is very high in comparison to the rural areas due to accessibility of technology, bank and financial institutions, securities brokers and flow of capital. Securities Board of Nepal (SEBON) has launched "One Nepali One Demat account" campaign to spread the capital market nationwide. SEBON has been organizing Capital Market Literacy and awareness programs among the school children and youths in different rural districts of Nepal continuously. Similarly , Securities Board of Nepal has been taking several approaches to design the curriculum of universities to include Capital Market and its instruments in the subject matter. Around 6 lakhs employee contribute to the employee provident fund and 24000 contribute in the pension fund. The total number of contributing offices in the employee provident fund is 29200. Citizen investment trust and social security fund operates social welfare savings to ensure effective investment management of collected fund. In the recent years financial literacy, financial accessibility and participations, awareness is

continuously increasing through the governments positive steps by incorporating different updated and friendly policies in the financial sectors. A detail research and data regarding youths involvement in the capital market , youths accessibility to financial sectors and youths contribution to the economy should be revised on the regular basis.

4. Guidelines Recommended by OECD

The guidelines and guidance recommend to promote financial education in schools of different member countries includes:

- Integrating financial education into the school curriculum as part of a coordinated national strategy for financial education and on the basis of identified needs;
- Setting appropriate, tailored and quantifiable goals of financial education in the school curriculum, including through dedicated learning frameworks;
- starting to teach financial education as early as possible and preferably at the beginning of formal schooling;
- Implementing financial education in schools in a flexible manner adapted to national, regional and local circumstances either through a standalone or a cross curricular approach;
- Identifying appropriate, commensurate and long-term financial and in-kind resources to ensure the sustainability and credibility of the development and implementation of financial education in schools;
- Planning and establishing, at the outset of the programme, methods and criteria to evaluate the progress and impact of financial education in schools;
- Ensuring the suitable involvement of important key stakeholders through both a top-down and bottom-up approach. This should include a leading and coordinating role for the government and ministry of education, other public authorities and the education system as well as a pivotal role for teachers and an appropriate role for parents, the local community, students and other relevant stakeholders;
- identifying, devising and making available adequate supporting tools and means to key stakeholders in the education system to facilitate the efficient introduction of financial education in schools. These should include:
    - the appropriate information and training of teaching staff;
    - the availability and provision of high quality, objective and efficient tools;

- the promotion of appropriate incentives; and
- the exchange and promotion of international good practices.

5. **Implementation**

In line with the OECD 2005 recommendations, an increasing number of countries are recognizing the importance of financial literacy, and have included financial education in school curricula. There are however significant barriers to overcome: lack of political will, lack of resources and materials, overcrowded curricula and insufficient expertise. There is no single recipe for success, but countries that have made the most progress have adopted the guidelines supported by the OECD and its International Network on Financial Education (INFE):

- Financial education in schools should be part of a coordinated national strategy. The strategy should have a visible leader or coordinating body to ensure relevance and long-term sustainability. The education system and profession should be involved in the development of the strategy.
- There should be a learning framework which sets out goals, learning outcomes, content, pedagogical approaches, resources and evaluation plans. The content should cover knowledge, skills, attitudes and values. The framework can be national, regional or local.
- To the extent possible, a sustainable source of funding should be identified at the outset.
- Financial education should start as early as possible, ideally from the beginning of formal schooling, and carry on until the end of the students' time at school.
- Financial education should ideally be a core part of the school curriculum. It can be, but need not be, taught as a 'stand-alone' subject; integration into other subjects like mathematics, economics, social science or citizenship can also be effective. Financial education can give a range of 'real life' contexts across a range of subjects.
- Teachers should be adequately trained and resourced, made aware of the importance of financial literacy and relevant pedagogical methods, they should receive continuous support and training to teach financial literacy.
- There should be easily accessible, objective, high-quality and effective learning tools and pedagogical resources available to schools and teachers that are appropriate to the level of study. n Students' progress should be assessed and their achievements recognized.

6. Conclusions

In order to be effective, financial education in schools should be integrated into wider community, national and/or regional initiatives. It also requires the commitment and involvement of a potentially vast range of stakeholders from diverse horizons: government, financial regulatory bodies, central banks, education systems, teachers, parents, the community and students should be involved. It may also be relevant and appropriate to seek the commitment of private financial institutions, business leaders and experts from non-for-profit associations, local networks and international organizations. As youths are the pillars of nations and if they have financial education from the high schools' levels their intellectual insights in financial decision making can be milestone in making happy family and prosperous nation.

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OECD Guidelines on Financial Education in Schools

Nepal Rastra Bank, Securities Board of Nepal websites

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Hedge Fund And Fund Of Funds

✍ Narayan Paudel*

1. Background

Every modern economy is based on a sound financial system which helps in production, capital and economic growth by encouraging savings habits, mobilizing savings from households and other segments and allocating savings into productive usage such as trade, commerce, manufacture etc. The financial system plays a key role in the economy by stimulating economic growth. This is achieved by financial infrastructure, in which entitles with funds allocate them to those who have potentially more productive ways to invest those funds. Financial system allows funds to be allocated, invested, or moved between economic sectors. They enable individuals and companies to pool, price, and exchange the associated risk. By overcoming the information asymmetry problem, the financial system facilitates balance between those with funds to invest and those needing funds. Capital market can play a crucial role to reduce disparity between the "haves" and "have nots" and ultimately for the establishment of the society oriented towards socialism, within the democratic framework.

2. Hedge Fund

Hedging is often discussed more broadly than it is explained. However, it is not an esoteric term. Even if you are a beginning investor, it can be beneficial to learn what hedging is and how it works.Hedge funds can provide benefits to financial markets by contributing to market efficiency and enhance liquidity. Many hedge fund advisors take speculative trading positions on behalf of their managed hedge funds based extensive research about the true value or future value of a security. They may also use short term trading strategies to exploit perceived mis-pricings of securities. Because securities markets are dynamic, the result of such trading is that market prices of securities will move toward their true value. Trading on behalf of hedge funds can thus bring price information to the securities markets, which can translate into market price efficiency. Hedge funds also provide liquidity to the capital markets by participating in the market.

Hedge funds, including fund of funds are unregistered private investment partnerships, funds or pools that may invest and trade in many different markets, strategies and instruments (including securities, non-securities and derivatives) and are not subject to the same regulatory requirements as mutual funds, including mutual fund requirements to provide certain periodic and standardized pricing and valuation information to investors.

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The term can also be defined by considering the characteristics most commonly associated with hedge funds.

Usually, hedge funds:

- are organized as private investment partnerships or offshore investment corporations;
- use a wide variety of trading strategies involving position-taking in a range of markets;
- employ as assortment of trading techniques and instruments, often including short-selling, derivatives and leverage;
- pay performance fees to their managers; and
- have an investor base comprising wealthy individuals and institutions and relatively high minimum investment limit.

Domestic Hedge Fund: Domestic hedge funds are usually organized (in USA) as limited partnerships to accommodate investors that are subject to U.S. income taxation. The fund's sponsor typically is the general partner and investment adviser. Hedge funds may also take the form of limited liability companies (LLC) or business trusts. LLPs, LLCs and business trusts are generally not separately taxed and, as a result, income is taxed only at the level of the individual investors. Each of three firms also limits investors liability; LLCs offer the additional benefit of limited liability for fund advisors (general partners).

Offshore Hedge Fund: Offshore hedge funds are typically organized as corporations in countries such as the Cayman Islands, British Virgin Islands, the Bahamas, Panama, The Netherlands Antilles or Bermuda. Offshore funds generally attract investments of U.S. tax exempt entities, such as pension funds, charitable trusts, foundations and endowments, as well as non-U.S. residents. U.S. tax-exempt investors favor investments in offshore hedge funds because they may be subject to taxation if they invest in domestic limited partnership hedge funds.

Hedge funds play an important role in a financial system where various risks are distributed across a variety of innovative financial instruments. They often assume risks by serving as ready counter parties to entities that wish to hedge risks. For example, hedge funds are buyers and sellers of certain derivatives, such as securitized financial instruments, that provide a mechanism for banks and other creditors to un-bundle the risks involved in real economic activity. By actively participating in the secondary market for these instruments, hedge funds can help such entities to reduce or manage their own risks because a portion of the financial risks are shifted to investors in the form of these tradable financial instruments. By reallocating financial risks, this market activity provides the added benefit of lowering the financing costs shouldered by other sectors of the economy. The absence of hedge funds from these markets could lead to fewer risk management

choices and a higher cost of capital. Hedge fund can also serve as an important risk management tool for investors by providing valuable portfolio diversification. Hedge fund strategies are typically designed to protect investment principal. Hedge funds frequently use investment instruments (e.g. derivatives) and techniques (e.g. short selling) to hedge against market risk and construct a conservative investment portfolio – one designed to preserve wealth. Hedging is a risk management strategy used to reduce the risk due to fluctuations in the asset price. The hedge fund which the central bank will set up is a type of insurance that will cover additional liability created to any party (investor or government) due to exchange rate fluctuations. In order to mitigate exchange rate risks while making payment in US dollars, the power utility and the project developers had agreed to hedge the investment by creating a fund with both parties contributing to it. But due to lack of a mechanism to hedge the investment, the project developers were having a hard time completing financial closure.

3. Funds of Funds (FoFs)

Fund of funds (FoFs) is a mutual fund scheme, which invests in the schemes of same mutual funds or other mutual funds, instead of investing in securities. These funds can invest in equity oriented, debt oriented and liquid schemes or sector specific schemes. Depending on the investment style of the fund managers, fund of funds schemes can be broadly classified into:

Sector specific funds: Such type of funds invest in different sectors of the economy and thus hedge themselves against the underperformance of any sector by taking the advantage from the rise in another sector.

Asset allocation funds: These funds diversify investment by holding several different asset classes at the same time. By varying the stocks to bonds proportion, the fund endeavors to endow the investors, with an appropriate asset allocation in different stages of their lives. They are also known as life cycle funds.

4. Benefits Of Fund Of Funds Scheme

Diversification: As a fund of funds invests in the schemes of other funds, it provides a greater degree of diversification.

Uncomplicated: Instead of investing in different stocks/units of mutual funds and keeping a track record of all of them, it will be much easier to invest in and track only one fund, which in turn invests in other mutual funds.

Cheap: While entering into the capital markets it is difficult to diversify because of limited funds. Fund of funds provide an opportunity to go for diversification with comparatively limited amounts.

Risk: Investors can trim down the risk by choosing this route. Because of diversification, even if one stock/scheme is not performing well risk level comes down.

Expertise of Various Managers: As in the case of schemes of mutual funds, fund of funds schemes also work under the due diligence of a fund manager. This gives the scheme additional expertise as compared to other mutual funds schemes. These schemes also provide access to information which may be difficult to obtain for an investor on a case-by-case basis.

5. Disadvantages Of Fund Of Funds Scheme

However, just like any other investment, fund of funds is not free from shortcomings. Few of the disadvantages are specified below.

Additional Fees: The more diversified the fund is, the greater the likelihood that the investor will incur an incentive fee on one or more of the constituent managers, regardless of overall FoF performance.

Associated Risks: Risks associated with all the underlying funds get added at this level. Following are the type of risks associated with fund of funds scheme.

Management Risks:Every fund manager has a particular style of diversification. This diversification style will be in perfect correlation with the number of managers involved. The views of a manager may be altogether different from the market.

Operational Risks: Due diligence of a scheme in itself gives rise to operational risks. Continuous monitoring is required for knowing about performance of the funds, any possibility of a fraud and to know about the investment style of the funds and any desirable or undesirable changes in it.

Qualitative Risks: These include risks associated with the management environment of the fund such as organizational structure, infrastructure, investment process, operational issues etc.

6. Conclusions

The concept of hedge funds has not been introduced in Nepal. However recently the Cabinet on approved a draft regulation created to establish and operate a hedge fund intended to reduce investment risk. The planned hedge fund will address the foreign exchange risk that comes withWhile writing this, Nepal's capital market has 20 closed-end mutual funds and 2 open-end mutual funds. The difference is that mutual funds are closely regulated investment products offered to the public. Mutual funds have units just like companies have shares under their name and they can be traded in NEPSE. However, hedge funds are private investments that take investment capital from a handful of investors, sometimes among a close group of people who know each other very well. Hedge funds have the freedom to use higher-risk investment strategies to achieve higher returns.

Hedge funds lie at the heart of capitalism in the international investment world. Hedge funds and the profits they generate attract the best academicians and doctorates, and the world of fund management is so glamorous that it has been a

subject of renowned books and movies. Unlike mutual funds that are known for giving mediocre returns in Nepal's context, hedge funds can take higher risks and there is virtually no limit to the returns they can generate. In addition, domestic and offshore hedge funds investment performance can exhibit low correlation to that of traditional investments in the equity and fixed income markets. Institutional investors have used hedge funds to diversify their investments based on this historic low correlation with overall market activity.

As an apex regulator of capital market of Nepal, SEBON has to take initiation for the development of such funds. The securities related act,2006 along with various regulation and guidelines have to improvised for the development of capital market and integrated it globally as a major part of financial integration. The draft regulation was tabled by the Finance Ministry, and its approval paves the way for the establishment of the fund at Nepal Rastra Bank, the country's central bank. Hedging is a risk management strategy used to reduce the risk due to fluctuations in the asset price. The hedge fund which the central bank will set up is a type of insurance that will cover additional liability created to any party (investor or government) due to exchange rate fluctuations. As per the recent draft regulation, Nepal Rasta Bank will establish and operate the fund which will cover risks due to a depreciation of the domestic currency by charging a premium. Thus, the appropriate policies and practices should be adopted to improve the outcome of both current generations of older people and future generations.

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BFIs role in Corporate Social Responsibilities

Pratigya Bhatt*

Introduction

Corporate Social Responsibility can be understood as the practices along with policies that would be undertaken by corporations intending to have a positive set of influence within the global world. There lies some sort of strength of corporate social responsibility within the spaces adopted voluntarily by organizations in any spaces around. Križanová, Anna & Gajanova, Lubica. (2016). Generally, it is broken into four categories - environmental, philanthropic, economic responsibility, or ethical followings there. CSR is a form of international private business self-regulation aiming to contribute to societal goals for the philanthropic process there.

Some consumers agree that at the time of achieving business targets, companies would somewhere engage in CSR efforts there within the same time. Here, consumers do believe companies working around charity for the entire receive a positive set of responses there itself. It was believed that CSR started operation in the early 20th century itself which aimed at growing concern through large corporations along with their power and where the continuing commitment for behaving with ethical guidelines for contributing to the environment and another social aspect.

Corporate Social Responsibilities have to be taken as one of the major responsibilities through which something would be given back to the society. Here, it has been seen that in Europe there are 99 % of business-based companies are located within SMEs which is strongly focused on the moreover structured implementation of CSR concept within SMEs type of business strategies (Ubrežiová et al., 2016). So, through many sources – organizations contributing to society can be understood as Corporate Social Responsibility (CSR).

Literature Review

Ethical behavior counts as an important element that holds significance for CSR, here business would be encouraged for following not just commercial logic but helps in behaving in such a pattern where their accordance will be accepted by social norms along with adopting an ethical code of conduct (Crane and Matten 2015). The ethical concerns that the organization needs to comply, with and give out a different portion for operating with excellence at various phases and scales around. Meanwhile what can be traced out here is that the approaches that are used by CSR among those businesses would workaround by providing channels where increasing feedback, dialogue, along with best practices, helping to understand

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and collaborate among the stakeholders, helping to include the educational base of consumers on social responsibility, and empowering stakeholders as the agents of change (EC, 2015).

There certainly exists a different set of challenges within the corporate arena which would impose limitations over the growth along with a possible layer of profit for the organization as it would hit the prospect and restriction here itself. There would lie four sets of dimensions where the environment based and similarly related CSR activities, aiming for a reduction of the firm's negative set of impact within this entire environment (Bekmezci, 2015). But things do not just end there there certainly lies various spaces for ensuring corporate goals which won't harm or disadvantage anyone within the environment there. They can be costly, but they do have some impact at various portions in one aspect or next which would be clearly understood there itself for various layers and aspects. CSR-related activities, that would be indicating about how the module of organizations operating over the suppliers, customers along with other players would further workaround in the process of the supply chain there itself (Bhardwaj, 2016; Tabesh et al., 2016).

With all sets of efficiency working around gaining there for leading the competitive set of positioning working for sustainability over time, there would then be value created for the firm working around to meet the demands within various sets of stakeholders (Collazzo-Yelpo and Kubelka, 2019). So, even the employees there would be highly provoked and motivated for operating within the business bases and the timing within the space and flow of the work it would motivate the employees with optimistic vibes and positive set of vision letting to operate through any best effort within the surface there itself.

Glavas, Ante & Radic, Mislav. (2019) explained how the business would always be engaged with a public set of affairs, in direct or indirect forms and where the company would not just give benefit for the credit but would impact the harmful aspect within the environment for the nature of the society within the phase.

CSR by BFIs

It was clearly stated in a new circular issued by Nepal Rastra Bank that BFIs can spend on various social projects like education, health, natural disaster management, environment protection, culture promotion, improvement of infrastructure in rural areas, income skills for the socially deprived sector, financial literacy and programs for consumer rights. But, out of the total profit, they should spend 1 percent on it. Ever since the light of CSR has been into existence and the practice has been effectively developed through any best layer possible. In the report published by Nepal Rastra Bank in 2021, it was concluded that though CSR is regarded to be a voluntary initiative, the increasing number of countries that

have adopted laws there for CSR would somewhere be incorporated with Company laws. It then explored various aspects finding out that 1.58 percent of net profit was spent by BFIs there. There was an immense role made by the banking sector in Corona Virus Control and Treatment Fund too. The report also made a suggestion about the CSR act to be formulated. Here, are some of the ways that BFIs can actually work out strongly for making the best use of their CSR-related activities with effectiveness assured.

- **Financial Literacy**: In the report presented by the World Bank of 2107, it was figured out that only 45 percent of the adult population had a bank account. This certainly states how weak Nepal is regarding financial literacy. Banks and Financial Institutions can spend a huge sum of their money on this project. There had been different programs that promoted Financial Literacy, but they didn't matter that high because they were highly focused on the promotion of their brand, and product. Organizing such activities can certainly be beneficial here. They can work out to finance books to primary level students, or develop new course content for their academics – organize various financial literacy programs with meaningful impact for provoking financial literacy there itself.
- **Environmental Contribution:** Contributing to the environment through direct impact creation like keeping dust bins in various spaces, or organizing tree plantation programs to keep the environment around the office eco-friendly can be one of the major ways through which Corporate Social Responsibilities can be conducted by these BFIs. They can get involved in river cleaning projects, road cleaning tasks to other various aspects because of which the activities concerning the possible layer can be provoked through various dimensions. Being concerned about society through direct impact – be that by not making misuse of water, or not being involved within the pollution type of activities can work out for better modality.
- **Business with Environment-Conscious Venture**: Next crucial aspect there that Banks and Financial Institutions can operate through and around would be by being supportive to businesses with various tasks and activities who would look after the major set of dimensions there itself. So, doing business with those firms who would operate and define the modality where they are self-concerned about the environment would certainly be beneficial here. Be it banks or insurances, prioritizing that business who are less harmful to the environment certainly counts as Corporate Social Responsibility based activities there. So, these businesses would somewhere workaround through such modality too, where they can operate with such excellence.

- **Remote Access:** It is no wonder that BFIs operating in remote regions are going through some sort of loss because there are more operational expenses than business in real. But, taking it from another perspective working with remote access is also the type of modality where the business-based operation and houses would work around through a series of operations. And, it becomes an obligation for them to operate with a different set of activities where you would operate around. This would promote financial inclusion anyway and will certainly create a positive impact within the economy with maximum participation in the firm hereby. The remote type of access might be under loss, but that can be incorporated within the CSR perspective there itself.
- **Economic Support**: There will certainly appear different types of soft activities which would operate through various types and through different means under which the procedure relating to finances would come around and create impact. Conducting businesses with those aspects and through such dimensions would be meaningful anyway and here the framing of activities and tasks would certainly hit. So, by making voluntary support to the economy and economic upliftment there, the benefit and prospects would be identified and determined. They will certainly come around aiming to bring a positive type of image in the workplace through various series of activities there itself. The benefit would somewhere carter the prospective field with some financial support at various layers.
- **Technical Support:** Banks and Financial Institutions can also help in the various technical supportive type of activities, through which the positive and prospective layers can be adopted. There, the pros and cons would be somewhere modified and uplifted. The possibility of such dimension would come around – be it by giving computers and laptops to schools, or providing free WiFi access at various public places – they can contribute to making the nation technology-friendly. Apart, they can also invest in various local level scientists who want to develop something. Technical assistance can be granted to remote regions for agriculture business upliftment as well. So, investing in technology would also be impactful on society from various angles and perspectives.
- **Internal Responsibilities**: Even employees are part of the organization. They can therefore work and plan to operate in such a way that the internal mechanisms and flow would be creating impact with positive layers of hope. Building a better working environment, promoting eco-friendly equipment and vehicles to the well-ventilated workplace with enough spaces; to helping those staff who are under financial crisis BFIs can also further work down

for improvement of such types of the mechanism through which entire set of operation and modality can be well operated with excellence. These responsibilities would not just motivate staff but create a better and smooth working environment too.

Conclusion

Often understood as strategies that companies keep into action as part of corporate governance where there are properly designed operations that would be ethical or beneficial for the society there itself. When conducting or spending on Corporate Social Responsibilities based tasks, it has to be accepted and regarded that they would be meaningful, creating impact through different perspectives. Tough situations would be making something better with significance there itself, and there would lie some sort of operation with positivity from various perspectives. These dimensions would certainly operate with excellence and hence, they will create an optimistic vision with a positive set of attitudes.

It is not that Corporate Social Responsibilities based operations are not conducted at this particular point in time. But, what would be the use if they are not created for the sake of bringing impact. Today there are records about how much has been spent on CSR activities, but there is no scale to measure the real impact made by such CSR activities from any perspective. There is neither a measuring rod identifying how deep the impact of CSR has made there. An impactful and motivational aspect certainly makes positive hope and they do matter in one dimension or the next. On the positive side, an optimistic vision and layer of activities where possibilities would be surrounded – a small push can contribute for bring positive changes, and hence Corporate Social Responsibilities (CSR) should be accountable for it. Only then, the true meaning of CSR can be felt by customers, employees, community, society, nation, and the globe as a whole. A business firm, a corporate world will always be welcomed in any society or country and then.

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Relationship between firms' financial performance and stock returns in Nepalese insurance companies

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Abstract

The study examines the relationship between financial performance and stock returns in the context of Nepalese insurance companies. Return on equity and stock return are selected as the dependent variables. The selected independent variables are return on assets, earnings per share, firm size, price earnings ratio, premium growth and book value per share. The study is based on the secondary data which are gathered from 20 insurance companies in Nepal for the period of 8 years from 2012/13 to 2019/20. The secondary data were collected from the annual report published by Beema Samiti (Insurance Board of Nepal) and annual reports of selected insurance companies. The correlation coefficients and regression models are estimated to test the significance and importance of firms' performance on the stock return of Nepalese insurance companies.

The study showed that there is positive impact of return on assets on return on equity and stock return. It indicates that higher the return on assets, higher would be the return on equity and stock return. Similarly, earnings per share have a positive impact on return on equity and stock return. It indicates that increase in earnings per share leads to increase in return on equity and stock return. In addition, firm size has a positive impact on return on equity and stock return. It indicates that larger the firm size, higher would be the return on equity and stock return. Similarly, price earnings ratio has a positive impact on return on equity and stock return. It indicates that increase in price earnings ratio leads to increase in return on equity and stock return. Likewise, premium growth has a positive impact on return on equity and stock return. It indicates that increase in premium growth leads to increase in return on equity and stock return. Moreover, book value per share has a positive impact on stock return. It indicates that higher the book value per share, higher would be the stock return.

***Keywords**: Return on equity, stock return, return on assets, earning per share, firm size, price earnings ratio, premium growth and book value per share.*

1. Introduction

The growth of an economy depends on the success of industries and individual companies which make up that economy. The performance of individual companies working in different industries is an important indicator of how well

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the whole economy is doing. Insurance companies are fundamental financial institutions that play significant roles which encompass, in addition to facilitating the transfer of funds, financial losses indemnity and reduction of uncertainty that people and businesses face (Abdeljawad et al., 2022). Those functions of insurance companies lead to a high-scale investment and well-performing economy. Financial institutions play a significant role in the growth of socio-economic conditions and for the development of the overall nation. The financial sector is one of the major factors for the economic development of the nation. Insurance sector being one of the major financial sectors, it provides a long-term fund for economic development (Agiobenebo and Ezirim, 2002). Company performance is an illustration of the financial condition of a company that is analyzed by financial analysis tools, which shows about the good or bad financial condition of a company that reflects work performance in a certain period. In case of insurance companies, profitability enhances solvency of the company which is very important to face risks and meet obligations towards policyholders and, as a result, fulfil insurance goals (Burca and Batrinca, 2014).

According to Tandelilin (2010), stock return is one of the major factors that motivates the investors to invest and also known as a reward for the courage of investors to bear the risk of the investment they make. Ratio analysis of financial statements helps to explain or provide an overview of the good or bad state or financial performance of a company. Return on assets (ROA) is a popular and well-known financial ratio which indicates how profitable a company is in relation to its total assets (Jewell and Mankin, 2011). Zaki and Islahuddin (2017) defined the stock price as a stock value whose movement is determined by bargaining power on the stock exchange and the selling price from investors to other investors. It can and will rise and fall, based on a variety of factors in the global landscape and within the company itself (Lapian and Dewi, 2018). Stock market is a very important economic institution that plays a crucial role in the economy (Adam *et al.*, 2016). Stock markets are essential for economic growth as they insure the flow of resources to the most productive investment opportunities (Kurihara, 2006).

Pratama and Idawati (2019) examined the effect of financial ratios on stock returns in agricultural companies listed on Indonesia Stock Exchange. The study showed that there is a significant impact of financial ratio on the stock return. Likewise, Ahmeti and Iseni (2022) revealed that size, leverage and age of company have significant effects on the return on assets. Sari *et al.* (2020) revealed that the increasing premium income will significantly increase the asset growth of insurance companies in Indonesia. In addition, Hatta and Dwiyanto (2012) concluded that earning per share and price earnings ratio have positive and significant effects on stock price. Similarly, debt to equity ratio and net profit margin have negative and significant impact on stock return. Shen (2000) found that price earnings ratio has

a negative impact on stock returns in the short and the long-run. Moreover, Karan (1996) concluded that price earnings ratio has a positive and significant impact on stock return. Mehari and Aemiro (2013) examined the firm specific factors that determine insurance companies' performance in Ethiopia. The study found that growth in writing premium has statistically insignificant relationship with financial performance. Similarly, Mardi *et al.* (2017) revealed that insurance premiums growth insignificantly affects the return on assets and financial performance of firms. Ajao and Ogieriakhi (2018) found that premium growth has an insignificant effect on the performance of the insurance companies. Banerjee and Majumdar (2018) concluded that growth in gross written premium (GWP), leverage, investment ratio and market share have significant impact on profitability of the insurance companies. Deyganto and Alemu (2019) revealed that premium growth has a significant impact on firms' financial performance. Omran and McKenzie (2000) concluded that book value per share has positive impact on stock return. Similarly, Christian (2015) examined the impact of financial ratios on stock return of the retail companies listed on Indonesia Stock Exchange. The study concluded that price earnings ratio, dividend yield, and book to market ratio have significant effect on stock return. Likewise, Margaretha and Damayanti (2008) revealed that there is a positive relationship of price earnings ratio, dividend yield, and market to book with stock return. Daniswara and Daryanto (2020) indicated that price book value and market return have positive and significant impact on stock return.

Wijaya and Sedana (2020) examined the effects of quick ratio, return on assets and exchange rates on stock returns. The study revealed that there is a positive and significant effect of return on assets on stock returns. Similarly, Adinugraha (2022) concluded that return on asset as a moderating variable has a significant impact on stock return of the firms listed on Jakarta Islamic Index. Similarly, Menaje (2012) found a significant relationship between return on assets and stock return of publicly listed firms in the Philippines. Idawati and Wahyudi (2015) concluded that return on assets has a positive and significant effect on share price of coal mining company listed in Indonesia stock exchange. Moreover, Purnamasari (2015) revealed that there is a positive effect of return on assets on stock return. However, Saleh (2015) found that return on assets negatively influence the stock return of the firms of oil and gas sector in Pakistan. Anwar (2019) revealed that return on asset has a positive effect on the stock return of the firms. Furthermore, Mogonta and Pandowo (2016) concluded that return on assets has a positive significant effect on market price of share of mining companies listed on Indonesia Stock Exchange. Julianto and Syafarudin (2019) indicated that return on assets has a positive and insignificant impact on stock return and company value. Moreover, Sukesti *et al.* (2021) found return on assets has a positive effect on stock return.

Hunjra *et al.* (2014) examined the impact of dividend policy, earning per share, return on equity and profit after tax on stock prices. The study found that earnings per share has a significant positive impact on stock return. Likewise, Talamati and Pangemanan (2015) concluded that earnings per share have a significant positive effect on stock price of banks listed in Indonesia stock exchange. Tran (2015) revealed that there is a positive and significant impact of earnings per share on stock return. However, Jasman and Kasran (2017) indicated that earnings per share has a significant negative effect on stock return. Ibrahim and Bala (2017) found that earnings per share have a positive and statistically significant effect on stock market returns of the listed food and beverages firms in Nigeria. Martina (2019) concluded that earnings per share has a positive and significant effect on stock returns. In contrast, Asikin *et al.* (2020) revealed that earnings per share have no effect on share prices and its return. In addition, Mudzakar (2021) also found that earnings per share have no effect on stock return. Similarly, Aryanti and Mawardi (2016) concluded that return on equity and current ratio have negative and significant impact on stock return. However, return on asset has a positive and significant impact on stock return of the companies listed on the Jakarta Islamic Index. Dita and Murtaqi (2014) revealed that net profit margin and debt equity ratio have positive significant impacts on the stocks return, while the price to book value has a significantly negative relationship with stocks return.

In the context of Nepal, Lamichhane and Rai (2021) found that return on equity has a positive and significant impact on stock return which shows that higher ROA leads to higher sock return. The study also concluded that earning per share has a positive and significant impact on market price per share and stock return. Likewise, Dahal (2016) concluded that earnings per share, price earnings ratio and return on assets have no significant effect on market price per share. Sapkota (2016) revealed that earnings per share, dividend per share, price earnings ratio, and return on assets have significant impact on market price of share. Bhattarai (2014) examined the determinants of share price of Nepalese commercial banks. The study revealed that earnings per share has a significant positive association with share price and stock return. Similarly, Manandhar (1998) found earning per share, price-earnings ratio, and dividend yield have negative impact on market capitalization. Moreover, Sharma (2011) showed that there is a significant positive relationship of dividend per share, earnings per share and book value per share with stock price.

The above discussion shows that empirical evidences vary greatly across the studies on the relationship between financial performance and stock return of firms. Though there are above mentioned empirical evidences in the context of other countries and in Nepal, no such findings using more recent data exist in the context of Nepal. Therefore, in order to support one view or the other, this study has been conducted.

The main purpose of the study is to examine the relationship between financial performance and stock return in the context of Nepalese insurance companies. Specifically, it examines the relationship of return on assets, earnings per share, firm size, price earnings ratio, premium growth, and book value per share with return on equity and stock return of Nepalese insurance companies.

The remainder of this study is organized as follows. Section two describes the sample, data and methodology. Section three presents the empirical results and the final sections draws the conclusion.

2. Methodological aspects

The study is based on the secondary data which were gathered from 20 insurance companies of Nepal for the period of 8 years from 2012/13 to 2019/20, leading to a total of 160 observations. The main sources of data include the annual report published by Beema Samiti (Insurance Board of Nepal) and annual reports of selected insurance companies. This study is based on descriptive as well as causal comparative research designs. Table 1 shows the list of insurance companies selected for the study along with the study period and number of observations.

Table 1: List of sample insurance companies selected for the study along with study period and number of observations

S. N.	Name of the insurance companies	Study period	Observations
1	Premier Insurance Company Limited	2012/13-2019/20	8
2	Siddharth General Insurance Limited	2012/13-2019/20	8
3	Shikhar Insurance Company Limited	2012/13-2019/20	8
4	Neco Insurance Company Limited	2012/13-2019/20	8
5	Lumbini General Company Limited	2012/13-2019/20	8
6	NLG Insurance Company Limited	2012/13-2019/20	8
7	Nepal Insurance Company Limited	2012/13-2019/20	8
8	United General Insurance Limited	2012/13-2019/20	8
9	Prudential Insurance Company Limited	2012/13-2019/20	8
10	Everest General Insurance Limited	2012/13-2019/20	8
11	Sagarmatha General Insurance Limited	2012/13-2019/20	8
12	IME General Insurance Limited	2012/13-2019/20	8
13	Himalayan General Insurance Limited	2012/13-2019/20	8
14	Gurans Life Insurance Limited	2012/13-2019/20	8

15	Asian Life Insurance Limited	2012/13-2019/20	8
16	Prime Life Insurance Limited	2012/13-2019/20	8
17	Nepal Life Insurance Limited	2012/13-2019/20	8
18	National Life Insurance Company Limited	2012/13-2019/20	8
19	Life Insurance Cooperation Limited	2012/13-2019/20	8
20	Surya Life Insurance Limited	2012/13-2019/20	8
Total number of observations			**160**

Thus, the study is based on 160 observations.

The model

The models used in this study analyze the relationship between firms' financial performance and stock returns in Nepalese insurance companies. The dependent variables selected for the study are return on equity and stock return. Similarly, the selected independent variables in this study are return on assets, earnings per share, firm size, price earnings ratio, premium growth, and book value per share. The following model equations are designed to test the hypotheses.

$ROE_i t = \beta_0 + \beta_1 ROA_{it} + \beta_2 EPS_{it} + \beta_3 FS_{it} + \beta_4 PER_{it} + \beta_5 PG_{it} + \beta_6 BVPS_{it} + e_{it}$

$SR_{it} = \beta_0 + \beta_1 ROA_{it} + \beta_2 EPS_{it} + \beta_3 FS_{it} + \beta_4 PER_{it} + \beta_5 PG_{it} + \beta_6 BVPS_{it} + e_{it}$

Where,

SR = Stock returns as measured by the change in price plus dividend to current price, in percentage.

ROE = Return on equity as measured by the ratio of net income to shareholder's equity, in percentage.

ROA = Return on assets as measured by the ratio of net income to total assets, in percentage.

FS = Firm size as measured by total assets, Rs in billion.

EPS = Earnings per share as measured by the ratio of company's total earnings to the total number of shares outstanding, in Rs.

PER = Price earnings ratio as measured by the ratio of market value per share to earnings per share, in times.

PG = Premium growth as measured by the change in gross written premium, in percentage.

BVPS= Book value per share as measured by the ratio of a firm's common equity to its number of shares outstanding, in Rs.

The following section describes the independent variables used in this study along with hypotheses formulation.

Return on assets

Jabbari and Fathi (2014) found that return on assets has a positive and significant relationship with return on shareholders' equity for Tehran based companies. Likewise, Har and Ghafar (2015) concluded that return on assets has a positive and significant association with stock returns in the context of Malaysia's plantation industry. Moreover, Naveed and Ramzan (2013) indicated that return on assets has insignificant positive relationship with stock return of the firms listed on Karachi stock exchange. Similarly, Bukit (2013) showed that return on assets has a positive and significant effect on stock returns. Furthermore, Wijaya and Sedana (2020) revealed that there is a positive and significant effect of return on assets on stock returns. Based on it, this study develops the following hypothesis:

H1: There is a positive relationship between return on assets and stock return.

Earnings per share

Jatoi *et al.* (2014) found that there is a significant positive impact of earnings per share on the market price of share of the firms in the context of Pakistan. Likewise, Taani and Banykhaled (2011) concluded that there is a positive and significant impact of earnings per share on stock trading volume and stock return. Similarly, Enow and Brijlal (2016) found that earnings per share have a significant positive relationship with share prices of listed firms on Johannesburg Stock Exchange. Furthermore, Chambers *et al.* (2013) indicated that there is a significant positive association between stock return and earnings per share of the listed firms on Istanbul Stock Exchange. Moreover, Mirfakhr-Al-Dini *et al.* (2011) concluded that there is a significant positive relationship between earnings per share and stock price. Based on it, this study develops the following hypothesis:

H2: There is a positive relationship between earnings per share and stock return.

Firm size

Srinivasan (2012) revealed that earning per share and firm size have a positive and significant impact on the share price of commercial banks. Malik (2011) concluded that there is a significantly positive relationship between profitability and firm size. Sivathaasan *et al.* (2013) found that there is a positive and insignificant impact of firm size on the firm profitability. Velnampy and Nimalathasan (2010) concluded that there is a positive relationship between firm size and profitability of commercial banks of Ceylon. Gharaibeh and Alnajjar (2007) found that there is a statistically significant positive effect of firm size on stock returns. Based on it, this study develops the following hypothesis:

H3: There is a positive relationship between firm size and stock return.

Price earnings ratio

Bhattarai (2014) revealed that earnings per share have a significant positive association with share price and stock return. Iskenderoglu and Karadeniz (2022) indicated that there exists a positive relationship between stock price volatility and price-to-earnings ratio. Budhi *et al.* (2018) concluded that price earnings ratio has a significant positive impact on the stock return of the firms. Aga and Kocaman (2006) indicated that there is a significant positive impact of price earnings ratio with stock return of the firms listed on Istanbul Stock Exchange. Based on it, this study develops the following hypothesis:

H4: There is a positive relationship between price earnings ratio and stock return.

Premium growth

Burca and Batrinca (2014) found that there is a significant positive relationship between premium growth and firm performance in the Romanian insurance market. Derbali (2014) found that there is a significant positive relationship between premium growth and bank performance of insurance companies in Tunisia. Similarly, Markonah *et al.* (2019) indicated that there is a positive relationship between premium growth and financial performance of insurance companies in Indonesia. Likewise, Kripa (2016) concluded that premium growth rate is positively related to profitability of insurance companies in Albania. Moreover, Ahmed *et al.* (2011) indicated that there is a positive and statistically significant relationship between premium growth and profitability of insurance companies of Pakistan. Based on it, this study develops the following hypothesis:

H5: There is a positive relationship between premium growth and stock return.

Book value per share

Menike and Prabath (2014) found that there is a positive impact of book value per share on the stock price of the firms listed on Colombo Stock Exchange, Sri Lanka. In addition, Al Kubaisi *et al.* (2017) concluded that book to market ratio has a positive and significant impact of stock return of the firms listed on Aman Stock Exchange. Similarly, Sharma and Singh (2006) revealed that book value per share has a significant impact on the market price of the stock. Moreover, Tandon and Malhotra (2013) found that firms' book value per share has a significant positive association with firm's stock price. Based on it, this study develops the following hypothesis:

H6: There is a positive relationship between book value per share and stock return.

3. Results and discussion

Descriptive statistics

Table 2 presents the descriptive statistics of the selected dependent and independent variables during the period 2012/13 to 2019/20.

Table 2: Descriptive statistics

This table shows the descriptive statistics of dependent and independent variables of 20 Nepalese insurance companies for the study period from 2012/13 to 2019/20. The dependent variables are SR (Stock returns as measured by the change in price plus dividend to current price, in percentage) and ROE (Return on equity as measured by the ratio of net income to shareholder's equity, in percentage). The independent variables are ROA (Return on assets as measured by the ratio of net income to total assets, in percentage), FS (Firm size as measured by total assets, Rs in billion), EPS (Earnings per share as measured by the ratio of company's total earnings to the total number of shares outstanding, in Rs), PER (Price earnings ratio as measured by the ratio of market value per share to earnings per share, in times), PG (Premium growth as measured by the change in gross written premium, in percentage) and BVPS (Book value per share as measured by the ratio of a firm's common equity to its number of shares outstanding, in Rs).

Variables	Minimum	Maximum	Mean	Std. Deviation
ROE	-20.20	505.11	17.50	42.59
SR	-101.78	1045.69	52.45	146.72
ROA	-113.00	54.17	10.00	13.97
EPS	-85.67	121.51	30.64	21.90
FS	18.92	25.48	21.97	1.28
PER	-52.50	347.06	45.22	54.16
PG	-99.00	231.00	27.45	41.43
BVPS	6.72	475.00	187.66	63.01

Source: SPSS output

Correlation analysis

Having indicated the descriptive statistics, Pearson's correlation coefficients are computed and the results are presented in Table 3.

Table 3: Pearson's correlation coefficients matrix

This table shows the bivariate Pearson's correlation coefficients of dependent and independent variables 20 Nepalese insurance companies for the study period from 2012/13 to 2019/20. The dependent variables are SR (Stock returns as measured by the change in price plus dividend to current price, in percentage) and ROE (Return on equity as measured by the ratio of net income to shareholder's equity, in percentage). The independent variables are ROA (Return on assets as measured by the ratio of net income to total assets, in percentage), FS (Firm size as measured by total assets, Rs in billion), EPS (Earnings per share as measured by the ratio of company's total earnings to the total number of shares outstanding, in Rs), PER (Price earnings ratio as measured by the ratio of market value per share to earnings per share, in times), PG (Premium growth as measured by the change in gross written premium, in percentage) and BVPS (Book value per share as measured by the ratio of a firm's common equity to its number of shares outstanding, in Rs).

Variables	ROE	SR	ROA	EPS	FS	PER	PG	BVPS
ROE	1							
SR	0.125	1						
ROA	0.454**	0.038	1					
EPS	0.296**	0.058	0.673**	1				

FS	0.210**	0.183*	-0.277**	-0.41	1			
PER	0.171*	0.009	-0.204*	-0.308**	0.433**	1		
PG	0.010	0.115	0.003	0.007	-0.007	0.087	1	
BVPS	-0.111	0.046	0.370**	0.466**	-0.134	-0.149	0.187*	1

Note: The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent levels respectively.

Table 3 shows that there is a positive relationship between return on assets and return on equity. It indicates that higher the return on assets, higher would be the return on equity. Similarly, there is a positive relationship between earnings per share and return on equity. It means that increase in earnings per share leads to increase in return on equity. Moreover, firm size has a positive relationship with return on equity. It means that increase in firm size leads to increase in return on equity. Furthermore, there is a positive relationship between price earnings ratio and return on equity. It indicates that increase in price earnings ratio leads to increase in return on equity. Similarly, there is a positive relationship between premium growth and return on equity. It indicates that increase in premium growth leads to increase in return on equity. In contrast, book value per share has a negative relationship with return on equity. It means that increase in book value per share leads to decrease in return on equity.

Similarly, the result also shows that there is a positive relationship between return on assets and stock return. It indicates that higher the return on assets, higher would be the stock return. Similarly, there is a positive relationship between earnings per share and stock return. It means that increase in earnings per share leads to increase in stock return. In addition, firm size has a positive relationship with stock return. It means that increase in firm size leads to increase in stock return. Furthermore, there is a positive relationship between price earnings ratio and stock return. It indicates that increase in price earnings ratio leads to increase in stock return. Similarly, there is a positive relationship between premium growth and stock return. It indicates that increase in premium growth ratio leads to increase in stock return. In addition, book to value per share has a positive relationship with stock return. It means that increase in book to value per share leads to increase in stock return.

Regression analysis

Having indicated the Pearson's correlation coefficients, the regression analysis has been carried out and results are presented in Table 4. More specifically, it shows the regression results of return on assets, earnings per share, firm size, price earnings ratio, premium growth, book value per share with return on equity in the context of Nepalese insurance companies.

Table 4: Estimated regression results of return on assets, earning per share, firm size, price earnings ratio, premium growth, book value per share with return on equity

The results are based on panel data of 20 insurance companies with 160 observations for the period of 2012/13-2019/20 by using the linear regression model and the model is ROEit = β0 + β1 ROAit + β2 EPSit+ β3 FSit + β4 PERit + β5 PGit + β6 BVPSit + eit where, the dependent variable is ROE (Return on equity as measured by the ratio of net income to shareholder's equity, in percentage). The independent variables are ROA (Return on assets as measured by the ratio of net income to total assets, in percentage), FS (Firm size as measured by total assets, Rs in billion), EPS (Earnings per share as measured by the ratio of company's total earnings to the total number of shares outstanding, in Rs), PER (Price earnings ratio as measured by the ratio of market value per share to earnings per share, in times), PG (Premium growth as measured by the change in gross written premium, in percentage) and BVPS (Book value per share as measured by the ratio of a firm's common equity to its number of shares outstanding, in Rs).

Model	Intercept	Regression coefficients of						Adj. R_bar^2	SEE	F-value
		ROA	EPS	FS	PER	PG	BVPS			
1	32.264	1.475						0.029	37.396	48.247
	(8.863)**	(6.946)**								
2	35.160		0.576					0.082	40.807	15.207
	(6.326)**		(3.900)*							
3	170.890			6.981				0.038	41.177	7.302
	(3.006)*			(2.702)*						
4	23.652				0.135			0.023	42.226	4.741
	(5.414)**				(2.177)*					
5	17.782					0.010		0.006	42.724	0.015
	(4.384)*					(0.122)				
6	31.551						-0.075	0.006	42.463	1.960
	(2.983)*						(1.400)			
7	30.184	1.584	0.104					0.226	34.477	24.179
	(5.822)**	(5.507)*	(0.565)							
8	319.706	2.137	0.310	13.213				0.363	33.981	31.260
	(6.499)**	(7.714)**	(1.822)	(5.913)**						
9	281.165	2.046	0.194	11.121	0.104			0.372	33.851	24.4118
	(5.233)*	(7.287)**	(1.072)	(4.405)*	(1.756)					
10	280.766	2.045	0.193	11.108	0.105	0.006		0.368	33.961	19.410
	(5.189)*	(7.258)**	(1.062)	(4.377)*	(1.749)	(0.085)				
11	274.871	2.051	0.165	10.983	0.105	0.001	-0.023	0.365	16.126	16.126
	(4.928)*	(7.252)**	(0.859)	(4.292)*	(1.755)	(0.015)	(0.454)			

Notes:

i. Figures in parenthesis are t-values.

ii. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively. Return on equity is the dependent variable

Table 4 shows that the beta coefficients for return on assets are positive with return on equity. It indicates that the return on assets has a positive impact on return on equity. This finding is similar to the findings of Bukit (2013). Similarly, the beta coefficients for earnings per share are positive with return on equity. It indicates that earnings per share have a positive impact on return on equity. This finding is consistent with the findings of Mirfakhr-Al-Dini *et al.* (2011). Likewise, the beta coefficients for firm size are positive with return on equity. It indicates that firm size has a positive impact on return on equity. This finding is similar to the findings of Velnampy and Nimalathasan (2010). Similarly, the beta coefficients for price earnings ratio are positive with return on equity. It indicates that price earnings ratio has a positive impact on return on assets. This finding is consistent with the findings of Aga and Kocaman (2006). Similarly, the beta coefficients for premium growth are positive with return on equity. It indicates that premium growth has a positive impact on return on equity. The findings are similar with the findings of Burca and Batrinca (2014).

The estimated regression results of return on assets, earning per share, firm size, price earnings ratio, premium growth and book value per share with stock return of Nepalese insurance companies are presented in Table 5.

Table 5: Estimated regression results of return on assets, earning per share, firm size, price earnings ratio, premium growth, book value per share with stock return

The results are based on panel data of 20 insurance companies with 160 observations for the period of 2012/13-2019/20 by using the linear regression model and the model is SRit = β0 + β1 ROAit + β2 EPSit+ β3 FSit + β4 PERit + β5 PGit + β6 BVPSit + eit where, the dependent variable is SR (Stock returns as measured by the change in price plus dividend to current price, in percentage). The independent variables are ROA (Return on assets as measured by the ratio of net income to total assets, in percentage), FS (Firm size as measured by total assets, Rs in billion), EPS (Earnings per share as measured by the ratio of company's total earnings to the total number of shares outstanding, in Rs), PER (Price earnings ratio as measured by the ratio of market value per share to earnings per share, in times), PG (Premium growth as measured by the change in gross written premium, in percentage) and BVPS (Book value per share as measured by the ratio of a firm's common equity to its number of shares outstanding, in Rs).

Model	Intercept	Regression coefficients of						Adj.	SEE	F-value
		ROA	EPS	FS	PER	PG	BVPS	R_bar^2		
1	48.492	0.396						0.005	147.08	0.225
	(3.387)*	(0.474)								
2	40.560		0.368					0.003	146.93	0.532
	(2.027)*		(0.730)							
3	512.798			20.952				0.027	144.69	5.482
	(2.604)*			(2.341)*						

4	51.521 (3.374)*				0.026 (0.119)			0.006	147.617	0.014
5	41.270 (2.973)*					0.407 (1.455)		0.007	146.20	2.118
6	51.107 (2.028)*						0.007 (0.060)	0.006	147.184	0.004
7	40.480 (1.985)*	0.025 (0.022)	0.399 (0.553)					0.009	147.406	0.265
8	554.571 (2.640)*	1.007 (0.852)	0.765 (1.054)	23.461 (2.459)*				0.022	145.09	2.198
9	718.200 (3.129)*	1.1385 (1.155)	1.234 (1.594)	32.286 (2.994)**	0.439 (1.733)			0.034	144.603	2.407
10	691.637 (3.010)*	1.340 (1.120)	1.174 (1.518)	31.397 (2.913)**	0.400 (1.573)	0.380 (1.337)		0.039	144.235	2.293
11	712.472 (3.007)*	1.320 (1.099)	1.273 (1.556)	31.838 (2.929)**	0.402 (1.577)	0.404 (1.384)	0.081 (0.378)	0.034	144.640	1.924

Notes:

i. Figures in parenthesis are t-values.

ii. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.

iii. Stock return is the dependent variable

Table 5 shows that the beta coefficients for return on assets are positive with stock return. It indicates that return on asset has a positive impact on stock return. This finding is similar to the findings of Jabbari and Fathi (2014). Similarly, the beta coefficients for earnings per share are positive with stock return. It indicates that earnings per share have a positive impact on stock return. This finding is consistent with the findings of Chambers *et al.* (2013). Similarly, the beta coefficients for firm size are positive with stock return. It indicates that firm size has a positive impact on stock return. This finding is similar to the findings of Srinivasan (2012). Similarly, the beta coefficients for price earnings ratio are positive with stock return. It indicates that the price earnings ratio has a positive impact on stock return. This finding is consistent with the findings of Iskenderoglu and Karadeniz (2022). Similarly, the beta coefficients for premium growth are positive with stock return. It indicates that the premium growth has positive impact on stock return. This finding is consistent with the findings of Ahmed *et al.* (2011).

4. Summary and conclusion

Financial institutions play a significant role in the socio-economic growth and development of a nation. The financial sector is one of the key components of economic development. Likewise, insurance companies are also an integral part of the financial system for the economic development of the nation. A stock market

is a financial market where the securities are bought and sold, also regarded as a long-term source of funding. The stock price of a company reflects the value of the company for the investors so that high stock prices attract the attention of investors to invest capital in the company.

This study attempts to analyze the relationship between financial performance and stock returns in the context of Nepalese insurance companies. The study is based on secondary data of 20 life and non-life insurance companies with 160 observations for the study period from 2012/13 to 2019/20.

The study showed that return on assets, earnings per share, firm size, price earnings ratio, premium growth have positive impact on return on equity. However, book value per share has negative impact on return on equity. Similarly, return on assets, earnings per share, firm size, price earnings ratio, premium growth and premium growth have positive impact on stock return. Likewise, the study concluded that return on assets followed by earnings per share is the most influencing factor that explains the changes in the return on equity. Likewise, the study also concluded that the most dominant factor that determines the stock return in the context of Nepalese insurance companies is firm size.

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Impact Investing and Sustainable Development

Raj Kumar Pandit*

Introduction

Impact investments are investments made with the intention to generate positive, measurable social and environmental impact alongside a financial return. Impact investments are made in all types of markets, and focuses on the scope of returns from below market to market rate, depending on investors' strategic objectives.

The developing impact investment market gives capital to address the world's most squeezing difficulties in areas like sustainable agriculture, renewable power, preservation, microfinance, and reasonable and available essential administrations including lodging, medical care, and schooling.

Core characteristics of Impact investing

The core characteristics of Impact Investing are as follows:

1. **Intention:** An investor's intention to have a positive social or environmental impact through investments is essential to impact investing**.**
2. **Range of return:** Impact investments target financial returns that range from below market to risk-adjusted market rate, and can be made across asset classes, including but not limited to cash equivalents, fixed income, venture capital, and private equity.
3. **Minimum return expectation:** Impact investments are expected to generate a financial return on capital at minimum.
4. **Impact measurement and management:** A sign of impact investing is the responsibility of the investor is to gauge furthermore, report the social and ecological presentation and progress of hidden speculations, guaranteeing straightforwardness and responsibility while illuminating the work on regarding impact investing and building the field.

Impact investing breaks the paradox that investing is only for gaining returns and also that social and environmental issues should be addressed only by philanthropic donations and government aid. Instead, impact investing gives innovative objective to capital in society, demonstrating that influential social and environmental development can be made side by side of financial returns.

The impact investing market offers assorted and reasonable open doors for investors to propel social and natural arrangements through investments that additionally produce monetary returns. Impact investing has attracted a wide variety of investors, both individual and institutional.

- Fund Managers
- Pension funds / insurance companies

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- Development finance institutions (DFIs)
- Banks and diversified financial institutions
- Family offices
- Individual investors
- NGOs
- Religious institutions

The list below describes the breadth and size of market leaders and investors stimulate the impact of investment activities worldwide. These organizations include the GIIN Investors' Council, a leading group of active, high-impact investors who support and lead the industry.

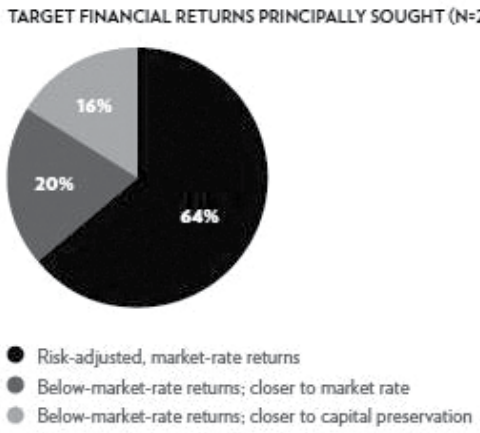
ACCION
ACUMEN
AHL VENTURE PARTNERS
THE ANNIE E. CASEY FOUNDATION
ATHENA CAPITAL ADVISORS
AXA INVESTMENT MANAGERS
BILL & MELINDA GATES FOUNDATION
BLUE HAVEN INITIATIVE
THE CALIFORNIA ENDOWMENT
CALVERT IMPACT CAPITAL
CDC GROUP PLC
CHRISTIAN SUPER
CITI FOUNDATION
COMMUNITY INVESTMENT
MANAGEMENT
CREDIT SUISSE
THE DAVID AND LUCILE PACKARD
FOUNDATION
DEUTSCHE BANK
DOEN PARTICIPATIES
ENCLUDE
ENTERPRISE COMMUNITY PARTNERS
EUROPEAN BANK FOR
RECONSTRUCTION AND
DEVELOPMENT
FINANCE IN MOTION
FMO
FORD FOUNDATION
GRAY GHOST VENTURES
HERON FOUNDATION
IMPACT COMMUNITY CAPITAL
INTER-AMERICAN DEVELOPMENT
BANK GROUP
INTERNATIONAL FINANCE
CORPORATION (IFC)
JPMORGAN CHASE & CO.
THE KRESGE FOUNDATION
LEAPFROG INVESTMENTS
LGT IMPACT
LOK CAPITAL
THE JOHN D. AND CATHERINE T.
MACARTHUR FOUNDATION
MARGARET A. CARGILL
PHILANTHROPIES
MICHAEL & SUSAN DELL FOUNDATION
MORGAN STNLEY
NATIONAL COMMUNITY
INVESTMENT FUND
NUVEEN, A TIAA COMPANY
OMIDYAR NETWORK
OVERSEAS PRIVATE INVESTMENT
CORPORATION
PRUDENTIAL
QUONA CAPITAL
RESPONSABILITY INVESTMENTS AG
THE ROCKEFELLER FOUNDATION
ROOT CAPITAL
SARONA ASSET MANAGEMENT
SKOPOS IMPACT FUND
SOROS ECONOMIC
DEVELOPMENT FUND
SURDNA FOUNDATION
TIEDEMANN WEALTH MANAGEMENT
TREEHOUSE INVESTMENTS, LLC
TRIODOS INVESTMENT MANAGEMENT
UBS
W.K. KELLOGG FOUNDATION
ZURICH INSURANCE GROUP

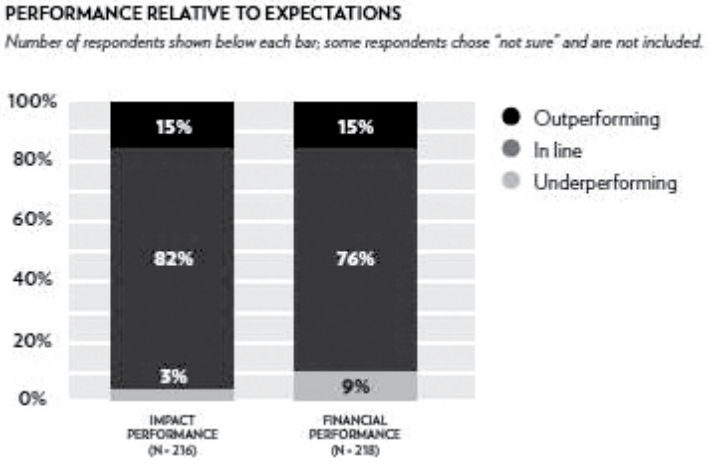
The impact investment is a relatively new term that was coined and used only ten years ago to describe investments consisting of multiple asset classes, sectors and regions. The exact size of the market is not yet known. The "floor" of market size indicates that the market is large and has great growth potential.

Impact investors have diverse financial return expectations. Many pursue market-competitive and market-beating returns, sometimes required by fiduciary

responsibility, while others intentionally invest for below-market-rate returns, in line with their strategic objectives. Most investors surveyed in the GIIN's 2018 Annual Impact Investor Survey pursue competitive, market-rate returns.

A large majority of investors surveyed reported that their investments have either met or exceeded their expectations for both financial performance and impact.





Source note for both graphics: The GIIN 2018 Annual Impact Investor Survey.

Impact measurement and management

Impact measurement and management (IMM) are integral to making effective impact investments. Four distinct actions help investors new to impact investing to get started.

1. Set Goals And Expectations: Goals should consider the effects an investment has on people and/or the planet and balance investor expectations for risk, return, liquidity, and impact.

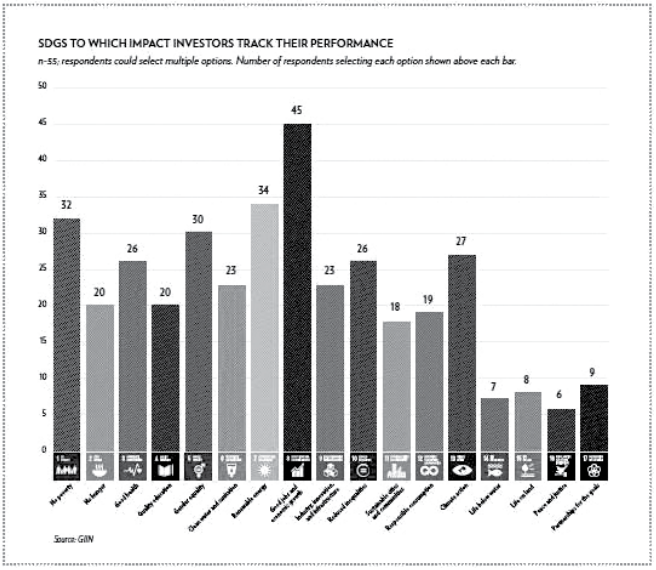
2. Define Strategies: There are many pathways to achieving impact goals and meeting expectations. It is important to consider which pathways make the most sense for individual portfolios, investment expertise, or client demand.

3. Select Metrics And Set Targets: Investors must use relevant output, outcomes, and proxy indicators to set targets, track performance, and manage toward success. Impact metrics should ultimately deliver investment decision information.

4. Measure, Track, Use The Data, And Report: Impact measurement and management are about more than counting metrics. They mean considering information about risks, returns, and impact to learn, adjust, and improve decision making, which can help strengthen portfolio performance and investment strategy.

Impact investing and the Sustainable Development Goals

When the United Nations developed the Sustainable Development Goals (SDGs) in 2015, it did so with active private-sector input, and the recognition that it would be impossible to achieve the goals without accessing the tremendous untapped potential of the world's investment capital to contribute to positive global change. These 17 interrelated global goals have provided a useful and inspiring framework for investors seeking to tackle social and environmental issues. Many of the goal areas correspond to issues impact investors have been tackling for decades, such as poverty alleviation, access to quality education and jobs, renewable energy, and climate action.



Source: Global Impact Investment Network (GIIN)

While certain investors have been making impact investments for a really long time, efforts to speed up the improvement of advanced market are still moderately new. Investors are hopeful about its improvement and anticipate expanded scale and proficiency as the market develops. Impact investors by and large perceive expansive advancement across key signs of market development, while additionally recognizing that a few difficulties actually remain.

Present situation in Nepal

There is a range of different types of investors active in Nepal, but only a limited number of each type. While we see funds, DFIs, diversified financial institutions/ banks, and family offices/high net-worth individuals (HNWIs) present as in other markets, most are still testing the market with a minimal number of investments. There have been some recent efforts by local fund managers to raise new funds, but these are largely not yet active or deploying capital.

While at present, foreign fund managers express a low appetite for investments in Nepal, domestic funds are slowly emerging, and although most of these funds are facing difficulties in closing and deploying capital, they are shaping the market. DFIs are the most active players in the market by capital deployed, but these too have only entered the market recently and are still very much testing the waters. Domestic family offices and HNWIs are operating largely informally—without formal fund structures or stringent timelines. We see small deal sizes as investors are wary of the market, small investors are looking to diversify their portfolios, and only a limited number of companies are capable of absorbing large capital infusions.

As Nepal represents a still-maturing impact investing landscape, there exists scope for additional research to highlight key opportunities in the country. In addition to determining what innovations in financial products are optimal for a nascent enterprise and investing market, further insight on what will make the market more attractive overall, would be beneficial. A greater understanding of what is happening in the surrounding areas would be helpful to the investors. Further study in specific sectors of interest, including tourism and hydropower, to estimate the financial performance and impact of historical activities, will provide lessons that will guide the market growth.

Testing Grounds and Misperceptions

Can My Financial Return Expectations Be Met?

In the 2018 GIIN Annual Impact Investor Survey, 64% of all impact investors surveyed expect nonconcessionary; market-rate returns on a risk-adjusted basis and 87% of impact investors targeting market-rate returns reported that their expectations were either met or exceeded.

Is It Hard To Measure And Manage Impact?

While it is true that the types of impact investors prioritize will differ, the fundamentals of impact measurement and management are the same for every investment, and allow investors to classify their investments in a common way. Following a common classification system enables investors to use comparable and standard metrics to gather and communicate about the types of impact they want to have and the results of their strategies. Dimensions to consider include:

• What outcomes the business contributes to and how important they are to stakeholders
• Who experiences the outcome and how underserved they were before
• How much benefit have they gained and for how long
• Whether the outcomes were better than what would have occurred otherwise
• The risk that the impact will be different from what was expected.

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