Determinant of Stock Price of Selected Banks in Nepal

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Abstract

The main purpose of the study is to explore the determinants of stock price in NEPSE, with special focus to private commercial banks. To meet the desired objectives, different statistical and financial tools has been used. Arithmetic mean, correlation and regression analysis, t-test is the major statistical tools that have been used for the study. In order to conduct this study, descriptive research design has been adopted. For the purpose of analysis of the data, the data collected from the survey were coded for statistical analysis. SPSS tool was used to organize the data, determine significant relationships and identify difference or similarities with & between different variables under study. The findings from Z test show that there is statistically significant relationship between the variables or not. Even though DPS, BVPS and EPS affect the MPS positively, there is several other factors i.e. internal as well as external environment that affects the market price of stock. Theoretically, when earnings, dividends and book value per share increases, the market price per share also increases and vice versa. But in the case of NEPSE, this theory does not seem to be true hundred percent. Meaning that there are various other factors too that affects the share price.

Key Words: Book value per share, Dividend per share, Earning per share, Market price per Share, Stock price

1. Introduction

Investment in equity shares is one of the major avenues of investment that yields considerable returns to investors. It is also a source of finance for the capital requirements of firms. Returns from such equity investments are subject to vary owing to the movement of share prices, which depend on various factors. Such factors that influence share prices could be either firm specific internal factors such as earnings, dividend, book value, etc. or external factors such as interest rate, government regulations, foreign exchange rate, etc Having knowledge of such factors and their possible impact on share prices is highly appreciable on the part of both firms and investors. Since share prices convey information to the outside world about the current and future performance of firms, it is imperative for the managers of the firms to pay due attention to the factors that influence share prices. This would help them to enhance their firm value in the market. Consideration of such factors by investors is also warranted while investing their funds, since this would aid them in making wise investment decisions and invest in stocks that yield good profits. A number of factors have been identified as share price determinants by the extant studies conducted on different markets. The pioneering work on determinants of share prices by Collins (1957) for US banks identified dividend, net profit, operating earnings and book value as the factors influencing share prices. Following Collins (1957), there have been various attempts to identify the determinants of share prices for different markets.

Karathanassis & Philippas (1988) for banks listed on Athens stock exchange found dividends, retained earnings and size to exert a significant positive influence on share prices. Midani (1991) studied the factors that influence share prices in the Kuwait stock market. The study pointed out earnings and

financial leverage as the major determinants of share prices. For a sample of Nepalese firms, Tamimi (2007) attempted to identify the factors that influence the stock prices in the United Arab Emirates financial market. The study found earnings of firms to have a significant and positive influence on share prices. Sunde & Sanderson (2009) for Zimbabwe market undertook a review to identify the factors that influence share prices. The study reports corporate earnings, management, lawsuits, mergers and takeovers, market liquidity and stability, availability of substitutes, Government policy, macroeconomic fundamentals, investor sentiments, technical influences and analyst reports as factors influencing share prices.

Uddin (2009) analysed the effect of certain microeconomic factors on the share prices of bank, leasing and insurance companies listed on Dhaka Stock Exchange. The study found dividend, earnings and net asset value per share to bear a significant relation with share prices. The pioneering study is by Srivastava (1968) that studied the effect of retained earnings on share prices. The study report that retained earnings has no significant influence on share prices. In a later study, Bhole (1980) found earnings to be a significant factor influencing share prices.

Zahir & Khanna (1982) show that share prices of private sector firms are significantly influenced by dividend and yield. Krishan (2010) examined the share prices of general engineering industry and cotton textiles industry. The study found that, in both the industries, book value per share and dividend are significant factors that determine share prices. In the case of cotton textiles industry, yield was also observed to be significantly influencing share prices. Zahir (1982) report dividend, earnings and yield as factors influencing prices of both more volatile and less volatile shares. Further, the study point out that security price index is a significant price determinant of more volatile shares.

The main purpose of the study is to explore the determinants of stock price in NEPSE, with special focus to selected banks in Nepal.

2. Literature Review

Shrestha (2010) wrote an article entitled "NRB Monetary Policy and Stock Market Impact". According to him monetary policy directly affects stock prices. Taking an example of monetary policy announcement in 2004/05, he writes "NRB Monetary Policy had an impact on the performance of stock market as investors were lured into buying shares of commercial banks at higher market price with the expectation that banks would issues bonus shares to increase its capital base to Rs. 100 million. As a result, there had been tremendous demand for shares of commercial banks in every day transaction raising stock market index to unexpected highs." Dangol (2011) wrote an article about "Unanticipated Political Events and Stock Returns." According to him Nepalese capital market is consistent with information content hypothesis, i.e. market reflects all political events concerned with capital market. Concluding the study he writes, 'The study has provided the evidence that the good-news leads to the positive average prediction error. Similarly, the bad-news drifts the negative prediction error on the post announcement period. Finally the data present important evidence on the speed of adjustment of market prices to new political information, i.e. in as many as 2 to 3 days from the announcement date. Thus the Nepalese stock market may be inferred to inefficient, but there is strong linkage between political uncertainty and common stock returns generation."

Friend and Puckett (1964) provided the relationships between dividends and stock prices using regression analysis of 110 firms from five industries for the period of 2006 to 2012. The regression results Pt = a + bDt + CRt exhibited the strong dividends effect and relatively weak retained earnings effects on three of the five industries, i.e. chemicals, foods and steels. Again, the study tested regression equation by adding lagged earnings price ratio Pt = a + bDt + CRt + d (E/P) t-1. The result showed that more than 80% of the variation in stock prices explained by these three independent variables. Dividends have a predominant influence in stock prices. The study also reveals the dividends and retained earnings coefficients are closer to each other than first set of regression. Chawla and Srinivasan (1987) carried out a study to identify the impact of dividend and retained earnings on stock price in the Indian context. They attempted to test the dividend retained earnings hypothesis and examine the structural changes in the estimated relations over time. The results indicate that in case of chemical industry both dividends and retained earnings significantly explain the variations in share price. The impact of dividends is more pronounced than that of the retained earnings. But the market has started the shifting towards more weight for retained earnings. Khan (2009) found the evidences that dividends, retained earnings and other determinants have dynamic relationship with market share price in the context of Bangladesh. The study suggests that the overall impact of dividends on stock prices is comparatively better that of retained earnings. The expected dividends play an important role in the determination of stock prices whatever determinants, like lagged price earnings ratio or lagged price, are considered.

Pradhan (2006) entitled," Studied the Market Behavior in Nepal" Concluded that large stocks have large PE ratios; large ratios of the market value to book of equity and smaller dividends. PE ratios and dividend ratio are more variable for smaller stocks where as market value to book value of equity is more variable for the large stocks. Large stocks also have lower liquidity, higher leverage, lower profitability, and lower assets turnover interest coverage stocks. Ojha (2010) entitled;" Financial Performances and Common Stock pricing" concluded by him was also reviewed for this study. The major findings of the research were: Nepalese stock market is in infancy stage. Dominant of banking sector is prevalent in the market due to other industries including finance and insurance companies. Manufacturing companies are not encouraging. He also concluded that people have misconceptions that the issuance of the bonus shares and right shares which actually decreases price and this makes them to invest even at a too high price with expectation of getting the same to increase their overall wealth. Further, he concluded that stock price in Nepal is determined more by other factors rather than the financial performance of the concerned company. Manandhar (1998) studied on dividend policy and value of firm to identify the determinants of dividend policy in the context of Nepal. The study found that dividend per share and return on equity have positive impact on market capitalization while earning per share, price-earnings ratio, and dividend yield have negative impact. It was also found a positive relationship between dividends and market capitalization. Chhetri (2008) has explained that there are differences in financial position of high dividend paying and low dividend paying companies. The study revealed that there is a positive relationship between dividends and stock prices. Further, the coefficient of dividends is higher as compared to the coefficient of retained earnings Pradhan (2003) also carried out a study to determine the relative importance of dividend and retained earnings in determining the market price of stock. He found that dividend payment is more important as opposed to retained earnings in Nepal. The results revealed the customary strong dividends effect and a very weak retained earning effect indicating the attractiveness of dividends among Nepalese investors. The findings suggest that Nepalese stock market has not started recognizing the impact of retained earnings.

3. Research Methodology

3.1 Research Design

To achieve the objective of this study, descriptive, analytical, inferential and explanatory research design has been used. Some financial and statistical tools have been applied to examine facts and descriptive techniques have been adopted to determine factors determining stock prices of listed companies in the NEPSE.

3.2. Description of the Sample

All the listed companies in Nepal Stock Exchange are the population for the study and collection of items or element from population for research is sampling. This study intends to identify the determinants of stock price of listed companies in Nepal. So, the population of the study is all the listed companies in Nepal. In this study, eight sample organizations representing the private commercial bank are taken into account among listed companies which fall in category "A" on the basis of the following criterion:"

- The company should have been in existence during the last five years i.e.2011-2015.
- The company should not have skipped the dividend during the period of study i.e., from 2011 to 2015.
- No financial data required for the calculation should be missing.
- Under this method, the primary data is collected from different brokers, investors, planners etc within the Kathmandu Valley and they are selected on random basis.

3.3. Data Collection Procedure and Analysis Tools

The secondary data has been collected through various published and unpublished documents of concerned authorities. The sources of secondary data were as follows:

- Annual report of SEBON, magazines, newspaper and journal
- Websites of SEBON, NEPSE and NRB.

Secondary data are based on various published and unpublished sources like annual report of sampled companies, journals, magazines, web sites etc. Data obtained from various sources have no meaning unless they will be arranged and presented in a systematic way. The data has been collected different secondary sources in raw forms, which are verified, simplified, classified and tabulated form for the purpose of analysis. Different statistical tools and technique are used while analyzing the data.

Regarding Time Frame for the study it will takes around 15 weeks" time. The required data will be collected from various sources within 5 weeks. The data coding will take 2 weeks. After that the data will be analyzed and interpreted. The data analysis and interpretation will be completed within 4 weeks of time. Finally, a report will be generated. The report generation will take 4 weeks. The data presented are analyzed through table, graph, correlation and regression analysis.

4. Discussion and Analysis

To analyze the relationship of EPS, DPS and BVPS to MPS, it is assumed that the market price of share is influenced with the changes in EPS, DPS and BVPS. So, MPS is the dependant variable; whereas BVPS, EPS and DPS are independent variables. Here in this section, relationship of EPS, DPS and BVPS with MPS is determined separately to each of the sampled listed companies. The correlation analysis is performed to determine the relationship of EPS, DPS and BVPS with MPS. To determine the effect of DPS, EPS and

BVPS on MPS, simple correlation as well as their coefficient of determination are calculated. To determine the magnitude of the effects of the independent variables to the dependant variable, simple and multiple regression analysis are made and the magnitude is identified after determining the regression equations. In addition to that, multiple correlation coefficient, coefficient of determination (MPS being dependant variable and DPS, BVPS and EPS being independent variables), Standard errors of estimate are analyzed during the correlation and regression analysis. Among the listed companies, 8 listed private commercial banks are taken for the study that fall in-group 'A'. Summary of the financial data of the sample listed companies of the study are presented with five years data (from fiscal year 2010/11 to 2014/15) including Market Price of Share [MPS], Dividend Per Share [DPS], Book Value Per Share [BVPS] and Earning Per Share [EPS]] in the Table 1 below and analysis is presented on their respective topic.

Table I

Average of MPS, DPS, BPS and EPS of Selected Companies

Year	MPS	DPS	BPS	EPS
10/11	2617.125	44.07	238.0775	66.12
11/12	1357.875	36.105	215.4188	55.43375
12/13	829.625	30.355	179.8825	49.055
13/14	861.125	33.3025	178.335	49.19
14/15	1040.375	31.94375	182.2625	53.40875

(Source: Annual Reports of sampled listed companies from Fiscal Year 2010/11 to 2014/15)

Where,

MPS = Market price per share

DPS = Dividend per share (i.e. including bonus share)

BVPS = Book value per share

EPS = Earnings per share

As per the above table, all the factors remain increasing in the initial period of the study period but it decreased during the mid period and slightly increased during the later stage. The result indicates that the overall financial performance of the selected companies are getting better during the study period.

Table II

Regression Analysis of Selected Companies

Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.936549568	0.877125094	0.754250187	469.6821788	8

Where,

T-table value is at 5 % level of significance (n-2 = 7-2 = 5 degree of freedom)

The R square of around 88% depicts that 88 % independent variables are explained in the dependant variables. This indicates significance of the overall model.

Table III Independent Sample T-Test Result

Variables	R	r²	t-cal	t-table	Remarks
Eps,Dps,Bps	0.9365	0.877	16.57	2.570	Significance

There is significant correlation between MPS with BPS, EPS and DPS. The coefficient of simple determination shows that 87 percent changes in the MPS is explained by the variables and remaining 13 percent is unexplained or it is explained by market related factors. The degree of correlation between MPS with the variables is significant at 95 percent level of confidence

The multiple regression analysis of mean gives the multiple regression equation (MPS being dependant variable and DPS, BVPS and EPS being independent variables) as:

MPS on DPS, BVPS and EPS

MPS =-3459.12 +36.18DPS +10.39 BVPS +26.92 EPS

5. Conclusion

There is a gap between the theory and practice of investment in Nepalese stock market due to lack of proper study and analysis of stock market. Nepalese investors are more conscious towards the dividend and price appreciation of the shares they are investing but most of the investors are only using buy and hold strategy as only few of them are trading their shares in secondary market. This shows that there lacks professionalism in Nepalese investors. Nepal Rastra Bank's guidelines are also affecting the share price of financial institutions. There are small group of investors who believes on price- trend, they only invest on such companies whose prices are increasing which leads to the fluctuation of share prices. Pricing behavior differs from company to company. Even though, DPS, BVPS and EPS jointly have significant effect on the share price, individually they do not have consistent relationship with MPS. It

means there are some other factors that have been influencing and determining the share price significantly. Company performance (EPS, BVPS, DPS, risk), information disclosed, change in management, timely AGM, other political and economic factors such as political stability, national economy, peace, strikes, demand and supply situation of the share are some factor they have direct impact on share prices. MPS is significantly affected by company's performance such as earnings, interest rate, cash dividends payment, book value, risk associated with the company and growth rate at 95 % level of significance.

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Appendix I

MPS, DPS, BVPS and EPS

MPS								
Year	SCB	NBL	вок	HBL	EBL	NIB	KBL	SBI
10/11	6,010.00	4,899.00	1,388.00	1,760.00	2,455.00	1,825.00	700.00	1,900.00
11/12	3,279.00	2,384.00	840.00	816.00	1,630.00	705.00	468.00	741.00
12/13	1,800.00	1,252.00	570.00	575.00	1,094.00	515.00	266.00	565.00
13/14	1,799.00	1,355.00	628.00	653.00	1,033.00	511.00	275.00	635.00
14/15	1,820.00	1,815.00	553.00	650.00	1,591.00	784.00	260.00	850.00

DPS								
Year	SCB	NBL	вок	HBL	EBL	NIB	KBL	SBI
10/11	100.00	85.00	47.00	43.56	30.00	20.00	10.00	17.00
11/12	70.00	70.00	30.00	36.84	30.00	25.00	10.00	17.00
12/13	50.00	30.00	34.00	36.84	10.00	50.00	12.00	20.00
13/14	60.00	60.00	26.00	28.42	30.00	30.00	8.00	24.00
14/15	50.00	65.00	15.00	30.55	30.00	35.00	10.00	20.00

BPS									
Year	SCB	NBL	вок	HBL	EBL	NIB	KBL	SBI	
10/11	327.53	324.00	142.00	256.52	316.64	206.25	137.00	194.68	
11/12	241.00	330.00	175.40	226.79	275.55	190.00	137.00	147.61	
12/13	228.00	340.00	179.13	199.77	29.65	171.00	138.00	153.51	
13/14	256.00	320.00	168.36	193.00	40.66	161.00	135.00	152.66	
14/15	249.00	315.00	196.19	195.00	35.65	169.00	137.00	161.26	

EPS								
Year	SCB	NBL	вок	HBL	EBL	NIB	KBL	SBI
10/11	109.99	106.76	37.42	61.90	99.99	54.68	22.04	36.18
11/12	77.65	84.00	43.08	38.10	100.16	52.55	24.24	23.69
12/13	69.51	71.00	44.51	44.66	83.18	39.06	15.67	24.85
13/14	72.60	84.00	37.88	39.94	88.55	27.06	20.55	22.94
14/15	65.70	95.00	36.64	40.44	91.88	46.20	18.66	32.75

Source: Annual Reports of sampled listed companies from Fiscal Year 2010/11 to 2014/15