Assessing the Impact of Dividend Policies on the Market Valuation of Development Banks in Nepal

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Abstract

This research delved into the assessing the impact of dividend policies on the market valuation of development banks in Nepal. Employing a cross-survey methodology, the study utilized data from secondary sources, specifically the annual reports of various development banks. The sample for the study included four national development banks, covering the time span from 2014/15 to 2020/21. Both descriptive and inferential statistical techniques were applied in analyzing the data. The dependent variable in this research was the market price, with independent variables including the price-earnings ratio, dividends, and earnings. The results indicated that price-to-earnings ratios and earnings per share exerted a positive and significant influence on the market price. Conversely, dividends per share showed no impact. Consequently, the market price movement is not consistently determined by the dividends paid out by the company.

1. Introduction

A company's dividend policy delineates the guidelines for distributing dividends to shareholders, impacting both the amount paid to shareholders and the retained amount within the company. Brealey & Myers (2003) identify the unresolved question of dividend policy as a top challenge in finance. Businesses, faced with post-tax profits, must decide whether to retain them for future use or distribute as dividends, influencing investors' decisions (Al Masum, 2014; Hussain et al., 2014). Rustagi (2001) defines dividends as after-tax income paid to stockholders, and Maheshwari (1999) characterizes them as a distribution of a percentage of a company's net income.

Business Jargons (2017) describes a company's dividend policy as a financial choice on earnings distribution, with management deciding the allocation between dividends and reinvestment. Historical data show investor preference for high dividend-paying companies, although such firms face financial pressure, leading to management cuts when dividends are excessive (NainTarasarfarzRaja, 2014). A finance manager's role in enhancing shareholder wealth emphasizes the importance of sound decisions on dividends and dividend policy,

impacting shareholder value (NainTarasarfarz Raja, 2014). The impact of dividend policy on stock prices is debated; Miller & Modigliani (1963) suggest a negligible impact, while academics like Enhardt (2013) and Ogolo (2012) disagree. This debate necessitates further research.

The paper examines how dividend policy affects the market prices of four Nepalese development banks (Muktinath & Garima, Shangri-La, and Jyoti). Only four out of 17 banks are studied, focusing on the influence of dividend per share, profits per share, and price-earnings ratio on development bank market share prices.

2. Literature Review

Literature reviews are essential to the research project since they provide both guidance and essential input on the subject matter that is being investigated. In this part of the chapter, the literature review is broken down into two parts: the first part is a theoretical review, and the second part is an empirical review on the same subject as the research.

Theoretical Review

Dividend

According to Pandy (2001), a dividend is the proposed distribution of a company's earnings to stockholders as decided by the board of directors. It refers the percentage of the nominal value of the company's ordinary share capital. Dividends refer to the portion of a company's profits that are returned to shareholders. It's a measure of how much money investors got back after putting it at risk in the business. Companies use dividends to incentivize current shareholders and attract new investors to purchase shares of common stock at a premium.

Dividend Policy

Company's profits that should be distributed to shareholders as a form of cash and the amount that should be kept by the company for use in further investment and growth have both been hot topics of debate. Several authors (Omoregie & Eromosele, 2016; Kolawole et al., 2018; Ozuomba et al., 2013) have stated that shareholders' wealth should be taken into account by investors when planning their portfolios based on a company's dividend policy. Thus, optimal dividend policy helps to maximise both the share price and the shareholders' wealth. Dividend policies are controversial among academics; some argue that they have little bearing on shareholder wealth (Idewele & Murad, 2019), while others argue that they have a significant impact (Ozuomba et al., 2013).

Dividend Irrelevance Theory

Miller & Modigliani (1961) proposed the dividend irrelevance hypothesis, which states that a firm's dividend policy does not affect the value of its shares since a firm's worth is determined by its assets and revenues rather than its dividend policy. Therefore, the

following assumptions underpin dividend irrelevance theory: The presence of flawless capital markets. This assumes that (1) there is no uncertainty, (2) there is free flow of information, (3) investors are rational and (4) The dividend policy of a company does not influence the company's investment strategy.

Dividend Relevance Theory

Walter (1963) argues, stock prices should represent the discounted value of dividends. Consequently, a company's value is affected by its dividend policy, the connection between investment and dividend policy is crucial. The model is presented as follows:

$$P = \frac{D + r/k \ (E-D)}{K}$$

Where,

P = Stock price

D=Dividend

E=Earnings

(E-D) =Retained earnings,

r = Investment return;

K = weighted average cost of capital

However, Gordon (1963) argues that a company's dividend policy is the key factor in determining stock price. The model is an illustration of Gordon's argument:

$$Po = \frac{E1 \ (1-b)}{k-b \ x \ r}$$

Where,

Po =Price

E1 = Ending year earnings

(1-b) =dividend payout ratio

b =retention ratio

k = Required rate of return

r = investment return

b x r = percentage of growth rate

Empirical Review

Masum (2014) identified a significant positive correlation between dividend policy and share market performance on the Dhaka stock exchange. Prabath (2014) highlighted the positive impact of dividends per share, profits per share, and book value per share on stock prices. Ogolo's (2012) study on 61 Nairobi Stock Exchange-listed businesses from

2003-2012 revealed a positive correlation between market price per share and earnings as well as dividend per share, emphasizing the significant impact of dividend policy on stock prices. Jakata & Nyamugure's (2012) research on Zimbabwean companies suggested that dividend announcements have minimal impact on stock prices. Kenyoru et al. (2013) found a noteworthy correlation between dividend policy and share price volatility among Kenyan firms. Nazir et al.'s (2014) study on Pakistani financial institutions indicated a positive correlation between dividend payout and share price, while growth in property showed a negative correlation. Khan's (2012) analysis of 29 companies from 2001 to 2010 revealed a small negative influence of payment on share prices, with profits per share and earnings after tax having a substantial positive effect. Enow & Brijlal's (2016) study on 14 firms on the Johannesburg Stock Exchange from 2009 to 2013 found that the price-earnings ratio, dividends, and profits accounted for 57.8% of stock price variation, with positive correlations among profits per share, price earnings, and share prices, but not dividends per share.

Review on the Nepalese Context

Silwal & Napit (2019) analyzed ten Nepalese commercial banks, finding positive correlations between stock price and book value per share, price-earnings ratio, and return on equity. Dividend yield showed a weakly positive relationship, while magnitude had a statistically insignificant negative impact. Sapkota (2016) established positive correlations between stock market valuations and profitability measures like earnings, dividends, ROA, P/E, and GDP. Bhattarai (2014) identified dividend yield, earnings per share, and price-earnings ratio as key factors affecting share price. Sapkota & Pradhan (2016) observed favorable correlations between stock price and financial metrics, emphasizing factors like return on assets, profits per share, dividends per share, price-to-earnings ratio, and GDP growth rate. They noted an inverse relationship between market price per share and inflation, interest rate, and leverage in Nepalese commercial banks. Bista's (2005) study found a positive correlation between commercial banks' dividend per share and market price per share, while Adhikari (2006) highlighted variability in dividend payout ratios among commercial banks in Nepal, emphasizing the importance of considering corporate earnings in investment decisions.

Literature Gap

The research aims to assess the impact of dividend policy on development banks' market share prices in Nepal from 2014/15 to 2020/21, considering varied perspectives, to determine the relevance of dividend policy based on an analysis of four banks over six years.

Research Methodology

Research Design

The research design of the study is based on a cross-sectional survey using the existing secondary data from the development banks.

Population and Sample selection

There are now 17 different development banks in Nepal. Out of the total of seventeen banks, eight are national banks and seven are regional banks. Out of a total of eight development banks, four were selected for this study as the market leaders.

Methods of Data collection and Techniques of Analysis

The study examined 2014/15–2020/21 data from four Nepalese development banks. The study examined secondary data from the banks' websites and annual reports. Study data was analysed using descriptive and inferential statistics. This study tested its hypothesis using multiple regression.

Model Specification:

The mathematical model for the study is as follows:

Market price = f (Dividend per share, Earning per share, P/E Ratio)

Mathematical Specification,

MPS = $\beta 0$ + $\beta 1$ DPS + $\beta 2$ EPS + $\beta 3$ P/E Ratio + ε

Where,

MPS = Market price per share

DPS = Dividend per share

EPS = Earnings per share

P/E Ratio = Price earnings ratio

$\beta 0$ = Constant

$\beta 1, \beta 2, \beta 3$ = *Coefficient of Independent Variables*

ε = Error term

4. Results and Discussion

Table 1. Descriptive Statistics of Each Variable from 2014/15-2020/21

	Minimum	Maximum	Mean	Std. Deviation
MPS	141	657	308.7	148.14
DPS	0	8.4	1.81	2.11
EPS	7.33	27.94	17.88	4.86
P/E Ratio	9.51	28.23	17.3	6.04
N	20			

Source: Author Computation (2023)

Table 1 summarizes all variables by showing their minimum, maximum, mean, and standard deviation. 141.00 MPS, 0.00 DPS, 7.33 EPS, and 9.51 P/E Ratio were the lowest possible values for the market, dividend, earnings, and price per share, respectively. Maximum values for all variables are positive and greater than their minimum values. This demonstrates the pervasiveness of each variable over the time span of the study. In addition, the data indicates that the median price per share (MPS), the dividend per share (DPS), the earnings per share (EPS), and the price to earnings ratio (P/E-Ratio) have all increased on average over time, with a mean value of 308.70, 1.81, 17.88, and 17.30 respectively. In addition, the value of the market share price (MPS) is more dispersed than the value of the dividend per share (DPS), as measured by the standard deviation, which is near to the mean.

Table 2. Correlation between Independent and Dependent Variables

	MPS	DPS	EPS	P/E- Ratio
MPS	1			
DPS	-0.12	1		
EPS	.675**	-0.231	1	
P/E- Ratio	.797**	-0.028	0.145	1

Source: Author Computation (2023)
**. Correlation is significant at the 0.01 level (2-tailed).

Table 2 shows the results of the correlation matrix indicate that the variable coefficients lie between -0.120 and 0.797, meaning the degree of correlation is found negative DPS with MPS whereas EPS and P/E ratio found strong and very strong relationship with MPS. The relationships are significant at the 1% level for EPS and P/E ratio respectively. The relationship between the two variables was examined using a correlation test. A high degree of correlation indicates a close association between the independent variables. Similarly, if there is little connection between the variables, the correlation is weak. The magnitude and direction of the association between two variables, as measured by their correlation coefficients, are thus made clear. It's possible for it to be anywhere from a perfect minus one to a perfect plus one. No connection could be found between the variables, as demonstrated by the correlation coefficient being 0.

Regression Analysis

Table 3. Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
97.8	0.957	0.948	33.65933

Table 3 represents a model summary of regression. The model's explanatory capacity was indicated by a R squared value of 0.957, which indicates that 95.7% of the fluctuations

in the share price of the development banks can be explained by dividend. It's possible that the remaining % can be accounted for by variables that were left out of the model. Excluding the constant variable from the regression model resulted in an adjusted R square value of 94.8%, which demonstrates the model's ability to explain the data when taken alone. In addition, the coefficient for R was 0.978, which suggests that there is a link between the market share price and the DPS, EPS, and P/E ratio. This is shown by the correlation coefficient.

Table 4. ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	398824.743	3	132941.581	117.341	.000[b]
Residual	18127.207	16	1132.950		
Total	416951.950	19			
Dependent Variable: MPS					
Predictors: (Constant), P/E Ratio, DPS, EPS					

Table 4 shows the results of a test for the goodness of fit of the model; the value of F=117.341, with a significance level of $p0.05$, demonstrates a statistically significant relationship between market share price and development bank DPS, EPS, and P/E-ratio. The sum of squared residuals illustrates the amount of variation in the observed variables that is not accounted for by the regression model. In contrast, the squared deviations that are explained and those that are not are represented by the sum of squares when using a regression model.

Table 5. Co-efficient and Collinearity Statistics

	Unstandardized Coefficients		Standard-ized Coef-ficients	t	Sig. Toler-ance	Collinearity Statistics	
	Std. Error	Beta				VIF	
(Constant)	-314.297	37.075		-8.477	0.000		
DPS	2.423	3.766	0.034	0.643	0.529	0.947	1.056
EPS	17.642	1.648	0.579	10.702	0.000	0.927	1.078
P/E -Ratio	17.527	1.293	0.714	13.559	0.000	0.979	1.022
Dependent Variable: MPS							

Table 5 represents the regression coefficients and Collinearity Statistics used to show the relationship between market share price with dividend per share, earnings per share and price earnings ratio. The results show that null hypothesis (H01) for the DPS is accepted (*p-value > 0.05*). similarly, the hypothesis formation for the null hypothesis (H02) for the EPS is rejected (*p-value < 0.05*). At last, the hypothesis formation for the null hypothesis

(H03) for the P/E ratio is rejected (*p-value < 0.05*). In order to determine whether or not the predictor variables (or independent variables) in a regression model exhibit a linear connection, the Collinearity Statistics test was run. With Tolerance 1 and VIF (Variation Inflation Factor) 10, we wish to determine the linear connection between the dependent and independent variables.

The primary aim of this study was to investigate how the dividend policies of development banks influence their stock prices on the Nepal Stock Exchange. Financial data from relevant banks spanning the years 2014/2015 to 2020/21 was collected for analysis. The correlation matrix highlights a negative correlation between market share price (MPS) and dividend per share (DPS). Conversely, both price-earnings ratios and earnings per share (EPS) exhibit a positive and statistically significant correlation with MPS. Furthermore, the data indicates that EPS and the price-to-earnings ratio (P/E ratio) have a positive and statistically significant impact on market share prices, while dividends per share (DPS) have a positive but non-significant effect.

This finding aligns with the proposition made by Miller and Modigliani in 1963, suggesting that a company's dividend policy has no substantial impact on the market price of its shares. The observed lack of significant influence of dividends per share on market prices resonates with the findings of previous research by Jakarta and Nyamugure in 2012, indicating that dividend announcements have minimal effects on the stock prices of Zimbabwean enterprises. This contributes to the body of knowledge questioning the conventional belief in the strong link between dividend policies and stock market performance.

5. Conclusion

The study analyzes data from 2014/15 to 2020/21 to explore the relationship between dividend policies and market share prices in Nepalese development banks. Descriptive statistics reveal an upward trend in median price per share, dividend per share, earnings per share, and price-to-earnings ratio. Pearson correlation matrix shows significant correlations, with DPS negatively correlated with MPS, and EPS and P/E Ratio positively correlated with MPS. Regression analysis demonstrates a high R squared value of 0.957, indicating that 95.7% of share price fluctuations are attributed to dividend-related factors. ANOVA results further validate the model, emphasizing the significant relationship between market share price and DPS, EPS, and P/E Ratio. The findings challenge traditional beliefs, highlighting the limited impact of DPS and emphasizing the importance of considering EPS and P/E Ratio in Nepal's banking sector.

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