Impact of Firm Specific Variables on Stock Price Volatility and Stock Returns of Nepalese Commercial Banks

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ABSTRACT

The main purpose of the study is to examine the impact of firm specific variables on stock price volatility and stock return in context of Nepalese commercials banks over the period of 2008/09 to 2015/16. This study employs causal comparative research design which deals with how bank specific variables, specifically, leverage ratio, market capitalization, growth of assets, earning price ratio, dividend yield and book to market effect on stock price volatility and stock return. The study reveals a positive relationship between leverage, market capitalization, dividend payout and dividend yield with stock return which indicates that higher the market capitalization, leverage, dividend payout and dividend yield ratio, higher would be the stock return. Likewise, there is negative relation between book to market, growth of assets, and earning price ratio with stock return which reveals that higher the book to market, growth of assets and earning price ratio, lower would be the stock return. Similarly, leverage, dividend payout, and dividend yield have positive relation with share price volatility, which shows higher the leverage, dividend payout and dividend yield, higher would be the share price volatility. However, there is negative relationship between market capitalization, book to market, growth of assets and earning price ratio which showing higher the market capitalization, book to market, growth of assets and earning price ratio, lower would be the share price volatility.

Keywords: *stock price volatility, dividend payout ratio, earning price ratio, stock return, leverage, dividend yield, size, commercial banks*

INTRODUCTION

The financial sector of any country plays a pivotal role in the development process of each economy and economy depends on the growth of its financial sector. The key player of the financial sector is the capital market who provides an avenue to the users and providers of the financial resources for investment purposes (Menike et al., 2015). Stock exchange market has multiple roles in an economy. It provides companies with the facility to raise capital for expansion through selling shares, raising capital for businesses, mobilizing savings for investment, facilitating company growth, creating investment opportunities for small investors and etc. Stock return is very important as it is the main objective of investment in common stock. Investors regard return as the fundamental reason for investing in a particular firm. Stock return can be in form of capital appreciation/depreciation plus dividend received if any. Stock returns are the returns or gain that the investors generate out of the stock market. The most common way of generating

stock market return is through trading in the secondary market. In the secondary market an investor could earn stick market return by buying a stock at lower price and selling it at a higher price (Idris and Bala, 2015). Stock prices are important metrics of measuring stock market return. Share prices are determined by demand and supply, which usually influence by firm specific factors and/or macroeconomic variables. Returns from investment are subjected to variations owing to the movement of stock price, which depends on various factors which could be internal or bank specific such as earning per share, bank size, and book to market equity (Shafana, 2013). The stock return is sensitive to number of bank specific factors such as earnings, dividends, risk, leverage, size, book-to-market ratio, right issue and bonus issues which explain the behavior of expected stock returns.

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 (Kanniainen, 2007). Guo (2002) also stated that the volatility of share price is the systemic risk faced by investors and it is a measure of the level of risk they are exposed to. Nel and Krugler (2001) argue that stock price with higher volatility results in greater risk that the share might not perform as excepted.

Studies on cross-sectional relations between risk and expected return on common stocks found covariance between its return and the return on market portfolio (Black et al., 1972). However, Lakonishok et al. (1994) and Daniel et al. (2001) found that stock betas has little or no ability in explaining the behavior of expected stock returns but bank size and book-to-market equity play significant role in explaining the behavior of expected stock returns

The empirical works on asset pricing have identified a number of variables that help to explain cross-sectional variation in stock returns, in addition to the market risk variable. Notably, firm size (Benz, 1981, leverage (Bhandari, 1988), P/E ratio (Basu, 1983), ratio of cash flow to stock price (Rosenberg et al., 1985), and book to market equity (Fama and French, 1992), are among those variables that are found to have significant explanatory power in asset pricing tests. Fama and French (1992) in their seminal work found that book to market equity stands out as the most significant factor in explaining cross-sectional returns. The cross sectional differences in stock returns on Japanese stocks to the underlying behavior of four fundamentals variables like earning yield, size, book to market ratio and cash flow yield. The four variables considered book to market value ratio and cash flow yield have been found to be most significant variables affecting stock returns (Chan et al., 1991).

Banks specific variables like earnings-to-price ratio, bank size defined by market value of equity, and book-to-market equity ratio are evaluated by Stattman (1980), Rosenberg et al. (1985) and Chan et al. (1991). But the joint role of beta, size, book-to-market equity and earnings-to-price in the cross-section of average stock returns was evaluated by Fama and French (1992).

Study on the size related anomalies and stock return seasonality found that smaller firms earn higher returns than the larger firms (Benz and Reinganum, 1981). Rosenberg et al. (1985) found that book to market (B/M) ratio is an important predictor of stock returns, and that

there is a positive relationship between the two variables. Pontiff and Schall (1998) study on book-to-market to predict stock returns and small firms excess returns for the 1926-1994 period.

Academics have developed many theoretical models describing the factors that managers should consider when making dividend policy decisions. In the theoretical context, two schools of thoughts came up with their suggestions. One school of thought advanced by Miller and Modigliani (1961) referred to as the "dividend irrelevance theory" believes that dividend is irrelevant and has no effect on the valuation of the firm. The second school of thought is advanced by Lintner (1956), Gordon (1962) and Walter (1963) referred to as the "dividend relevance theory". They viewed that dividends are relevant in making valuation of firm. Ofer and Siegel's (1987), Bae (1996) and Benartzi et al. (1997) found a positive correlation between share price and dividend. In addition, Campbell and Shiller (1988) found a relationship between stock prices, earnings and expected dividends and a conclusion that earnings and dividends is powerful in predicting stock returns over several years. Moreover, Shiller (1987) recommended investors to buy the stocks when price is low relative to dividends and to sell stocks when it is high payoffs.

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. Kanniainen (2007) stated that stock price volatility is a measure of the arrival rate of new information. Investors, brokers, dealers, academics and regulators all concern about volatility in the stock prices. They do so not only because volatility measures of risk and affect the value of firm but also because changes in the stock prices reflect important news about the firm. Guo (2002) also stated that the volatility of stock price is the systemic risk faced by investors who possess ordinary shares investment. Investors are by nature risk adverse, and the volatility of their investments is of importance to them because it is a measure of the level of risk they are exposed to.

Stock price response to an unexpected dividend change announcement is related to the dividend preferences of the marginal investor in that firm where other things remaining same (Denis et al., 1994). Common stocks are an ownership claim

against primarily real or productive asset. If the company prospers, stockholders are the chief beneficiaries, if it falters; they are the chief losers (Higgins, 1995). Dividends are only cash payments regularly made by corporations to their stockholders which is decided upon the declaration by the board of the directors and can range from zero to virtually any amount the corporation can afford to pay (John et al. 1998).

In the context of Nepal, Pradhan (2006) found that dividend payout affects the price of a common stock and the major factors affecting corporate dividend policy are earnings, availability of cash, past dividends, and concern about increasing stock price. Bhatta (2010) revealed that stock prices in Nepal shows a systematic pattern that is valuable for observing the behavior of past price movements to predict future price.

The above discussion shows that the studies dealing with impact of firms specific variables on share price volatility and stock return are of greater significance. Though there are these findings in the context of different countries, no such findings using more recent data exist in the context of Nepal. Hence, this study focuses on analyzing the relationship of firm's specific variables with share price volatility and stock return in Nepalese commercial banks.

LITERATURE REVIEW

Chaopricha and Pollard (2007) examined the cross section analysis of stock returns on Chinese stock market, applied a different method to test the book to market ratio effect on Chinese stock market. The study attempted to test the performance of the Fama and French three factor model (1993) in explaining the stock portfolio returns on the Chinese share market from 1996 to 2005. However, the book to market ratio effect could replace by other factors that could predict the stock returns more accurately than the book to market. The study found that cross section stock returns were positively related to the book to market ratio on Chinese stock market. Fama and French (2008) analyzed the effect of book to market equity in different approach and studied that whether the past changes in book to market and price did contain independent information about the expected cash flow that could enhance the estimates of expected returns. The study also examined the effect in terms of share issue, changes in price and book to equity per share and new issue of shares. The study found that

there is a significant positive coefficient of book to market equity for both ABM and microcap stock implying that higher book to market stock could have higher returns than lower book to market stocks.

Muradoglu and Sivaprasad (2008) studied 2,673 companies listed in the London Stock Exchange from 1965 to 2004. An empirical test on leverage and stock returns revealed that there is positive relationship between leverage and stock returns which is unique to utilities, a risk class that is highly regulated and has high concentration of leverage ratio.

Suleman et al. (2011) studied the effects of dividend policy on share price volatility in Pakistan. The study extracted data from Karachi Stock Exchange regarding five important sectors for the period of 2005 to 2009 and used multiple regressions model for their analysis. The study also revealed that share price volatility has significant negative relationship with growth. The study also found that share price volatility has significant positive relationship with dividend yield.

An attempt has been made by Hussainey et al. (2010) to examine the impact of dividend yield on stock price changes using123 English companies from 1998 to 2007 in UK. The result of the study showed a positive relation between dividend yield and stock price changes and negative relation between dividend payout ratio and stock price changes. Their results further indicated that the firms' earnings, growth rate, level of debt and size also explain the change in stock prices of UK. Their findings discovered that the payout ratio is the predominant determinant of the stock price volatility and size and debt have the strongest relationship with price volatility.

Nazir et al. (2010) examined the relationship between share price volatility and dividend policy for the period of 2003 to 2008 in 73 firms listed in Karachi Stock Exchange (KSE). The study applied fixed effect and random effect models on panel data. They found that share price volatility has significant negative association with dividend yield and dividend payout. They also reported that size and leverage have non-significant negative effect on share price volatility. Similar study carried out in Malaysia by Hashemijoo et al. (2012) to analyze the impact of dividend policy on share price volatility in the Malaysian stock market during 2005 to 2010. The study used sample of

84 companies from 142 consumer product companies listed in main market of Bursa Malaysia. The regression model was expanded by adding control variables including size, earning volatility, leverage, debt and growth. The empirical results of this study showed significant negative relationship between share price volatility with two main measurements of dividend policy which are dividend yield and dividend payout.

Another study was conducted by Habib et al. (2012) to examine the relationship between dividend policy and share price volatility in Pakistani stock market. The cross sectional regression is used to analyse the relationship of share price with dividend yield and payout ratio. This study also proposed that signalling effect is also relevant in determining the share price volatility. The study found that dividend yield and share prices are positively related but payout ratio is negatively related to share price.

Gabriel and Ugochukwu (2012) investigated the relationship between volatility and stock price in Nigerian Stock Market. The study used month end stock price of four major companies from the period January 2005 to December, 2009 data. The results revealed that out of the four companies, only two companies' stock price was predicted by volatility in their stock prices The major result of the study showed stock price volatility could not predict their current stock price and hence volatility was insignificant and negatively correlated.

An attempt has been made Bahreini et al. (2013) to examine the relationship between changes in economic leverage and the operational performances of the accepted companies of Tehran's Stock Market, Study used 145 companies from 2005 to 2006 with systematic elimination method. The study found that an increase in the debt led to an increase in the relationship between the economic leverage and the stock price. The study showed that the relationship between the economic leverage and the stock price is a meaningful and negative. The results indicated that there was a meaningful relationship between the economic leverage and the stock price.

Profilet and Bacon (2013) identified the impact of certain financial variables on the stock price volatility. The study used samples of 500 publicly traded firms were taken to explain the results on dividend policy and stock price volatility in the U.S. The ordinary least square

multiple regression is used to find the results. The study revealed that leverage and growth both have negative relationship with stock price volatility and there is positive relationship observed between the payout ratio and the stock price volatility.

Study on stock price volatility in relation to dividend policy with reference to Karachi Stock Market, analyzed the stock price volatility by taking non-financial firms listed on Karachi stock exchange. The study found out a negative but statistically insignificant relationship between earnings per share and price volatility of stocks. It also identified that there is no relationship between price volatility and earnings volatility of firms. This study has also identified a positive but statically insignificant relationship between sizes of firms and price volatility of stocks (Sadiq et al., 2013).

Study on dividend policy and share price volatility in Kenya seeks to determine the impact of dividend policy on share price volatility. The study used data from the actively trading companies listed in the Nairobi Securities Exchange for a period of ten years from 1999-2008. The estimation is based on multiple regression analysis between dividend policy measures (dividend payout ratio and dividend yield) and share price volatility. The results of the study were that payout ratio is determinant for share price volatility, payout ratios (Kenyoru et al., 2013).

This study was conducted by Tahir et al. (2013) to bridge the gap in the literature by offering empirical evidence about firm's characteristics and their effect to stock returns in Pakistan. The secondary data of 307 Non-financial companies listed in Karachi Stock Exchange (KSE) were collected covering a period 2000 to 2012. Market Capitalization (MC), sales Growth (SG), Earnings per Share (EPS) and Book to Market value (BMV) were taken as independent variables while Stock Market Returns as dependent variable. First two independent variables were used as proxies for size effect while later as value effect. In order to analyze the data correlation matrix, multiple regression analysis, unit root test and granger causality were employed. Results revealed that MC, EPS and BTM value had significant impact while sales growth had no effect on stock market returns.

Regarding the relationship between firms' specific characteristics and stock market return,

a study conducted by Idris and Bala (2015) in Nigeria covering the period 2007 to 2013. The study investigated the impact of certain firms' attributes namely: Market Capitalization, Debt-to-Equity Financing and Earnings per Share on Stock Market Returns of listed food and beverages firms in Nigeria. The population comprises all the twenty-one (21) food and beverages firms listed on the Nigerian Stock Exchange (NSE) December, 2013. Out of which nine (9) firms constitute the sample of the study. The study adopted both correlation and ex-post facto research design. Data was analyzed using several options of multiple panel data regression. But the most robust of all is OLS regression. The findings revealed that Market Capitalization has a significant negative impact on Stock Market Returns of listed food and beverages firms in Nigeria; while the impact of Debt-to-Equity Financing and Earnings per Share on Stock Market Returns are found to be positive and statistically significant.

RESEARCH METHODOLOGY

The study has employed descriptive and causal comparative research designs to deal with the fundamental issues associated with factors influencing share price volatility and stock returns of the commercial banks in the context of Nepal. For the purpose of this study, 20 commercial banks are taken as a sample out of 28 commercial banks. This study is based on secondary data. For the secondary data, annual reports of SEBON, annual report of respective banks, Economic Survey published by Ministry of Finance and Banking and Financial Statistics published by Nepal Rastra Bank and Annual Report of individual bank were observed. The data cover eight-year period starting from 2008/2009 to 2015/2016. Multiple regression models have been used to find out the impact of independent variable on dependent variable solely and combined with other variables. In order to get the results, the statistical package SPSS-14 has been used.

Model Specification

The present study focuses to examine the impact of bank specific variables (market capitalization, leverage, dividend payout, dividend yield, assets growth, book-to-market, and earning price) on stock price volatility and stock return. To examine the impact of bank specific variables on stock price volatility and stock return, following models have been used:

Model 1

In this model 1, the dependent variable is stock price volatility whereas dividend payout, dividend yield, leverage, assets growth, size, book-to-market and earning price ratio are independent variables. The model is presented as:

$SPV_{it} = \alpha + \beta_1 DPR_{it} + \beta_2 DYR_{it} + \beta_3 LEV_{it} + \beta_4 MC_{it} + \beta_5 BTM_{it} + \beta_6 E/P_{it} + \beta_7 GAa_{it} + ei \ldots\ldots\ldots$ (I)

Model 2

In this model 2, the dependent variable is sum of capital gain and dividend yield as a proxy of stock returns. The impact of firm specific variable likes dividend payout, dividend yield, leverage, assets growth, market capitalization, book-to-market and earning price ratio on stock return of commercial bank is tested. The model is presented as:

$SR_{it} = \alpha + \beta_1 DPR_{it} + \beta_2 DYR_{it} + \beta_3 LEV_{it} + \beta_4 MC_{it} + \beta_5 BTM_{it} + \beta_6 E/P_{it} + \beta_7 GA_{it} + ei \ldots\ldots\ldots$ (II)

Where,

i	=	Bank
t	=	Time
SRit	=	Stock returns
SPVit	=	Share price volatility
DPR	=	Dividend payout ratio
MC	=	Size
BTM	=	Book-to-market ratio
E/P	=	Earning price ratio
LEV	=	Leverage
GA	=	Growth of asset
eit	=	Disturbance or error term

The Variables and Hypotheses

The variables that are used in the study are as follows:

Dependent Variable

Stock Returns

The returns on investment provides over a period of time, expressed as a time-weighted annual percentage. Sources of returns can include dividends, returns of capital and capital appreciation. Annual stock returns as dividend yield in year t divided by closing share price in year t-1 plus change in share price in year t. Fama and French (1998) found that the power of

dividend yields to forecast stock returns increases with the return horizon.

Stock price volatility (SPV)

Share price volatility is another dependent variable that is used for this study. For calculation of price volatility, each year share price is taken from the annual report of the bank. The average of share prices is then calculated. The share price of each year is divided by average and then raised the second power. This calculation method for share price volatility is consistent with Baskin (1989).

Independent Variable

Dividend Payout Ratio (DPR)

It is based on the ratio of dividend per share to earnings per share. Baskin (1989), Rashid and Rahman (2008) and Zakaria et al. (2012) found significant positive relationship between the dividend payout of a firm and share price volatility. Boudoukh et al. (2007) found dividend payout is statistically and economically significant on stock return. Based on it, this study develops the following hypothesis:

H1: Dividend payout ratio has positive relationship with share price volatility and stock return.

Dividend Yield Ratio (DY)

Dividend yield is measured as gross dividend in year t divided by the market value of equity in year t-1. Dividend yield of a stock signifies how much a company pays dividend in relation to its stock price. Dividend yield is considered as a major factor affecting stock return by Allen and Rachim (1996), Nishat and Irfan (2003), Rashid and Rahman (2008). Nazir et al. (2010) argued that it significantly explains the effect of dividend policy on stock market prices. The study found there is a positive relationship between dividend yield and stock price (Hussainey et al., 2011 and Suleman et al., 2011). Based on it, this study develops the following hypothesis:

H2: Dividend yield ratio has positive relationship with share price volatility and stock return.

Leverage (LEV)

Leverage indicates the proportion of a firm's assets that is financed by debt against equity. Raising capital through debt involves periodic interest payments on part of firms. Increased use of debt by a firm would therefore result in

higher interest payments and this lowers the earnings available to equity shareholders. Therefore, investors generally prefer firms with lower debt. Irmala et al. (2011) found leverage is significant determinant of share prices. Financial leverages are strong determinants of the market value of share prices in Nigeria (Uwuigbe et al., 2012). Midani (1991) also concluded that leverage is the influencing factor for share price changes. Profilet and Bacon (2013) found negative relation of stock price volatility with leverage. The higher the leverage higher would be the risk of the company. Bhandari (1988), Fama and French (1992), Muradoglu and Sivaprasad (2008) found a positive association between leverage and stock returns. However, Arditti (1967) and Hall et al. (1967) found negative association between stock returns and leverage. Based on it, the study develops following hypothesis.

H3: There is positive relationship of leverage with share price volatility and stock returns.

Growth of Assets (GA)

Growth of assets is used as independent variable for the study. It is the change in total assets from beginning of the fiscal year to the end of the fiscal year. The study of Profilet and Bacon (2013) found that growth of assets has a negative relation with share price volatility. However, Suleman et al. (2013) found positive relationship between growth of assets and stock price volatility in Karachi stock exchange. Based on it, this study develops the following hypothesis:

H4: Growth of total assets has negative relationship with stock price volatility and stock return.

Market Capitalization

Market capitalization is one of the independent variable for the study measured by using the natural logarithm of total market value of equity. Different researchers found different results regarding the relationship between stock returns and firm size. Hussainey et al. (2011) and Habib et al. (2012) found inverse association between Market capitalization and stock price volatility. Market capitalization (MVE) has been used as a proxy for firm size, in reflection of the size effect. Knez and Ready (1997), Gaunt (2004) and Chen and Zhang (1998) were examined a positive relationship between firm size and stock returns. However, Benz (1981), Keim (1983), Stoll and Whaley

(1983), Fama and French (1992), Gomes et al. (2003) and Wang et al. (2006) found negative association between form size and stock returns. Nazir et al. (2010) examined that size have negative effect on share price volatility. Similarly, Mian et al. (2010) also found that size have negative impact on stock price volatility. Based on it, the study develops the following hypothesis.

H5: There is negative relationship of market capitalization with share price volatility and stock returns.

Book to Market Ratio (BTM)

A ratio of book value of a firm to its market value is known as book to market ratio. Different researchers found different results regarding the relationship between stock returns and book to market ratio. For instance, Chan (1991), Barry et al., (2002) and Fama and French (2008) were examined a positive association between book to market ratio and stock returns. However, Kothari et al. (1995) and Wang and Xu (2004) found negative association between stock returns and book to market ratio. Arshad et al. (2015) found a negative but significant relationship between book to market ratio and stock price. Based on it, the study develops following hypothesis.

H6: There is negative relationship between book to market ratio on share price volatility and stock return.

Earning Price Ratio (E/P)

Like dividends, current earnings are considered as proxy for the future earnings. It is argued that high risky stock with high expected returns will have low prices relative to their earnings (Fama and French, 1992). Basu (1997), and Akdenz et al. (2000) found negative association between earning price ratio and stock returns. However, Jaffe et al. (1989), Kemi (1990), and Strong and Walker (1996) found positive association between earning price ratio and stock returns. Based on it, the study develops following hypothesis.

H7: There is negative relationship between earning price ratio and stock returns.

RESULTS AND DISCUSSION

Descriptive Statistics

The descriptive statistics used in this study consists of mean, standard deviation, minimum and maximum value associated with variables under consideration. Table 4.1 summarizes the descriptive statistics of dependent and independent variables used in this study during the period 2008 through 2016 associated with 20 samples commercial banks of Nepal.

Table4.1. *Descriptive statistics*

Variables	N	Minimum	Maximum	Mean	Std. Deviation
SR	160	-67.32	258.69	11.27	52.98
SPV	160	0.00	4.00	0.91	1.03
MC	160	0.57	77.25	14.33	13.51
LEV	160	81.93	100.00	91.89	2.83
DPR	160	0.00	201.61	52.53	42.13
DY	160	0.00	14.90	2.65	2.22
BTM	160	0.00	276.13	34.03	41.11
GA	160	-77.53	496.22	23.74	46.69
EPR	160	0.00	59.91	5.34	6.77

Sources from SPSS output

Table 4.1 shows that the stock return ranges from minimum value of negative 67.32 percent to maximum value of 258.69 percent with an average of 11.27 percent. Similarly, average share price volatility is noticed to be 0.91 times with minimum value of 0 times and maximum of 4 times. Market capitalization varies from Rs. 0.57 billion to Rs. 77.25 billion with an average of 13.51 billion. Leverage has an average of 91.89 percent with minimum value of 81.93 percent and maximum value of 100 percent. Likewise, dividend payout ratio of firm ranges from minimum value of 0 percent to maximum value of

201.61 percent with an average value of 42.13 percent.

Dividend yield ratio varies from minimum value of 0 percent to maximum value of 14.90 percent with an average value of 2.65 percent. Similarly, book to market ratio has minimum value of 0 percent and maximum value of 276 percent with an average of 34.03 percent. The average growth of assets is noticed to be 23.74 percent having minimum value of negative77.53 percent and maximum value of 496.22 percent. Likewise, earning price ratio during the study period is found to have minimum value of 0 percent and

maximum value of 59.91 percent with an average 6.77 percent.

Correlation Results

Having indicated the descriptive statistics, the Pearson correlation coefficients have been computed and the results are presented in the Table 4.2. The correlation coefficients show the extent and direction of the linear relationship between dependent and independent variables. Table 4.2 reveals that there is positive relation

between stock return and size of the bank which indicates that higher the size of the firm, higher would be the stock return. Similarly, there is positive relationship between stock return and leverage which revealed that higher the leverage ratio, higher would be the stock return. There is positive relationship between dividend payout ratio and stock returns which indicates that higher the dividend payout, higher would be the stock return.

Table4.2. *Computation of Pearson's correlations coefficients for dependent and independent variables*

Variables	SR	SPV	MC	LEV	DPR	DY	BTM	AG	EPR
SR	1								
SPV	.408**	1							
MC	0.154	-0.173	1						
LEV	0.005	.227**	.311**	1					
DPR	0.063*	0.033*	.233**	0.073	1				
DY	0.014	0.216*	-0.097	-.173*	.471**	1			
BTM	-0.034*	-.246**	-.376**	-.564**	-.245**	0.121	1		
GA	-0.09*	-.185*	-0.051	.235**	-0.089	-0.051	-0.046	1	
EPR	-0.016**	-.189*	-0.173	-.366**	-0.114	.211*	.771**	-0.067	1

** Correlation is significant at the 0.01 level (2-tailed), * Correlation is significant at the 0.05 level (2-tailed).

Likewise, the result also shows positive relationship between dividend yield and stock return which means higher the dividend yield, higher would be the stock returns. The result show that book to market ratio has negative relation with stock return showing that higher the book to market value, lower would be the stock returns. Similarly, growth of assets is negatively related to stock return, which indicates that higher the growth of assets, lower would be the stock return. Result shows that there is a negative relation between earning price ratio and stock return which revealed that higher the earning price ratio, lower would be the stock return.

The market capitalization is negatively related to share price volatility which indicates that higher the size of the bank, lower would be the share price volatility. Likewise, there is negative relation between book to market value and share price volatility which reveals that higher the book to market value, lower would be the share price volatility. The result shows negative

relation between growth of assets and share price volatility showing that higher the growth of assets, lower would be the share price volatility. Moreover, price earnings ratio is negatively related to share price volatility which indicates that higher the earning price ratio, lower would be the share price volatility. However, there is positive relation between leverage and share price volatility which shows that higher the leverage, higher would be the share price volatility. Similarly, dividend payout ratio is positively related to share price volatility which reveals that higher the dividend payout, higher would be the share price volatility. In the same way, there is a positive relation between dividend yield and share price volatility showing that higher the dividend yield, higher would be the share price volatility.

Regression Analysis

The results regression analysis has been presented in Table 4.3. More specifically, the regression of different independent variables on stock returns is shown in Table 4.3.

Regression Results	
Variables	**Beta Coefficients**
SR	162.66 (0.47)
MC	0.72 (0.09)
LEV	1.74 (0.47)
DPR	0.08* (1.99)
DY	0.78 (0.77)
BTM	-0.02*(2.31)
AG	-0.56* (2.51)
EPR	-0.29** (2.81)

R^2	0.35
F-Value	10.24
DW	1.36

a. *Figure in parentheses is t-values.*

a. *The signs *and ** denote the results are significant at 5% and 1% level of significance respectively.*

Table 4.3 indicates that earning price ratio has significant negative impact on stock return which shows that higher the earning price ratio, lower would be the stock return. This finding supports the finding of Basu (1997) and Akdenz et al. (2000). Similarly, growth of assets has significant negative impact on stock return which indicates that higher the growth of assets, lower would be the stock return. This finding supports the finding of Shaw et al. (2008). Likewise, book to market ratio has significant negative impact on stock returns which reveals that higher the book to market ratio, lower would be the stock return. This finding supports with the findings of Kothari et al. (1995), Wang and Xu (2004) and Arshad et al. (2015). However, dividend payout ratio has significant positive impact on stock return showing higher the dividend payout, higher would be the stock return. This finding supports with the finding of Boudoukh et al. (2007).

The beta coefficient is positive for Market capitalization. The result indicates that higher the market capitalization, higher would be the stock return. This finding supports the finding of Gaunt (2004) and Chen and Zhang (1998). Likewise, beta coefficient is positive for leverage. It reveals that higher the leverage, higher would be the stock return. This finding supports the finding of Fama and French (1992). Moreover, beta coefficient is positive for dividend yield. This shows that higher the dividend yield, higher would be the stock return. This finding contradicts with the finding of Fama and French (1998). The beta coefficient for dividend payout, book to market and growth of assets are significant at 5 percent level of significance.

The estimated regression results of share price volatility and independent variables have been reported in Table 4.4

Regression Results	
Variables	**Beta Coefficients**
SPV	3.42 (0.37)
MC	-0.01 (0.25)
LEV	0.24** (3.56)
SDPR	0.19* (2.48)
DY	0.98* (2.37)
BTM	-0.45** (3.21)
AG	-0.58* (2.44)
EPR	-0.02* (2.25)
R^2	0.43
F-Value	13.19
DW	1.22

b. *Figure in parentheses is t-values.*

c. *The signs *and ** denote the results are significant at 5% and 1% level of significance respectively.*

Table 4.4 indicates that leverage has significant positive impact on share price volatility which reveals that higher the leverage ratio, higher would be the share price volatility. This finding supports the finding of Irmala et al. (2011) and Uwuigbe et al. (2012). However, book to market ratio has significant negative impact on share price volatility which indicates that higher the book to market ratio, lower would be the share price volatility. This finding supports the finding of Arshad et al. (2015). The result shows that dividend payout ratio has significant positive impact on share price volatility which shows that

higher the dividend payout, higher would be the share price volatility. This finding supports the finding of Baskin (1989) and Zakaria et al. (2012).

Moreover, dividend yield ratio has significant positive impact on share price volatility which reveals that higher the dividend yield, higher would be the share price volatility. This finding supports with the findings of Hussainey et al. (2011) and Rashid and Rahamn (2008). Likewise, the result found that there is negative relation between growth of assets and share price volatility which showing that higher the growth of assets, higher would be the share price volatility. Such

finding supports the finding of Suleman et al. (2013), but contradictory with the finding of Profilet and Bacon (2013). Similarly, earning price ratio has significant negative relation with stock price volatility which indicates that higher the earning price ratio, lower would be the stock price volatility. This finding supports the finding of Fama and French (1992). The beta coefficient is negative for market capitalization. The result shows that higher the Market capitalization, lower would be the share price volatility. This result supports the finding of Nazir et al. (2011) and Habib, Kiani and Khan (2012). The beta coefficient for dividend payout ratio, dividend yield, growth of assets and earning price ratio are significant at 5 percent level of significance.

CONCLUSION

The result shows that market capitalization, leverage, dividend payout ratio and dividend yield ratio are positively related with stock returns which indicate that higher the market capitalization, leverage, dividend payout, and dividend yield ratio higher would be the stock return. However, book to market ratio, growth of assets and earning price ratio are negatively related with stock returns which shows higher the book to market, growth of assets and earning price ratio lower would be the stock return. The study shows that dividend payout ratio, growth of assets and book to market are statistically significant at 1% whereas earning price ratio is significant at 5% in model 1.

Similarly, the regression result shows that leverage, dividend payout ratio and dividend yield has positive relation with stock price volatility which indicates that higher leverage, dividend payout ratio and dividend yield, higher would be the stock price volatility. However, book to market ratio, growth of assets, earning price ratio and Market capitalization have negative relationship with stock price volatility which indicates that higher the book to market, growth of assets, earning price ratio and market capitalization, lower would be the share price volatility. The study shows that, dividend yield; dividend payout ratio, growth of assets and earning price ratio are statistically significant at 1% whereas leverage and book to market are significant at 5% in model 2.

Therefore, growth of assets, book to market and earnings price ratio are the major determining variables of stock return of Nepalese commercial banks. Similarly, growth of assets, leverage, dividend payout ratio, book to market and dividend yield are the major determining variables of share price volatility of Nepalese commercial banks.

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